



3 4456 0299670 1

CRNL/TM-11157

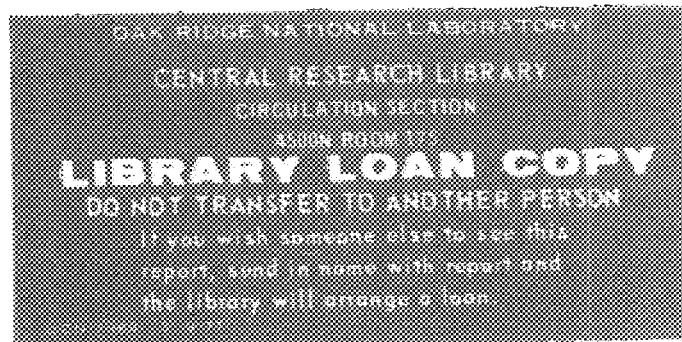
ornl

OAK RIDGE
NATIONAL
LABORATORY

UNCLASSIFIED//
REF ID: A663063

Atom Probe Field-Ion Microscopy
and Related Topics:
A Bibliography 1978-87

M. K. Miller
A. R. McDonald



OPERATED BY

MARTIN MARETTA ENERGY SYSTEMS, INC.

FOR THE UNITED STATES

DEPARTMENT OF ENERGY

DOE FEDERAL ENERGY RESEARCH CENTER

Printed in the United States of America Available from
National Technical Information Service
U.S. Department of Commerce
5285 Port Royal Road, Springfield, Virginia 22161
NTIS price codes—Printed Copy, A12 Microfiche A01

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

Metals and Ceramics Division

ATOM PROBE FIELD-ION MICROSCOPY AND RELATED TOPICS:
A BIBLIOGRAPHY 1978-87

M. K. Miller
A. R. McDonald

Date Published — April 1989

Prepared for the
DOE Office of Basic Energy Sciences
KC 02 01 01 0

Prepared by the
OAK RIDGE NATIONAL LABORATORY
Oak Ridge, Tennessee 37831-6285
operated by
MARTIN MARIETTA ENERGY SYSTEMS, INC.
for the
U.S. DEPARTMENT OF ENERGY
under Contract DE-AC05-84OR21400

MARTIN MARIETTA ENERGY SYSTEMS LIBRARIES



3 4456 0299670 1

PREFACE

This bibliography includes references related to the following topics: field-ion microscopy (FIM), field emission microscopy (FEM), atom probe field-ion microscopy (APFIM), and liquid metal ion sources (LMIS). Technique-orientated studies and applications are included.

| This bibliography covers the period 1978 to 1987. A previous publication, *Field-Ion Microscopy and Related Techniques, A Bibliography: 1951-1978*, compiled by R. E. Thurstans and J. M. Walls, published by Warwick, Birmingham, contains the papers published prior to this period. |

The references contained in this document were compiled from a variety of sources including computer searches and personal lists of publications. To reduce the length of this document, the references have been reduced to the minimum necessary to locate the articles. The references are listed alphabetically by authors in the year in which they were published.

We would like to thank Dr. G. D. W. Smith of Oxford University, Dr. J. Bentley of Oak Ridge National Laboratory (ORNL), and M. Alexander of the ORNL Central Library for their stoic efforts in the preparation of this document. We would also like to thank the many authors for supplying their personal publications lists and we apologize for any errors or omissions that may have occurred in compiling this document.

M. K. Miller and A. R. McDonald
Metals and Ceramics Division

CONTENTS

1978	1
1979	21
1980	39
1981	69
1982	89
1983	119
1984	141
1985	167
1986	185
1987	219
ADDENDUM	243
APPENDIX	245

1978

Atom Probe Field-Ion Microscopy Bibliography for 1978

- 1 A study of atom zigzag chains on the surface of tungsten Audiffren, M.
Traimon, P.
Bardon, J.
Drechsler, M. Surf. Sci. (1978) 75,
751
- 2 Field ion microscope studies of submonolayer films of nickel, palladium and platinum on (110) tungsten surfaces Bassett, D. W. Thin Solid Films (1978) 48, 237-46
- 3 Diffusion of single adatoms of platinum, iridium and gold on platinum surfaces Bassett, D. W.
Webber, P. R. Surf. Sci. (1978) 70,
520
- 4 Investigation of second phase particles in AKS-doped tungsten by TEM, SEM and atom probe microanalysis Beaven, P. A.
Chandrasekharaiyah, M. N.
Miller, M. K.
Toll, J. R. F.
Williams, P. R.
Smith, G. D. W. Electron Microsc.,
Pap. Int. Congr., 9th,
Sturgess, J. M., ed.,
(1978) 1, 614-15,
Microsc. Soc. Canada,
Toronto, Ont.
- 5 Combined TEM, FIM, atom probe analysis of a nickel based superalloy Beaven, P. A.
Delargy, K. M.
Miller, M. K.
Smith, G. D. W. Electron Microsc.,
Pap. Int. Congr., 9th,
Sturgess, J. M., ed.,
(1978) 1, 626-7
Microsc. Soc. Canada,
Toronto, Ont.
- 6 FIM and microanalysis of aluminum alloys Boyes, E. D. Electron Microsc.,
Pap. Int. Congr., 9th,
Sturgess, J. M., ed.,
(1978) 1, 104-5,
Microsc. Soc. Canada,
Toronto, Ont.
- 7 Autoionization microscope Bobkov, A. F.
Vasil'ev, V. A.
Kuznetsov, B. Y.
Kukavadze, G. M.
Suvorov, A. L.
Tumbakova, M. I.
Shakhov K. P. Instrum. Exp. Tech.
(1978) 21, 784
- 8 An advanced field electron emission spectrometer Braun, E.
Forbes, R. G.
Pearson, J.
Pelmore, J. M.
Latham, R. V. J. Phys. E (1978) 11,
222-8
- 9 Application of field-ion microscopy techniques to metallurgical problems Brenner, S. S. Surf. Sci. (1978) 70,
427-51

Atom Probe Field-Ion Microscopy Bibliography for 1978

- 10 Field-ion microscope detection of ultra-fine defects in neutron-irradiated iron-0.34 pct. copper alloy Brenner, S. S.
Wagner, R.
Spitznagel, J. A. Metall. Trans. (1978)
9A, 1761-4
- 11 The visibility of atomic objects in the field electron emission microscope Brodie, I. Surf. Sci. (1978) 70,
186-96
- 12 The use of analytical surface tools in the fundamental study of wear Buckley, D. H. Wear (1978) 46, 19
- 13 Adsorption peculiarities of barium oxide on silicon field cathodes But, Z. P.
Miroshnichenko, L. S.
Yatsenko, A. F. Ukr. Fiz. Zh. (1978)
23, 978-82
- 14 Evaluation of volcano-style field ionization source and field emitting cathodes for mass spectrometry and applications Buttrill, S. E., Jr.
Spindt, C. A. NASA, CR (1978),
No. NASA-CR-156986
23
- 15 Surface self-diffusion by ion impact Cavaille, J. Y.
Drechsler, M. Surf. Sci. (1978) 75,
342
- 16 Calculation of the spin polarization of field-emitted electrons from monocrystalline iron Chazalviel, J. N.
Smith, N. V.
Yafet, Y. Conf. Ser. - Inst. Phys.
(1978) 39, Transition
Met., 1977, 272-6
- 17 Mobility of carbon monoxide on the (110) plane of tungsten Chen, J. R.
Gomer, R. Surf. Sci. (1978) 81,
589-602
- 18 Indium epitaxy on an imperfect FEM/FIM tungsten emitter Ciszewski, A.
Kozlowski, G. Acta Phys. Pol. A
(1978) A53, 687-91
- 19 Miniature ion sources for analytical instruments Clampitt, R.
Jefferies, D. K. Nucl. Instrum. Methods
(1978) 149, 739-42
- 20 Molten metal field ion sources Clampitt, R.
Jefferies, D. K. Conf. Ser. - Inst. Phys.
(1978) 38, Low-Energy
Ion Beams, 12-17
- 21 The field ionization time-of-flight mass spectrometer. A tool for chemical kinetic investigations as shown by elemental sulfur reactions Cocke, D. L.
Abend, G.
Block, J. H. Adv. Mass Spectrom.
(1978) 7A, 703-6
- 22 Field ion and field desorption mass spectrometry of inorganic compounds Cocke, D. L.
Block, J. H. Surf. Sci. (1978) 70,
363-91
- 23 Tellurium adsorption on single crystal faces of molybdenum and tungsten field emitters Collins, R. A.
Kiwanga, C. A. Surf. Sci. (1978) 71,
185-90

Atom Probe Field-Ion Microscopy Bibliography for 1978

- 24 Dependence of Rydberg-state field-ionization thresholds on Cooke, W. E.
Gallagher, T. F. Phys. Rev. A (1978) 17,
1226-8
- 25 Magnetic sector atom-probe field ion microscopy with a retarding potential analyzer Culbertson, R. J.
Sakurai, T. J. Vac. Sci. Technol. (1978) 15, 1752-5
- 26 Field Emission and Related Topics, In: Surf. Sci. 70, 1978 Cutler, P. H.
Tsong, T. T.
Editors (1978) (North-Holland Publ. Company,
Amsterdam, Neth..)
- 27 Compact IR laser radiation based on a field-emission cathode tube Demidov, S. S.
Kozina, G. S.
Kurbatov, L. N.
Myasnikov, A. F.
Rudnevskii, V. S. Kvantovaya Elektron. (Moscow) (1978) 5,
2049-52
- 28 Adsorption of nitrogen on iridium. Influence of steps on the surface potential studied by field emission Derochette, J. M. Phys. Status Solidi A (1978) 45, 163-9
- 29 A comparison of the translational energies released in the first field-free region after electron impact and field ionization Derrick, P. J.
Gardiner, T. M.
Loudon, A. G. Adv. Mass Spectrom. (1978) 7A, 77-82
- 30 Thermal desorption of lanthanum hexaboride from tungsten surface using field emission microscopy Dharmadhikari, C. V.
Joag, D. S.
Kanitkar, P. L. Proc. Nucl. Phys. Solid State Phys. Symp. (1978) 21C, 500-2
- 31 Temperature effects on appearance potentials of gas phase field ions Domke, M.
Hummel, E.
Block, J. H. Surf. Sci. (1978) 78,
307-23
- 32 Field emission into nonpolar organic liquids Dotoku, K.
Yamada, H.
Sakamoto, S.
Noda, S.
Yoshida, H. J. Chem. Phys. (1978) 69, 1121-5
- 33 Atomistic images in field ion microscopy at high temperatures Doyama, M.
Nishida, T.
Obara, M.
Tanigawa, S. Jpn. J. Appl. Phys. (1978) 17, 805-10
- 34 Erwin Müller and the early development of field emission microscopy Drechsler, M. Surf. Sci. (1978) 70,
1-18

Atom Probe Field-Ion Microscopy Bibliography for 1978

- 35 Field-ion image contrast. The gas distribution hypothesis re-examined Duffell, J.
Forbes, R. G. J. Phys. D (1978) 11, L123-L125
- 36 Observation of grain-boundary migration using field ion microscopy Eaton, H. C.
Bayuzick, R. J. Appl. Phys. Lett. (1978) 33, 115-17
- 37 Field-induced stresses in field emitters Eaton, H. C.
Bayuzick, R. J. Surf. Sci. (1978) 70, 408-26
- 38 Measurement of the absolute tunneling current density in field emission from tungsten(110) Ehrlich, C. D.
Plummer, E. W. Phys. Rev. B, Condens. Matter (1978) 18, 3767-71
- 39 Field dependence of critical energy deficits during the field ionization of ammonia Ernst, N.
Bozdech, G.
Block, J. H. Int. J. Mass Spectrom. Ion Phys. (1978) 28, 27-31
- 40 Critical energy deficits during the field ionization and proton capture of noble gases at rhodium and tungsten field emitters Ernst, N.
Bozdech, G.
Block, J. H. Int. J. Mass Spectrom. Ion Phys. (1978) 28, 33-48
- 41 Field ion appearance spectroscopy, investigations on ion generating processes at field emitter surfaces Ernst, N.
Bozdech, G.
Block, J. H. Ned. Tijdschr. Vacuumtech. (1978) 16, 271-2
- 42 The interaction of molecules with field emitter surfaces studied by field ion appearance spectroscopy Ernst, N.
Bozdech, G.
Block, J. H. Ber. Bunsenges. Phys. Chem. (1978) 82, 756-66
- 43 Determination of mass numbers of ions in mass-spectrometric analysis using field ionization Faerman, V. I.
Agafonov, N. L. Zavod. Lab. (1978) 44, 310-11
- 44 Molecular beam epitaxy and field emission deposition for metal film growth on III-V compound semiconductors - a comparative study Farrow, R. F. C.
Cullis, A. G.
Grant, A. J.
Jones, G. R.
Clampitt, R. Thin Solid Films (1978) 58, 189-196
- 45 Field ion microscopy of halogens on tungsten Faulian, K.
Bauer, E. Surf. Sci. (1978) 70, 271-85
- 46 A review of the theoretical and experimental analyses of electron spin polarization in ferromagnetic transition metals. II. New theoretical results for the analysis of ESP in field emission, photoemission, and tunneling Feuchtwang, T. E.
Cutler, P. H.
Nagy, D. Surf. Sci. (1978) 75, 490-528

Atom Probe Field-Ion Microscopy Bibliography for 1978

- 47 A review of the theoretical and experimental analyses of electron spin polarization in ferromagnetic transition metals. I. Field emission, photo-emission, magneto-optic Kerr effect and tunneling Feuchtwang, T. E.
Cutler, P. H.
Schmit, J. Surf. Sci. (1978) 75, 401-89
- 48 Surface site geometry and diffusion characteristics of single nickel atoms on W(111) Flahive, P. G.
Graham, W. R. Thin Solid Films (1978) 51, 175
- 49 Surface site geometry and diffusion characteristics of single nickel atoms on tungsten (111) Flahive, P. G.
Graham, W. R. J. Vac. Sci. Technol. (1978) 15, 472-3
- 50 Field adsorption - the monopole-dipole interaction Forbes, R. G. Surf. Sci. (1978) 78, L504
- 51 Field ionization and surface plasmons. An alternative theoretical formulation Forbes, R. G. Ned. Tijdschr. Vacuumtech. (1978) 16, 268-9
- 52 Field evaporation theory: the atomic-jug formalism Forbes, R. G. Surf. Sci. (1978) 70, 239-54
- 53 Field effect desorption Gallot, J. Vide (1978) Numero Spec., 251-60
- 54 Field ion-microscopic study of vacancy distribution in tungsten microcrystals irradiated by 0.2-1.0 MeV protons Garber, R. I.
Geisherik, V. S.
Dranova, Z. I.
Mikhailovskii, I. M.
Sadanov, E. V.
Tolstolutskaya, G. D. Vopr. Atom. Nauki i Tekhn. Ser. Fiz. Radiats. Povrezhdenii i Radiats. Materialoved. (1978) 1, 21-4
- 55 Ionization dynamics of a model atom in an electrostatic field Geltman, S. J. Phys. B (1978) 11, 3323-37
- 56 Magnetic sector atom probe FIM Glowacki, M.
Lenkow, W. E. Sci. Papers Inst. Electron Technol., Wroclaw Tech. Univ. (1978) 21, 86

Atom Probe Field-Ion Microscopy Bibliography for 1978

- 57 Transport and focussing of intense electron and ion beams using external magnetic fields and plasma channels Goldstein, S. A.
Bacon, D. P.
Mosher, D.
Cooperstein, G. Proc. Int. Top. Conf. High Power Electron Ion Beam Res. Technol., 2nd, Nation, J. A., Sudan, R. N., eds., (1978) 1, 71-81, Cornell Univ., Lab. Plasma Stud., Ithaca, NY
- 58 Applications of field emission to chemisorption Gomer, R. Surf. Sci. (1978) 70, 19-31
- 59 Shape change and field electron emission of micron-sized metallic points Grishanov, B. I.
Zhukov, V. M.
Polezhaev, S. A.
Fursei, G. N.
Chibukov, Y. Y.
Yasnov, G. I. Radiotekh. Elektron. (1978) 23, 575-83
- 60 A metallic glass tip - a promising field electron emission source Heinrich, H.
Haag, T.
Geiger, J. J. Phys. D (1978) 11, 2439-42
- 61 A gnomonic method for the indexing of field ion micrographs Henslee, S. P.
Margolis, W. S.
Johnson, R. M.
Wiseman, C. D. J. Appl. Phys. (1978) 49, 4574
- 62 Appearance potentials of field desorbed silver ions Hummel, E.
Domke, M.
Block, J. H. Z. Naturforsch. (1978) 34A, 46-54
- 63 Laser-shock-induced microstructural changes and a comparison with explosive-shock-induced phenomena in metals: field-on and electron microscopic studies Inal, O. T.
Murr, L. E. J. Appl. Phys. (1978) 49, 2427-34
- 64 A field ion microscope study of black chrome and nickel electroplated coatings Inal, O. T.
Torma, A. E. Thin Solid Films (1978) 54, 161-9
- 65 Field-ion-microscopy of cementation vs substrate dissolution as a function of pH: copper on tungsten system Inal, O. T.
Torma, A. E. J. Met. (1978) 30, 16-19

Atom Probe Field-Ion Microscopy Bibliography for 1978

- 66 Coadsorption of lanthanum and boron on tungsten by field emission and field ion microscope Inoue, T.
Nakada, M.
Okuno, K. Electron Microsc., Pap. Int. Congr., 9th,
Sturgess, J. M., ed.,
(1978) 1, 60-1, Microsc. Soc. Canada, Toronto,
Ont.
- 67 Extended range field emission spectroscopy Isaacson, M.
Gomer, R. Appl. Phys. (1978) 15,
253-6
- 68 Field-ion image of atoms in platinum-iridium alloys Ivchenko, V. A.
Syutkin, N. N. Fiz. Tverd. Tela
(Leningrad) (1978) 20,
3015-22
- 69 A comparative study on the cold type and thermal type field emission guns used in the same electron microscope Iwatsuki, M.
Kokubo, Y.
Harada, Y. Electron Microsc., Pap. Int. Congr., 9th,
Sturgess, J. M., ed.,
(1978) 1, 58-9, Microsc. Soc. Canada, Toronto,
Ont.
- 70 Some studies of lead and iron adsorption on the tungsten (100) surface by field emission microscopy Jones, J. P.
Roberts, E. W. Surf. Sci. (1978) 78,
37-57
- 71 Field emission microscopy of gold on (110), (100) and (211) tungsten surfaces Jones, J. P.
Roberts, E. W. Thin Solid Films (1978)
48, 215-28
- 72 Field ionization of ozone Kapur, S. Surf. Sci. (1978) 70,
403-7
- 73 Effect of ordered overlayer on field emission from a substrate Kar, N. Surf. Sci. (1978) 70,
101-13
- 74 Plasma-wall interactions in PLT: an imaging atom probe analysis Kellogg, G. L.
Panitz, J. A. Report (1978)
No. SAND-77-1891C,
CONF-780431-2, 5
- 75 Direct observation of surface diffusion and atomic interactions on metal surfaces Kellogg, G. L.
Tsong, T. T.
Cowan, P. Surf. Sci. (1978) 70,
485-519
- 76 Analyzer system for field emission energy distribution (FEED) measurements Kempin, H. F.
Klapper, K.
Ertl, G. Rev. Sci. Instrum.
(1978) 49, 1285-7
- 77 Modification of field-emission currents from tungsten by external magnetic fields Kennedy, P. J.
Muir, A. Y. Solid State Commun.
(1978) 27, 279-81

Atom Probe Field-Ion Microscopy Bibliography for 1978

- 78 Electron optical properties of an electron gun system with field emission cathode Kern, D.
Kurz, D.
Speidel, R. Optik (Stuttgart) (1978) 52, 61-70
- 79 Recent test and new applications of the unified theory of electron emission Khristov, S. Surf. Sci. (1978) 70, 32-51
- 80 Adsorption of iron on tungsten Kim, H.
Sasaki, T.
Okuno, K. Shinku (1978) 21, 127-9
- 81 Electron field emission from ferromagnetic europium sulfide on tungsten Kisker, E.
Baum, G.
Mahan, A. H.
Raith, W.
Reihl, B. Phys. Rev. B (1978) 18, 2256-75
- 82 Mechanism of ionization of trapping centers by an electric field in crystal phosphors Kiveris, A.
Kudzmauskas, S.
Pipinys, P. Liet. Fiz. Rinkinys (1978) 18, 531-9
- 83 Field emission energy distribution (FEED) spectroscopy from iridium surfaces Klapper, H.
Kempin, H. F.
Ertl, G. Ned. Tijdschr. Vacuumtech. (1978) 16, 238-9
- 84 Field emission spectroscopy from clean and adsorbate covered iridium surfaces Klapper, H.
Kempin, H. F.
Ertl, G. Z. Phys. Chem. (Wiesbaden) (1978) 112, 45-57
- 85 Coverage dependence of FE flicker noise. Spectral density functions due to potassium on tungsten (112) and tungsten (111) Kleint, C.
Meclewski, R.
Blaszczyzyn, R. Surf. Sci. (1978) 70, 151-64
- 86 Photo field emission spectroscopy of the tantalum band structure Kleint, C.
Radon, T. Surf. Sci. (1978) 70, 131-50
- 87 Field emission and field ionization studies and their impact on the formulation of elementary steps in the heterogeneous activation of gas molecules by transition metal surfaces Knor, Z. Surf. Sci. (1978) 70, 286-91
- 88 Field desorption of antimony from tungsten (110) plane investigated by means of field emission and field ion microscopy Kozlowski, G.
Ciszewski, A. Acta Univ. Wratislav., Mat., Fiz., Astron. (1978) 31, 125-8
- 89 A short-term experiment on ion migration Krah, W. Prax. Naturwiss. Chem. (1978) 27, 212-3

Atom Probe Field-Ion Microscopy Bibliography for 1978

- 90 Surface investigations of refractory metals and alloys by means of field ion microscope and atom probe Krautz, E. High Temp.-High Pressures (1978) 10, 141
- 91 Investigations of chromium-gas surface reaction with the field ion microscope and atom probe Krautz, E. Jenny, R. Leisch, M. Z. Metallkd. (1978) 69, 501-5
- 92 Highly charged ions in field evaporating 4d-transition metals Krishnaswamy, S. V. McLane, S. B. Surf. Sci. (1978) 70, 265-70
- 93 Mechanism of adsorption in an electrical field Kuliev, A. M. Rasulov, A. M. Teimurova, F. A. Dzhafarova, F. S. Gasanov, N. G. Zh. Fiz. Khim. (1978) 52, 712-3
- 94 Electron spin polarization in field emission Landolt, M. Campagna, M. Surf. Sci. (1978) 70, 197-210
- 95 Spin polarization of electrons field emitted from single-crystal iron surfaces Landolt, M. Yafet, Y. Phys. Rev. Lett. (1978) 40, 1401-3
- 96 Positive spin polarization in field emission from nickel (110) and demagnetization by hydrogen adsorption Landolt, M. Yafet, Y. Wilkens, B. Campagna, M. Solid State Commun. (1978) 25, 1141-4
- 97 Field ion microscopy of polycrystalline iron whiskers Lashmore, D. Melmed, A. J. J. Appl. Phys. (1978) 49, 4586-7
- 98 Indirect long-range oscillatory interaction between adsorbed atoms Lau, K. H. Kohn, W. Surf. Sci. (1978) 75, 69-85
- 99 Low voltage field emission cathodes from eutectic composites Lee, J. D. (1978) 125, Univ. Microfilms Int., Order No. 7907227
- 100 Surface electronic wave functions of a semi-infinite muffin-tin lattice. II. Application to copper (001) and (110) Lee, M. J. G. Holzwarth, N. A. W. Phys. Rev. B, Condens. Matter (1978) 18, 5365-78
- 101 Periodic field-dependent photocurrent from a tungsten field emitter Lee, M. J. G. Reifenberger, R. Surf. Sci. (1978) 70, 114-30
- 102 Field-ionization processes in excited atoms Littman, M. G. Kash, M. M. Kleppner, D. Phys. Rev. Lett. (1978) 41, 103-7

Atom Probe Field-Ion Microscopy Bibliography for 1978

- 103 Comparative study of behavior of some C₇ hydrocarbons in a field ion source Liitmaa, M.
Rang, S.
Eisen, O. Zh. Org. Khim. (1978)
14, 1335
- 104 High-field electrolysis of zinc oxide surface layers while field emitting electrons or ions Marien, J. Bull. Soc. R. Sci. Liege (1978) 47, 249-64
- 105 Argon field ion microscopy of zinc oxide emitters oriented (0001) and (0001) Marien, J. Bull. Soc. R. Sci. Liege (1978) 47, 237-48
- 106 Atom probe microanalytical studies of some commercially important steels Miller, M. K.
Beaven, P. A.
Lewis, R. J.
Smith, G. D. W. Surf. Sci. (1978) 70, 470-84
- 107 The influence of silicon on the impact and tensile properties of steels Mintz, B.
Turner, P. J. Metall. Trans. (1978)
9A, 1611
- 108 Applications of computer simulation to materials research Mishra, N. S.
Ranganathan, S. Proc. Ind. Acad. Sci., Section C (1978) 1
- 109 Field emission spectroscopy of transition metals Modinos, A. Surf. Sci. (1978) 70, 52-91
- 110 FIM observation of an iron-coated tungsten tip Morikawa, H.
Suzuki, T.
Terao, T.
Yashiro, Y. Surf. Sci. (1978) 75, 38-48
- 111 Spacecraft charging control by thermal field emission with lanthanum-hexaboride emitters Morris, J. F. NASA Tech. Memo.
(1978) NASA-TM-78990,
E-9773
- 112 Developments in field ion microscopy Müller, E. W. Diffraction Imaging Tech.
Mater Sci. (2nd Ed.)
(1978) 2, 811-47,
North-Holland,
Amsterdam, Neth.
- 113 Surface studies by field emission Müller, E. W. Diffraction Imaging Tech.
Mater Sci. (2nd Ed.)
(1978) 2, 791-810,
North-Holland,
Amsterdam, Neth.
- 114 Field emission from bismuth sulfide Nabitovich, I. D.
Sukhorskii, Y. S.
Bigun, G. I.
Bandrivchak, E. V. Fiz. Elektron. (Lvov) (1978) 16, 82-4

Atom Probe Field-Ion Microscopy Bibliography for 1978

- 115 Many-body and spin-dependent surface potential effects in spin-polarized field emission Nagy, D. D. (1978) 187, Univ. Microfilms Int., Order No. 7818778
- 116 Atom-probe FIM studies of beta-silicon carbide whiskers Nakamura, S. Kuroda, T. Surf. Sci. (1978) 70, 452-8
- 117 TOF atom-probe investigation of metal oxides Ng, Y. S. McLane, S. B. Tsong, T. T. J. Appl. Phys. (1978) 49, 2517-22
- 118 ToF (time-of-flight) atom-probe FIM investigation of surface segregation in dilute alloys Ng, Y. S. Tsong, T. T. Surf. Sci. (1978) 78, 419-38
- 119 FIM studies of the lattice damage in tungsten following low-energy helium ion bombardment Nicholson, R. J. K. Walls, J. M. J. Nucl. Mater. (1978) 76-77, 251-2
- 120 Surface shape changes of a tungsten emitter studied by field ion microscopy Nishigaki, S. Nakamura, S. Kuroda, T. Jpn. J. Appl. Phys. (1978) 17, 79-83
- 121 Field ion microscopy of structures at interfaces Nishikawa, O. • Nippon Kinzoku Gakkai Kaiho (1978) 17, 746-52
- 122 Field ion microscope Nishikawa, O. Gendai Kagaku (1978) 93, 38-47
- 123 Direct observation of atoms and application to ultra-fine processing Nishikawa, O. Denshi Tsushin Gakkaishi (1978) 61, 658-65
- 124 Direct observation of the behavior of surface atoms using a field ion microscope Nishikawa, O. Hyomen (1978) 16, 427-35
- 125 Field ion image qualities of gallium, indium and tin on tungsten and work functions Nishikawa, O. Saadat, A. R. Surf. Sci. (1978) 70, 292-301
- 126 Field-ion microscopic study of surface damage of contacts caused by closing voltages Nishikawa, O. Walko, R. J. Saadat, A. R. IEEE Trans. Components, Hybrids, Manuf. Technol. (1978) CHMT-1, 94-9
- 127 Atom-probe field-ion microscopy of gallium arsenide and gallium phosphide Ohno, Y. Kuroda, T. Nakamura, S. Surf. Sci. (1978) 75, 689-702

Atom Probe Field-Ion Microscopy Bibliography for 1978

- 128 Mechanisms of field ionization and field evaporation on semiconductor surfaces Ohno, Y.
Nakamura, S.
Kuroda, T. Jpn. J. Appl. Phys. (1978) 17, 2013-22
- 129 Coadsorption of lanthanum and boron on tungsten Okuno, K.
Sasaki, T.
Kim, H.
Inoue, T.
Sugata, E. Jpn. J. Appl. Phys. (1978) 17, 719-20
- 130 Field electron emission from dense array of microneedles of tungsten Okuyama, F.
Aoyagi, M.
Kitai, T.
Ishikawa, K. J. Vac. Sci. Technol. (1978) 15, 98-102
- 131 Properties of multiple field ion emitters of tungsten and a simple method for improving their ionization Okuyama, F.
Beckey, H. D. Int. J. Mass Spectrom. Ion Phys. (1978) 27, 391-402
- 132 Fine-focus ion beams with field ionization Orloff, J.
Swanson, L. W. J. Vac. Sci. Technol. (1978) 15, 845-8
- 133 Imaging atom-probe mass spectroscopy Panitz, J. A. Prog. Surf. Sci. (1978) 8, 219-62
- 134 Vacancies in Fe-Al alloys Paris, D.
Lesbats, P. J. Nucl. Mater. (1978) 69-70, 628
- 135 Effect of individual fields of ions on field emission Petrosov, V. A. Zh. Tekh. Fiz. (1978) 48, 1949-56
- 136 I-F emission, field ion emission into plasma Porotnikov, A. A.
Rodnevich, B. B. Sov. Phys.-Tech. Phys. (1978) 23, 740
- 137 Thermal field emission taking into account individual fields of ions Porotnikov, A. A.
Rodnevich, B. B. Zh. Prikl. Mekh. Tekh. Fiz. (1978) 25-8
- 138 Intensity dependence of helium-neon laser-induced photo field emission from tantalum Radon, T.
Kleint, C. Acta Univ. Wratislav., Mat., Fiz., Astron. (1978) 31, 51-60
- 139 Field desorption of cluster ions: a method of testing the mechanism of ion formation Rechsteiner, C. E., Jr.
Youngless, T. L.
Bursey, M. M.
Buck, R. P. Int. J. Mass Spectrom. Ion Phys. (1978) 28, 401-7
- 140 The potential above field adsorbed gas atoms Rendulic, K. D. Surf. Sci. (1978) 70, 234-8
- 141 Energy distribution study of field-emitted electrons from (100) and (111) nickel planes Rihon, N. Phys. Status Solidi A (1978) 49, 697-703

Atom Probe Field-Ion Microscopy Bibliography for 1978

- 142 Field emission energy distribution from zinc oxide: observation of surface state emission Rihon, N. Surf. Sci. (1978) 70, 92-100
- 143 Possible applications of a high brightness gallium source to ion microprobes Ringo, G. R. Krohn, V. E. Nucl. Instrum. & Methods (1978) 149, 735
- 144 Evidence of halogen exchange between gaseous halogenated alkanes and solid alkali halides obtained by field desorption mass spectrometry Röllgen, F. W. Ott, K. H. J. Chem. Soc. Comm. (1978) 612
- 145 Adsorption and self-diffusion on tungsten surfaces with adsorbed palladium Roux, R. Piquet, A. Moulin, Y. Uzan, R. Drechsler, M. Surf. Sci. (1978) 71, 375
- 146 On the limits of resolution of field emission and ion microscopes Roy, D. K. Roy, P. N. Proc. Nucl. Phys. Solid State Phys. Symp. (1978) 21C, 239
- 147 Anomalous field evaporation of silicon Sakurai, T. Culbertson, R. J. Melmed, A. J. Surf. Sci. (1978) 78, L221-6
- 148 Study of semiconductor surfaces using an atom-probe field ion microscope. (1) Hydrogen chemisorption on silicon Sakurai, T. Tsong, T. T. Culbertson, R. J. J. Vac. Sci. Technol. (1978) 15, 647-9
- 149 Atom probe: experimental results on tungsten and iron-aluminum alloy samples Sarrau, J. M. Bostel, A. Martin, C. Gallot, J. C. R. Hebd. Seances Acad. Sci., Ser. B (1978) 286, 285-8
- 150 The study of radiation damage in metals with the field-ion and atom-probe microscopes Seidman, D. N. Surf. Sci. (1978) 70, 532-65
- 151 Field desorption of potassium from (001), (011) and (112) tungsten planes Sendecka, K. Meclewski, R. Surf. Sci. (1978) 70, 255-64
- 152 A field emitter electron beam exposure system Stille, G. Astrand, B. Phys. Scr. (1978) 18, 367-71
- 153 Thermodynamics of surface clusters - direct observation of diatomic rhenium on tungsten (211) Stolt, K. Wrigley, J. D. Ehrlich, G. J. Chem. Phys. (1978) 69, 1151-61

Atom Probe Field-Ion Microscopy Bibliography for 1978

- 154 Contribution of field effects to the achievement of higher brightness ion sources Sudraud, P.
Van de Walle, J.
Colliex, C.
Castaing, R. Surf. Sci. (1978) 70,
392-402
- 155 Field emission microscopy and emission properties of uranium (film system) Suvorov, A. L. Reaktor. Materialoved.
Tr. Konf. po Reaktor.
Materialoved,
Alushta, 29 Maya-1
Iyunya, (1978) 163-71
- 156 Field emission microscopy of defects in thoriated tungsten caused by fission fragments Suvorov, A. L.
Kukavadze, G. M.
Bobkov, A. F. Reaktor. Materialoved.
Tr. Konf. po Reaktor.
Materialoved.
Alushta, 29 Maya-1
Iyunya, (1978) 144-61
- 157 Current fluctuations from various crystal faces of a clean tungsten field emitter Swanson, L. W. Surf. Sci. (1978) 70,
165-80
- 158 Effect of the surface potential barrier on the photofield emission of electrons from metals Taranko, E. Ann. Univ. Mariae
Curie-Sklodowska, Sect.
AAA (1978) 33, 11-23
- 159 Field emission of electrons from the d band of the transition metals Taranko, R. Ann. Univ. Mariae
Curie-Sklodowska, Sect.
AAA (1978) 33, 49-63
- 160 Field emission of electrons from tungsten Taranko, R. Ann. Univ. Mariae
Curie-Sklodowska, Sect.
AAA (1978) 33, 37-48
- 161 Two-band model in field emission of electrons from metals Taranko, R. Ann. Univ. Mariae
Curie-Sklodowska, Sect.
AAA (1978) 33, 25-36
- 162 Instability of adatom lattices and fluctuations in field emission current Tarasenko, A. A.
Tomchuk, P. M.
Chumak, A. A. Fiz. Tverd. Tela
(Leningrad) (1978) 20,
1213-7
- 163 Photoelectric emission from a tungsten or tungsten-barium tip subjected to an electric field Teisseyre, Y.
Haug, R.
Coelho, R. Surf. Sci. (1978) 75,
592-608
- 164 FIM observation of radiation damages in neutron-irradiated tungsten Terao, T.
Hayashi, Y.
Yoshida, H.
Yashiro, Y. Scr. Metall. (1978) 12,
827-9

Atom Probe Field-Ion Microscopy Bibliography for 1978

- 165 High-field electronic conduction in insulators Thornber, K. K. Solid-State Electron. (1978) 21, 259-66
- 166 Measurement of the field evaporation rate of several transition metals Tsong, T. T. J. Phys. F (1978) 8, 1349-52
- 167 Field ion image formation Tsong, T. T. Surf. Sci. (1978) 70, 211-33
- 168 Behavior and properties of single atoms on metal surfaces Tsong, T. T. Cowan, P. L. CRC Crit. Rev. Solid State Mater. Sci. (1978) 7(4), 289-316
- 169 Quantification of atom-probe FIM data and an application to the investigation of surface segregation of alloys Tsong, T. T. Ng, Y. S. Krishnaswamy, S. V. Appl. Phys. Lett. (1978) 32, 778-80
- 170 TOF (time of flight) atom-probe mass spectra of gallium arsenide Tsong, T. T. Ng, Y. S. Melmed, A. J. Surf. Sci. (1978) 77, L187-92
- 171 Single atom self-diffusion on nickel (331) Tung, R. T. Graham, W. R. J. Chem. Phys. (1978) 68, 4764-5
- 172 Statistics of 1-dimensional atom motion with next-nearest neighbor transitions Twigg, M. E. Report (1978) R-811, UILU-ENG-2204 Order No. AD-A058494 137
- 173 Influence of the surface structure on the adsorption of ethylene on platinum, as studied by field emission probe-hole microscopy Van Strien, A. J. Nieuwenhuys, B. E. Ned. Tijdschr. Vacuumtech. (1978) 16, 127-8
- 174 Imaging of microstructures in a field ion microscope Vijendran, P. Ramanathan, D. Dass, S. Proc. Symp. Struct. Prop. Correl. Instrum. Tech. Mater. Res. (1978) 219-23, India Dep. Atomic Energy, Bombay, India
- 175 Thermionicfield emission from a metal into organic polymer semiconductor films Vodenicharova, M. M. Phys. Status Solidi A (1978) 49, K49-53
- 176 An atom probe field ion microscope study of the range and diffusivity of helium in tungsten Wagner, A. (1978) 273, Univ. Microfilms Int., Order No. 7902377
- 177 Morphology and chemistry of internally nitrided Fe-3 at. % Mo Wagner, R. Brenner, S. S. Acta Metall. (1978) 26, 197-206

Atom Probe Field-Ion Microscopy Bibliography for 1978

- 178 A specimen-exchange device for an ultra-high vacuum atom-probe field-ion microscope Wagner, A.
Hall, T. M.
Seidman, D. N. Vacuum (1978) 28,
543-5
- 179 An atom-probe field-ion microscope for the study of the interaction of impurity atoms or alloying elements with defects Wagner, A.
Hall, T. M.
Seidman, D. N. J. Nucl. Mater. (1978)
69-70, 413-23
- 180 Field ion microscopy of metal-metal contacts Walko, R. J. Surf. Sci. (1978) 70,
302-24
- 181 Studies in field ionization kinetics Warren, S. E. (1978) 9, Univ.
Microfilms Int., Order
No. 7911136
- 182 The role of the atom probe technique in the investigation of continuous transformations Watts, A. J.
Ralph, B. Surf. Sci. (1978) 70,
459-69
- 183 An imaging atom probe using a single time-gated channel plate Waugh, A. R. J. Phys. E (1978) 11,
49-52
- 184 Ring counting in field-ion micrographs Webber, R. D.
Walls, J. M.
Smith, R. J. Microsc. (Oxford)
(1978) 113, 291-9
- 185 The stage II recovery behavior of ion-irradiated Pt(Au) alloys Wei, C.-Y.
Seidmen, D. N. J. of Nucl. Mat. (1978)
69 & 70, 693-5
- 186 Direct observation of the vacancy structure of a (220) platelet in an ion-irradiated platinum-4.0 at. % gold alloy Wei, C.-Y.
Seidman, D. N. Philos. Mag. (1978) 37,
257-72
- 187 Identification of chemisorption levels in iridium by field-emission spectroscopy Williams, R. S.
Wehner, F. S.
Kevan, S. D.
Davis, R. F.
Shirley, D. A. Phys. Rev. Lett. (1978)
41, 323-6
- 188 Microstructural observations on high strength polycrystalline ion whiskers Wilsdorf, H. G. F.
Inal, O. T.
Murr, L. E. Z. Metallkd. (1978) 69,
701
- 189 Critical distance of field ionization Wojciechowski, K. F. Ned. Tijdschr.
Vacuumtech. (1978) 16,
270
- 190 Approximate formula for the emission current density in the second intermediate region of Christov Wysocki, J. K.
Vodenicharov, K. Phys. Status Solidi A
(1978) 50, 411-5

Atom Probe Field-Ion Microscopy Bibliography for 1978

- 191 Observation of oxygen adsorption on molybdenum trioxide by the field electron emission technique Yamada, H.
Azuma, K. J. Res. Inst. Catal.,
Hokkaido Univ. (1978)
26, 1-6
- 192 Some recent results in the study of metals by field ion microscopy (FIM) Yamamoto, M.
Nenno, S. Nippon Kinzoku Gakkai
Kaiho (1978) 17, 910-9
- 193 Field ion microscope study of order-disorder transformations Yamamoto, M.
Nenno, S. Kinzoku Butsuri Semina
(1978) 3, 81-7
- 194 Field emission current instability induced by migrating atoms on tungsten (310) surface Yamamoto, S.
Saitou, N.
Fukuhara, S. Surf. Sci. (1978) 71,
191-8
- 195 Lanthanum hexaboride single crystal hot cathode Yamauchi, T.
et al. Muki Zaishitsu
Kenkyusho Kenkyu
Hokokusho (1978) 17,
121-31
- 196 Radiation damage and stage III defect annealing in thermal neutron irradiated tungsten Young-Won, K.
Galligan, J. M. Acta Metall. (1978) 26,
379
- 197 An annealing study of thermal neutron irradiated tungsten Young-Won, K.
Galligan, J. M. J. Nucl. Mater. (1978)
60-79, 680
- 198 On imaging of aluminium by field ion microscopy Zingg, W.
Warlimont, H. Phys. Status Solidi A
(1978) 45, 117

1979

Atom Probe Field-Ion Microscopy Bibliography for 1979

- 1 Influences of high electric fields on surface reactions of sulfur on metals. Investigated by field desorption Abend, G.
Abitz, R. G.
Block, J. H. Nonlinear Behav. Mol., At. Ions Electr., Magn. Electromagn. Fields, Proc. Int. Meet. Soc. Chim. Phys., 31st Neel, L., ed., (1979) 261-75, Elsevier, Amsterdam, Neth.
- 2 Effect of laser irradiation of a mass-spectrometer field ion source emitter on ion current value Agafonov, I. L.
Faerman, V. I. Prib. Tekh. Eksp. (1979) 218-9
- 3 A differentially pumped low-energy ion beam system for an ultrahigh-vacuum atom probe field-ion microscope Amano, J.
Seidman, D. N. Rev. Sci. Instrum. (1979) 50, 1125-9
- 4 Atom-probe microanalysis Andrén, H.-O.
Nordén, H. Scand. J. Metall. (1979) 8, 147-52
- 5 Flicker-noise spectra of semiconductor field emitters Bakhtizin, R. Z.
Gots, S. S. Izv. Vyssh. Uchebn. Zaved., Fiz. (1979) 22, 145
- 6 Low-temperature field ionization of localized impurity levels in semiconductors Banavar, J. R.
Coon, D. D.
Derkits, G. E., Jr. Appl. Phys. Lett. (1979) 34, 94-6
- 7 Measured temperature drops along field emitters Barnes, G.
Johnson, M. L. J. Phys. D (1979) 12, 1761-7
- 8 Effect of deep capture centers on the emissivity of broad-band semiconductor field-emission cathodes Baskin, L. M.
Egorov, N. V.
Ptitsyn, V. E.
Fursei, G. N. Pis'ma Zh. Tekh. Fiz. (1979) 5, 1345-8
- 9 Atom probe techniques for the study of phase transformations Beaven, P. A.
Miller, M. K.
Smith, G. D. W. Inst. Metall., Ser. 3 (London) (1979) 11, Phase Transform. 2, I/12-4
- 10 Field desorption 'without fields' reply to comments Beckey, H. D. Org. Mass Spectrom. (1979) 14, 292
- 11 Experimental techniques in field ionization and field desorption mass spectrometry Beckey, H. D. J. Phys. E (1979) 12, 72-83

Atom Probe Field-Ion Microscopy Bibliography for 1979

- 12 Study of the kinetics and mechanisms of reactions of organic ions in a time range from 10^{-11} to 10^{-5} sec by mass-spectrometry with field ionization Beckey, H. D.
Bekki, G. D. Kinetich.
Mass-spektrometr. i ee
Analit. Primeneniya, M.
(1979) 222-30
- 13 Field desorption 'without fields' Beckey, H. D.
Röllgen, F. W. Org. Mass Spectrom.
(1979) 14, 188-90
- 14 Field ionization and field desorption mass spectrometry in analytical chemistry Beckey, H. D.
Schulten, H. R. Pract. Spectrosc. (1979)
3, Mass Spectrom.,
145-266
- 15 Optimal positioning of field emitters for ion injection in liquid helium Bhatti, M. H.
McClintock, P. V. Cryogenics (1979) 19,
535-6
- 16 Field emission current fluctuations from single crystals of potassium on tungsten Biernat, T.
Kleint, C. Acta Univ. Wratislav.,
Mat., Fiz., Astron.
(1979) 33, 37-43
- 17 Grain boundary grooving by surface diffusion and free evaporation Binh, V. T.
Moulin, Y.
Uzan, R.
Drechsler, M. Surf. Sci. (1979) 79,
133
- 18 Interaction hydrogen-rhenium surface in the presence of a high electric field. Preliminary results Blaszkiewicz, M. Acta Univ. Wratislav.,
Mat., Fiz., Astron.
(1979) 33, 77-81
- 19 An introduction to several solid state techniques for the study of ion implanted materials Borders, J. A. NATO Adv. Study Inst.
Ser., Ser. B (1979) B47,
Site Charact.
Aggregation Implanted
At. Mater., 399-412
- 20 The application of thin-film field-emission cathodes to electronic tubes Brodie, I.
Spindt, C. A. Appl. Surf. Sci. (1979)
2, 149-63
- 21 Field at the surface of a field cathode Bundza, B. P.
Nepiiko, S. A.
Yas'ko, S. V. Izv. Akad. Nauk SSSR,
Ser. Fiz. (1979) 43,
584-8
- 22 Mobility of oxygen on the (110) plane of tungsten Chen, J. R.
Gomer, R. Surf. Sci. (1979) 79,
413-44
- 23 Field emission of electrons from metal Chocianowski, P. Elektronika (1979) 20,
464-8
- 24 Growth and desorption of indium epitaxial layer investigated by high field microscopy Ciszewski, A. Surf. Sci. (1979) 83,
253-66

Atom Probe Field-Ion Microscopy Bibliography for 1979

- 25 Ion plating by field emission deposition Clampitt, R. Thin Solid Films (1979) 54, 471-8
- 26 Field emission deposition sources Clampitt, R. Thin Solid Films (1979) 58, 129-32
- 27 The oxidation of clean ruthenium surfaces. I. Field ion microscope studies Cranstoun, G. K. L. Appl. Surf. Sci. (1979) 2, 359-74
Pyke, D. R.
- 28 The oxidation of clean ruthenium surfaces. II. Atom probe analyses of oxide films Cranstoun, G. K. L. Appl. Surf. Sci. (1979) 2, 375-81
Pyke, D. R.
Smith, G. D. W.
- 29 Applications of magnetic-sector atom-probe field-ion microscopy Culbertson, R. J., Jr. (1979) Microfilms Int., Order No. 8010043
- 30 Ionization mechanism of gallium on a tungsten field emitter Culbertson, R. J. J. Vac. Sci. Technol. (1979) 16(6), 1868-70
Robertson, G. H.
Sakurai, T.
- 31 Ionization of liquid metals, gallium Culbertson, R. J. J. Vac. Sci. Technol. (1979) 16, 574-6
Sakurai, T.
Robertson, G. H.
- 32 Field ionization of surface adsorbates Culbertson, R. J. Phys. Rev. B, Condens. Matter (1979) 19, 4427-34
Sakurai, T.
Robertson, G. H.
- 33 Time of flight field ionization mass spectrometer (TOFFIMS) Curtis, C. C. Conf. Pap. - Int. Cosmic Ray Conf., 16th (1979) 11, 70-3, Univ. Tokyo, Inst. Cosmic Ray Res., Tokyo, Japan
Hsieh, K. C.
Hudor, A.
Fan, C. Y.
- 34 Effect of field-emission measurements on the form of current-voltage characteristics of a germanium single crystal D'yakonova, N. I. Fiz. Tverd. Tela (Leningrad) (1979) 21, 3130-2
Mileshkina, N. V.
- 35 Effect of adsorption actions on the field-emission and spectral characteristics of germanium D'yakonova, N. I. Izv. Akad. Nauk SSSR, Ser. Fiz. (1979) 43, 1318-21
Mileshkd, G. B.
- 36 Field ionization of molecules (nonequilibrium conditions) Dalidchik, F. I. Teor. Eksp. Khim. (1979) 15, 130-7
- 37 Stability of the field emission of point cathodes passivated by transition metal films Davydova, E. I. Zh. Tekh. Fiz. (1979) 49, 2344-8
Karpenko, A. D.
Shishkin, V. A.

Atom Probe Field-Ion Microscopy Bibliography for 1979

38	Problems in the production and measurement of atomically clean surface environments and their confirmation based on the use of field emission	De Chernatony, L.	Vacuum (1979) <u>29</u> , 389-403
39	Problems in the production and measurement of very high vacuum, especially in applications, and a new approach to measurement based on the use of field emission	De Chernatony, L. Yarwood, J.	Vacuum (1979) <u>29</u> , 125-8
40	Field ionization kinetics. Unimolecular decomposition of the hexanal radical cation over the time range from 10 ps to 10 μ s	Derrick, P. J. Falick, A. M. Lewis, S. Burlingame, A. L.	J. Phys. Chem. (1979) <u>83</u> , 1567-73
41	Adsorption, surface migration and thermal desorption of lanthanum hexaboride on tungsten surface using field emission microscopy	Dharmadhikari, C. V. Joag, D. S. Kanitkar, P. L.	J. Phys. D (1979) <u>12</u> , 809-14
42	The energy spread of metal ions drawn from their liquid	Dixon, A. J.	J. Phys. D. Appl. Phys. (1979) <u>12</u> , L77
43	Effect of electric field and heating on the work of tantalum autocathodes	Drandarov, N.	Bulg. J. Phys. (1979) <u>6</u> , 353-60
44	Effect of oxygen on the emission and surface diffusion of tantalum field-emission cathodes	Drandarov, N.	Bulg. J. Phys. (1979) <u>6</u> , 207-14
45	Actual possibilities of observation by field emission microscopes	Drechsler, M.	Bull. Cercle Etud. Met. (1979) <u>14</u> , V/1-15
46	Present possibilities of observation using field emission microscopes	Drechsler, M.	Met. Corros.-Ind. (1979) <u>54</u> , 120-7
47	Experimental investigation of the absolute tunneling current density in field emission from tungsten (110)	Ehrlich, C. D.	(1979) 154, Univ. Microfilms Int., Order No. 7928123
48	On the field penetration into semiconductors in the field ion microscope	Ernst, L.	Surf. Sci. (1979) <u>85</u> , 302-8
49	Appearance potential measurements on singly and doubly charged field evaporated and field ionized metal ions	Ernst, N.	Ultramicroscopy (1979) <u>4</u> , 369

Atom Probe Field-Ion Microscopy Bibliography for 1979

50	Experimental investigation on field evaporation of singly and doubly charged rhodium	Ernst, N.	Surf. Sci. (1979) <u>87</u> , 469-82
51	Field ion appearance spectroscopy investigations on ion generating processes at field emitter surfaces	Ernst, N. Bozdech, G. Block, J. H.	Surf. Sci. (1979) <u>80</u> , 645-55
52	Field ionsation and surface plasmons: An alternative theoretical formulation	Forbes, R. G.	Nederlands Tijdschrift voor Vacuumtechniek (1979) <u>16</u> , 268-9
53	Conceptual errors in the theory of field adsorption	Forbes, R. G.	Surf. Sci. (1979) <u>87</u> , L278-84
54	The influence of depolarisation on surface-atom polarisation energy	Forbes, R. G.	Surf. Sci. (1979) <u>82</u> , L620-4
55	Evaluation method for integral energy distributions of field-emitted ions	Frank, O. Schmidt, W. A.	Int. J. Mass Spectrom. Ion Phys. (1979) <u>29</u> , 117-24
56	Field ion microscopy of aluminum alloys	Furrer, P. Kysela, S. Zingg, W.	Aluminium (Duesseldorf) (1979) <u>55</u> , 590-4
57	Effect of a magnetic field on field emission from tungsten	Fursei, G. N. Ptitsyn, V. E. Egorov, N. V.	Pis'ma Zh. Tekh. Fiz. (1979) <u>5</u> , 1161-4
58	Field-ion and electron microscopies of carbon tips	Futamoto, M. Hosoki, S. Kawabe, U.	Surf. Sci. (1979) <u>86</u> , 718-22
59	Field ionization of excited states of potassium	Gallagher, T. F. Cooke, W. E.	Phys. Rev. A (1979) <u>19</u> , 694-9
60	Field-ion microscopy of a niobium-zirconium alloy	Gärber, R. I. Ksenofontov, V. A. Kul'ko, V. B. Lazarev, B. G. Mikhailovskii, I. M.	Fiz. Tverd. Tela (Leningrad) (1979) <u>21</u> , 2073-8
61	Green functions in an external electric field	Gavrilov, S. P. Gitman, D. M. Shvartsman, S. M.	Yad. Fiz. (1979) <u>29</u> , 1097-110

Atom Probe Field-Ion Microscopy Bibliography for 1979

- 62 Ion-molecule and radical reactions in condensed layers studied by low temperature field ionization mass spectrometry Gierlich, H. H.
Röllgen, F. W. Int. J. Mass Spectrom. Ion Phys. (1979) 29, 125
- 63 Hydrogen-platinum interaction in a high electric field. Preliminary FIM results Gierowska-Pluta, E. Acta Univ. Wratislav., Mat., Fiz., Astron. (1979) 33, 135-8
- 64 Field desorption of nonelectrolytes using simply activated wire emitters Giessmann, U.
Heinen, H. J.
Röllgen, F. W. Org. Mass Spectrom. (1979) 14, 177-9
- 65 On the electric field distribution within the field ion microscope and near the surface of field emitters Gipson, G. S.
Yannitell, D. W.
Eaton, H. C. J. Phys. D (1979) 12, 987-96
- 66 On the mechanism of liquid metal electron and ion sources Gomer, R. Appl. Phys. (1979) 19, 365-75
- 67 Recent applications of field emission microscopy Gomer, R. CRC Crit. Rev. Solid State Mater. Sci. (1979) 8, 119-34
- 68 Emission characteristics of tungsten-uranium dioxide cold cathode Goodrum, J. W.
Elfe, T. B.
Hutta, J. J. Conf. In Situ Compos., (Proc.) (1979) 3, 202-8
- 69 Characteristics of the luminescence clean surfaces of refractory metals in a stream of field electrons Gorbatyi, N. A.
Belyaev, A. V.
Trifonov, V. S. Izv. Akad. Nauk SSSR, Ser. Fiz. (1979) 43, 534-7
- 70 Field-induced redistribution processes in adsorption layers of hydrogen on ruthenium Greiner, G.
Menzel, D.
Klein, R. Surf. Sci. (1979) 84, 129-40
- 71 Photon stimulated field electron emission from semiconductor Herman, M. H.
Tsong, T. T.
Melmed, A. J. Amer. Phys. Soc. (1979) 24, 284
- 72 Photon excited field emission from a semiconductor surface Herman, M. H.
Tsong, T. T. Phys. Lett. A (1979) 71A, 461-3
- 73 The emission of electrons into gases from thin tungsten wires subjected to strong electric fields Hibbert, D. B.
Robertson, A. J. B. Int. J. Electron. (1979) 46, 109-24
- 74 The effect of cathode geometry on the emission characteristics of low voltage field emitters fabricated from uranium dioxide-tungsten composites Hill, D. N. (1979) 238, Univ. Microfilms Int., Order No. 8001359

Atom Probe Field-Ion Microscopy Bibliography for 1979

- 75 A high resolution investigation of the decompton of a nickel aluminum alloy Hill, S. A.
Ralph, B. Inst. Metall Ser. 3
(London) 1979 11,
Phase Transform. 2, 44
- 76 Dynamic correlations in an electron gas. I. First-order perturbation theory Holas, A.
Aravind, P. K.
Singwi, K. S. Phys. Rev. B, Condens. Matter (1979) 20,
4912-34
- 77 Field desorption 'without fields'
Comments Holland, J. F. Org. Mass Spectrom.
(1979) 14, 291
- 78 Field emission characteristics of carbon tips Hosoki, S.
Yamamoto, S.
Futamoto, M.
Fukuhara, S. Surf. Sci. (1979) 86,
723-33
- 79 Appearance potentials of field-desorbed silver ions Hummel, E.
Domke, M.
Block, J. H. Z. Naturforsch.
(1979) 34A, 46-54
- 80 FIM observation of defect clusters in tungsten irradiated with 200 KeV carbon⁽¹⁺⁾ ion Igata, N.
Shibata, K.
Sato, S. Radiat. Eff. (1979) 41,
251-60
- 81 A field ion microscope study of microstructural features of solar collector coatings Inai, O. T.
Yarbrough, W. Thin Solid Films
(1979) 64, 129-41
- 82 Surface analysis of field-ion samples exposed to the plasma of the impurities studies experiment (ISX-A) tokamak Kellogg, G. L.
Clausing, R. E. Appl. Phys. Lett. (1979)
35, 109-11
- 83 Surface analysis of field emitter samples exposed to the plasmas of PLT and ISX Kellogg, G. L.
Panitz, J. A. Ultramicroscopy (1979)
4, 361
- 84 Field desorption and field ion surface studies of samples exposed to the plasmas of PLT and ISX Kellogg, G. L.
Panitz, J. A. J. Nucl. Mater. (1979)
85-86, 951-5
- 85 The application of high-field surface analytical techniques to the study of plasma-wall interactions in PLT Kellogg, G. L.
Panitz, J. A. Appl. Surf. Sci. (1979)
3, 13-37
- 86 Study of phase transitions in alloy H55M20B25 quenched with different velocities Khlyntsev, V. P.
Kudrayavtsev, A. N.
Potapov, L. P.
Kirienko, V. N. Fiz. Metal. Metalloved.
(1979) 47, 815-20

Atom Probe Field-Ion Microscopy Bibliography for 1979

- 87 Field-ion microscopic study of a nickel-niobium amorphous alloy transition to crystalline state Khlyntsev, V. P.
Potapov, L. P.
Kirienko, V. I. Fiz. Met. Metalloved.
(1979) 47, 1316-19
- 88 Band structure effects on the current-voltage characteristics of M-germanium monosulfide-M junctions in the field emission region Khristov, S.
Vodenicharov, K. Phys. Status Solidi A
(1979) 51, 201-7
- 89 Periodic current deviations of photo field emission from tantalum and their frequencies Kleint, C.
Radon, T. Acta Univ. Wratislav.,
Mat., Fiz., Astron.
(1979) 33, 29-36
- 90 FEM and FIM study of the work function of stepped metal surfaces Knor, Z. Collect. Czech. Chem. Commun. (1979) 44,
3434-40
- 91 Apparatus for studying field emission in nano- and subnanosecond time ranges Koval, B. A.
Proskurovskii, D. I.
Rotshtein, V. P. Prib. Tekh. Eksp.
(1979) 243-7
- 92 Thin film characterization by atom probe field ion microscopy Krishnaswamy, S. V.
Messier, R.
Ng, Y. S.
Tsong, T. T. Appl. Phys. Lett. (1979)
35, 870-2
- 93 Dependence of electron-emission current of tungsten/europium(II) sulfide field emitters as a function of annealing temperature Kuhlmann, E.
Kisker, E. J. Magn. Magn. Mater.
(1979) 13, 209-10
- 94 Fabrication of low voltage field emitter arrays from metal oxide-metal composites Lee, J. D.
Cochran, J. K.
Hill, D. N.
Chapman, A. T.
Feeney, R. K. Conf. In Situ Compos.
(Proc.) (1979) 3, 209-20
- 95 Study of the temperature dependence of vaporization fields of tungsten Lenkow, W.
Parnicka, R. Mater. Semin. Nauk.
Wydz. Mat.-Przyr.,
Wyzsza Szkoła Pedagog.
Częstochowie (1979) 3,
27-9
- 96 Gallium-field-ion emission from liquid point anodes Mair, G. L. R.
Von Engel, A. J. Appl. Phys. (1979)
50, 5592-5
- 97 Field-ion transmission microscopy Melmed, A. J.
Smit, J. J. Phys. E (1979) 12,
355-6

Atom Probe Field-Ion Microscopy Bibliography for 1979

- 98 Evidence for reconstructed (001) tungsten obtained by field-ion microscopy Melmed, A. J.
Tung, R. T.
Graham, W. R.
Smith, G. D. W. Phys. Rev. Lett. (1979)
43, 1521-4
- 99 A study on the kinetic energy release in metastable transitions generated by electron impact and field ionization Migahed, M. D.
Abd El-Kader, F. H. Int. J. Mass Spectrom. Ion Phys. (1979) 31, 373-9
- 100 Field-ion microscopic study of the collective-field evaporation of tungsten atoms Mikhailovskii, I. M.
Dranova, Z. I.
Ksenofontov, V. A.
Kul'ko, V. B. Zh. Eksp. Teor. Fiz. 76, 1309-15
- 101 A versatile time-of-flight atom probe for metallurgical applications Miller, M. K.
Beaven, P. A.
Smith, G. D. W. Surf. Interface Anal. (1979) 1, 149-60
- 102 Tempering of carbon martensites Miller, M. K.
Beaven, P. A.
Smith, G. D. W. Inst. Metall., Ser. 3 (London) (1979) 11, Phase Transform. II, 114-6
- 103 Strongly anisotropic field ionization of a common deep level in gallium arsenide Mircea, A.
Mitonneau, A. J. Phys., Lett. (Orsay, FR) (1979) 40, L31-3
- 104 Depolarization of hot photoluminescence in gallium arsenide crystals in a magnetic field Mirlin, D. N.
Nikitin, L. P.
Reshina, I. I.
Sapega, V. F. Pis'ma Zh. Eksp. Teor. Fiz. (1979) 30, 419-22
- 105 Applications of computer simulation to materials research Mishra, N. S.
Ranganathan, S. Proc. - Indian Acad. Sci. C (1979) 2, 1-15
- 106 Field desorption in the field ion microscope Moore, A. J. W.
Spink, J. A. Phys. Mater., Borland, D. W., Clarebrough, L. M., Moore, A. J. W., eds., (1979) 170-8, Univ. Melbourne, Australia
- 107 The role of substrate dislocations and grain boundaries in the nucleation and growth of thin electrochemical overgrowths. TEM and FIM studies Murr, L. E.
Inal, O. T. Phys. Status Solidi A (1979) 51, 345-58
- 108 Many-body and spin-dependent surface potential effects in spin-polarized field emission from metals Nagy, D.
Cutler, P. H.
Feuchtwang, T. E. Phys. Rev. B, Condens. Matter (1979) 19, 2964-74

Atom Probe Field-Ion Microscopy Bibliography for 1979

- 109 Atom probe FIM and its applications to surface analysis of minute areas Nakamura, S. Koseido (Suita, Jpn.) (1979) 9, 7-17
- 110 FEM and FIM study of field emitters Nakamura, S. Mem. Inst. Sci. Ind. Res., Osaka Univ. (1979) 36, 1-13
- 111 ToF (time-of-flight) atom probe FIM study of lanthanum hexaboride single crystals Nakamura, S. Ng, Y. S. Tsong, T. T. McLane, S. B., Jr. Surf. Sci. (1979) 87, 656-64
- 112 The formation of negative ions in high electric fields Nazarenko, V. A. Pokhodenko, V. D. Int. J. Mass Spectrom. Ion Phys. (1979) 31, 381-5
- 113 Absolute composition depth profile of a NiCu alloy in a surface segregation study Ng, Y. S. Tsong, T. T. McLane, S. B. Jr. Phys. Rev. Lett. (1979) 42, 588
- 114 Atom probe FIM investigation of surface segregation in nickel-copper stainless steel 410 and platinum-gold alloys Ng, Y. S. Tsong, T. T. McLane, S. B., Jr. Surf. Sci. (1979) 84, 31-53
- 115 Registering device for atom probe Nikonenkov, N. V. Instrum. Exper. Technol. (1979) 3, 196-9
- 116 Photon-induced field ionization mass spectrometry of ethylene on silver Nishigaki, S. Drachsel, W. Block, J. H. Surf. Sci. (1979) 87, 389-409
- 117 Field ion microscopy - direct observation of atoms Nishikawa, O. Kagaku (Tokyo) (1979) 49, 19-27
- 118 FIM observation of a gallium (3×3) superstructure on tungsten and molybdenum (011) Nishikawa, O. Yasuoka, M. Surf. Sci. (1979) 87, L239-42
- 119 Notes on photon assisted field ionization. Reply to comments Niu, B. H. C. Bryant, P. J. J. Chem. Phys. (1979) 70, 2584-5
- 120 A novel technique for preparing tungsten field cathodes with (001) orientation Okuyama, F. Phys. Status Solidi A (1979) 55, 793-800
- 121 Oriented structure transformation from tungsten carbide (W_2C) to tungsten as revealed by field electron and transmission electron microscopy Okuyama, F. Phys. Status Solidi A (1979) 56, 285-92

Atom Probe Field-Ion Microscopy Bibliography for 1979

- 122 Decarburization of monocrystalline ditungsten carbide as revealed by field electron microscopy Okuyama, F. Appl. Surf. Sci. (1979) 3, 1-12
- 123 Angular intensity of a gas-phase field ionization source Orloff, J. J. Appl. Phys. (1979) 50, 6026-7
- 124 Imaging atom-probe and field-ion investigations of hydrogen in metals Panitz, J. A. (1979) DOE/ER-0026, Anal. Hydrogen Solids, 53-63
- 125 Isothermal ramped field-desorption of benzene from tungsten Panitz, J. A. J. Vac. Sci. Technol. (1979) 16, 868-74
- 126 Absorption and condensation of bismuth on tungsten Radon, T. J. Cryst. Growth (1979) 47, 115-20
- 127 Measurement of the total energy distribution in photoinduced field emission Reifenberger, R. Surf. Sci. (1979) 83, 599-616
- 128 Field emission study of dysprosium, holmium, and erbium adsorption on the surface of a point tungsten single crystal Reshetnikova, L. V. Izv. Akad. Nauk SSSR, Ser. Fiz. (1979) 43, 538-42
- 129 The effect of metallic adsorbates on the surface resonances of the tungsten and molybdenum (100) planes Richter, L. Surf. Sci. (1979) 83, 93-116
- 130 Field-emission microscopy from glass-coated tips Fowler-Nordheim emission regime and periodic current oscillations Rihon, N. Phys. Status Solidi A (1979) 54, 189-94
- 131 Influence of steps on the electronic structure of iridium(III) surface: field-emission spectroscopy study Rihon, N. Bull. Soc. R. Sci. Liege (1979) 48, 93-6
- 132 Study of bimolecular reactions on the emitter in field ionization of alkane-alkyne mixtures Ryska, M. Int. J. Mass Spectrom. Ion Phys. (1979) 29, 39-46
- 133 Field ion microscopy of silicon Sakurai, T. Surf. Sci. (1979) 86, 562-71
- 134 Magnetic-sector atom-probe field ion microscopy Sakurai, T. Oyo Butsuri (1979) 48, 55-65
- 135 Photoillumination effect on silicon field ion microscopy Sakurai, T. J. Vac. Sci. Technol. (1979) 16, 626-8
- Culbertson, R. J.
Melmed, A. J.

Atom Probe Field-Ion Microscopy Bibliography for 1979

- | | | | |
|-----|---|--|---|
| 136 | Field ion microscopy of liquid metal gallium | Sakurai, T.
Culbertson, R. J.
Robertson, G. H. | Appl. Phys. Lett. (1979)
<u>34</u> , 11-13 |
| 137 | On the point-defect annealing mechanism for stage III recovery in irradiated or quenched tungsten | Seidman, D. N. | Scr. Metall. (1979) <u>13</u> , 251-257 |
| 138 | High resolution ion beam processes for microstructure fabrication | Seliger, R. L.
Kubena, R. L.
Oiney, R. D.
Ward, J. W.
Wang, V. | J. Vac. Sci Technol. (1979) <u>16</u> , 1610-2 |
| 139 | Effect of substrate temperature on the relation between the work function and the coverage for silver layers adsorbed on tungsten | Sidorski, Z.
Szelwicki, T.
Dworecki, Z. | Thin Solid Films (1979) <u>61</u> , 203-15 |
| 140 | Application of field-ion microscopy to the study of grain boundary dislocations | Smith, D. A. | Scr. Metall. (1979) <u>13</u> , 379-81 |
| 141 | Measurement of the total energy distribution of field-emitted electrons | Stepien, Z.
Lenkow, W. | Pr. Nauk. Inst. Technol. Elektron. Politech. Wrocław. (1979) <u>18</u> , 437-42 |
| 142 | Preliminary study of field emission cold cathode devices prepared from directionally solidified eutectic materials | Stewart, D.
Wilson, P.
Rivlin, V. G. | Conf. In Situ Compos., (Proc.) (1979) <u>3</u> , 232-45 |
| 143 | Energy distribution of EHD emitted gold ion | Sudraud, P.
Colliex, C.
Walle, J. | J. de Phys. Lett. (1979) <u>40</u> , L207 |
| 144 | Gallium phosphide negative-electron-affinity cold cathodes | Sukegawa, T.
Kan, H.
Nakamura, T.
Katsuno, H.
Hagino, M. | J. Appl. Phys. (1979) <u>50</u> , 3780-2 |
| 145 | Field-emission microscope for studying emission properties of single crystal faces | Suvorov, A. L.
Bobkov, A. F.
Kuznetsov, B. Y.
Zaitsev, S. V. | Prib. Tekh. Eksp. (1979), 248-50 |

Atom Probe Field-Ion Microscopy Bibliography for 1979

- 146 Field emission electron microscopic study of a niobium-lanthanum alloy Suvorov, A. L.
Savitskii, E. M.
Burov, I. V.
Litvak, L. N. Splavy Redk. i
Tugoplavk. Met. s
Osob. Fiz. Svoistvami,
M. (1979) 236-41
- 147 Deposition direction dependency of Fe on W tip Suzuki, T.
Shimizu, H.
Morikawa, H.
Yashiro, Y. Surf. Sci. (1979) 86,
42-5
- 148 Field electron and ion source research for high-density information storage system Swanson, L. W.
Orloff, J.
Bell, A. E. Report (1979)
AFAL-TR-79-1133
Order No.
AD-A078520 202
- 149 Emission characteristics of gallium and bismuth liquid metal field ion sources Swanson, L. W.
Schwind, G. A.
Bell, A. E.
Brady, J. E. J. Vac. Sci. Technol.
(1979) 16, 1864-7
- 150 Tunneling current due to thermionic-field emission in gold-indium sulfide Schottky-barrier diode Takarabe, K.
Nishino, T.
Hamakawa, Y. Jpn. J. Appl. Phys.
(1979) 18, 107-12
- 151 Influence of surface potential barrier on the photofield emission of electrons by metals Taranko, R. Ann. Univ. Mariae
Curie-Sklodowska, Sect.
AAA (1979) 33, 11-23
- 152 Two-band model of field emission of electrons from metals Taranko, R. Ann. Univ. Mariae
Curie-Sklodowska, Sect.
AAA (1979) 33, 25-36
- 153 Field emission of electrons from tungsten Taranko, R. Ann. Univ. Mariae
Curie-Sklodowska, Sect.
AAA (1979) 33, 37-48
- 154 Field emission of electrons from "d" band of transition metals Taranko, R. Ann. Univ. Mariae
Curie-Sklodowska, Sect.
AAA (1979) 33, 49-63
- 155 Quantitative atom-probe and field ion microscope studies at atomic resolution Tsong, T. T. Chemica. Scr. (1979)
14, 7-15
- 156 Field penetration and band bending for semiconductor of simple geometries in high electric fields Tsong, T. T. Surf. Sci. (1979) 85,
1-8
- 157 Direct observation of the atomic structure of tungsten (100) surfaces Tsong, T. T.
Sweeney, J. Solid State Commun.
(1979) 30, 767-70

Atom Probe Field-Ion Microscopy Bibliography for 1979

- 158 Application of a thermal field emission source for high resolution, high current e-beam microprobes Tuggle, D.
Swanson, L. W.
Orloff, J. J. Vac. Sci. Technol. (1979) 16, 1699-703
- 159 Photon-enhanced field ionization on semiconductor surfaces Viswanathan, B.
Drachsel, W.
Block, J. H.
Tsong, T. T. J. Chem. Phys. (1979) 70, 2582-3
- 160 Direct observation of solute segregation to voids in a fast neutron irradiated Mo-1.0 at. % Ti alloy Wagner, A.
Seidman, D. N. J. Nucl. Mater. (1979) 83, 48-56
- 161 Range profiles of 300- and 475-eV $^4\text{He}^+$ ions and the diffusivity of ^4He in tungsten Wagner, A.
Seidman, D. N. Phys. Rev. Lett. (1979) 42, 515
- 162 Magnification in the field-ion microscope Walls, J. M.
Southworth, H. N. J. Phys. D, Appl. Phys. (1979) 12, 657
- 163 Surface analysis and grain-boundary segregation measurements using atom probe techniques Waugh, A. R.
Southon, M. J. Surf. Sci. (1979) 89, 718-24
- 164 The shape of field-ion emitters Webber, R. D.
Smith, R.
Walls, J. M. J. Phys. D (1979) 12, 1589-95
- 165 The depth of sputtering damage in tungsten by field-ion microscopy Webber, R. D.
Walls, J. M. Radiat. Eff. (1979) 45, 111-8
- 166 Direct observation of the vacancy structure of depleted zones in tungsten irradiated with 30 keV W^+ , Mo^+ or Cr^+ Ions at 10 K Wei, C.-Y.
Seidman, D. N. Applied Phys. Lett. (1979) 34, 622-4
- 167 Fine scale analysis of partitioning in pearlitic steels Williams, P. R.
Miller, M. K.
Beaven, P. A.
Smith, G. D. W. Inst. Metall., Ser. 3 (London) (1979) 11, Phase Transform II, 98-100
- 168 Structure and initial precipitation in a rapidly solidified nickel superalloy Wood , J. V.
Mills, P. F.
Bingham, J. K.
Bee, J. V. Metall. Trans. (1979) 10A, 575
- 169 Stability of carbon field emission current Yamamoto, S.
Hosoki, S.
Fukuhara, S.
Futamoto, M. Surf. Sci. (1979) 86, 734-42

Atom Probe Field-Ion Microscopy Bibliography for 1979

- 170 Thermoelectrotransfer of atoms on the surface of tungsten and molybdenum crystals Zakurdaev, I. V. Liberova, G. I. Yakovlev, V. N. Fiz. Tverd. Tela (Leningrad) (1979) 21, 456-62

1980

Atom Probe Field-Ion Microscopy Bibliography for 1980

- 1 Study of evaporation process by field desorption microscopy Abe, T.
Hirano, K. Proc. 27th IFES,
Tokyo, (1980) 15,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 2 Imaging of pure Al and Al-Cu alloy Abe, T.
Miyazaki, K.
Hirano, K. Proc. 27th IFES,
Tokyo, (1980) 81,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 3 Characteristics of a volcano field ionization source mass spectrometer operating at 30 kV acceleration voltage Aberth, W. Biomed. Mass Spectrom.
(1980) 1, 367-71
- 4 Direct determination of radiation damage profiles in the order-disorder alloy platinum-cobalt (Pt_3Co) irradiated with low-energy (500-2500 eV) neon⁺ ions Aidelberg, J.
Seidman, D. N. Nucl. Instrum. Methods
(1980) 170, 413-7
- 5 Emission characteristics of a liquid cesium ion source Aitken, K. L.
Mair, G. L. R. J. Phys. D (1980) 13,
2165-73
- 6 Angular distributions of ions produced by field ionization Aleksandrov, M. L.
Gall, L. N.
Pavlenko, V. A.
Tirkeltaub, S. V. Adv. Mass Spectrom.
(1980) 8B, 1903-7
- 7 Field corrosion of field-ion microscope specimens caused by polymer gaskets Andrén, H.-O.
Henjered, A.
Nordén, H. J. Phys. E (1980) 13,
392-5
- 8 Composition of MC precipitates in a titanium stabilized austenitic stainless steel Andrén, H.-O.
Henjered, A.
Nordén, H. J. Mater. Sci. (1980)
15, 2365-8
- 9 Atom-probe analysis of a high speed steel Andrén, H.-O.
Nordén, H. Proc. 27th IFES,
Tokyo, (1980) 250,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 10 FIM studies of amorphous metglass 2826 ($\text{Fe}_{40}\text{Ni}_{40}\text{P}_{14}\text{B}_6$) alloy Arise, T.
Lu, H.
Nakamura, M.
Yamamoto, R.
Doyama, M. Proc. 27th IFES,
Tokyo, (1980) 399,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan

Atom Probe Field-Ion Microscopy Bibliography for 1980

- 11 The effect of the applied field on the energy spectra of electrons emitted from microscopic sites on broad-area copper electrodes Athwal, C. S.
Latham, R. V. Ned. Tijdschr.
Vacuumtech. (1980) 18,
125-7
- 12 A micropoint probe technique for identifying field emitting sites on broad area high voltage electrodes Athwal, C. S.
Latham, R. V. Ned. Tijdschr.
Vacuumtech. (1980) 18,
26-7
- 13 Field-ion microscope atom probe microanalysis by metallographic methods Bach, P. W. Ned. Tijdschr.
Natuurkd. (1980) A46,
69-72
- 14 Atom probe analysis of bainitic phase boundaries in a low alloyed chromium-molybdenum steel Bach, P. W.
Beyer, J.
Verbraak, C. A. Ser. Metall. (1980) 14,
205-10
- 15 FIM atom-probe analysis of boundaries in low alloyed CrMo steel Bach, P. W.
Verbraak, C. A. Proc. 27th IFES,
Tokyo, (1980) 254,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 16 Characteristics of flicker noise of silicon field emitters Bakhtizin, R. Z.
Gots, S. S. Radiotekh. Elektron.
(1980) 25, 217-8
- 17 Trace element detection at the atomic level by atom probe microanalysis Beaven, P. A.
Miller, M. K.
Williams, P. R.
Delargy, K. M.
Smith, G. D. W. Phil. Trans. R. Soc.
Lond, A (1980) 295,
131-2
- 18 Activation energy of field emission flicker noise power due to adsorbed potassium on tungsten Beben, J.
Kleint, C.
Meclewski, R. Surf. Sci. (1980) 93,
33-46
- 19 Diffusion of adsorbed sulfur atoms on a tungsten field emitter Bechtold, E.
Leonhard, H. Z. Phys. Chem.
(Wiesbaden) (1980) 120,
65-78
- 20 Decomposition of Cu-Ti-alloys studied by means of the FIM atom-probe Biehl, K.-E. Proc. 27th IFES,
Tokyo, (1980) 267,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 21 Favorable growth conditions of potassium epitaxial layers on tungsten FEM emitter Biernat, T.
Beben, J.
Ciszewski, A. J. Cryst. Growth (1980)
50, 521-6

Atom Probe Field-Ion Microscopy Bibliography for 1980

- 22 Field emission current fluctuations from potassium single crystals Biernat, T.
Kleint, C.
Meclewski, R. Proc. 27th IFES,
Tokyo, (1980) 40,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 23 Interactions of sulfur and nickel:
Preliminary FEM observations Blaszczyzyn, R.
Blaszczyzyn, M.
Meclewski, R.
Madey, T. E.
Melmed, A. J. Proc. 27th IFES,
Tokyo, (1980) 427,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 24 Electron sorption characteristics of thin dielectric layers of SiO and Al₂O₃ Bobev, K.
Vassileva-Popova, J.
Vassilev, N. Proc. 27th IFES,
Tokyo, (1980) 133,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 25 Kinetics of field evaporation (pulsed conditions) Bobkov, A. F.
Suvorov, A. L. Zh. Eksp. Teor. Fiz.
(1980) 79, 1376-84
- 26 Field-ion microscopy of radiation-induced defects in tungsten irradiated by 50 keV tungsten(1+) ions.
I. Procedure and results of the experiment Bobkov, A. F.
Zabolotny, V. T.
Ivanov, L. I.
Kukavadze, G. M.
Makhlin, N. A.
Suvorov, A. L. At. Energ. (1980) 48,
325-6
- 27 The temperature dependence of unimolecular decomposition processes following field ionization Brand, W.
Beckey, H. D.
Fassbender, B.
Heindrichs, A.
Levsen, K. Int. J. Mass Spectrom.
Ion Phys. (1980) 35,
11-22
- 28 Thermal energy distribution and energy deposition during field ionization Brand, W.
Levsen, K. Int. J. Mass Spectrom.
Ion Phys. (1980) 35,
1-9
- 29 Microchemical analysis of steels and other ferrous alloys with the atom-probe Brenner, S. S.
Miller, M. K. Proc. 27th IFES,
Tokyo, (1980) 238,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 30 Trapping of antimony by TiC in ion-implanted iron Brenner, S. S.
Myers, S. M. Proc. 27th IFES,
Tokyo, (1980) 219,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan

Atom Probe Field-Ion Microscopy Bibliography for 1980

- 31 Segregation of antimony and phosphorus to nitride interfaces in iron-molybdenum alloy Brenner, S. S.
Walck, S. D. Proc. 27th IFES,
Tokyo, (1980) 328,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 32 Field emission electric propulsion.
Development and manufacturing of a positive pressure tank Bugeat, J. P.
Morel, R.
Robert, M.
Valentian, D. 1980, ESA-CR(P)-1365
Order No.
81-12165/9 212
- 33 Thorium field ion microscopy Carroll, J. J.
Klein, R.
Melman, A. J. Surf. Sci. (1980) 23,
L93-7
- 34 Pair interaction of metal atoms on a metal surface Casanova, R.
Tsong, T. T. Phys. Rev. B, Condens. Matter (1980) 22, 5590
- 35 Surface diffusion of single W atoms on hydrogen saturated W(123) plane Casanova, R.
Tsong, T. T. Surf. Sci. (1980) 94,
L179-83
- 36 Adatom-adatom interaction on tungsten surfaces Casanova, R.
Tsong, T. T. Proc. 27th IFES,
Tokyo, (1980) 6,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 37 Observation of the gold-tungsten interface by field ion microscopy Cavaleru, A.
Scortaru, A. Rev. Roum. Phys.
(1980) 25, 93-6
- 38 Quantum mechanical estimates of the speed of field ionization of shallow impurity levels Chaudhuri, S.
Coon, D. D.
Derkits, G. E. Appl. Phys. Lett. (1980)
37, 111-3
- 39 Field evaporation end form of LaB₆ and CeB₆ in active and inactive gases Chen, Q.
Adachi, T.
Nakamura, S. Proc. 27th IFES,
Tokyo, (1980) 377,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 40 Field emission of electrons from superconducting and normal electrodes Cobourne, M. H.
Williams, W. T. Ned. Tijdschr.
Vacuumtech. (1980) 18,
32-4
- 41 Field ion microscope studies of the oxidation of iron Cranstoun, G. K. L.
Lynch, J. T. Appl. Surf. Sci. (1980)
5, 161-79
- 42 Atom-probe field-ion microscopy of a high intensity gallium ion source Culbertson, R. J.
Robertson, G. H.
Kuk, Y.
Sakurai, T. J. Vac. Sci. Technol.
(1980) 17, 203-6

Atom Probe Field-Ion Microscopy Bibliography for 1980

- 43 A new grand-scale mass spectrometer: preliminary measurements with field desorption under rapid heating Cullis, P. G.
Neumaan, G. M.
Rogers, D. E.
Derrick, P. J. Adv. Mass Spectrom.
(1980) **8B**, 1729-38
- 44 Sputtering of tungsten: a direct view of a near surface depleted zone created by a single 30 keV⁶³ Cu⁺ projectile Current, M. I.
Seidman, D. N. Nucl. Instrum. Meth.
(1980) **170**, 377-81
- 45 MCP replaces carbon foil in TOF spectrometer Curtis, C. C. Proc. 27th IFES,
Tokyo, (1980) **87**,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 46 Anode behavior in high intensity field emission diodes D'Anna, E.
Leggieri, G.
Luches, A.
Nassisi, V.
Perrone, A.
Perrone, M. R. J. Vac. Sci. Technol.
(1980) **17**, 838-41
- 47 Effect of oxygen adsorption on field-emission properties of a germanium single crystals D'yakonova, N. I.
Mileshkina, N. V. Fiz. Tverd. Tela
(Leningrad) (1980) **22**,
734-7
- 48 Cross-correlation of field emission flicker noise from potassium submonolayers Dabrowski, A.
Kleint, C. Acta Univ. Wratislav.,
Mat., Fiz., Astron.
(1980) **32**, 111-20
- 49 Photofield electron emission from silicon with an atomically clean surface Dadykin, A. A. Radiotekh. Elektron.
(Moscow) (1980) **25**,
2628-33
- 50 Field emission spectroscopy from (111) flat and stepped planes of iridium Dao Viet, D.
Rihon, N.
Mignolet, J. C. P. Phys. Status Solidi A
(1980) **58**, 501-6
- 51 The adsorption, desorption, and exchange reactions of oxygen, hydrogen, and water on platinum surfaces. IV. Field emission studies on the adsorption of water, hydrogen and the reaction between hydrogen and adsorbed oxygen Dawson, P. T.
Peng, Y. K. Surf. Sci. (1980) **22**,
1-13
- 52 Field ionization from impurity states in semiconductors Derkits, G. E., Jr. 1980, 98, Univ.
Microfilms Int., Order
No. 8112590

Atom Probe Field-Ion Microscopy Bibliography for 1980

- 53 Studies of field-emission gallium ion sources Dixon, A. J.
Von Engel, A. Conf. Ser. - Inst. Phys.
(1980) 54, Low-Energy Ion 292-6
- 54 Relation between low and high temperature field ion microscopy Doyama, M.
Obara, M.
Tanigawa, S.
Okura, A.
Nakata, E.
Ariga, K. Proc. 27th IFES,
Tokyo, (1980) 394,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 55 Surface analysis of photon-pulse field desorption mass spectrometry Drachsel, W.
Nishigaki, S.
Block, J. H. Adv. Mass Spectrom.
(1980) 8A, 1037-46
- 56 Photon-induced field ionization mass spectroscopy Drachsel, W.
Nishigaki, S.
Block, J. H. Int. J. Mass Spectrom.
Ion Phys. (1980) 32,
333-43
- 57 Method of studying radiation blistering in an field-ion microscope Dranova, Z. I.
Mikhailovskii, I. M.
Suvorov, A. L. Prib. Tekh. Eksp.,
(1980) 3, 225-8
- 58 On field emitter facetting and its relation to catalysis Drechsler, M. Proc. 27th IFES,
Tokyo, (1980) 143,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 59 A study of the surface self-diffusion of tungsten induced by ion impact Drechsler, M.
Junack, M.
Meclewski, R. Surf. Sci. (1980) 97,
111
- 60 Matter transport on surfaces induced by ion impact (He^+/W) Drechsler, M.
Junack, M.
Meclewski, R. Proc. 27th IFES,
Tokyo, (1980) 199,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 61 Solid state analysis with electrons, ions and x-rays. Field emission microscopy Edelmann, C. Festkoerperanal.
Elektronen, Ionen
Roentgenstr.
Bruemmer, Otto,
Heydenreich, Johannes,
Krebs, and Karl Heinz,
eds., 1980, 263-80, VEB
Dtsch. Verlag Wiss.,
Berlin, GDR
- 62 Quantitative examination of individual atomic events on solids Ehrlich, G. J. Vac. Sci. Technol.
(1980) 17, 9-14

Atom Probe Field-Ion Microscopy Bibliography for 1980

- 63 Analytical field-ion microscopy and its application to solid-state physics and material research Ehrlich, G. Wiss. Ber. - Akad. Wiss. D. D. R., Zentralinst. Festkoerperphys. Werkstoffforsch. (1980) 20, 71-92
- 64 Electron-stimulated field desorption of multiply charged rare-gas ions from tungsten surfaces Ernst, N. Phys. Rev. Lett. (1980) 45, 1573-6
- 65 Comparison of Debye temperatures for rhodium surface atoms determined during field evaporation and low energy electron diffraction Ernst, N. Block, J. H. Surf. Sci. (1980) 91, L27-31
- 66 Field desorption microscopy of MC particles in austenitic stainless steels Ernst, N. Bozdech, G. Proc. 27th IFES, Tokyo, (1980) 100, Yashiro, Y. and Igata, N., eds., Univ. of Tokyo, Tokyo, Japan
- 67 Electron-stimulated field desorption of rare gas ions from tungsten, iridium, and rhodium Ernst, N. Bozdech, G. Block, J. H. Proc. 27th IFES, Tokyo, (1980) 151, Yashiro, Y. and Igata, N., eds., Univ. of Tokyo, Tokyo, Japan
- 68 Field evaporation of singly and doubly charged rhodium ions studied by field ion mass spectrometry and field ion appearance spectroscopy Ernst, N. Gozdeck, G. Block, J. H. Ultramicroscopy (1980) 5, 263
- 69 Field desorption of protonated hydrogen molecules from tungsten, iridium, and rhodium Ernst, N. Bozdech, G. Block, J. H. Proc. 27th IFES, Tokyo, (1980) 164, Yashiro, Y. and Igata, N., eds., Univ. of Tokyo, Tokyo, Japan
- 70 Field-emission electron source made from carbon fiber Fialkov, A. S. Osipov, N. I. Anaskin, I. F. Kuprikova, N. D. Prib. Tekh. Eksp. 1980 238-9
- 71 The charge state of the ions produced by a saddle field ion source and its application to the measurement of sputtering yields Fitch, R. K. Mahmoud, E. A. Ghafouri, S. N. Vide, Couches Minces (1980) 201, Suppl., Proc. Int. Conf. Solid Surf., 4th, 2, 1085-8
- 72 Pair potential calculations of single atom self-diffusion activation energies Flahive, P. G. Graham, W. R. Surf. Sci. (1980) 91, 449-62

Atom Probe Field-Ion Microscopy Bibliography for 1980

- 73 The determination of single atom surface site geometry on W(111), W(211) and W(321) Flahive, P. G.
Graham, W. R. Surf. Sci. (1980) 91, 463-88
- 74 Appearance energies for tungsten ions field-evaporated from ionic bonding states Forbes, R. G. J. Phys. D (1980) 13, 1357-63
- 75 Derivation of surface-atom polarizability from field-ion energy deficits Forbes, R. G. Appl. Phys. Lett. (1980) 36, 739-40
- 76 Wave-mechanical theory of field ionization and field-ion energy distribution Forbes, R. G. Prog. Surf. Sci. (1980) 10, 249-85
- 77 An array model for the field adsorption of helium on tungsten (111) Forbes, R. G.
Wafi, M. K. Surf. Sci. (1980) 93, 192-212
- 78 Field desorption emitter temperature regulator for constant temperature control Fraley, D. F.
Woodward, W. S.
Bursey, M. M.
Kenan, W. R., Jr. Anal. Chem. (1980) 52, 2290-3
- 79 Field-ion and electron microscopy study of carbon field emitters Futamoto, M.
Hosoki, S.
Yamamoto, S.
Kawabe, U. Shinku (1980) 23, 430-7
- 80 Field ion microscopy of rare earth hexaborides Futamoto, M.
Kawabe, U. Surf. Sci. (1980) 93, L117-23
- 81 Field ion and field emission microscopy of titanium carbide Futamoto, M.
Yuito, I.
Kawabe, U. Proc. 27th IFES,
Tokyo, (1980) 363,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 82 Field ion sources and their applications to maskless processing Gamo, K.
Namba, S. Iongen to Sono Oyo,
Shinpojumu, 4th, 1980,
165-72, Ion Kogaku
Kendankai, Kyoto,
Japan
- 83 Boron, arsenic and silicon field ion sources Gamo, K.
Ukegawa, T.
Inomoto, Y.
Ka, K. K.
Namba, S. Jpn. J. Appl. Phys.
(1980) 19, L595-8

Atom Probe Field-Ion Microscopy Bibliography for 1980

- 84 Field ion sources using eutectic alloys Gamo, K.
Ukegawa, T.
Namba, S. Jpn. J. Appl. Phys. (1980) **19**, L379-82
- 85 Optical microscopy of field desorption of organic compounds Giessmann, U.
Röllgen, F. W. Proc. 27th IFES, Tokyo, (1980) 170, Yashiro, Y. and Igata, N., eds., Univ. of Tokyo, Tokyo, Japan
- 86 Supply mechanisms and mass transfer effects in field desorption mass spectrometry Giessmann, U.
Stoll, R.
Röllgen, F. W. Adv. Mass Spectrom. (1980) **8A**, 1047-53
- 87 An improved empirical formula for the electric field near the surface of field emitters Gipson, G. S. J. Appl. Phys. (1980) **51**, 3884
- 88 The electric field distribution in the field ion microscope as a function of specimen shank Gipson, G. S.
Eaton, H. C. J. Appl. Phys. (1980) **51**, 5537
- 89 Photo-field emission from semiconductor multitips Givargizov, E. I.
Kulishova, G. G.
Lifshits, I. E.
Stepanova, A. N.
Yatsenko, A. F. Proc. 27th IFES, Tokyo, (1980) 66, Yashiro, Y. and Igata, N., eds., Univ. of Tokyo, Tokyo, Japan
- 90 Field emission electron source with semiconductor tips Givargizov, E. I.
Kudintseva, G. A. Proc. 27th IFES, Tokyo, (1980) 344, Yashiro, Y. and Igata, N., eds., Univ. of Tokyo, Tokyo, Japan
- 91 An investigation of field ionization of helium above single atoms of tungsten emitter Glowacki, M. S.
Lenkow, W. E. Proc. 27th IFES, Tokyo, (1980) 21, Yashiro, Y. and Igata, N., eds., Univ. of Tokyo, Tokyo, Japan
- 92 A simple method for extending the voltage and frequency range of a mercury relay high voltage pulse generator Godfrey, T. J.
Smith, G. D. W. J. Phys. E (1980) **13**, 1287-8
- 93 Surface diffusion of adsorbates and related matters Gomer, R. AIP Conf. Proc. (1980) **61**, Aspects Kinet. Dyn. Surf. React., 207-19

Atom Probe Field-Ion Microscopy Bibliography for 1980

- 94 Direct imaging of grain boundaries Gronsky, R. Grain Boundary Structure and Kinetics (1980) 45-69, ASM Int'l, Metals Park, OH
- 95 Observations of a beryllium adlayer on a tungsten field emitter Grzesiak, W. Krajniak, J. Acta Univ. Wratislav., Mat., Fiz., Astron. (1980) 37, 103-9
- 96 Effect of inelastic scattering on the escape of electrons Gusinskii, E. N. Rabinovich, R. I. Fiz. Tekh. Poluprovodn. (Leningrad) (1980) 14, 1046-53
- 97 Gaseous field ion sources for submicron fabrication Hanson, G. R. Siegel, B. M. Proc. - Electrochem. Soc. (1980) 80-6, Proc. Symp. Electron Ion Beam Sci. Technol., Int. Conf., 9th, 583-93
- 98 FIM observation of radiation damages in W induced by heavy ion irradiation Hayashi, Y. Yoshida, H. Terao, T. Yashiro, Y. Proc. 27th IFES (1980) 229-32, Yashiro, Y. and Igata, N., eds., Univ. of Tokyo, Tokyo, Japan
- 99 The post-ionization of field evaporated ions Haydock, R. Kingham, D. R. Vide, Couches Minces (1980) 201, Suppl., Proc. Int. Conf. Solid Surf., 4th, 2, 1267-70
- 100 Post-ionization of field-evaporated ions Haydock, R. Kingham, D. R. Phys. Rev. Lett. (1980) 44, 1520-3
- 101 Field desorption microscopy of MC particles in austenitic stainless steels Henjered, A. Andrén, H.-O. Nordén, H. Proc. 27th IFES, Tokyo, (1980) 106, Yashiro, Y. and Igata, N., eds., Univ. of Tokyo, Tokyo, Japan
- 102 Atom-probe analysis of TiC coatings on cemented carbides Henjered, A. Nordén, H. Proc. 27th IFES, Tokyo, (1980) 358, Yashiro, Y. and Igata, N., eds., Univ. of Tokyo, Tokyo, Japan
- 103 Emission of electrons from active centers on borosilicate glass subjected to strong electric fields Hibbert, D. B. Proc. 27th IFES, Tokyo, (1980) 138, Yashiro, Y. and Igata, N., eds., Univ. of Tokyo, Tokyo, Japan

Atom Probe Field-Ion Microscopy Bibliography for 1980

- 104 The emission into ultra-high vacuum of electrons from borosilicate glass subjected to a strong electric field Hibbert, D. B.
Robertson, A. J. B. Int. J. Electron. (1980) 48, 301-3
- 105 Proximity effect in an EB lithographic system using a field emission (FE) electron gun Hosaka, S.
Ichihashi, M.
Hayakawa, H.
Nishi, S.
Migitaka, M. Jpn. J. Appl. Phys. (1980) 19, 1797-8
- 106 Angular confinement of tungsten (100) field emitters Hosoki, S.
Yamamoto, S.
Hirai, Y.
Kawase, S. Vide, Couches Minces (1980) 201, Suppl., Proc. Int. Conf. Solid Surf., 4th, 2, 1089-91
- 107 FIM observation of defect clusters in tungsten irradiated with charged particles Igata, N.
Sato, S. Kaku Yugo Kenkyu, Bessatsu (1980) 43, 167-74
- 108 Helium compound observed by magnetic sector type atom-probe Igata, N.
Sato, S. Proc. 27th IFES, Tokyo, (1980) 95, Yashiro, Y. and Igata, N., eds., Univ. of Tokyo, Tokyo, Japan
- 109 Application of FIM to sputtering Igata, N.
Sato, S.
Sawai, T.
Tanabe, N. Proc. 27th IFES, Tokyo, (1980) 204, Yashiro, Y. and Igata, N., eds., Univ. of Tokyo, Tokyo, Japan
- 110 Depth profile of defect clusters in ion bombarded tungsten Igata, N.
Sato, S.
Sawai, T.
Tanabe, N. Proc. 27th IFES, Tokyo, (1980) 214, Yashiro, Y. and Igata, N., eds., Univ. of Tokyo, Tokyo, Japan
- 111 Atomistic defects in tungsten irradiated with Ar⁺ ion Igata, N.
Sato, S.
Sawai, T.
Tanabe, N. Proc. 27th IFES, Tokyo, (1980) 224, Yashiro, Y. and Igata, N., eds., Univ. of Tokyo, Tokyo, Japan
- 112 Simulation rule among various kinds of particle bombardment Igata, N.
Sato, S.
Shibata, K. Proc. 27th IFES, Tokyo, (1980) 233, Yashiro, Y. and Igata, N., eds., Univ. of Tokyo, Tokyo, Japan
- 113 High-temperature crystallization behavior of amorphous Fe₈₀B₂₀ Inal, O. T.
Keller, L.
Yost, F. G. J. Mater. Sci. (1980) 15, 1947-61

Atom Probe Field-Ion Microscopy Bibliography for 1980

- 114 Field ion microscope studies of the propagation of substrate grain boundaries into an overgrowth Inal, O. T.
Murr, L. E. Thin Solid Films (1980)
72, 161-70
- 115 Electric field calculation of an electrohydrodynamic ion source Ishitani, T.
Tamura, H. Proc. 27th IFES,
Tokyo, (1980) 194,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 116 Field emission microscopic study of the adsorption of sulfur and its compounds on molybdenum Ishizuka, K. Proc. 27th IFES,
Tokyo, (1980) 123,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 117 Field ion microscopy of structural transformations in platinum-iridium alloys Ivchenko, V. A.
Syutkin, N. N. Fiz. Met. Metalloved.
(1980) 49, 145-52
- 118 Field ion microscopy of gallium-tungsten and gallium-molybdenum interfaces. I. Structures of gallium and field emission current Izuchi, M.
Yamada, K.
Wada, M.
Nishikawa, O. Shinku (1980) 23,
289-96
- 119 Triplet correlation in metallic glasses. A field-ion microscopy study Jacobaeus, P.
Madsen, J. U.
Kragh, F.
Cotterill, R. M. J. Philos. Mag. B (1980)
41, 11-20
- 120 Calculations of field desorption and field ionization Jakusz, K.
Wojciechowski, K. F. Acta Phys. Pol. A
(1980) A58, 207-19
- 121 Photon-induced field desorption and field evaporation from Cu- and Ag-emitters Jentsch, T.
Drachsel, W.
Block, J. H. Proc. 27th IFES,
Tokyo, (1980) 159,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 122 Diabatic field ionization of highly excited sodium atoms Jeys, T. H.
Foltz, G. W.
Smith, K. A.
Beiting, E. J.
Kellert, F. G.
Dunning, F. B.
Stebbins, R. F. Phys. Rev. Lett. (1980)
44, 390-3
- 123 Some developments in field emission techniques and their application Jones, J. P. Chem. Phys. Solids
Their Surf. (1980) 8,
18-40

Atom Probe Field-Ion Microscopy Bibliography for 1980

- 124 Indium antimonide electron pulse relaxation in a magnetic field Kadushkin, V. I. Fiz. Tekh. Poluprovodn. (Leningrad) (1980) 14, 2015-9
- 125 The interaction of low energy deuterium ions with field-emitter surfaces and its application to plasma-wall studies in tokamaks Kellogg, G. L. Ultramicroscopy (1980) 5, 253
- 126 A direct observation of the trapping of deuterium ions at a grain boundary in tungsten Kellogg, G. L. Panitz, J. K. G. Appl. Phys. Lett. (1980) 37, 625
- 127 Pulsed-laser-induced atom-probe mass spectroscopy Kellogg, G. L. Tsong, T. T. Ultramicroscopy (1980) 5, 259
- 128 Pulsed-laser atom-probe field-ion microscopy Kellogg, G. L. Tsong, T. T. J. Appl. Phys. (1980) 51, 1184-93
- 129 The effect of sulfur on the adsorption of H₂, Co, N₂, and C₂H₄ on molybdenum: flash desorption combined with FEM Kikuchi, T. Ishizuka, K. Proc. 27th IFES, Tokyo, (1980) 128, Yashiro, Y. and Igata, N., eds., Univ. of Tokyo, Tokyo, Japan
- 130 Field ion microscope observations of oxygen adsorption on tungsten at 5 and 300 K Kim, Y.-W. Microstruct. Sci. (1980) 8, 115-20
- 131 Near-field emission of lead-sulfide-selenide homojunction lasers Kimble, H. J. IEEE J. Quantum Electron. (1980) QE16, 740-3
- 132 FIM study of ordering in the near-surface of Ni₄Mo alloy Kingetsu, T. Yamamoto, M. Nenno, S. Proc. 27th IFES, Tokyo, (1980) 10, Yashiro, Y. and Igata, N., eds., Univ. of Tokyo, Tokyo, Japan
- 133 Field-ion microscope observation of deformation twin induced by field stress in ordered Ni₄Mo alloy Kingetsu, T. Yamamoto, M. Nenno, S. J. J. Appl. Phys. (1980) 51, 2037-45
- 134 Study of dispersion hardened compositions by a field ion microscopy method Kirienko, V. I. Il'inskii, A. I. Savchenko, I. A. Ukr. Fiz. Zh. (1980) 25, 2056-8
- 135 Field-emission microscopic and ion bombardment studies of catalytic active sites on platinum Kojima, I. Miyazaki, E. Yasumori, I. Appl. Surf. Sci. (1980) 6, 93-104

Atom Probe Field-Ion Microscopy Bibliography for 1980

- 136 The emission characteristics of liquid metal ion sources of gallium, lead and gold Komuro, M. Proc. 27th IFES, Tokyo, (1980) 189, Yashiro, Y. and Igata, N., eds., Univ. of Tokyo, Tokyo, Japan
- 137 Field emission liquid metal ion sources Komuro, M. Kawakatsu, H. Iongen to Sono Oyo, Shinpojumu, 4th, 1980, 81-2, Ion Kogaku Kondankai, Kyoto, Japan
- 138 On the temperataure dependence of evaporation field of W and Mo, and Ga on W Konishi, M. Izuchi, M. Nishikawa, O. Wada, M. Proc. 27th IFES, Tokyo, (1980) 70, Yashiro, Y. and Igata, N., eds., Univ. of Tokyo, Tokyo, Japan
- 139 Field ion microscopy of gallium-tungsten and gallium-molybdenum interfaces. II. Temperature dependence of evaporation field Konishi, M. Wada, M. Nishikawa, O. Shinku (1980) 23, 297-302
- 140 Field emission in strong laser fields Kormendi, F. F. Proc. 27th IFES, Tokyo, (1980) 54, Yashiro, Y. and Igata, N., eds., Univ. of Tokyo, Tokyo, Japan
- 141 Studies of boron and tungsten borides with the field ion microscope and atom probe Krautz, E. Leisch, M. Proc. 27th IFES, Tokyo, (1980), Yashiro, Y. and Igata, N., eds., Univ. of Tokyo, Tokyo, Japan
- 142 Single-atom analysis of metals and alloys with the field-ion microscope atom-probe Krautz, E. Leisch, M. Mikrochim. Acta (1980) 2, 435-44
- 143 Atom-probe field ion microscopy of thin films Krishnaswamy, S. V. McLane, S. B. Messier, R. Tsong, T. T. Ng, Y. S. Proc. 27th IFES, Tokyo, (1980) 298, Yashiro, Y. and Igata, N., eds., Univ. of Tokyo, Tokyo, Japan
- 144 Summary abstract: atom probe FIM a thin film characterization technique Krishnaswamy, S. V. Messier, R. Ng, Y. S. Tsong, T. T. J. Vac. Sci. Technol. (1980) 17, 63

Atom Probe Field-Ion Microscopy Bibliography for 1980

- 145 Atom probe FIM investigation of voids in amorphous germanium Krishnaswamy, S. V.
Messier, R.
Ng, Y. S.
Tsong, T. T.
McLane, S. B. J. Non-Cryst. Solids (1980) 35-36, 531-6
- 146 Shielding by an electron gas in a semiconductor in a magnetic field Krupski, J. Phys. Status Solidi B (1980) 100, 551-5
- 147 Field-emission microscopic study of catalytic decomposition of methanol on metal surfaces. Part 1. Tungsten Kubota, J.
Azuma, K. J. Chem. Soc., Faraday Trans. 1 (1980) 76, 588-96
- 148 Memory effect in field emission from the tungsten-europium sulfide system Kuhlmann, E.
Kisker, E. Phys. Rev. Lett. (1980) 45, 207-10
- 149 Optical emission from gallium ionization at a field emitter Kuk, Y.
Sakurai, T.
Culbertson, R. J.
Robertson, G. H. Appl. Phys. Lett. (1980) 36, 957-9
- 150 An ionization mechanism of liquid metal at a field ion emitter Kuk, Y.
Sakurai, T. Proc. 27th IFES, Tokyo, (1980) 74, Yashiro, Y. and Igata, N., eds., Univ. of Tokyo, Tokyo, Japan
- 151 An atom-probe investigation of a micro-crack associated with hydrogen in a Fe-Ti alloy Kuk, Y.
Sakurai, T.
Pickering, H. W. Proc. 27th IFES, Tokyo, (1980) 339, Yashiro, Y. and Igata, N., eds., Univ. of Tokyo, Tokyo, Japan
- 152 Direct observation of the epitaxial growth phenomenon of cesium on a tungsten emitter with a field emission microscope Kuroda, T. Jpn. J. Appl. Phys. (1980) 19, 759-60
- 153 Thermally enhanced field emission from a laser-illuminated tungsten tip: temperature rise of tip Lee, M. J. G.
Reifenberger, R.
Robins, E. S.
Lindenmayr, H. G. J. Appl. Phys. (1980) 51, 4996-5006
- 154 Anomalous field emission properties of (011) tungsten plane Lenkow, W. E.
Stepien, Z. Proc. 27th IFES, Tokyo, (1980) 422, Yashiro, Y. and Igata, N., eds., Univ. of Tokyo, Tokyo, Japan
- 155 Chemical ionization, field ionization and field desorption Levsen, K. Adv. Mass Spectrom. (1980) 8A, 897-917

Atom Probe Field-Ion Microscopy Bibliography for 1980

- 156 FIM investigation of nonstoichiometric alloy Ni-Al at high temperatures Lu, H.
Arise, T.
Nakamura, M.
Doyama, M.
- Proc. 27th IFES,
Tokyo, (1980) 386,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 157 Emission from liquid metal ion sources Mair, G. L. R.
- Nucl. Instrum. Methods
(1980) 172, 567-76
- 158 The high resolution imaging atom-probe with application to nickel platings Martinka, M.
- 1980, ARLPSUTM0-
80-242, Order No.
AD-A095 254, 180
- 159 New silicon emitter for field ionization and desorption mass spectrometry Matsuo, T.
Matsuda, H.
Katakuse, I.
- Adv. Mass Spectrom.
(1980) 8A, 990-6
- 160 Time of flight atom-probe timer development McLane, S. B.
Ng, Y. S.
Sweeney, J.
Tsong, T. T.
- Proc. 27th IFES,
Tokyo, (1980) 84,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 161 A history of field emission microscopy Melmed, A. J.
- Proc. 27th IFES,
Tokyo, (1980) 1,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 162 Analysis of high resistivity silicon in a energy-compensated ToF atom-probe Melmed, A. J.
Martinka, M.
Sakurai, T.
Kuk, Y.
- Proc. 27th IFES,
Tokyo, (1980) 430,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 163 The formation of negative ions by field ionization Mes, G. F.
Van der Greef, J.
Nibbering, N. M.
Ott, K. H.
Röilgen, F. W.
- Int. J. Mass Spectrom.
Ion Phys. (1980) 34,
295-301
- 164 Rectification and I-V characteristics of metal-vacuum-metal point-contact junctions of identical metals.
I. Effects of temperature and multiple image interactions Miskovsky, N. M.
Cutler, P. H.
- Proc. 27th IFES,
Tokyo, (1980) 60,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan

Atom Probe Field-Ion Microscopy Bibliography for 1980

- 165 The measurement of a tip-base temperature Morikawa, H.
Kozakai, M.
Terao, T.
Yashiro, Y. Proc. 27th IFES,
Tokyo, (1980) 404,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 166 Preparation of a [310] tungsten tip from a rolled sheet Morikawa, H.
Terao, T.
Yashiro, Y. Jpn. J. Appl. Phys.
(1980) **19**, 1415-6
- 167 Corrosion of tungsten with organic liquid Morikawa, H.
Terao, T.
Shimizu, H.
Kitano, T.
Kosakai, M.
Yashiro, Y. Proc. 27th IFES,
Tokyo, (1980) 391-3,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 168 Field ion microscopy observation of silicon Nakamura, M.
Lu, H.
Arise, T.
Yamamoto, R.
Doyama, M. Proc. 27th IFES,
Tokyo, (1980) 381,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 169 Acceleration of charged particles by atomic fields in crystals Nasonov, N. N. Pis'ma Zh. Tekh. Fiz.
(1980) **6**, 499-501
- 170 Study of surface segregation in dilute alloys by the computerized time-of-flight atom-probe FIM Ng, Y. S. 1980, 108, Univ.
Microfilms Int., Order
No. 8015824
- 171 Surface segregation of a nickel-copper alloy as studied by a computerized atom-probe FIM Ng, Y. S.
McLane, S. B., Jr.
Tsong, T. T. J. Vac. Sci. Technol.
(1980) **17**, 154-8
- 172 Use of microchannel plates for detection of ions Nikonenkov, N. V.
Kudryavtsev, A. N. Instrum. Exper.
Technol. (1980) **1**,
191-3
- 173 Field-desorption microscope Nikonenkov, N. V.
Khlyntsev, V. P. Instrum. Exper.
Technol. (1980) **1**,
221-3
- 174 Atom-probe analysis of Ga-W interface Nishikawa, O.
Kurihara, K.
Nachi, M.
Wada, M.
Konishi, M. Proc. 27th IFES,
Tokyo, (1980) 313,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 175 FIM observations of tungsten, gallium and tin structures on tungsten and molybdenum (001) surfaces Nishikawa, O.
Wada, M.
Konishi, M. Surf. Sci. (1980) **27**,
16-24

Atom Probe Field-Ion Microscopy Bibliography for 1980

- 176 Performance of the new energy-compensated time-of-flight atom-probe Nishikawa, O.
Wada, M.
Konishi, M.
Kurihara, K.
Nachi, M.
- Proc. 27th IFES,
Tokyo, (1980) 91,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 177 Field emission from p-type gallium arsenide and gallium phosphide crystals Ohno, Y.
Nakamura, S.
Kuroda, T.
- Surf. Sci. (1980) 91,
636-54
- 178 FEM studies of oxygen and gold adsorption and field desorption on gallium arsenide and gallium phosphide surfaces Ohno, Y.
Nakamura, S.
Kuroda, T.
- Surf. Sci. (1980) 91,
L7-16
- 179 Adsorption of palladium and hydrogen on a tungsten surface Okuno, K.
Mun, D.
- Proc. 27th IFES,
Tokyo, (1980) 109,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 180 Cathodic needle growth at field electron and T-F electron emission regions Okuyama, F.
- Proc. 27th IFES,
Tokyo, (1980) 45,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 181 A technique to prepare field emitters for FI- and FD-MS Okuyama, F.
- Proc. 27th IFES,
Tokyo, (1980) 147,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 182 A technique to prepare metallic multi-point field emission sources Okuyama, F.
- Rev. Sci. Instrum.
(1980) 51, 1109-15
- 183 Growth of metallic whisker crystals incorporated with field electron emission Okuyama, F.
- Appl. Phys. Lett. (1980)
36, 46-7
- 184 Bonn-type field ion source for a compact magnetic mass analyzer Okuyama, F.
Ishikawa, K.
Chida, M.
Yamato, Y.
- Anal. Chem. (1980) 52,
1987-90
- 185 Tantalum carbide cathode for field emission guns Ono, M.
Hojo, H.
Shimizu, H.
Murakami, H.
- Proc. 27th IFES,
Tokyo, (1980) 353,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan

Atom Probe Field-Ion Microscopy Bibliography for 1980

- 186 The work function change of the tungsten contaminated TiC (001) surface with oxygen chemisorption Oshima, C.
Zaima, S.
Tanaka, T.
Aono, M.
Shibata, Y. Proc. 27th IFES,
Tokyo, (1980) 368,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 187 Negative ion field desorption mass spectra of some inorganic and organic compounds Ott, K. H.
Röllgen, F. W.
Zwinselman, J. J.
Fokkens, R. H.
Nibbering, N. M. M. Org. Mass Spectrom.
(1980) 15, 419
- 188 Appearance energies of negative field ions Ott, K. H.
Stoll, R.
Röllgen, F. W. Proc. 27th IFES,
Tokyo, (1980) 174,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 189 Video recording of low intensity CEMA images Panitz, J. A. J. Vac. Sci. Technol.
(1980) 17, 757
- 190 Protein deposition on field-emitter tips and its removal by UV radiation Panitz, J. A.
Giaever, I. Surf. Sci. (1980) 97,
25-42
- 191 Atom probe analysis of segregation of iron-0.15 wt. % titanium Pickering, H. W.
Kuk, Y.
Sakurai, T. Appl. Phys. Lett. (1980)
36, 902-4
- 192 Cluster formation and the elevated temperature strengthening of iron alloys by titanium Pickering, H. W.
Kuk, Y.
Sakurai, T. Proc. 27th IFES,
Tokyo, (1980) 260,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 193 Atom-probe analysis of the decomposition of amorphous Fe₄₀Ni₄₀B₂₀ Piller, J. Proc. 27th IFES,
Tokyo, (1980) 285,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 194 Determination of an adsorbed layer on a field emission tip with the aid of nuclear microanalysis methods (palladium or carbon adsorbed on tungsten) Piquet, A.
Roux, H.
Pralong, G.
Dupin, J. P. Rev. Phys. Appl. (1980)
15, 67-73
- 195 Liquid metal field-emission ion sources and their applications Prewett, P. D.
Jefferies, D. K. Conf. Ser. - Inst. Phys.
(1980) 54, Low-Energy
Ion Beams, 316-21

Atom Probe Field-Ion Microscopy Bibliography for 1980

- 196 Characteristics of a gallium liquid metal field emission ion source Prewett, P. D.
Jefferies, D. K. J. Phys. D (1980) 13,
1747-55
- 197 Anomalies of field emission in a magnetic field Ptitsyn, V. E.
Fursei, G. N.
Egorov, N. V. Pis'ma Zh. Eksp. Teor. Fiz. (1980) 31, 733-7
- 198 Temperature dependence of magnetic effects in field emission Ptitsyn, V. E.
Fursei, G. N.
Egorov, N. V. Pis'ma Zh. Tekh. Fiz. (1980) 6, 619-22
- 199 A field emission study of carbon on tungsten Radon, T. Acta Phys. Pol. A (1980) A58, 377-82
- 200 Intensity dependence of argon-laser induced photo field emission from rhenium Radon, T.
Kleint, C. Acta Univ. Wratislav., Mat., Fiz., Astron. (1980) 37, 47-55
- 201 Nonohmic characteristics and electron emission from electroformed aluminum-gold couples and gold thin films Rahman, A.
Raven, M. S. J. Phys. D (1980) 13,
701-13
- 202 The microstructure of engineering materials Ralph, B. Royal Micros. Soc. (1980) 15, 254
- 203 Surface layer tunneling and field emission in thin gold films which contain submicron gaps Raven, M. S. Vide, Couches Minces (1980) 201, Suppl., Proc. Int. Vac. Congr., 8th, 1, 619-22
- 204 Field ion microscopy of biological molecules Reichelt, R. Wiss. Fortschr. (1980) 30, 226-8
- 205 The gas supply function in field ion microscopy Rendulic, K. D.
Leisch, M. Surf. Sci. (1980) 95, L271-2
- 206 Field desorption of common gases from iridium and tungsten Rendulic, K. D.
Leisch, M. Surf. Sci. (1980) 93, 1-8
- 207 On the formation of cluster ions and molecular ions in field desorption of salts Röllgen, F. W.
Ott, K. H. Int. J. Mass Spectrom. Ion Phys. (1980) 32, 363-7
- 208 Imaging of microsurfaces in a field ion microscope Romanathan, D. Proc. 27th IFES, Tokyo, (1980) 408,
Yashiro, Y. and Igata, N., eds., Univ. of Tokyo, Tokyo, Japan

Atom Probe Field-Ion Microscopy Bibliography for 1980

- 209 Study of field-emission cathodes Rybakov, Y. L.
Suvorov, A. L.
Kukavadze, G. M.
Koltygin, V. M.
Vasichev, B. N.
Izv. Akad. Nauk SSSR,
Ser. Fiz. (1980) 44,
1272-4
- 210 Resonance measurements of f-h and f-i intervals in cesium using selective and delayed field ionization Safinya, K. A.
Gallagher, T. F.
Sandner, W.
Phys. Rev. A (1980) 22,
2672-8
- 211 Current fluctuation of thermal field emission from tungsten emitter Saitou, N.
Yamamoto, S.
Appl. Surf. Sci. (1980)
5, 374-87
- 212 Time-of-flight atom-probe study of tungsten-zirconium field emitter Sakurai, T.
Kuk, Y.
Proc. - Electrochem.
Soc. (1980) 80-6, Proc.
Symp. Electron Ion
Beam Sci. Technol.,
Int. Conf., 9th, 68-77
- 213 Atom-probe study of bright spots in Mo-Re FI images Sakurai, T.
Kuk, Y.
Igata, N.
Kohyama, A.
Yashiro, Y.
Morikawa, H.
Proc. 27th IFES,
Tokyo, (1980) 302-306,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 214 A time-of-flight atom-probe study of a molybdenum-rhenium-carbon alloy Sakurai, T.
Marlow, G.
Kuk, Y.
Jpn. J. Appl. Phys.
(1980) 19, L167-9
- 215 Time-of-flight atom-probe study of a zirconiated tungsten field emitter Sakurai, T.
Kuk, Y.
Robertson, G.
Marlow, G.
Murarka, S. P.
Appl. Phys. Lett. (1980)
36 871-3
- 216 Time-of-flight atom-probe study of a W-Zr field emitter Sakurai, T.
Kuk, Y.
Inoue, T.
Murarka, S. P.
Proc. 27th IFES,
Tokyo, (1980) 177,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 217 A spectroscopic study of the optical emission from a high intensity gallium ion emission source Sakurai, T.
Kuk, Y.
Culbertson, R. J.
Proc. 27th IFES,
Tokyo, (1980) 183,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan

Atom Probe Field-Ion Microscopy Bibliography for 1980

- 218 Phosphorus segregation to grain boundaries in a Fe-0.04%P alloy Sakurai, T.
Kuk, Y.
Grabke, H. J.
Birchenall, A. K.
Pickering, H. W. Proc. 27th IFES,
Tokyo, (1980) 334,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 219 Atom probes: relationship between results of analysis and structure of a sample Sarrau, J.-M.
Martin, C.
Bostel, A.
Gallot, J. C. R. Hebd. Seances
Acad. Sci., Ser. B
(1980) 290, 63-6
- 220 Gas adsorption on tungsten exposed to a mixture of nitrogen and oxygen Sato, M. Phys. Rev. Lett. (1980)
45, 1856-8
- 221 FEM study of nitric oxide-tungsten and nitrogen dioxide-tungsten adsorption system Sato, M. Surf. Sci. (1980) 95,
269-85
- 222 FEM study of N₂ and O₂-W adsorption system Sato, M. Proc. 27th IFES,
Tokyo, (1980) 118,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 223 Theory of photostimulated field emission Schwartz, C. 1980, 138, Univ.
Microfilms Int., Order
No. 8107632
- 224 Photostimulated field emission-triangular barrier model Schwartz, C.
Cole, M. W. Surf. Sci. (1980) 95,
L243-8
- 225 Adsorption of sodium chloride on tungsten Sendecka, K.
Sendecki, S.
Meclewski, R. Acta Univ. Wratislav.,
Mat., Fiz., Astron.
(1980) 37, 121-5
- 226 Direct observation of surface phenomena on an atomic scale Shrednik, V. N. Konspekt Lektsii -
Mezhdunar. Shk. Spets.
Rostu Krist., 4th,
Osip'yan, Yu. A. ed.,
(1980) 1, 68-79, Akad.
Nauk SSSR, Moscow,
USSR
- 227 Adsorption of copper on the W (100) plane at different temperatures Sidorski, Z.
Szelwicki, T.
Dworecki, Z. Proc. 27th IFES,
Tokyo, (1980) 112,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan

Atom Probe Field-Ion Microscopy Bibliography for 1980

- 228 A study of field emission sites on molybdenum electrodes by a probehole technique Sinha, M. K.
Johnson, R. P. Ned. Tijdschr.
Vacuumtech. (1980) 18,
28-33
- 229 Emitter for field ionization and field electron emission Soerdel, S. G. Anal. Chem. (1980) 52,
1357-60
- 230 Experimental study of quantum size effects in very thin metal films Stark, D.
Zwicknagl, P. Appl. Phys. (1980) 21,
397-406
- 231 A simple modelistic treatment of virtual surface states Steslicka, M.
Perkal, Z. Solid State Commun. (1980) 35, 349-52
- 232 Virtual surface states and the field penetration Steslicka, M.
Perkal, Z. Proc. 27th IFES,
Tokyo, (1980) 48,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 233 Recent developments in broad area field emission cold cathodes Stewart, D.
Wilson, P. Vacuum (1980) 30,
527-32
- 234 Study on additional propellants for field emission thrusters Stewart, D.
Wilson, P. D.
Nicholas, M. G. 1980, FRI-R664,
ESA-CR(P)-1395, 85
- 235 FIM investigation of heavy ion damage in W Stiller, K.
Nordén, H. Proc. 27th IFES,
Tokyo, (1980) 209,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 236 Applications of FIM (field ion microscope) to science education Sugimoto, K.
Sakai, K.
Fujiki, K.
Yasuoka, M. Toyama Daigaku
Kyoikugakubu Kiyo B (1980) 19-28
- 237 Propagation of collision sequences of atoms in metals Suvorov, A. L. 1980 No. ITEF-146
(1980) 24
- 238 Computers in field ion microscopy Suvorov, A. L.
Razinkova, T. L.
Sokolov, A. G. Phys. Status Solidi A (1980) 61, 11-52
- 239 A comparison of the emission characteristics of liquid ion sources of gallium and bismuth Swanson, L. W.
Bell, A. E.
Scheind, G. A.
Larson, D. Proc. 27th IFES,
Tokyo, (1980) 418,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan

Atom Probe Field-Ion Microscopy Bibliography for 1980

- 240 Measurement of the energy distribution of a gallium liquid metal ion source Swanson, L. W.
Schwind, G. A.
Bell, A. E. J. Appl. Phys. (1980)
51, 3453-5
- 241 Emission characteristics of a large radius field electron source Swanson, L. W.
Tuggle, D. Proc. 27th IFES,
Tokyo, (1980) 413,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 242 Measurement of field ionization enhancement by field adsorption of helium and neon Sweeney, J. H.
Tsong, T. T. Proc. 27th IFES,
Tokyo, (1980) 27,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 243 Effect of the model crystal potential on the electron field emission from metals Taranko, R. Acta Univ. Wratislav.,
Mat., Fiz., Astron.
(1980) 37, 153-64
- 244 Field-ion microscopy and related techniques (A bibliography: 1951-1978) Thurstans, R. E.
Walls, J. M. ISBN 0 906989 019
(1980) Warwick Publ.,
Birmingham, GB
- 245 Electron holography by field emission electron microscope Tonomura, A.
Matsuda, T.
Endo, J. Nippon Kessho
Gakkaishi (1980) 22,
263-9
- 246 Application of field emission electron beam to electron holography Tonomura, A.
Matsuda, T.
Endo, J. Proc. 27th IFES,
Tokyo, (1980) 57,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 247 Quantitative investigations of atomic processes on metal surfaces at atomic resolution Tsong, T. T. Prog. Surf. Sci. (1980)
10, 165-248
- 248 Elementary displacement steps in the migration of tungsten diatomic clusters on the tungsten (110) plane Tsong, T. T.
Casanova, R. Phys. Rev. B (1980) 21,
4564
- 249 Migration behavior of single tungsten atoms and tungsten diatomic clusters on the tungsten (100) plane Tsong, T. T.
Casanova, R. Phys. Rev. B (1980)
22, 4632
- 250 Atom-probe FIM study of surface segregation of dilute alloys Tsong, T. T.
McLane, S. B.
Ng, Y. S. Proc. 27th IFES,
Tokyo, (1980) 324,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan

Atom Probe Field-Ion Microscopy Bibliography for 1980

- 251 Surface segregation of nickel-copper alloy in nitrogen and oxygen: an atom-probe field-ion microscope study Tsong, T. T.
Ng, Y. S.
McLane, S. B., Jr. J. Appl. Phys. (1980) 51, 6189-91
- 252 Surface segregation of a platinum-gold alloy: an atom probe field ion microscope investigation Tsong, T. T.
Ng, Y. S.
McLane, S. B., Jr. J. Chem. Phys. (1980) 73, 1464-8
- 253 Single atom self-diffusion on nickel surfaces Tung, R. T.
Graham, W. R. Surf. Sci. (1980) 92, 73-87
- 254 Study of the stability of a field emission current source in a high vacuum Vasin, V. A.
Zaporozhchenko, V. I.
Nevrovskii, V. A.
Rakhovskii, V. I. Izv. Akad. Nauk SSSR, Ser. Fiz. (1980) 44, 415-21
- 255 Physical methods used for characterizing oxidation catalysts Vedrine, J. Chem. Phys. Aspects Catal. Oxid., (Proc. Spring Sch. CNRS Catal. Oxid.) Portefaix, J. L. and Figueras, F., eds, (1980) 367-96, CNRS, Paris, France
- 256 Binding states of Ga and Sn on W and Mo: structures, evaporation field and its temperature dependence Wada, M.
Konishi, M.
Nishikawa, O. Surf. Sci. (1980) 100, 439-52
- 257 FIM observation of 2.25Cr-1Mo steel Wada, M.
Hosoi, K.
Nishikawa, O. Proc. 27th IFES, Tokyo, (1980) 17, Yashiro, Y. and Igata, N., eds., Univ. of Tokyo, Tokyo, Japan
- 258 Quantitative field-ion spectroscopy for the study of phase transformation in alloys Wagner, R. High Purity Mater. Sci. Technol., Int. Symp., Proc., 5th, 1980, 2, 111-22, Akad. Wiss. DDR, Zentralinst. Festkorperphys. Werkstoffforschung, Dresden, GDR
- 259 Application of field ion spectroscopy in metal-physical problems Wagner, R. Phys. Bl. (1980) 36, 65-8, 73-6
- 260 Atom-probe analysis of the decomposition of Ni-14 at. % Al Wendt, H. Proc. 27th IFES, Tokyo, (1980) 280, Yashiro, Y. and Igata, N., eds., Univ. of Tokyo, Tokyo, Japan

Atom Probe Field-Ion Microscopy Bibliography for 1980

- 261 An in situ field-ion microscope study of the recovery behavior of ion-irradiated tungsten and tungsten alloys Wilson, K. L.
Baskes, M. I.
Seidman, D. N. Acta Metall. (1980) 28,
89-102
- 262 Adsorption of sulfur on a tungsten field emitter Wohlmuth, M.
Bechtold, E. Appl. Surf. Sci. (1980)
5, 243-57
- 263 Rapidly solidified nickel-base superalloys Wood, J. V.
Mills, P. F.
Waugh, A. R.
Bee, J. V. J. Mater. Sci. (1980)
15, 2709-19
- 264 A retarding potential field electron emission spectrometer Workowski, C. J. J. Phys. E (1980) 13,
67-73
- 265 Surface diffusion by an atomic exchange mechanism Wrigley, J. D.
Ehrlich, G. Phys. Rev. Lett. (1980)
44, 661
- 266 At atom-probe field ion microscope study of the stoichiometry of ordered Ni₄Mo Yamamoto, M.
Seidman, D. N. Proc. 27th IFES,
Tokyo, (1980) 290,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 267 The determination of the composition of ordered Pt₃Co by atom-probe field ion microscopy: intrinsic problems Yamamoto, M.
Seidman, D. N. Proc. 27th IFES,
Tokyo, (1980) 307,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 268 A study of the chemistry of the {111} GaP planes by atom-probe field ion microscopy Yamamoto, M.
Seidman, D. N.
Nakamura, S. Proc. 27th IFES,
Tokyo, (1980) 317,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 269 Some emitter surface modifications in field ionization and field desorption mass spectrometry Youngless, T. L. 1980, 151, Univ. Microfilms Int., Order No. 8114878
- 270 Field-ion microscopy of radiation-induced defects in tungsten irradiated by 50 keV tungsten(1+) ions. II. Discussion of the experimental data Zabolotny, V. T.
Ivanov, L. I.
Makhlin, N. A.
Suvorov, A. L. At. Energ. (1980) 48,
326-7

Atom Probe Field-Ion Microscopy Bibliography for 1980

- 271 Spread of total energy distribution of thermal field-emitted electrons from lanthan hexaboride single crystal needles Zaima, S.
Sase, M.
Adachi, H.
Shibata, Y.
Ohshima, C.
Tanaka, T.
Kawai, S. *J. Phys. D (1980) 13,*
L47-9
- 272 Field emission from TaC Zaima, S.
Saito, K.
Adachi, H.
Shibata, Y.
Hojo, H.
Ono, M. *Proc. 27th IFES,*
Tokyo, (1980) 348,
Yashiro, Y. and Igata,
N., eds., Univ. of
Tokyo, Tokyo, Japan
- 273 Observation of gold atoms migration in silicon Zakharov, N. D.
Rozhanskii, V. N. *Electron Microsc.,*
Proc. Eur. Congr., 7th,
Brederoo, P. and Boom,
G., eds., (1980) 1,
308-9, Seventh Eur.
Congr. Electron
Microsc. Found.,
Leiden, Neth.
- 274 The effect of temperature on the field emission from lead Zebrowski, J. *Acta Phys. Pol. A*
(1980) A57, 369-76

1981

Atom Probe Field-Ion Microscopy Bibliography for 1981

- 1 Performance computations for a high-resolution retarding field electron energy analyzer with a simple electrode configuration Adachi, H.
Sase, M.
Zaima, S.
Shibata, Y. J. Phys. D (1981) 14,
769-78
- 2 Experimental determination of the particle reflection coefficients of low-energy (100-1500 eV) ${}^3\text{He}$ and ${}^4\text{He}$ atoms from the (110) plane of tungsten Amano, J.
Seidman, D. N. J. Appl. Phys. (1981)
52, 6934
- 3 Range profiles of low-energy (100 to 1500 eV) implanted helium-3 and -4 atoms in tungsten. I. Experimental results Amano, J.
Wagner, A.
Seidman, D. N. Philos. Mag. A (1981)
44, 177-98
- 4 Range profiles of low-energy (100 to 1500 eV) implanted ${}^3\text{He}$ and ${}^4\text{He}$ atoms in tungsten II. Analysis and discussion Amano, J.
Wagner, A.
Seidman, D. N. Philo. Mag. A (1981)
44, 199-222
- 5 Atom-probe microanalysis of a tempered high-speed steel Andrén, H.-O. Ser. Metall. (1981) 15,
749-52
- 6 The effect of the applied field on the energy spectra of electrons field emitted from microscopic sites on broad-area copper electrodes Athwal, C. S.
Latham, R. V. Physica B+C
(Amsterdam) (1981)
104, 189-5
- 7 Emission of nonequilibrium excited electrons from a field emitter Azizov, S. T.
Lugovskoi, V. B. Zh. Tekh. Fiz. (1981)
51, 2554-9
- 8 FIM-atom probe investigation of the bainite transformation in a chromium-molybdenum steel Bach, P. W. 1981, No. DE82-780187,
INIS-mf-6830 Order No.
N82-29443, 100
- 9 Flicker noise in semiconductor field-emission cathodes Bakhtizin, R. Z.
Gots, S. S. Izv. Vyssh. Uchebn.
Zaved., Radiofiz. (1981)
24, 1276-81
- 10 Long-time correlations of current fluctuations in silicon autoemitters Bakhtizin, R. Z.
Gots, S. S.
Ishmuratov, F. F. Izv. Vyssh. Uchebn.
Zaved., Radiofiz. (1981)
24, 1294-6
- 11 A calculation of surface diffusion coefficients of absorbates on the (110) plane of tungsten Banavar, J. R.
Cohen, M. H.
Gomer, R. Surf. Sci. (1981) 107,
113-26
- 12 Field emission of p-type indium antimonide Baranchuk, S. I.
Mileshkina, N. V. Fiz. Tverd. Tela
(Leningrad) (1981) 23,
2941-5

Atom Probe Field-Ion Microscopy Bibliography for 1981

- 13 Carbon atom distribution in a dual phase steel: an atom probe study Barnard, S. J.
Smith, G. D. W.
Sarikaya, M.
Thomas, G. Scr. Metall. (1981) 15,
387-92
- 14 Carbon atom redistribution during the aging and early stages of tempering of ferrous martensites Beaven, P. A.
Miller, M. K.
Smith, G. D. W. Proc. Int. Conf. on Martensitic Transf. (1979) 559-64
- 15 Combined FIM/TEM determination of the structure of an incoherent twin boundary in tungsten Beaven, P. A.
Smith, D. A.
Miller, M. K.
Smith, G. D. W. Philos. Mag. A (1981) 43, 1063-70
- 16 Temperature dependence of the noise of the tungsten buildup emitter tip investigated by field emission flicker noise Biernat, T.
Kleint, C. Acta Univ. Wratislav., Mat., Fiz., Astron. (1981) 40, Proc. Semin. Surf. Phys., 5th, 13-22
- 17 Electron field emission tunneling spectroscopy of platinum group and tungsten metals in the presence of molecular gas and noble metal adsorbates Billington, R. L., III 1981, 182, Univ. Microfilms Int., Order No. 8119476
- 18 Temperature measurement of microcrystals heated by electron bombardment: tungsten tips from 2800 K to 3650 K Binh, V. T.
Heyde, P.
Drechsler, M.
Uzan, R. J. Phys. E (1981) 14, 719-24
- 19 Controlled heating of microcrystals by electron bombardment Binh, V. T.
Heyde, P.
Drechsler, M.
Uzan, R. J. Phys. E, Scientif. Instr. (1981) 14, 719
- 20 Use of the real-time atom probe Biavette, D.
Bostel, A.
Sarrau, J. M. Rev. Phys. Appl. (1981) 16, 405-9
- 21 Signal shapes observed in photon-induced field ionization mass spectra Block, J. H.
Jentsch, T.
Drachsel, W. Int. J. Mass Spectrom. Ion Phys. (1981) 38, 195-213
- 22 Direct observations of the behavior of single silicon atoms on a metal surface Casanova, R.
Tsong, T. T. Surf. Sci. (1981) 109, L497-503
- 23 Thermal rearrangement of the titanium covered tungsten surface observed by field ion microscopy Cavaleru, A.
Scortaru, A. Rev. Roum. Phys. (1981) 26, 725-8

Atom Probe Field-Ion Microscopy Bibliography for 1981

- 24 Decomposition of ammonia on rhenium. I. Hydrogen adsorption on rhenium Cholach, A. R. Sobyanin, V. A. Gorodetskii, V. V. React. Kinet. Catal. Lett. (1981) 18, 371-5
- 25 Decomposition of ammonia on rhenium. II. Nitrogen adsorption on rhenium Cholach, A. R. Sobyanin, V. A. Gorodetskii, V. V. React. Kinet. Catal. Lett. (1981) 18, 381-5
- 26 Advances in molten metal field ion sources Clampitt, R. Nucl. Instrum. Methods Phys. Res. (1981) 189, 111-6
- 27 Field emission of electrons from superconducting and normal electrodes Cobourne, M. H. Williams, W. T. Physica B+C (Amsterdam) (1981) 104, 50-5
- 28 FEM study of silver layers adsorbed on tungsten. III. Silver layer growth modes Contescu, C. Rev. Roum. Chim. (1981) 26, 355-61
- 29 FEM study on silver layers adsorbed on tungsten. II. Surface structure and surface migration Contescu, C. Vass, M. L. Rev. Roum. Chim. (1981) 26, 175-83
- 30 Field desorption of polymers: polybutadiene Craig, A. G. Cullis, P. G. Derrick, P. J. Int. J. Mass Spectrom. Ion Phys. (1981) 38, 297-304
- 31 Single atom sputtering events: direct observation of near-surface depleted zones in ion-irradiated tungsten Current, M. I. Wei, C.-Y. Seidman, D. N. Philos. Mag. B (1981) 43, 103-38
- 32 Field emission spectroscopy of beryllium atoms adsorbed on tungsten Czyzewski, J. J. Grzesiak, W. Krajniak, J. Acta Phys. Pol. A (1981) A60, 249-59
- 33 Cross-correlation function of field emission flicker noise from potassium submonolayers on tungsten at 420 K Dabrowski, A. Kleint, C. Acta Univ. Wratislav., Mat., Fiz., Astron. (1981) 40, Proc. Semin. Surf. Phys., 5th, 23-34
- 34 Study of tungsten/rhenium alloys by field emission spectroscopy Dao Viet, D. Rihon, N. Bull. Soc. Chim. Belg. (1981) 90, 143-6
- 35 Interference of electrons during the photoionization of an atom in a electric field Demkov, Yu. N. Kondratovich, V. D. Ostrovskii, V. N. Pis'ma Zh. Eksp. Teor. Fiz. (1981) 34, 425-7

Atom Probe Field-Ion Microscopy Bibliography for 1981

- 36 Field-ion emission from liquid tin Dixon, A.
Colliex, C.
Ohana, R.
Sudraud, P.
Van de Walle, J. Phys. Rev. Lett. (1981)
46, 865-8
- 37 Field evaporation of impurity ions from a liquid gallium ion source Dixon, A.
Colliex, C.
Sudraud, P.
Van de Walle, J. Surf. Sci. (1981) 108,
L424-8
- 38 Field ionization phenomena during interaction of particles with a surface Dorozhkin, A. A.
Petrov, N. N. Avtoionizatsion.
Yavleniya v Atomakh.
Tr. 2-go Nauch.
Seminara, Moskva,
1980, 209-25
- 39 Autoionic-microscopic determination of the degree of penetration of an electric field into a metal Dranova, Z. I.
Mikhailovskii, I. M. Zh. Tekh. Fiz. (1981)
51, 845-9
- 40 Field ion and electron-microscopic study of a tungsten surface irradiated by helium ions Dranova, Z. I.
Mikhailovskii, I. M.
Pivovar, L. I.
Tolstolutskaya, G. D. Issled. i Razrab.
Materialov dlya
Reaktorov Termoyader.
Sinteza, M., 1981,
52-61
- 41 A field ion observation of a grain boundary node Eaton, H. C. Proc. - Annu. Meet.,
Electron Microsc. Soc.
Am., 1981 39, 10-11
- 42 Grain boundary dislocation observations using the field ion microscope Eaton, H. C. Phys. Status Solidi A
(1981) 65, 497-502
- 43 A numerical and experimental study of the electric field distribution within field emission systems Eaton, H. C. J. Vac. Sci. Technol.
(1981) 19, 1033
- 44 Wandering surface atoms and the field ion microscope Ehrlich, G. Phys. Today (1981) 34,
44-53
- 45 Quantitative studies of individual atoms and clusters on solids Ehrlich, G.
Stolt, K. Proc. - Annu. Meet.,
Electron Microsc. Soc.
Am., 1981 39, 2-5
- 46 Post-field ionization of singly charged rhodium: an experimental and theoretical study Ernst, N.
Jentsch, T. Phys. Rev. B, Condens.
Matter (1981) 24,
6234-41

Atom Probe Field-Ion Microscopy Bibliography for 1981

- 47 Field ionization kinetics of the loss of water from stereoisomeric cyclohexanediol radical ions Espinosa, G. J.
Gruetzmacher, H. F. Int. J. Mass Spectrom. Ion Phys. (1981) 38, 181-94
- 48 Direct observation of overlayer structures on W(110) Fink, H.-W.
Ehrlich, G. Surf. Sci. (1981) 110, L611-4
- 49 Progress with the theory of noble gas field adsorption Forbes, R. G. Vacuum (1981) 31, 567-70
- 50 Charge hopping and charge draining: Two mechanisms of field desorption Forbes, R. G. Surf. Sci. (1981) 102, 255-63
- 51 The influence of hyperpolarizability and field-gradient polarizability on field adsorption binding energies for helium on tungsten(111) Forbes, R. G. Surf. Sci. (1981) 108, 311-28
- 52 Silanized carbon microneedle emitters for chemical/field ionization Fraley, D. F.
Bursey, M. M. Anal. Chem. (1981) 53, 1546-8
- 53 Statistics of field electronic emission for different tungsten single crystal faces Fursei, G. N.
Egorov, N. V.
Kocheryzhakov, A. V. Pis'ma Zh. Tekh. Fiz. (1981) 7, 798-801
- 54 Relaxation of the electron beam in a beam-plasma discharge in crossed fields Gadeev, K. K.
Krastov, E. M.
Ivanov, A. A.
Muksunov, A. M.
Nikiforov, V. A.
Severnyi, V. V.
Khripunov, B. I.
Shapkin, V. V. Fiz. Plazmy (Moscow) (1981) 7, 1020-3
- 55 Spin-orbit effect in the electric field ionization of rubidium and cesium Gallagher, T. F.
Perry, B. E.
Safinya, K. A.
Sandner, W. Phys. Rev. A (1981) 24, 3249-51
- 56 Liquid metal ion sources and their application Gamo, K.
Namba, S. Oyo Butsuri (1981) 50, 542-6
- 57 Electrohydrodynamic effects in field desorption mass spectrometry Giessmann, U.
Röllgen, F. W. Int. J. Mass Spectrom. Ion Phys. (1981) 38, 267
- 58 Investigation of field ionization of helium above single atoms of a tungsten emitter Glowacki, M.
Lenkow, W. Acta Univ. Wratislav., Mat., Fiz., Astron. (1981) 40, Proc. Semin. Surf. Phys., 5th, 45-51

Atom Probe Field-Ion Microscopy Bibliography for 1981

- 59 A new emitter for field-desorption mass spectrometry with silver-electroplated microneedles Goldenfeld, I. V.
Veith, H. J. Int. J. Mass Spectrom. Ion Phys. (1981) 40, 361-3
- 60 Study of phosphorus-containing macrocyclics by field-desorption mass spectrometry Golovatyi, V. G.
Korol, E. N. Teor. Eksp. Khim. (1981) 17, 849-51
- 61 Energy spreading in the hydrogen field ionization source Hanson, G. R.
Siegel, B. M. J. Vac. Sci. Technol. (1981) 19, 1176-81
- 62 Impact fusion and the field emission projectile Harrison, E. R. Nature (London) (1981) 291, 472-3
- 63 The model dependence of the ionization rate of hydrogen in a uniform electric field Haydock, R.
Kingham, D. R. J. Phys. B (1981) 14, 385-96
- 64 Some predictions of a theory of post-ionization of field-evaporated ions Haydock, R.
Kingham, D. R. Surf. Sci. (1981) 104, L194-8
- 65 Field ionization theory: a new analytic formalism Haydock, R.
Kingham, D. R. Surf. Sci. (1981) 103, 239-47
- 66 Atom-probe microanalysis of titanium carbide coatings on cemented carbides Henjered, A.
Kjellsson, L.
Andrén, H.-O.
Nordén, H. Scr. Metall. (1981) 15, 1023-7
- 67 Field ion microscopic studies on G.P. zones in aluminum-copper alloys Hirano, K.
Abe, T.
Miyazaki, K. Sci. Rep. Res. Inst., Tohoku Univ., Ser. A (1981) 29, 37-40
- 68 Electric field ionization rate of the hydrogen atom Hoe, N.
D'Etat, B.
Coulaud, G. Phys. Lett. A (1981) 85A, 327-30
- 69 A measurement of the surface self-diffusion of tantalum Hok, S.
Drechsler, M. Surf. Sci. (1981) 107, L362-6
- 70 Synthesis and electronic applications of oxide-metal eutectic composites Holder, J. D.
Clark, G. W.
Cochran, J. K.
Hill, D. N.
Chapman, A. T. Verbundwerkst., Ber. Vortr. Diskussionstag. Dtsch. Ges. Metallkd., 1981, 465-84, Dtsch. Ges. Metallkd., Oberursel, FRG
- 71 Atom-probe field ion microscopy Igata, N.
Sato, S. Nippon Kinzoku Gakkai Kaiho (1981) 20, 621-8

Atom Probe Field-Ion Microscopy Bibliography for 1981

- 72 800 MeV proton damage in tungsten and molybdenum: a field-ion-microscope observation Inai, O. T.
Sommer, W. F. J. Nucl. Mater. (1981) 99, 94-9
- 73 Field-emission spectroscopy of tungsten coated with barium and barium oxide layers Ivanov, V. A.
Kirsanova, T. S.
Tumareva, T. A. Fiz. Tverd. Tela (Leningrad) (1981) 23, 664-8
- 74 Condensation of bombarding gallium ions on a solid silicon surface Ishitani, T.
Shimase, A.
Tamura, H. Appl. Phys. Lett. (1981) 39, 627-8
- 75 Scanning microbeam using a liquid metal ion source Ishitani, T.
Tamura, H. Iongen to Ion o Kiso Toshita Oyo Gijutsu, Shinpojumu, 5th Takagi, Toshinori, ed., 1981, 129-32, Ion Kogaku Kondankai, Kyoto, Japan
- 76 Copper cluster ions in photon-induced field ionization mass spectra Jentsch, T.
Drachsel, W.
Block, J. H. Int. J. Mass Spectrom. Ion Phys. (1981) 38, 215-22
- 77 Investigation of fine-structure quantum beats in sodium Rydberg atoms by field ionization Jeys, T. H.
Smith, K. A.
Dunning, F. B.
Stebbins, R. F. Phys. Rev. A (1981) 23, 3065-70
- 78 Study of Rydberg-atom l-changing collisions using selective field ionization Kellert, F. G.
Jeys, T. H.
McMillian, G. B.
Smith, K. A.
Dunning, F. B.
Stebbins, R. F. Phys. Rev. A (1981) 23, 1127-33
- 79 Pulsed laser atom probe study of the dissociation of carbon monoxide on molybdenum Kellogg, G. L. Surf. Sci. (1981) 111, 205-13
- 80 Determining the field emitter temperature during laser irradiation in the Pulsed Laser Atom Probe Kellogg, G. L. J. Appl. Phys. (1981) 52, 5320-8
- 81 Experimental evidence for multiple post-ionization of field-evaporated ions Kellogg, G. L. Phys. Rev. B, Condens. Matter (1981) 24, 1848-51
- 82 Pulsed laser-stimulated field desorption of hydrogen from molybdenum Kellogg, G. L. J. Chem. Phys. (1981) 74, 1479-87

Atom Probe Field-Ion Microscopy Bibliography for 1981

- 83 Imaging metal surfaces by pulsed laser stimulated field desorption of field adsorbed atoms Kellogg, G. L. Tsong, T. T. Surf. Sci. (1981) 110, L599-605
- 84 Field-ion microscope observation of thermal faceting in a nickel-molybdenum in (Ni₄Mo) emitter Kingetsu, T. Yamamoto, M. Nenno, S. Jpn. J. Appl. Phys. (1981) 20, 2037-46
- 85 Field-ion microscope studies of Ni₄W type ordering in the near-surface of nickel-16.6 at. % tungsten alloy Kingetsu, T. Yamamoto, M. Nenno, S. Fukura, H. Jpn. J. Appl. Phys. (1981) 20, 1407-21
- 86 Field-ion microscope study of ordering in the near-surface of nickel molybdenum (Ni₄Mo) alloy Kingetsu, T. Yamamoto, M. Nenno, S. Sci. Rep. Res. Inst., Tohoku Univ., Ser. A (1981) 29, 31-6
- 87 Field-ion microscope observation of ordering in the near-surface of nickel-molybdenum (Ni₄Mo) alloy using *in situ* annealing Kingetsu, T. Yamamoto, M. Nenno, S. Surf. Sci. (1981) 103, 13-53
- 88 Comments on "Polarizabilities and binding energies of gallium on tungsten and post-field-ionization of gallium" by M. Konishi, M. Wada and O. Nishikawa Kingham, D. R. Surf. Sci. (1981) 108, L460-2
- 89 Energy broadening in field emitted electron and ion beams Knauer, W. Optik (1981) 59, 335-354
- 90 Ion beam exposure apparatus using a liquid metal source Komuro, M. Iongen to Ion o Kiso toshita Oyo Gijutsu, Shinpojumu, 5th, Takagi, T., ed., 1981, 45-52, Ion Ion Kogaku Kondankai, Kyoto, Japan
- 91 Ion sources for microfabrication. Field emitter type in sources Komuro, S. Oyo Butsuri (1981) 50, 55-6
- 92 Field-emission liquid-metal ion source and triode ion gun Komuro, M. Kawakatsu, H. J. Appl. Phys. (1981) 52, 2642-5
- 93 Reply to the comments by D. R. Kingham on "Polarizabilities and binding energies of gallium on tungsten and post-field-ionization of gallium" Konishi, M. Wada, M. Nishikawa, O. Surf. Sci. (1981) 108, L453-4

Atom Probe Field-Ion Microscopy Bibliography for 1981

- 94 Polarizabilities and binding energies of gallium on tungsten and post-field-ionization of gallium Konishi, M.
Wada, M.
Nishikawa, O. Surf. Sci. (1981) 107,
63-74
- 95 Changes of the surface structure of a tungsten emission tip induced by the adsorption of antimony Kozlowski, G.
Ciszewski, A. Acta Univ. Wratislav.,
Mat., Fiz., Astron.
(1981) 40, Proc. Semin.
Surf. Phys., 5th, 153-5
- 96 Adsorption of antimony on the surface of a tungsten FEM emitter tip Kozlowski, G.
Ciszewski, A. Acta Univ. Wratislav.,
Mat., Fiz., Astron.
(1981) 40, Proc. Semin.
Surf. Phys., 5th, 153-8
- 97 Surface self-diffusion modifications induced by the adsorption of antimony on the tungsten field emitter tip Kozlowski, G.
Ciszewski, A. Jpn. J. Appl. Phys.
(1981) 20, L114-6
- 98 Über fortschritte bei untersuchungen von Metallocberflächen mit feldionenmikroskop-atomsonden Krautz, E. Beitr.
elektronenmikroskop.
Direktabb. Oberflö.
BEDO (1981) 14, 1-14
- 99 Effect of hydrogen in studies of high-melting metals using the field ion microscope and atom probe Krautz, E. Proc. Plansee-Semin.,
10th Ortner, H. M.,
ed., 1981, 1, 43-56
Metallwerk Plansee
GmbH, Reutte, Austria
- 100 Field evaporation of metals and alloys at low and high temperatures Krautz, E. Mikrochim. Acta (1981)
2, 433-46
- 101 Effect of hydrogen in studies of refractory metals using the field ion microscope and the atom probe Krautz, E. High Temp. - High Pressures (1981) 13,
583-92
- 102 Field ion microscopy of tantalum and niobium at low residual gas pressures Krautz, E.
Haiml, G. Z. Metallkd. (1981) 72,
116-9
- 103 Cluster formation in amorphous and polycrystalline thin films Krishnaswamy, S. V.
Messier, R.
McLane, S. B.
Ng, Y. S.
Tsong, T. T. Thin Solid Films (1981)
19, 21-6
- 104 Atom probe analysis of r.f.-sputtered hydrogenated amorphous silicon films Krishnaswamy, S. V.
Messier, R.
Wu, C. S.
McLane, S. B.
Tsong, T. T. J. Vac. Sci. Technol.
(1981) 18, 309-12

Atom Probe Field-Ion Microscopy Bibliography for 1981

- 105 Study of the composition of strengthening phases in macaging iron-15% nickel-15% cobalt-10% tungsten steel by a field ion mass spectrometer Kudryavtsev, A. N. Ednreal, A. F. Dokl. Akad. Nauk SSSR (1981) 261, 611-5 (Tech. Phys.)
- 106 Study of alloy surfaces and ion and electron emitter surfaces by field ion microscope Kuk, Y. 1981, 160, Univ. Microfilms Int., Order No. DA8129176
- 107 A high-performance atom probe field-ion microscope study of segregation and hydrogen cracking in Fe-0.29 Ti Kuk, Y. Pickering, H. W. Sakurai, T. Hydrogen Eff. Met., Proc. Int. Conf., 3rd, Bernstein, I. M. and Thompson, A. W., eds., 1981, 123-32, Metall. Soc. AIME, Warrendale, PA
- 108 Study of mechanisms of reactions of hydrocarbons during field-ionization mass spectrometry Kuras, M. Ryska, M. Sb. Vys. Sk. Chem.-Technol. Praze, Technol. Paliv. (1981) D44, 165-90
- 109 Electroluminescence effects associated with the field emission of electrons from a carbon fiber micropoint emitter Latham, R. V. Wilson, D. A. J. Phys. D (1981) 14, 2139-45,
- 110 Surface composition profiles of alloys, determined with single-layer resolution Leisch, M. Mikrochim. Acta, Suppl. (1981) 9, 343-7
- 111 Electron emission upon mechanical treatment Linke, E. Proc. Int. Symp. Exoelectron Emiss. Appl., 6th, 1981, 133-7, Wilhelm-Pieck-Univ. Rostock, Rostock, GDR
- 112 Development of radiation damage in pressure vessel steels Lott, R. E. Brenner, S. S. Miller, M. K. Wolfenden, A. Proc. American Nuclear Soc., Trans. (1981) 38, 303
- 113 Technology and applications of field emission Lu, J.-H. Zhang, Q. Chen K'ung K'o Hsueh Yu Chi Shu (1981) 1, 95-103
- 114 Large-area field emission diode for semiconductor annealing Luches, A. Nassisi, V. Perrone, A. Perrone, M. R. Physica B+C (Amsterdam) (1981) 104, 228-32

Atom Probe Field-Ion Microscopy Bibliography for 1981

- 115 Mass transport in liquid gallium ion beam sources Mair, G. L. R.
Von Engel, A. J. Phys. D (1981) 14, 1721-8
- 116 Surface distributions of hydrogen field adsorbed on rhodium as displayed by imaging atom probe Martinka, M. Surf. Sci. (1981) 109, L539-44
- 117 The high resolution imaging atom-probe with application to nickel platings Martinka, M. 1981, 180, Univ. Microfilms Int., Order No. 8112823
- 118 Analysis of high resistivity semiconductor specimens in an energy-compensated time-of-flight atom probe Melmed, A. J.
Martinka, M.
Girvin, S. M.
Sakurai, T.
Kuk, Y. Appl. Phys. Lett. (1981) 39, 416-7
- 119 Feasibility of ToF atom-probe analysis of silicon Melmed, A. J.
Sakurai, T.
Kuk, Y.
Givargizov, E. I. Surf. Sci. (1981) 103, L139-42
- 120 A study of the early stages of tempering of iron-carbon martensites by atom probe field ion microscopy Miller, M. K.
Beaven, P. A.
Smith, G. D. W. Metall. Trans. A (1981) 12, 1197-204
- 121 An atom probe study of the anomalous field evaporation of alloys containing silicon Miller, M. K.
Smith, G. D. W. J. Vac. Sci. Technol. (1981) 19, 57-62
- 122 Spectroscopic investigations of a field emission generated radiative zone: mass spectroscopic measurements Mitterauer, J. 1981, N-8231499,
ESA-CR(P)-1589, 106
- 123 Field emission from tungsten (110) Modinos, A.
Oxinos, G. J. Phys. C (1981) 14, 1373-80
- 124 Spin-polarized field-emission from nickel (100) Modinos, A.
Oxinos, G. Conf. Ser. - Inst. Phys. (1981) 55, Phys. Transition Met., 157-60
- 125 The simulation of FIM desorption patterns Moore, A. J. W. Philos. Mag. A (1981) 43, 803-14
- 126 Surface diffusion of lead on tungsten Morin, R.
Drechsler, M. Surf. Sci. (1981) 111, 128
- 127 A study of coadsorbate surface diffusion Morin, R.
Drechsler, M. Surf. Sci. (1981) 111, 140

Atom Probe Field-Ion Microscopy Bibliography for 1981

- 128 Recent progress in field ion microscopy Nakamura, S. Oyo Butsuri (1981) 50, 77-84
- 129 FEM/FIM/atom-probe studies of metal-metal interfaces Nishikawa, O. Oyo Butsuri (1981) 50, 807-17
- 130 Atom-probe study of gallium-molybdenum and tin-iridium interfaces Nishikawa, O. Nachi, M. Kurihara, K. Tsunashima, Y. Hara, Y. Phys. Status Solidi A (1981) 67, 461-8
- 131 Performance of the new high mass resolution time of flight atom probe Nishikawa, O. Kurihara, K. Nachi, M. Konishi, M. Wada, M. Rev. Sci. Instrum. (1981) 52, 810-8
- 132 Direct comparison between atom probe and STEM/EDS x-ray analysis of thin specimens Nordén, H. Andrén, H.-O. Hellsing, M. Henjered, A. Quant. Microanal. High Spat. Resolut., Proc. Conf., Lorimer, G. W., Jacobs, M. H., and Doig, P. eds., 1981, 262-6, Met. Soc., London, UK
- 133 An improved technique for the activation of filamentary field-anodes based on cathodic needle growth Okuyama, F. Int. J. Mass Spectrom. Ion Phys. (1981) 38, 255-66
- 134 Ion formation mechanisms in field-desorption mass spectrometry of semirefractory metal elements Okuyama, F. Shen, G. H. Int. J. Mass Spectrom. Ion Phys. (1981) 39, 327-37
- 135 Optical column design with liquid metal ion sources Orloff, J. Swanson, L. W. J. Vac. Sci. Technol. (1981) 19, 1149-52
- 136 The observations of surface diffusion in tungsten and rhenium in FIM (field ion microscope) Orr, K. K. Tsong, T. T. Han'guk Pusik Hakhoechi (1981) 10, 27-31
- 137 Feld desorptionsmassenspektrkometrie negativer ionen (NFD - MS) von salzen Ott, K. H. Röllgen, F. W. Zwinselman, J. J. Fokkens, R. H. Nibbering, N. M. M. Angew. Chem. (1981) 93, 96 Angew. Chem. Int. Ed. (1981) 20, 111

Atom Probe Field-Ion Microscopy Bibliography for 1981

- 138 Anionization of volatile molecules on the surface of electrolytic solutions exposed to high electric fields Ott, K. H.
Röllgen, F. W.
Daehling, P.
Zwinselman, J. J.
Fokkens, R. H.
Nibbering, N. M. M. Org. Mass Spectrom. (1981) 16, 336-8
- 139 Molecular imaging in high electric fields Panitz, J. A. Proc. - 39th Annu. Meet., Electron Microsc. Soc. Am. (1981) 39, 18-21
- 140 Ferritin deposition on field-emitter tips Panitz, J. A.
Glaever, I. Ultramicroscopy (1981) 6, 3-6
- 141 Ionization of an atom by an external electrostatic field Persi, T.
Fonda, L. 1981, IC-81/15, 11, INIS
- 142 Segregation studies using a high performance atom probe Pickering, H. W.
Sakurai, T. Environ. Degrad. Eng. Mater. Hydrogen, Proc. Int. Conf., 2nd, Louthan, M. R., Jr., McNitt, R. P., and Sisson, R. D., Jr., eds., 1981, 413-23, Virginia Polytech. Inst., Blacksburg, VA
- 143 The development of a sprayer for field emission deposition Prewett, P. D.
Gowland, L.
Aitken, K. L.
Mahony, C. M. O. Thin Solid Films (1981) 80, 117-24
- 144 Liquid metal source of gold ions Prewett, P. D.
Jefferies, D. K.
Cockhill, T. D. Rev. Sci. Instrum. (1981) 52, 562-6
- 145 Study of palladium recrystallization processes in a field-emission microscope Pugachevich, V. P.
Morozov, K. A.
Bezrukov, A. V. Fiz. Met. Metalloved. (1981) 51, 166-71
- 146 The application of atom-probe techniques in materials science and technology Ralph, B.
Waugh, A. R.
Hill, S. A.
Southon, M. J.
Thomas, M. P. Proc. - 39th Annu. Meet., Electron Microsc. Soc. Am. (1981) 39, 12-5

Atom Probe Field-Ion Microscopy Bibliography for 1981

- 147 Numerical transmission probabilities and the oscillatory photo-induced field emission current: static and dynamic image charge effects Reifenberger, R.
Haavig, D. L.
Egert, C. M. Surf. Sci. (1981) 102,
276-90
- 148 Band bending in field emission spectroscopy from the zinc oxide (0001) polar face Rihon, N. Phys. Status Solidi A (1981) 63, 617-24
- 149 Construction of a desorption chemical-ionization probe for activated field-desorption emitters Roach, J. A. G.
Malatesta, A. J.
Sphon, J. A.
Brumley, W. C.
Andrzejewski, D.
Dreifuss, P. A. Int. J. Mass Spectrom. Ion Phys. (1981) 39,
151-6
- 150 Applicability of silicon field emitters in microprobe instruments Rybalko, V. V.
Belousov, V. U. 1981, No. VINITI
4378-81, 11
- 151 Field-ion microscopic study of surface self-diffusion on tungsten surfaces Sadakane, Y.
Abe, T.
Hirano, K. J. Japan Inst. Metals (1981) 45, 20-8
- 152 Atom-probe study of phosphorus segregation and of other elements in grain boundaries of iron Sakurai, T.
Kuk, Y.
Birchenall, A. K.
Pickering, H. W.
Grabke, H. J. Scr. Metall. (1981) 15,
535-8
- 153 High performance time-of-flight atom-probe for characterization of hydrogen in metals Sakurai, T.
Pickering, H. W. Am. Phys. Soc. & Am. Iron and Steel Inst., Schwerer, F. C., ed., (1981)
- 154 A goniometer head for an atom-probe field ion microscope Sarrau, J. M.
Gallot, J.
Avenel, O.
Roubeau, P. J. Phys. E (1981) 14,
800-2
- 155 Electric field gradient effects on the spectroscopy of adsorbed molecules Sass, J. K.
Neff, H.
Moskovits, M.
Holloway, S. J. Phys. Chem. (1981) 85, 621-3
- 156 Field ion emission from thin tungsten wires covered with a layer from an etching procedure Schmidt, W. A.
Goldenfeld, I. V.
Helal, A. I. Int. J. Mass Spectrom. Ion Phys. (1981) 38,
241-54

Atom Probe Field-Ion Microscopy Bibliography for 1981

- 157 Field ion microscope observations of radiation effects Seidman, D. N. 1981, DOE/ER/03158-99 Order No. DE81030934 8
- 158 Direct observations of the primary state of radiation damage of ion-irradiated tungsten and platinum Seidman, D. N. Current, M. I. Pramanik, D. Wei, C.-Y. Nucl. Instrum. Methods (1981) 182-183, 477-81
- 159 Field emission microscopy of defects in tungsten subjected to electric-spark treatment Sharov, B. V. Bobkov, A. F. Zaitsev, S. V. Suvorov, A. L. Vopr. Atom. N. i Tekhn. Fiz. Radiats. Povreždenii i Radiats. Materialoved., (Moskva) (1981) 79-81
- 160 Adsorption of copper on tungsten low index planes at various substrate temperatures: a field emission microscopy study Sidorski, Z. Szelwicki, T. Dworecki, Z. Thin Solid Films (1981) 75, 87-104
- 161 Field emission STEM X-ray microanalysis and atom probe microanalysis: a comparison Smith, G. D. W. Delargy, K. M. Barnard, S. J. Williams, P. R. Garratt-Reed, A. J. Vander Sande, J. B. Proc. Analytical Electron Microscopy Workshop, Vail, Colorado, Geiss, R., ed., San Francisco Press, Inc. (1981) 76-78
- 162 A comparison between atom probe and STEM microanalysis Smith, G. D. W. Garratt-Reed, A. J. Vander Sande, J. B. Proc. of Conf. on Quantitative Microanalysis with High Spatial Resolution, Manchester, Lorimer, G. W., Jacobs, M. H., and Doig, P., eds., The Metals Society, London (1981) 238-249
- 163 Field emission cold cathode devices based on eutectic systems Stewart, D. Rivlin, V. G. Wilson, P. D. 1981, RADC-TR-81-170, Order No. AD-A104795, 117
- 164 Energy spectra of electrons field emitted from a broad area composite cathode of tantalum carbide Stewart, D. Wilson, P. D. Latham, R. V. Allen, N. K. J. Mater. Sci. (1981) 16, 111-17

Atom Probe Field-Ion Microscopy Bibliography for 1981

- 165 Thermal desorption of quasimolecular ions Stoll, R.
Röllgen, F. W. Org. Mass Spectrom.
(1981) 16, 72-5
- 166 Ionic microscopy of defective regions of singular cascades of atomic displacements in metals Suvorov, A. L. Radiats. Defekty Met., Mater. Vses. Soveshch., 2nd, Luk'yanov, A. T., ed., 1981, 23-32, Izd. Nauka Kaz. SSR, Alma-Ata, USSR
- 167 Electron spectroscopy from a vacuum gap under a prebreakdown condition Suzuki, K.
Kobayashi, S. Saitama Daigaku Kiyo, Kogakubu (1981) 15, 11-3
- 168 Combined STEM/atom probe investigation of precipitation in powder-metallurgy high-speed steel Svensson, L. E.
Howell, P. R.
Andrén, H.-O.
Nordén, H.
Dunlop, G. L. Quant. Microanal. High Spat. Resolut., Proc. Conf., Lorimer, G. W., Jacobs, M. H., and Doig, P. eds., 1981, 256-61, Met. Soc., London, UK
- 169 Recent progress in thermal field electron source performance Swanson, L. W.
Tuggle, D. Appl. Surf. Sci. (1981) 8, 185-96
- 170 Measurement of enhancement in field ionization of helium and neon by self field adsorption Sweeney, J. H.
Tsong, T. T. Surf. Sci. (1981) 104, L179-84
- 171 Preferential sputtering of nickel-aluminum (Ni_3Al) single crystals studied using atom-probe field-ion microscopy and XPS Thomas, M. P.
Waugh, A. R.
Southon, M. J.
Ralph, B. Proc. 39th Annu. Meet., Electron Microsc. Soc. Am. (1981) 39, 16-17
- 172 Analytical electron microscopy of carbide precipitates in a stabilized austenitic stainless steel Thorvaldsson, T.
Rubinsztein-Dunlop, H.
Andrén, H.-O.
Dunlop, G. L. Proc. Quantitative Microanalysis with High Spatial Resolution (1981) 227, 250-254, The Metals Soc., London
- 173 Atomic structure and interactions at single crystal metal surfaces Tung, R. T. 1981, 190, Univ. Microfilms Int., Order No. 8117868
- 174 Characteristics of electric field evaporation-type ion source using a liquid alloy Ukegawa, T.
Imoto, Y.
Ka, K.
Ochiai, Y.
Yamaguchi, K.
Gamo, K.
Namba, S. Ion Chunyu to Sabumikuron Kako, Shimpojumu, 12th, (1981) 113-16, Rikagaku Kenkyusho, Wako, Japan

Atom Probe Field-Ion Microscopy Bibliography for 1981

- 175 Optical emission: a probe of neutral atoms in liquid metal ion sources Venkatesan, T.
Wagner, A.
Barr, D. Appl. Phys. Lett. (1981)
38, 943-5
- 176 Electrostatic charge energy near the semiconductor interface and potential barrier shape in field emission Voitenko, A. I.
Gabovich, A. M.
Il'chenko, L. G. Fiz. Tverd. Tela
(Leningrad) (1981) 23,
1531-3
- 177 Droplet emission in liquid metal ion sources Wagner, A.
Venkatesan, T.
Petroff, P. M.
Barr, D. J. Vac. Sci. Technol.
(1981) 19, 1186-9
- 178 Trajectory calculations of the extraction region of a liquid-metal ion source Ward, J. W.
Seliger, R. L. J. Vac. Sci. Technol.
(1981) 19, 1082-6
- 179 A study of segregation to the dislocation substructure in patented steel wire using atom-probe techniques Waugh, A. R.
Paetke, S.
Edmonds, D. V. Metallography (1981)
14, 237-51
- 180 Direct observation of the primary state of damage of ion-irradiated tungsten Wei, C.-Y.
Current, M. I.
Seidman, D. N. Philos. Mag. A (1981)
44, 459-91
- 181 The spatial distribution of self-interstitial atoms around depleted zones in tungsten ion-irradiated at 10 K Wei, C.-Y.
Seidman, D. N. Philos. Mag. A (1981)
43, 1419-39
- 182 An improved ion optical system for high transmission for FI/FD sources Winkler, H. U.
Beckey, H. D. Int. J. Mass Spectrom.
Ion Phys. (1981) 32,
111-5
- 183 A new ion source for field-ionization kinetic measurements Winkler, H. U.
Weber, R.
Wagner, W.
Heindrichs, A.
Beckey, H. D.
Levsen, K. Int. J. Mass Spectrom.
Ion Phys. (1981) 32,
105-9
- 184 Use of the thermal-field emission characteristics for the evaluation of work function and electric field strength in FEM Wysocki, J. K. Surf. Sci. (1981) 104,
463-77
- 185 Some fundamental properties of zirconiated tungsten(100) field-emission cathode Yamamoto, S.
Hosoki, S.
Kawase, S.
Hirai, Y. J. Appl. Phys. (1981)
52, 1011-4

Atom Probe Field-Ion Microscopy Bibliography for 1981

- | | | | |
|-----|---|---|--|
| 186 | Field ionization at a surface modified by chemically bound carboxylic acid groups | Youngless, T. L.
Bursey, M. M.
Pedersen, L. G. | Int. J. Mass Spectrom.
Ion Phys. (1981) 38 ,
223-39 |
| 187 | Negative ion field desorption mass spectrometry by clustering with anions | Zwinelman, J. J.
Fokkens, R. H.
Nibbering, N. M. M.
Ott, K. H.
Röllgen, F. W. | Biomed. Mass Spectrom.
(1981) 8 , 312 |

1982

Atom Probe Field-Ion Microscopy Bibliography for 1982

- 1 Imaging of pure aluminum and aged aluminum-4 wt. % copper alloys by field-ion microscope Abe, T.
Miyazaki, K.
Hirano, K. I. Acta Metall. (1982) 30,
357-66
- 2 Field ion microscopic investigation of GP zones in aluminum alloys Abe, T.
Miyazaki, K.
Kawai, M.
Hirano, K. Proc. Int. Conf. Solid-Solid Phase Transform.,
Aaronson, H. I., ed.,
1982, 359-61, Metall.
Soc. AIME, Warrendale,
PA
- 3 Atom probe study on G.P. zones in aluminum alloys Abe, T.
Yoshimura, T.
Shibata, M.
Hirano, K.
Nishikawa, O. Proc. Int. Field Emiss.
Symp., 29th, Andrén,
H.-O. and Nordén, H.,
eds., 1982, 541-6,
Almqvist & Wiksell,
Stockholm, Sweden
- 4 Method for studying the number of elementary acts during field emission Afanas'eva, N. P.
Egorov, N. V.
Kocheryzhenkov, A. V.
Fursei, G. N. Prib. Tekh. Eksp.
(1982) 141-2
- 5 Multiple emission zones in liquid metal field ion thrusters Aitken, K. L.
Jefferies, D. K.
Prewett, P. D. Proc. Int. Field Emiss.
Symp., 29th, Andrén,
H.-O. and Nordén, H.,
eds., 1982, 373-82,
Almqvist & Wiksell,
Stockholm, Sweden
- 6 A high resolution electron spectrometer facility for studying the spectra of microscopically localized field emission sites on planar cathodes Allen, N. K.
Athwal, C. S.
Latham, R. V. Vacuum (1982) 32,
325-32
- 7 Decomposition of Cu-1.9 at % Ti investigated by FIM-atom-probe techniques Alvensleben, L. v.
Wagner, R. Proc. Int. Field Emiss.
Symp., 29th, Andrén,
H.-O. and Nordén, H.,
eds., 1982, 563-72,
Almqvist & Wiksell,
Stockholm, Sweden
- 8 Development of a gallium ion source scanning ion microscope and its applications Anazawa, N.
Aihara, R.
Okunuki, M.
Shimizu, R. Scanning Electron
Microsc. (1982) 1443-51
- 9 Field ionization of deep levels in semiconductors with applications to mercury cadmium telluride ($Hg_{1-x}Cd_xTe$) p-n junctions Anderson, W. W.
Hoffman, H. J. J. Appl. Phys. (1982)
53, 9130-45

Atom Probe Field-Ion Microscopy Bibliography for 1982

- 10 Proceedings of the 29th International Field Emission Symposium, Göteborg, Sweden, 1982; *J. de Phys.* (1982) Andrén, H.-O.
Nordén, H. 1982, Almqvist and Wiksell, Stockholm, Sweden
- 11 Field ion microscopic studies of amorphous Metglas 2826 ($\text{Fe}_{40}\text{Ni}_{40}\text{P}_{14}\text{B}_6$) γ alloy Arise, T.
Lu, H.
Nakamura, M.
Suzuki, Y.
Yamamoto, R.
Doyama, M. Proc. Int. Conf. Rapidly Quenched Met., 4th, Masumoto, T. and Suzuki, K. eds., (1982) 1, 435-8, *Jpn. Inst. Met.*, Sendai, Japan
- 12 Field ion microscopy of transition metal trichalcogenides: niobium selenide (NbSe_3) Arise, T.
Nakamura, M.
Suzuki, A.
Otake, K.
Suzuki, Y.
Lu, H.
Yamamoto, R.
Endo, K.
Doyama, M. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 145-50, Almqvist & Wiksell, Stockholm, Sweden
- 13 Field emission and secondary electron emission from niobium-tin (Nb_3Sn) surfaces Arnolds-Mayer, G.
Hilleret, N. Adv. Cryog. Eng. (1982) 28, 611-21
- 14 Ionization of a model atom by strong and superstrong electric fields Arrighini, G. P.
Gavarini, M. Lett. Nuovo Cimento Soc. Ital. Fis. (1982) 33, 353-8
- 15 Atom probe studies: 1) The role of silicon in tempering of steel and 2) low-temperature chromium diffusivity in bainite Barnard, S. J.
Smith, G. D. W.
Garratt-Reed, A. J.
Vander Sande, J. Proc. Int. Conf. Solid-Solid Phase Transform., Aaronsen, H. I., ed., 1982, 881-5, Metall. Soc. AIME, Warrendale, PA
- 16 The equilibrium shape of a cubic face centered crystal (nickel) Barsotti, T.
Bermond, J. M.
Drechsler, M. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 51-8, Almqvist & Wiksell, Stockholm, Sweden
- 17 Liquid metal ion sources for space propulsion Bartoli, C.
Rohden, H. H.
Thompson, S. P. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 363-72, Almqvist & Wiksell, Stockholm, Sweden

Atom Probe Field-Ion Microscopy Bibliography for 1982

- 18 The emission characteristics of an aluminum liquid-metal ion source Bell, A. E.
Schwind, G. A.
Swanson, L. W. J. Appl. Phys. (1982) 53, 4602-5
- 19 The trajectories of neutral polarizable particles in an inhomogeneous electric field Bermond, J. M. Rev. Phys. Appl. (1982) 17, 491-8
- 20 An atom-probe study of bainite Bhadeshia, H. K. D. H.
Waugh, A. R. Proc. Int. Conf. Solid-Solid Phase Transform., Aaronson, H. I., ed., 1982, 993-7, Metall. Soc. AIME, Warrendale, PA
- 21 Bainite: an atom-probe study of the incomplete reaction phenomenon Bhadeshia, H. K. D. H.
Waugh, A. R. Acta Metall. (1982) 30, 775-84
- 22 Early stage decomposition in Cu-Ti alloys Biehl, K.-E.
Wagner, R. Proc. Int. Conf. Solid-Solid Phase Transform., Aaronson, H. I., ed., 1982, 185, Metall. Soc. AIME, Warrendale, PA
- 23 Theoretical arguments against the Müller-Schottky mechanism of field evaporation Biswas, R. K.
Forbes, R. G. J. Phys. D (1982) 15, 1323-38
- 24 An FEM study of sulfur adsorption on nickel Blaszczyzyn, M.
Blaszczyzyn, R.
Meclewski, R.
Madey, T. E.
Melmed, A. J. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 35-42, Almqvist & Wiksell, Stockholm, Sweden
- 25 Atom-probe analysis of matrix-precipitate interfaces: determination of the analyzed depth Blavette, D.
Bostel, A.
Sarrau, J. M.
Gallot, J. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 497-503, Almqvist & Wiksell, Stockholm, Sweden
- 26 Atomic probe analysis of precipitates in an iron-chromium-nickel-aluminum ($\text{FeCr}_{20}\text{Ni}_2\text{Al}_2$) alloy Blavette, D.
Martin, C.
Gaillet, J. Scr. Metall. (1982) 16, 59-64
- 27 Direction and depth of atom probe analysis Blavette, D.
Sarrau, J. M.
Bostel, A.
Gallot, J. Rev. Phys. Appl. (1982) 17, 435-40

Atom Probe Field-Ion Microscopy Bibliography for 1982

- 28 Adsorption of aluminum on low-resistance gallium arsenide Blazhnova, E. I.
Mileshkina, N. V.
Nazarov, G. B. Izv. Akad. Nauk SSSR,
Ser. Fiz. (1982) 46,
1420-2
- 29 Electron emission from gold island films Blessing, R.
Pagnia, H. Phys. Status Solidi B
(1982) 110, 537-42
- 30 Molecular ions formed by field ionization Block, J. H. Ber. Bunsenges. Phys.
Chem. (1982) 86,
852-60
- 31 Field desorption and photon-induced field desorption Block, J. H. Springer Ser. Chem.
Phys. (1982) 20, Chem.
Phys. Solid Surf.,
407-34
- 32 Field ionization and surface interaction of silane on tungsten Block, J. H.
Helal, A. I.
Frank, O. Int. J. Mass Spectrom.
Ion Phys. (1982) 43,
157-66
- 33 Electron field emission of a carbon fiber Bondaenko, B. V.
Rybakov, Y. L.
Sheshin, E. P. Radiotekh. Elektron.
(Moscow) (1982) 27,
1593-7
- 34 Imaging atom probe investigations of oxide films formed on iron Bray, A.
Cornell, R. M.
Cranstoun, G. K. L. Proc. Int. Field Emiss.
Symp., 29th, Andrén,
H.-O. and Nordén, H.,
eds., 1982, 193-200,
Almqvist & Wiksell,
Stockholm, Sweden
- 35 FIM/atom-probe and electron-microscope analysis of precipitates in high-strength, low-alloy steel Brenner, S. S.
Burke, M. G.
Cuddy, L. J.
Miller, M. K.
Piller, J. Proc. Int. Field Emiss.
Symp., 29th, Andrén,
H.-O. and Nordén, H.,
eds., 1982, 457-64,
Almqvist & Wiksell,
Stockholm, Sweden
- 36 An atom probe study of precipitation in iron-chromium alloys at low temperatures Brenner, S. S.
Miller, M. K.
Soffa, W. A. Proc. Int. Conf. Solid-Solid Phase Transform.,
Aaronson, H. I., ed.,
1982, 191-5, Metall.
Soc. AIME, Warrendale,
PA
- 37 Spinodal decomposition of iron-32 at. % chromium at 470°C Brenner, S. S.
Miller, M. K.
Soffa, W. A. Scr. Metall. (1982) 16,
831-6

Atom Probe Field-Ion Microscopy Bibliography for 1982

- 38 Investigation of mechanisms in field-desorbed ion formation using a pulsed field desorption time-of-flight mass spectrometer Buttrill, S. E., Jr. Report, 1982, ARO-15893.2-LS, Order No. AD-A119 635 44
- 39 Field ion microscopy of alpha uranium Carroll, J. J. Surf. Sci. (1982) 116, 225-39
- 40 Direct observation of atomic processes: silicon adatoms on tungsten surfaces Casanova, R. Thin Solid Films (1982) 93, 40-66
- 41 The temperature dependence of evaporation field for Gomer-type field-evaporation mechanisms Chibane, K. Surf. Sci. (1982) 122, 191-215
- 42 Power supplies for field desorption mass spectrometry with silicon emitters Chung, H. L. Chem., Biomed. Environ. Instrum. (1982) 12, 33-8
- 43 Crystalline coadsorption layers of indium and antimony on tungsten field emitter tips Ciszewski, A. J. Cryst. Growth (1982) 57, 125-30
- 44 Field emission microscopy study of silver adsorption on tungsten single-crystal planes Contescu, C. Thin Solid Films (1982) 97, 245-57
- 45 Field ionization mass spectrometer for space applications Curtis, C. C. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 231-4, Almqvist & Wiksell, Stockholm, Sweden
- 46 Cross-correlation coefficient of field-emission flicker noise from potassium submonolayers on tungsten Dabrowski, A. Surf. Sci. (1982) 119, 118-32
- 47 Adsorption of oxygen on silicon field-emission cathodes with atomically clean surfaces Dadykin, A. A. Poverkhnost (1982) 76-80
- 48 Negative ion field desorption mass spectrometry of anionic surfactants Daehling, P. Fresenius' Z. Anal. Chem. (1982) 312, 335-7
Röllgen, F. W.
Zwinselman, J. J.
Fokkens, R. H.
Nibbering, N. M. M.

Atom Probe Field-Ion Microscopy Bibliography for 1982

- 49 Field emission spectroscopy study of surface reactions and alloys Dao, V. D. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 75-82, Almqvist & Wiksell, Stockholm, Sweden
- 50 Stability of field emission from a tungsten-scandium metal film cathode in molecular hydrogen, molecular nitrogen, methane, and carbon monoxide Davydova, E. I. Shishkin, V. A. Zh. Tekh. Fiz. (1982) 52, 1641-6
- 51 Field emission thermal desorption spectroscopy. Dynamic measurement of work function Derochette, J. M. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 67-74, Almqvist & Wiksell, Stockholm, Sweden
- 52 Adsorption of oxygen on iridium(100) and (111) studied by field emission Derochette, J. M. Bull. Soc. R. Sci. Liege (1982) 51, 147-50
- 53 Field emission study of silver and aluminum adsorption on rhenium Derochette, J. M. Bull. Soc. R. Sci. Liege (1982) 51, 136-46
- 54 Field-emission thermal-desorption spectroscopy: desorption of hydrogen from iridium(100) and iridium(110) Derochette, J. M. Surf. Sci. (1982) 118, 145-64
- 55 Adsorption of hydrogen and nitrogen on iridium(100) studied by field emission Derochette, J. M. Phys. Status Solidi A (1982) 71, K99-102
- 56 Field emission thermal desorption spectroscopy Derochette, J. M. Rev. Sci. Instrum. (1982) 53, 34-7
- 57 Thermoelastic fracture of cathode whiskers during vacuum breakdown Dmitriev, A. S. Sinkevich, O. A. Zh. Tekh. Fiz. (1982) 52, 1660-8
- 58 Photon induced field ionization of metals: two regimes of ion formation Drachsel, W. Jentsch, T. Block, J. H. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 299-308, Almqvist & Wiksell, Stockholm, Sweden
- 59 Preparation of field-emission cathodes operating under worse vacuum conditions and the determination of their main parameters Drandarev, N. Bulg. J. Phys. (1982) 9, 436-45

Atom Probe Field-Ion Microscopy Bibliography for 1982

- 60 The study of surface self-diffusion mass transport by measurements of the morphological evolution of tip crystals Drechsler, M. Surf. Mobilities (1982), 243-5, Plenum, New York
- 61 On the different driving forces for the matter transport along surface Drechsler, M. Surf. Mobilities (1982), 191-4, Plenum, New York
- 62 On the surface energy anisotropy, the equilibrium shape and the surface structure of hexagonal metal crystals Drechsler, M. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 59-66, Almqvist & Wiksell, Stockholm, Sweden
- 63 Topographic analysis of grain boundary dislocations in cold-worked tungsten using field ion microscopy Eaton, H. C. Phys. Status Solidi A (1982) 72, 817-24
Chou, A. C.
Carter, J. C.
- 64 The simulation of images in the field ion microscope: specimens of arbitrary crystal structure and orientation Eaton, H. C. J. Appl. Phys. (1982) 53, 988-94
Lee, L.
- 65 Diffusion in surface layers Ehrlich, G. Solid State and Mater. Sci. (1982) 10, 391-409
- 66 Physical model of processes occurring in a field-emission diode in a magnetic field Egorov, N. V. Pis'ma Zh. Tekh. Fiz. (1982) 8, 1038-41
- 67 Practical aspects of the operation of a field emission probe El Gomati, M. M. Conf. Ser. - Inst. Phys. (1982) 61, Electron Microsc. Anal., 45-6
Browning, R.
Prutton, M.
- 68 Field adsorption of neon on tungsten studied by electron-stimulated field desorption Ernst, N. Surf. Sci. (1982) 117, 561-70
Block, J. H.
- 69 Temperature programmed field desorption of hydrogen from tungsten Ernst, N. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 175-84, Almqvist & Wiksell, Stockholm, Sweden
Bozdech, G.
Allam, S. H.
Block, J. H.
- 70 Compatibility of FIM and LEED observations for the tungsten(001) reconstruction Estrup, P. J. Surf. Sci. (1982) 123, L703-5
Roelofs, L. D.
Ying, S. C.

Atom Probe Field-Ion Microscopy Bibliography for 1982

- 71 A note on the magnetohydrodynamics of liquid metal ion sources Evans, G. A.
MacGregor, M. D.
Smith, R. Report, 1982,
LUT-MR-164, 10, BLLD
- 72 Golden rule formulation of metal-vacuum-metal point contact spectroscopy Feuchtwang, T. E.
Cutler, P. H.
Miskovsky, N. M. Proc. Int. Field Emiss.
Symp., 29th, Andrén,
H.-O. and Nordén, H.,
eds., 1982, 1-10,
Almqvist & Wiksell,
Stockholm, Sweden
- 73 Field emission spectroscopy study of the dynamics of the interaction between rarefied gas flows and a solid surface Filippov, B. V.
Sorokin, I. L.
Berezin, G. V. Mol. Gazodin., (Mater.
Vses. Konf. Din.
Razrezh. Gazov Mol.
Gazov. Din.), 5th,
Struminskii, V. V.,
ed., 1982, 120-7, Izd.
Nauka, Moscow, USSR
- 74 A new formula for predicting low-temperature evaporation field Forbes, R. G. Appl. Phys. Lett. (1982)
40, 277
- 75 The escape mechanism in low temperature field evaporation Forbes, R. G. Proc. Int. Field Emiss.
Symp., 29th, Andrén,
H.-O. and Nordén, H.,
eds., 1982, 11-8,
Almqvist & Wiksell,
Stockholm, Sweden
- 76 Experimental support for a Gomer-type escape mechanism and heavy-ion tunneling in field evaporation Forbes, R. G. J. Phys. D (1982) 15,
L149-52
- 77 Towards a criterion for the a priori prediction of field-evaporation mechanism Forbes, R. G. J. Phys. D (1982) 15,
L99-104
- 78 Electrothermodynamic cycles applied to ionic potentials and to field evaporation Forbes, R. G. J. Phys. D (1982) 15,
1301-22
- 79 An evaporation-field formula including the repulsive ion-surface interaction Forbes, R. G. J. Phys. D (1982) 15,
L75-7
- 80 New activation-energy formulas for charge-exchange type mechanisms of field evaporation Forbes, R. G. Surf. Sci. (1982) 116,
L195-201
- 81 Field evaporation theory: a re-analysis of published field sensitivity data Forbes, R. G.
Biswas, R. K.
Chibane, K. Surf. Sci. (1982) 114,
498-514

Atom Probe Field-Ion Microscopy Bibliography for 1982

- 82 A fresh look at the electric-field dependence of surface-atom binding energy Forbes, R. G.
Chibane, K. Surf. Sci. (1982) 121, 275-89
- 83 The derivation of surface atomic information from field evaporation data Forbes, R. G.
Chibane, K. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 19-26, Almqvist & Wiksell, Stockholm, Sweden
- 84 Arguments about emitter shape for a liquid-metal field-ion emission source Forbes, R. G.
Mair, G. L. R. J. Phys. D (1982) 15, L153-8
- 85 Resistive heating of emitter wires for field desorption and ionization: a theory Fraley, D. F.
Pedersen, L. G.
Bursey, M. M. Int. J. Mass Spectrom. Ion Phys. (1982) 43, 99-129
- 86 Atom-probe study of the interactions between solute atoms Fukase, S.
Wada, M.
Nishikawa, O. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 547-54, Almqvist & Wiksell, Stockholm, Sweden
- 87 Study on titanium carbide field emitters by field-ion microscopy, field-electron emission microscopy, Auger electron spectroscopy, and atom-probe field-ion microscopy Futamoto, M.
Yuito, I.
Kawabe, U.
Nishikawa, O.
Tsunashima, Y.
Hara, Y. Surf. Sci. (1982) 120, 90-102
- 88 Influence of semiconductor dielectric function spatial dispersion on charge electrostatic energy near the semiconductor/vacuum interface and field emission current Gabovich, A. M.
Voitenko, A. I. Phys. Status Solidi B (1982) 110, 407-16
- 89 Field in a spherical diode and current of a liquid-metal ion emitter Gabovich, M. D.
Starkov, V. N. Zh. Tekh. Fiz. (1982) 52, 1249-51
- 90 Characteristics of Sb and Zn liquid metal alloy ion sources Gamo, K.
Ochiai, Y.
Matsui, T.
Namba, S. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 333-40, Almqvist & Wiksell, Stockholm, Sweden
- 91 Emission characteristics study of a liquid metal ion source Garry, G.
Dieumegard, D.
Croset, M.
Sudraud, P. Van de Walle, J.
Vide, Couches Minces (1982) 212, Suppl. 273-80

Atom Probe Field-Ion Microscopy Bibliography for 1982

- 92 Some new results about in-situ TEM observations of the emission region in LMIS Gaubi, H.
Sudraud, P.
Tencé, M.
Van de Walle, J. Proc. Int. Field Emiss.
Symp., 29th, Andrén,
H.-O. and Nordén, H.,
eds., 1982, 357-62,
Almqvist & Wiksell,
Stockholm, Sweden
- 93 Crystallographic work function distribution of LaB₆ Gesley, M. A.
Davis, P. R.
Swanson, L. W. Proc. Int. Field Emiss.
Symp., 29th, Andrén,
H.-O. and Nordén, H.,
eds., 1982, 121-28,
Almqvist & Wiksell,
Stockholm, Sweden
- 94 Technique for conveying three-dimensionality from a sequence of image-level slices Ghiglia, D. C.
Flickner, M. D. Optics Lett. (1982) 7,
116-8
- 95 Magnetic sectoral atom probe for studying the field ionizing process Glowacki, M. S.
Lenkow, W. E. J. Tech. Phys. (Warsaw)
(1982) 23, 203-12
- 96 Application of a liquid metal ion source in ion microprobe analysis Gnaser, H.
Rüdenauer, F. G.
Studnicka, H.
Pollinger, P. Proc. Int. Field Emiss.
Symp., 29th, Andrén,
H.-O. and Nordén, H.,
eds., 1982, 401-8,
Almqvist & Wiksell,
Stockholm, Sweden
- 97 Silicon field emitter array technology Gray, H. F. Proc. Int. Field Emiss.
Symp., 29th, Andrén,
H.-O. and Nordén, H.,
eds., 1982, 111-8,
Almqvist & Wiksell,
Stockholm, Sweden
- 98 The characterization of silicon surfaces by time-of-flight atom probe analysis Grovenor, C. R. M.
Smith, G. D. W. Surf. Sci. (1982) 123,
L686-92
- 99 FIM-atom probe analysis of metallic glasses Grüne, R.
Piller, J.
Öhring, M.
Wagner, R. Proc. Int. Field Emiss.
Symp., 29th, Andrén,
H.-O. and Nordén, H.,
eds., 1982, 533-40,
Almqvist & Wiksell,
Stockholm, Sweden
- 100 The incomplete bainite reaction: possible reasons for the apparent differences in TEM and atom-probe determination of austenite carbon content Hall, D. J.
Bhadeshia, H. K. D. H.
Stobbs, W. M. J. de Phys. (1982) C-4,
449-54

Atom Probe Field-Ion Microscopy Bibliography for 1982

- 101 The thermo-field emission of electrons in arc discharges Hantsche, E. Beitr. Plasmaphys. (1982) 22, 325-46
- 102 Grain boundary depletion and enrichment in austenitic stainless steels Henjered, A. Karlsson, L. Andrén, H.-O. Nordén, H. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 505-10, Almqvist & Wiksell, Stockholm, Sweden
- 103 Photo field emission and field emission energy distributions from silicon Herman, M. H. 1982, 151, Univ. Microfilms Int., Order No. DA8305647
- 104 Observation of multiple peaks in field-emission energy distributions from silicon Herman, M. H. Tsong, T. T. Phys. Rev. Lett. (1982) 48, 1029-32
- 105 Atomic resolution observations of solute atom segregation to stacking faults in a Co-0.96 at. % Nb alloy Herschitz, R. Seidman, D. N. Scr. Metall. (1982) 16, 849-54
- 106 Field stimulation exoelectron emission Hibbert, D. B. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 43-70, Almqvist & Wiksell, Stockholm, Sweden
- 107 Electric field ionization of helium(nIP) Rydberg atoms Higgs, C. Fineman, M. A. Dunning, F. B. Stebbings, R. F. J. Phys. B (1982) 15, L697-701
- 108 Continuous phase separation in a nickel-aluminium alloy Hill, S. A. Ralph, B. Acta Metall. (1982) 30, 2219-25
- 109 Fabrication of submicron pattern with an EB lithographic system using a field emission (FE) electron gun Hosaka, S. Ichihashi, M. Hayakawa, H. Nishi, S. Migitaka, M. Jpn. J. Appl. Phys. (1982) 21, 543-9
- 110 Direct observation of heavy radiation damage process by field ion microscopy Igata, N. Sato, S. Sawai, T. Point Defects Defect Interact. Met., (Proc. Yamada Conf.) 5th, Takamura, J., Doyama, M., and Kiritani, M., eds., 1982, 811-4, 834, Univ. Tokyo Press, Tokyo, Japan

Atom Probe Field-Ion Microscopy Bibliography for 1982

- 111 Radiation induced segregation of nickel alloys Igata, N.
Sato, S.
Sawai, T.
Nishikawa, O.
Shibata, M. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 433-40, Almqvist & Wiksell, Stockholm, Sweden
- 112 Growth and surface properties of lanthanum hexaboride crystals Inoue, T.
Nakada, M.
Uozumi, T.
Sugata, E. J. Vac. Sci. Technol. (1982) 21, 952-6
- 113 Extracted-beam divergence calculations for a liquid-metal ion source Ishitani, T.
Koike, H.
Sakudo, N. Jpn. J. Appl. Phys., Part 2 (1982) 21, L155-6
- 114 Carbon needle emitter for boron and aluminum ion liquid-metal-ion sources Ishitani, T.
Shimase, A.
Tamura, H. Jpn. J. Appl. Phys., Part 2 (1982) 21, 277-8
- 115 Scanning microbeam using a liquid metal ion source Ishitani, T.
Tamura, H.
Todokoro, H. J. Vac. Sci. Technol. (1982) 20, 80-3
- 116 Stability of doubly charged homonuclear trimeric metal clusters Jentsch, T.
Drachsel, W.
Block, J. H. Chem. Phys. Lett. (1982) 93, 144-7
- 117 Electric field ionization of sodium Rydberg atoms Jeys, T. H. 1982, 130, Univ. Microfilms Int., Order No. DA8216325
- 118 Electric field ionization of highly excited sodium atoms Jeys, T. H.
McMillian, G. B.
Smith, K. A.
Dunning, F. B.
Stebbins, R. F. Phys. Rev. A (1982) 26, 335-40
- 119 Field emission spectroscopy of bismuth adsorbed on the tungsten(100) surface Jones, J. P. Surf. Sci. (1982) 121, 487-503
- 120 A numerical analysis of the electric field and trajectories with and without the effect of space charge for a field electron source Kang, N. K.
Tuggle, D.
Swanson, L. W. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 101-10, Almqvist & Wiksell, Stockholm, Sweden

Atom Probe Field-Ion Microscopy Bibliography for 1982

- 121 Grain boundary segregation in an austenitic stainless steel containing boron - an atom-probe study Karlsson, L.
Andrén, H.-O.
Nordén, H. *Ser. Metall.* (1982) 16, 297-302
- 122 Field electron emission systems Kasper, E. *Adv. Opt. Elec. Microsc.* (1982) 8, 207-59
- 123 Temperature dependence of the silicon field evaporation voltage Kellogg, G. L. *Surf. Sci.* (1982) 124, L55-9
- 124 The dissociation of CO on molybdenum: a pulsed-voltage and pulsed-laser atom-probe study Kellogg, G. L. *J. Vac. Sci. Technol.* (1982) 20, 892
- 125 The pulsed laser atom-probe: recent applications Kellogg, G. L. *Proc. Int. Field Emiss. Symp.*, 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 291-8, Almqvist & Wiksell, Stockholm, Sweden
- 126 Field-ion microscopy and pulsed laser atom-probe mass spectroscopy of insulating glasses Kellogg, G. L. *J. Appl. Phys.* (1982) 53, 6383-6
- 127 Measurement of the charge state distribution of field evaporated ions: evidence for post-ionization Kellogg, G. L. *Surf. Sci.* (1982) 120, 319-33
- 128 Pulsed laser atom-probe study of clean and oxygen-covered silicon Kellogg, G. L. *Appl. Surf. Sci.* (1982) 11-12, 186-95
- 129 Emission stability of carbon field cathodes in sealed devices Khatapova, R. M.
Romanova, V. K. *Zh. Tekh. Fiz.* (1982) 52, 567-9
- 130 Mechanism of thermal faceting of nickel-molybdenum (Ni_4Mo) alloy emitters Kingetsu, T.
Yamamoto, M.
Nenno, S. *Jpn. J. Appl. Phys.*, (1982) 21, 1421-6
- 131 The mechanism of charge transfer during field evaporation Kingham, D. R. *Proc. Int. Field Emiss. Symp.*, 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 27-34, Almqvist & Wiksell, Stockholm, Sweden
- 132 Model calculations of tunneling and thermal evaporation rate constants relating to field evaporation Kingham, D. R. *J. Phys. D* (1982) 15, 2537-44

Atom Probe Field-Ion Microscopy Bibliography for 1982

- 133 A new view of field evaporation Kingham, D. R. Vacuum (1982) 32,
471-6
- 134 The post-ionization of field evaporated ions: a theoretical explanation of multiple charge states Kingham, D. R. Surf. Sci. (1982) 116,
273-301
- 135 Field emission study of VIII transition metals. III. Adsorption of ethylene and acetylene on platinum Kojima, I.
Miyazaki, E.
Yasumori, I. Appl. Surf. Sci. (1982)
10, 27-41
- 136 Field-emission study of face-centered cubic Group VIII transition metals. Part 2. Adsorption of hydrogen, ethylene, and acetylene on palladium Kojima, I.
Miyazaki, E.
Yasumori, I. J. Chem. Soc., Faraday Trans. 1 (1982) 78,
1423-30
- 137 Field emission liquid metal ion source Komuro, M. Shinku (1982) 25,
349-58
- 138 Field ion microscope and atom probe studies of hydrogen interactions with metals Krautz, E. Hydrogenc Mater.,
Congr. Int., 3rd, Azou,
P., ed., (1982) 1, 101-6,
Inst. Super. Mater.
Constr. Mec., Saint-
Ouen, France
- 139 The influence of dissolved hydrogen in FIM investigations of niobium Krautz, E.
Polanschutz, W.
Haiml, G. Proc. Int. Field Emiss.
Symp., 29th, Andrén,
H.-O. and Nordén, H.,
eds., 1982, 151-60,
Almqvist & Wiksell,
Stockholm, Sweden
- 140 Study of oxygen distribution in the Nb-Zr alloy using field-ion microscopy and mass spectrometry Ksenofontov, V. A.
Kul'ko, V. B.
Lazarev, B. G. Phys. Metals (1982) 4,
1094-100
- 141 Field ion microscopy and mass-spectrometric study of the distribution of oxygen in a niobium-zirconium alloy Ksenofontov, V. A.
Kul'ko, V. B.
Lazarev, B. G.
Lazareva, L. S.
Mikhailovskii, I. M.
Poltavets, V. A. Metallofizika (Akad.
Nauk Ukr. SSR, Otd.
Fiz.) (1982) 4, 36-40
- 142 Field-ion mass-spectroscopy of Fe- and Ni-based alloys Kudryavtsev, A. P.
Potapov, L. P. Metallofizika (1982) 4,
96-8
- 143 Electron distribution function at the initial stage of the ionization of hydrogen in a constant electric field Kuznetsov, Y. K.
Lebed, S. A. Fiz. Plazmy (Moscow)
(1982) 8, 1269-73

Atom Probe Field-Ion Microscopy Bibliography for 1982

- 144 The development of a high-definition cathode-ray tube using a carbon fiber field-emission electron source Latham, R. V.
Wilson, D. A. J. Phys. E (1982) **15**, 1083-92
- 145 Atom probe studies of platinum electrolytically deposited on nickel and pure iron Leisch, M.
Reinmueller, H. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 219-24, Almqvist & Wiksell, Stockholm, Sweden
- 146 Brief introduction to field ion microscope Lu, H. Wuli (1982) **11**, 618-25
- 147 Field ion microscope and its application Lu, H. Zhenkong Kexue Yu Jishu (1982) **2**, 245-51
- 148 Inhomogeneous-field stripper for field ionization detection and analysis of fast beams of highly excited atoms MacAdam, K. B.
Rolfes, R. G. Rev. Sci. Instrum. (1982) **53**, 592-9
- 149 Liquid metal field emission systems for high technology applications: the FED sprayer Mahony, C.
Gowland, L.
Prewett, P. D. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 383-91, Almqvist & Wiksell, Stockholm, Sweden
- 150 Space-charges and other factors affecting the current level in liquid metal ion sources Mair, G. L. R. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 327-32, Almqvist & Wiksell, Stockholm, Sweden
- 151 Space-charge effects in liquid metal ion sources Mair, G. L. R. J. Phys. D (1982) **15**, 2523-30
- 152 Mechanism of explosive emission Martsinovskii, A. M. Yur'ev, V. G. Pis'ma Zh. Tekh. Fiz. (1982) **8**, 1312-6
- 153 FIM desorption probe study of the oxidation of a platinum-rhodium alloy McCabe, A. R.
Smith, G. D. W. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 201-7, Almqvist & Wiksell, Stockholm, Sweden

Atom Probe Field-Ion Microscopy Bibliography for 1982

- 154 High-resolution field ionization of sodium(ns,nd) Rydberg atoms McMillian, G. B.
Jeys, T. H.
Smith, K. A.
Dunning, F. B.
Stebbins, R. F. J. Phys. B (1982) 15,
2131-8
- 155 Surface reconstruction of clean (001)W Melmed, A. J.
Graham, W. R. Surf. Sci. (1982) 2,
470
- 156 Reply to comment on "on the atomic structure of {001}W" Melmed, A. J.
Graham, W. R. Surf. Sci. (1982) 123,
L706
- 157 A general purpose atom probe field ion microscope Melmed, A. J.
Martinka, M.
Klein, R. Proc. Int. Field Emiss.
Symp., 29th, Andrén,
H.-O. and Nordén, H.,
eds., 1982, 243-8,
Almqvist & Wiksell,
Stockholm, Sweden
- 158 Atom probe study of iron-boron (Fe-B) amorphous alloys Menand, A.
Bouet, M.
Martin, C.
Gallot, J. Proc. Int. Field Emiss.
Symp., 29th, Andrén,
H.-O., and Nordén, H.,
eds., 1982, 527-32,
Almqvist & Wiksell,
Stockholm, Sweden
- 159 Atom probe and field ion microscopy: some experimental results on amorphous metals Menand, A.
Gallot, J. C. R. Acad. Seances
Sci., Ser. 2 (1982) 294,
413-8
- 160 Determination of the atomic configuration of twin boundaries in tungsten by field ion microscopy Mikhailovskii, I. M. Fiz. Tverd. Tela
(Leningrad) (1982) 24,
3210-5
- 161 Carbon distribution during the aging of iron-nickel-carbon martensites Miller, M. K.
Beaven, P. A.
Smith, G. D. W.
Brenner, S. S. Int. Conf. on Solid-Solid Phase Transform., Aaron,
H. I., ed., (1982) 863-7,
Metall. Soc. AIME,
Warrendale, PA
- 162 Low temperature precipitation in iron-chromium binary alloys Miller, M. K.
Brenner, S. S.
Camus, P. P.
Piller, J.
Soffa, W. A. Proc. Int. Field Emiss.
Symp., 29th, Andrén,
H.-O. and Nordén, H.,
eds., 1982, 489-96,
Almqvist & Wiksell,
Stockholm, Sweden

Atom Probe Field-Ion Microscopy Bibliography for 1982

- 163 The distribution of palladium in a Pd-modified 4130 steel Miller, M. K.
Brenner, S. S.
Wilde, B. E.
- Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 481-8, Almqvist & Wiksell, Stockholm, Sweden
- 164 Mass-spectrometric study of the energetic characteristics of methanol and ethanol ions during ionization by a strong electric field Mischanchuk, B. G.
Pokrovskii, V. A.
Shabel'nikov, V. P.
Korol, E. N.
- Teor. Eksp. Khim. (1982) 18, 307-12
- 165 Use of a counter potential method in a mass spectrometer for studying formation mechanisms of field ions Mischanchuk, B. G.
Pokrovskii, V. A.
Shabel'nikov, V. P.
Korol, E. N.
- Teor. Eksp. Khim. (1982) 18, 200-6
- 166 Field-ion microscopic study of short range order and microdomains in nickel-tungsten alloys Mishra, N. S.
Ranganathan, S.
- Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 555-62, Almqvist & Wiksell, Stockholm, Sweden
- 167 Space-charge effects in liquid metal ion sources of different geometries Miskovsky, N. M.
Cutler, P. H.
- Appl. Phys. (1982) A28, 73-7
- 168 Effect of temperature and space charge on beam dispersion in liquid metal ion sources of different geometries Miskovsky, N. M.
Cutler, P. H.
Feuchtwang, T. E.
- Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 317-26, Almqvist & Wiksell, Stockholm, Sweden
- 169 The measurement and calculation of loop temperatures in an FIM Morikawa, H.
Kozakai, M.
Terao, T.
Yashiro, Y.
- J. Vac. Sci. Technol. (1982) 21, 95-9
- 170 FIM atom probe study of microalloyed pearlitic steels containing vanadium and chromium Mottishaw, T. D.
Smith, G. D. W.
- Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 465-72, Almqvist & Wiksell, Stockholm, Sweden
- 171 Atom-probe analysis of lanthanum hexaboride Murakami, K.
Adachi, T.
Komoda, O.
Kuroda, T.
Nakamura, S.
- Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 257-64, Almqvist & Wiksell, Stockholm, Sweden

Atom Probe Field-Ion Microscopy Bibliography for 1982

- 172 Preliminary results with a new AP-FIM Murakami, K.
Adachi, T.
Nakamura, S. Shinku (1982) 25, 271-5
- 173 A field-ion microscopy observation of martensitic transformation of carbon steel Nakamura, M.
Arise, T.
Suzuki, Y.
Yamamoto, R.
Doyama, M. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 449-56, Almqvist & Wiksell, Stockholm, Sweden
- 174 Atom probe field ion microscope. Microscopic surface analysis Nakamura, S.
Kuroda, T. Seisan to Gijutsu (1982) 34, 36-8
- 175 An investigation of electric field ionization of neutral indium atoms in Rydberg states Neijzen, J. H. M.
Donszelmann, A. J. Phys. B (1982) 15, 1981-2000
- 176 High-field electron velocities in silicon surface inversion layers Nelson, D. F.
Cooper, J. A., Jr. Surf. Sci. (1982) 113, 267-72
- 177 An airlock for a resistively heatable specimen on a field ion microscope and an atom-probe Nishikawa, O.
Horie, S. Jpn. J. Appl. Physics (1982) 21, L429-30
- 178 Atom-probe study of nickel and tungsten silicide formation Nishikawa, O.
Tsunashima, Y.
Nomura, E.
Wada, M.
Horie, S.
Shibata, M.
Yoshimura, T.
Uemori, R. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 185-92, Almqvist & Wiksell, Stockholm, Sweden
- 179 Atom-probe study of physisorbed hydrogen on copper and aluminum Nishikawa, O.
Yoshimura, T.
Shibata, M. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 167-74, Almqvist & Wiksell, Stockholm, Sweden
- 180 Electron field emission from broad-area electrodes Noer, R. J. Appl. Phys. (1982) A28, 1-24
- 181 Growth of chromium needle crystals induced by field electron emission Okuyama, F. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 235-41, Almqvist & Wiksell, Stockholm, Sweden

Atom Probe Field-Ion Microscopy Bibliography for 1982

- 182 A study of the precipitation reactions in a 17/7 PH stainless steel, using an IAP atom probe Paetke, S.
Waugh, A. R. Proc. Int. Conf. Solid-Solid Phase Transform., Aaronson, H. I., ed., 1982, 769-73, Metall. Soc. AIME, Warrendale, PA
- 183 Properties of silicon films produced by field emission deposition Pang, T. M.
Prewett, P. D.
Gowland, L. Thin Solid Films (1982) 88, 219-24
- 184 On the feasibility of imaging unstained DNA by field-ion tomography Panitz, J. A. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 249-55, Almqvist & Wiksell, Stockholm, Sweden
- 185 Field-ion microscopy. A review of basic principles and selected applications Panitz, J. A. J. Phys. E (1982) 15, 1281-94
- 186 Point-projection imaging of unstained ferritin clusters Panitz, J. A. Ultramicroscopy (1982) 7, 241-8
- 187 Point-projection imaging of macromolecular contours Panitz, J. A. J. Microscopy (1982) 125, 3-23
- 188 Atom probe field ion microscopy of a iron-nickel-boron (FeNiB) glass Piller, J.
Haasen, P. Acta Metall. (1982) 30, 1-8
- 189 Nucleation and coarsening behaviour of TiC precipitates in alpha-Fe and the effects of antimony additions Piller, J.
Miller, M. K.
Brenner, S. S. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 473-80, Almqvist & Wiksell, Stockholm, Sweden
- 190 Autocorrelation analysis of atom probe concentration profiles Piller, J.
Wendt, H. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 265-74, Almqvist & Wiksell, Stockholm, Sweden
- 191 Some comments on the mechanism of emission from liquid metal ion sources Prewett, P. D.
Mair, G. L. R.
Thompson, S. P. J. Phys. D (1982) 15, 1339-48
- 192 Field emission cathodes using commercial carbon fibers Prohaska, R.
Fisher, A. Rev. Sci. Instrum. (1982) 53, 1092-3

Atom Probe Field-Ion Microscopy Bibliography for 1982

- 193 The formation and decomposition of silicide phases in the niobium-silicon system by field-emission microscopy Pugachevich, V. P.
Chistyakov, Y. D.
Timoshenkov, S. P. Fiz. Met. Metalloved. (1982) 54, 499-506
- 194 The investigation of engineering materials using atom-probe techniques Ralph, B.
Hill, S. A.
Southon, M. J.
Thomas, M. P.
Waugh, A. R. Ultramicroscopy (1982) 8, 361-76
- 195 Monte Carlo analysis of experiments on individual adatoms Reed, D. A.
Ehrlich, G. Surf. Sci. (1982) 120, 179-202
- 196 Field desorption mass spectrometry Röllgen, F. W. Trends in Analytical Chem. (1982) 1, 304
- 197 Equilibrium coverage distributions of an adsorbate along a curved crystal surface Roux, H.
Piquet, A.
Uzan, R.
Drechsler, M. Surf. Sci. (1982) 114, 653-66
- 198 Study of tungsten-tantalum carbide field-emission cathodes Rybakov, Y. L.
Vasichev, B. N.
Koltygin, V. M.
Sheshin, E. P. Poverkhnost (1982) 84-7
- 199 Field ion microscopy of silicon with different imaging gases Sakata, T.
Block, J. H. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 135-44, Almqvist & Wiksell, Stockholm, Sweden
- 200 Field evaporation of silicon (111) surfaces in the presence of hydrogen Sakata, T.
Block, J. H. Surf. Sci. (1982) 116, L183-9
- 201 High-performance time-of-flight atom probe for hydrogen characterization in metals Sakurai, T.
Pickering, H. W. Adv. Tech. Charact. Hydrogen Met., Proc. Symp., Fiore, N. F. and Berkowitz, B. J., eds., 1982, 171-81, Metall. Soc. AIME, Warrendale, PA
- 202 Solute element partitioning and austenite stabilization in steels Sarikaya, M.
Thomas, G.
Steeds, J. W.
Barnard, S. J.
Smith, G. D. W. Proc. Int. Conf. Solid-Solid Phase Transform., Aaronson, H. I., ed., 1982, 813-7, Metall. Soc. AIME, Warrendale, PA

Atom Probe Field-Ion Microscopy Bibliography for 1982

- 203 Quasi-point liquid metal ion sources for microfabrication Sakurai, T. Oyo Butsuri (1982) 51, 1020-5
- 204 FEM study of low-temperature adsorption of mixture of nitrogen and oxygen on tungsten Sato, M. Jpn. J. Appl. Phys., Part 2 (1982) 21, L146-8
- 205 The topography of nickel crystals during the reaction towards nickel tetracarbonyl ($\text{Ni}(\text{CO})_4$) a field ion microscope study Schmidt, W. A. Surf. Sci. (1982) 122, 409-21
Block, J. H.
Becker, K. A.
- 206 Photostimulated field emission - image rounded barrier model Schwartz, C. Surf. Sci. (1982) 115, 290-300
Cole, M. W.
- 207 Description of a low temperature - high voltage orientable holder for F.I.M. Seaton, C. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 241-2, Almqvist & Wiksell, Stockholm, Sweden
Olivares, J. L.
- 208 The study of defects, radiation damage and implanted gases in solids by field-ion and atom-probe microscopy Seidman, D. N. Adv. Tech. Charact. Microstruct., Wiffen, F. W. and Spitznagel, J. A., eds., 1982, 125-44, Metall. Soc. AIME, Warrendale, PA
Amano, J.
Wagner, A.
- 209 Atomic resolution observations of the point defect structure of depleted zones in ion-irradiated metals Seidman, D. N. J. Nucl. Mater. (1982) 108 & 109, 67-8
Current, M. I.
Pramanik, D.
- 210 Fine focused ion beams Seliger, R. L. Jpn. J. Appl. Phys., Part 1 (1982) 21, Suppl. 21-1, Proc. Conf. Solid State Devices, 13th, 1981, 3-10
Kubena, R. L.
Wang, V.
- 211 Interaction of high resolution field ion probes with materials Siegel, B. M. Report, 1982, TR-1, Order No. AD-A122531, 48
- 212 Direct comparison of performance of atom probe in pulsed-laser and voltage-pulsed modes Smith, G. D. W. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 283-9, Almqvist & Wiksell, Stockholm, Sweden
Grovenor, C. R. M.
Delargy, K. M.
Godfrey, T. J.
McCabe, A. R.

Atom Probe Field-Ion Microscopy Bibliography for 1982

- 213 Atom-probe studies of precipitation in iron-chromium-cobalt alloys Soffa, W. A.
Brenner, S. S.
Camus, P. P.
Miller, M. K. Proc. Int. Field Emiss.
Symp., 29th, Andrén,
H.-O. and Nordén, H.,
eds., 1982, 511-8,
Almqvist & Wiksell,
Stockholm, Sweden
- 214 Field emission cathode array development for high current density applications Spindt, C. A.
Holland, C. E.
Stowell, R. D. Proc. Int. Field Emiss.
Symp., 29th, Andrén,
H.-O. and Nordén, H.,
eds., 1982, 119-20,
Almqvist & Wiksell,
Stockholm, Sweden
- 215 Faulty field evaporation at divacancies in (222) tungsten Stiller, K.
Andrén, H.-O. Surf. Sci. (1982) 114,
L57-61
- 216 Many-phonon effects in electron field emission Sumetskii, M. Y. Fiz. Tverd. Tela
(Leningrad) (1982) 24,
3513-5
- 217 Probability of field ionization of a hydrogen-like atom near a metal surface Sumetskii, M. Y. Zh. Tekh. Fiz. (1982)
52, 1672-4
- 218 Field-ion microscopy of ordered alloys Syutkin, N. N.
Ivchenko, V. A. Faz. Prevrashch. i
Struktura Met. i
Splavov, Sverdlovsk,
(1982) 90-5
- 219 Some features of water adsorption on silicon dioxide Talviste, I.
Talviste, E. Tartu Riikliku Ulik.
Toim. (1982) 632,
107-11
- 220 Corrosion of tungsten with n-octyl alcohol with an applied D.C. voltage Terao, T.
Kozakai, M.
Iwatsu, F.
Suzuki, Y.
Morikawa, H.
Yashiro, Y. Proc. Int. Field Emiss.
Symp., 29th, Andrén,
H.-O. and Nordén, H.,
eds., 1982, 211-8,
Almqvist & Wiksell,
Stockholm, Sweden
- 221 Field emission and thermionic emission in relation to electric parameters of high-frequency discharges Tesar, C. Folia Fac. Sci. Nat.
Univ. Purkynianae
Brun. (1982) 23, 13-23
- 222 An atom-probe study of implantation and preferential sputtering resulting from ion bombardment of crystalline targets with ions from a liquid gallium source Thomas, M. P.
Ralph, B. Proc. Int. Field Emiss.
Symp., 29th, Andrén,
H.-O. and Nordén, H.,
eds., 1982, 441-8,
Almqvist & Wiksell,
Stockholm, Sweden

Atom Probe Field-Ion Microscopy Bibliography for 1982

- 223 A study of the sputtering of copper-nickel using a combination of techniques Thomas, M. P.
Ralph, B. J. Vac. Sci. Technol. (1982) 21, 986
- 224 Some comments on the electrodynamics of wetted needle anodes Thompson, S. P. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 349-56, Almqvist & Wiksell, Stockholm, Sweden
- 225 Field emission of metal ions and microparticles Thompson, S. P.
Engel, A. v. J. Phys. D (1982) 15, 925-31
- 226 Electron emission from electroformed metal-insulator-metal structures Thurstans, R. E. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 89-99, Almqvist & Wiksell, Stockholm, Sweden
- 227 Role of ion bombardment in field emission current instability Todokoro, H.
Saitou, N.
Yamamoto, S. Jpn. J. Appl. Phys., Part 1 (1982) 21, 1513-6
- 228 Applications of electron holography to microscopic magnetic field measurement Tenomur, A.
Matsuda, T.
Suzuki, R.
Fujiwara, H. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 129-34, Almqvist & Wiksell, Stockholm, Sweden
- 229 Field-emission liquid aluminum ion source Torii, Y.
Yamada, H. Jpn. J. Appl. Phys., Part 2 (1982) 21, L132-4
- 230 Measurement of the energy distributions of field desorbed inert gas ions and metal ions by the pulsed-laser atom-probe Tsong, T. T.
Kinkus, T. J.
McLane, S. B. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 309-15, Almqvist & Wiksell, Stockholm, Sweden
- 231 Pulsed laser time of flight atom-probe field ion microscopy Tsong, T. T.
McLane, S. B.
Kinkus, T. J. Proc. Int. Field Emiss. Symp., 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 275-81, Almqvist & Wiksell, Stockholm, Sweden

Atom Probe Field-Ion Microscopy Bibliography for 1982

- 232 Pulsed-laser time-of-flight atom-probe field ion microscope Tsong, T. T.
McLane, S. B.
Kinkus, T. J. Rev. Sci. Instrum.
(1982) 53, 1442-8
- 233 Field evaporation events as Markov chains: a time-of-flight atom-probe study of iridium, platinum-rhodium alloys, and metallic glasses Tsong, T. T.
McLane, S. B., Jr.
Ahmad, M.
Wu, C. S. J. Appl. Phys. (1982)
53, 4180-8
- 234 Desorption by electric field observed in liquid ionization mass spectrometry Tsuchiya, M.
Nonaka, T.
Taira, T.
Tanaka, S. Shitsuryo Bunseki
(1982) 30, 95-7
- 235 On the atomic structure of (001) tungsten Tung, R. T.
Graham, W. R.
Melmed, A. J. Surf. Sci. (1982) 115,
576-98
- 236 Contribution of field-ionized Rydberg atoms in observations on convoy electrons Vager, Z.
Zabransky, B. J.
Schneider, D.
Kanter, E. P.
Zhuang, G. Y.
Gemmill, D. S. Phys. Rev. Lett. (1982)
48, 592-5
- 237 Potentials of mean force for adatoms on surfaces Valone, S. M.
Doll, J. D.
McDowell, H. K. Surf. Sci. (1982) 119,
71-8
- 238 Realization and properties of a uranium LMIS Van de Walle, J.
Sudraud, P. Proc. Int. Field Emiss.
Symp., 29th, Andrén,
H.-O. and Nordén, H.,
eds., 1982, 341-8,
Almqvist & Wiksell,
Stockholm, Sweden
- 239 Linear intensity dependence of photoinduced field emission from tungsten Venus, D.
Lee, M. J. G. Surf. Sci. (1982) 116,
359-68
- 240 Role of carbides in the grain boundary segregation of phosphorus in a 2.25Cr-1Mo steel Wada, M.
Fukase, S.
Nishikawa, O. Scr. Metall. (1982) 16,
1372-8
- 241 Atom probe analysis of chromium-molybdenum (2.25Cr-1Mo) steel Wada, M.
Hosoi, K.
Nishikawa, O. Acta Metall. (1982) 30,
1013-8

Atom Probe Field-Ion Microscopy Bibliography for 1982

- 242 FIM (field ion microscopy) observation of chromium-molybdenum (2.25Cr-1Mo) steel Wada, M.
Hosoi, K.
Nishikawa, O. Acta Metall. (1982) 30,
1005-11
- 243 The hydrodynamics of liquid metal ion sources Wagner, A. Appl. Phys. Lett. (1982)
40, 440-2
- 244 Field-ion microscopy in materials science Wagner, R. Crystals: Growth,
Properties, and
Applications (1982) 6,
Springer-Verlag,
Berlin, FRG
- 245 Field and temperature dependence of the directional walk of single adsorbed W atoms on the W(110) plane Wang, S. C.
Tsong, T. T. Phys. Rev. B 26, (1982)
12, 6470-75
- 246 Measurement of the barrier height of the reflective W{110} plane boundaries in surface diffusion of single atoms Wang, S. C.
Tsong, T. T. Surf. Sci. (1982) 121,
85-97
- 247 The field and temperature dependence of the directional walk of single adsorbed tungsten atoms on the tungsten(110) plane Wang, S. C.
Tsong, T. T. Proc. Int. Field Emiss.
Symp., 29th, Andrén,
H.-O. and Nordén, H.,
eds., 1982, 161-5,
Almqvist & Wiksell,
Stockholm, Sweden
- 248 The application of liquid metal ion sources to SIMS Waugh, A. R.
Bayly, A. R.
Anderson, K. Proc. Int. Field Emiss.
Symp., 29th, Andrén,
H.-O. and Nordén, H.,
eds., 1982, 409-16,
Almqvist & Wiksell,
Stockholm, Sweden
- 249 Application of field emission to microanalysis by SIMS and AES Welkie, D. G.
Gerlach, R. L. Proc. Int. Field Emiss.
Symp., 29th, Andrén,
H.-O. and Nordén, H.,
eds., 1982, 393-400,
Almqvist & Wiksell,
Stockholm, Sweden
- 250 Early decomposition stages in a nickel-aluminium alloy Wendt, H. Proc. Int. Conf. Solid-Solid Phase Transform.,
Aaronson, H. I., ed.,
1982, 445, Metall. Soc.
AIME, Warrendale, PA

Atom Probe Field-Ion Microscopy Bibliography for 1982

- 251 Beobachtungen zur Entmischung von Legierungen mittels atomsonde Wendt, H.
Haasen, P.
Zhu, F. Konf. über:
Reaktionen in
kristallinen und
glasartigen
Legierungen,
Clausthal-Zellerfeld
(1982), Mordike, B. L.,
ed.
- 252 Mechanical properties of Cu-Fe alloys in the transition from solid solution to precipitation hardening Wendt, H.
Wagner, R. Acta Metall. (1982) 30,
1561-70
- 253 The partitioning of alloy elements during the pearlite transformation: an atom probe study Williams, P. R.
Miller, M. K.
Smith, G. D. W. Proc. Int. Conf. Solid-Solid Phase Transform.,
Aaronson, H. I., ed.,
1982, 813-7, Metall.
Soc. AIME, Warrendale,
PA
- 254 Field ion emission from a single organic droplet Wong, S. S.
Röllgen, F. W. Proc. Int. Field Emiss.
Symp., 29th, Andrén,
H.-O. and Nordén, H.,
eds., 1982, 225-30,
Almqvist & Wiksell,
Stockholm, Sweden
- 255 Investigation of the apparatus function in field emission electron spectrometer Wysocki, J. K. Proc. Int. Field Emiss.
Symp., 29th, Andrén,
H.-O. and Nordén, H.,
eds., 1982, 83-8,
Almqvist & Wiksell,
Stockholm, Sweden
- 256 Testing of a field electron energy analyzer Wysocki, J. K. J. Phys. E (1982) 15,
12, 1376
- 257 Quantitative compositional analyses of ordered platinum-cobalt (Pt_3Co) by atom-probe field-ion microscopy Yamamoto, M.
Seidman, D. N. Surf. Sci. (1982) 118,
535-54
- 258 A study of the composition of the (111) planes of gallium phosphide on an atomic scale Yamamoto, M.
Seidman, D. N. Surf. Sci. (1982) 118,
555-71
- 259 Study of the phase composition of a submonolayer carbon film on iridium by determining the life-time on the surface of probe-beam particles Zandberg, E. Y.
Nazarov, E. G.
Rasulev, U. K.
Rut'kov, E. V.
Tontegode, A. Y. Zh. Tekh. Fiz. (1982)
52, 746-52

Atom Probe Field-Ion Microscopy Bibliography for 1982

- 260 Spin-polarized field emission from the (100) and (111) planes of nickel Zavadil, J.
Modinos, A. *J. Phys. C (1982)* **15**, 7255-62
- 261 Surface adsorption studied by field-emission microscopy Zhang, Z.
Wan, X.
Fu, W.
Cheng, B. *Zhenkong Kexue Yu Jishu (1982)* **2**, 258-62
- 262 An equipment for preparing silicon emitters for FDMS Zhiru, W.
Matsuo, T.
Katakuse, I.
Matsuda, H. *Shitsuryo Bunseki (1982)* **30**, 71-9
- 263 Atom probe field ion microscopy of a iron-chromium-cobalt permanent magnet alloy Zhu, F.
Wendt, H. *Proc. Int. Field Emiss. Symp.*, 29th, Andrén, H.-O. and Nordén, H., eds., 1982, 519-25, Almqvist & Wiksell, Stockholm, Sweden
- 264 Atom probe field ion microscopy of a iron-chromium-cobalt permanent magnet alloy Zhu, F.
Wendt, H.
Haasen, P. *Scr. Metall.* (1982) **16**, 1175-80

1983

Atom Probe Field-Ion Microscopy Bibliography for 1983

1	Stable carbide field emitter	Adachi, H. Fujii, K. Zaima, S. Shibata, Y. Oshima, C. Otani, S. Ishizawa, Y.	Appl. Phys. Lett. (1983) <u>43</u> , 702-3
2	Observation of superstructure formation on rhodium(001) by laser-pulse assisted field evaporation	Ai, C. Tsong, T. T.	Surf. Sci. (1983) <u>127</u> , L165-71
3	A field emission study of silver on rhenium	Al-Rawi, O. Z. Jones, J. P.	Surf. Sci. (1983) <u>124</u> , 220-40
4	Method for studying field emission in an superhigh-frequency electric field	Anan'ev, L. L. Bogatskii, M. M. Borisov, D. A. Kantonistov, A. A. Fursei, G. N.	Prib. Tekh. Eksp. (1983) 165-8
5	Characteristics of field emission graphite cathodes in a superhigh-frequency current modulator	Andriyanov, Y. V. Bazdyrev, V. N. Dubovoi, L. V.	Zh. Tekh. Fiz. (1983) <u>83</u> , 1217-20
6	Tin ion doping during gallium arsenide MBE with a field ion gun	Bamba, Y. Miyauchi, E. Kuramoto, K. Takamori, A. Furuya, T.	Jpn. J. Appl. Phys., Part 2 (1983) <u>22</u> , 331-2
7	Medium range interaction between neutral metal atoms and a metallic surface (tantalum/tungsten)	Bardon, J. Audiffren, M.	J. Phys. Lett. (1983) <u>44</u> , 883-7
8	The influence of silicon on the tempering of steel	Barnard, S. J. Smith, G. D. W. Garratt-Reed, A. J. Vander Sande, J.	Proc. Conf. on Advances in the Physical Metallurgy and Applications of Steels, Liverpool, UK, The Metals Society, London (1983) <u>284</u> , 33-7
9	Molecular SIMS with a liquid metal field ion point source	Barofsky, D. F. Giessmann, U. Swanson, L. W. Bell, A. E.	Int. J. Mass Spectrom. Ion Phys. (1983) <u>46</u> , 495-7

Atom Probe Field-Ion Microscopy Bibliography for 1983

- 10 Molecular secondary ion mass spectrometry with a liquid metal ion primary source Barofsky, D. F.
Giessmann, U.
Bell, A. E.
Swanson, L. W. Anal. Chem. (1983) 55,
1318-23
- 11 Observing surface diffusion at the atomic level. I. Single atoms Bassett, D. W. NATO Adv. Sci. Inst. Ser., Ser. B (1983) 86,
Surf. Mobilities Solid Mater., 63-82
- 12 Observing surface diffusion at the atomic level. II. Adatom clusters Bassett, D. W. NATO Adv. Sci. Inst. Ser., Ser. B (1983) 86,
Surf. Mobilities Solid Mater., 83-108
- 13 High-resolution scanning secondary ion mass spectrometry (SIMS) using liquid metal field-ionization sources Bayly, A. R.
Waugh, A. R.
Anderson, K. Scanning Electron Microsc. (1983), 23-9
- 14 Field emission fluctuation phenomena of potassium microcrystals on tungsten. I. Spectral density functions and flip-flop Biernat, T.
Kleint, C.
Meclewski, R. Surf. Sci. (1983) 127,
487-97
- 15 Field emission fluctuation phenomena of potassium microcrystals on tungsten. II. Temperature dependence and simulation of noise properties Biernat, T.
Kleint, C. Surf. Sci. (1983) 127,
498-512
- 16 Interactions of sulfur with nickel surface: adsorption, diffusion, and desorption Blasczyszyn, R.
Blasczyszyn, M.
Meclewski, R.
Melmed, A. J.
Madey, T. E. Surf. Sci. (1983) 131,
433
- 17 Anomalous effect of aluminum adsorption on emission properties of gallium arsenide Blazhnova, E. I.
Kalganov, V. D.
Mileshkina, N. V. Fiz. Tverd. Tela (Leningrad) (1983) 25,
3548-53
- 18 New developments in laser pulse induced field desorption Block, J. H.
Drachsel, W.
Ernst, N.
Jentsch, T.
Nishigaki, S. Springer Ser. Chem. Phys. (1983) 25, Ion Form. Org. Solids,
211-6
- 19 Kinetics of field evaporation (contrast in desorption and field-ion images) Bobkov, A. F.
Suvorov, A. I. Poverkhnost, 1983,
67-78
- 20 Status of and some ways for the further development of field-emission electronics Bondarenko, B. V. Radiotekh. Elektron. (Moscow) (1983) 28,
2305-12

Atom Probe Field-Ion Microscopy Bibliography for 1983

- 21 Emission stability and lifetime of some variants of field emission cathodes Bondarenko, B. V.
Makukha, V. I.
Sheshin, E. P. Radiotekh. Elektron. (Moscow) (1983) 28, 1649-52
- 22 Surface model for field emission processes Bono, S.
Good, R. H., Jr. Surf. Sci. (1983) 134, 272-82
- 23 Experiments on the excitation of the innermost electrons in extremely strong fields Bosch, F. NATO Adv. Study Inst. Ser., Ser. B (1983) 80, Quantum Electrodyn. Strong Fields, 155-78
- 24 Atomic scale analysis with the atom probe Brenner, S. S.
Miller, M. K. J. Met. (1983) 35(3), 54-63
- 25 Finely focused ion beams - New tools for technology Brown, W. L.
Wagner, A. Proc. Int. Ion Eng. Congress (ISIAT and IPAT) (1983) Kyoto, Japan, Takagi, T., ed., Inst. Elec. Engrs. of Japan, Tokyo, 1738A-1738L
- 26 Factors affecting mass spectral sensitivity for ions sampled by field evaporation from a liquid matrix Chan, K. W. S.
Cook, K. D. Anal. Chem. (1983) 55, 1306-9
- 27 Scanning ion beam lithography with a magnetic ion species filter Cleaver, J. R. A.
Heard, P. J.
Ahmed, H. Microcircuit Eng. 83 (Proc. Microcircuit Eng. Conf.), Ahmed, H., Cleaver, J. R. A., and Jones, G. A. C., eds., 1983, 135-42, Academic, London, UK
- 28 Scanning ion beam lithography for submicron structure fabrication Cleaver, J. R. A.
Heard, P. J.
Ahmed, H. Proc. SPIE-Int. Soc. Opt. Eng. (1983) 393, Electron-Beam, X-Ray, Ion-Beam Tech. Submicron. Lithogr. 2, 129-36
- 29 Direct observation of the primary state of damage of ion-irradiated tungsten: II. Definitions and results Current, M. I.
Wei, C.-Y.
Seidman, D. N. Philosophical Mag. A (1983) 47, 407-434
- 30 Ionization by proton abstraction in negative ion field desorption mass spectrometry Daehling, P.
Ott, K. H.
Röllgen, F. W.
Zwinselman, J. J.
Fokkens, R. H.
Nibbering, N. M. M. Int. J. Mass Spectrom. Ion Phys. (1983) 46, 301-4

Atom Probe Field-Ion Microscopy Bibliography for 1983

- 31 Interatomic interactions in liquid alloys and in metallic glasses: an x-ray/neutron diffraction and a field ion microscopic study De Hosson, J. T. M. Amorphous Mater., Model. Struct. Prop., Proc. Symp., Vitek, V., ed., 1983, 147-66, Metall. Soc. AIME, Warrendale, PA
- 32 Phase composition and phase stability of alloy IN939 Delargy, K. M. Smith, G. D. W. Proc. Conf. on High Temperature Alloys for Gas Turbines, Liege, Belgium, Brunestand, R. et al., eds., D. Reidel, Dordrecht, Holland (1983) 705-19
- 33 Phase composition and phase stability of a high-chromium nickel-based superalloy, IN939 Delargy, K. M. Smith, G. D. W. Metal. Trans. (1983) 14A, 1771-83
- 34 Dynamic measurement of work function with the field emission microscope Derochette, J. M. Rev. Sci. Instrum. (1983) 54, 337-40
- 35 Field emission microscope studies of carbon on nickel surfaces Dost, A. A. Dhanak, V. R. Bassett, D. W. Vacuum (1983) 33, 687-90
- 36 Laser-pulse induced field desorption of small molecules Drachsel, W. Block, J. H. Viswanathan, B. Springer Ser. Chem. Phys. (1983) 33, Surf. Stud. Lasers, 221-5
- 37 New techniques in surface specific mass analysis by photon induced field desorption Drachsel, W. Jentsch, T. Block, J. H. Int. J. Mass Spectrom. Ion Phys. (1983) 46, 293-6
- 38 Photon-induced field desorption of hydrogen H^+ , H^{2+} , and H^{3+} from tungsten Drachsel, W. Nishigaki, S. Ernst, N. Block, J. H. Int. J. Mass Spectrom. Ion Phys. (1983) 46, 297-300
- 39 On the equilibrium shape of metal crystals Drechsler, M. V. T. Binh Surface Mobilities on Solid Materials, Plenum Publ. Corp., NY (1983) 405-58
- 40 The study of surface self-diffusion mass transport by measurements of the morphological evolution of tips Drechsler, M. NATO Adv. Sci. Inst. Ser., Ser. B (1983) 86, Surf. Mobilities Solid Mater., 243-6
- 41 The segregation of osmium to grain boundary dislocations in tungsten Eaton, H. C. Scr. Metall. (1983) 17, 1043-6

Atom Probe Field-Ion Microscopy Bibliography for 1983

- 42 Electric field dependence of photo-induced field emission current Egert, C. M. 1983, 164, Univ. Microfilms Int., Order No. DA8400348
- 43 Layer growth - an atomic picture Ehrlich, G. Proc. Int. Vac. Congr. Int. Conf. Solid Surf., 9th, DeSegovia, J. L., ed., (1983), 3-16, Assoc. Esp. Vacio Sus Apl., Madrid, Spain
- 44 Grain boundary segregation in metals using surface-analytical methods Erhart, H. Moeller, R. Grabke, H. J. Oberflaechenanal. Metallkd., Grabke, H. J., ed., 1983, 109-23, Dtsch. Ges. Metallkd., Oberursel, FRG
- 45 Comment on "Temperature dependence of the silicon field evaporation voltage" by G. L. Kellogg Ernst, L. Surf. Sci. (1983) 131, L419-20
- 46 Temperature-programmed field desorption of protonated hydrogen from rhodium and tungsten Ernst, N. Block, J. H. Surf. Sci. (1983) 126, 397-404
- 47 A new type of intense carbon dioxide laser-induced electron emission from a gold surface Farkas, G. Chin, S. L. Galarneau, P. Yergeau, F. Opt. Commun. (1983) 48, 275-8
- 48 A field-ion microscopy study of ion damage to tungsten Farnum, D. J. Inal, O. T. Walko, R. J. Phys. Status Solidi A (1983) 80, 287-303
- 49 Basic field emission properties of titanium carbide and zirconium carbide single crystals Fujii, K. Zaima, S. Adachi, H. Otani, S. Oshima, C. Ishizawa, Y. Shibata, Y. Shinku (1983) 26, 251-8
- 50 Liquid metal ion sources Gabovich, M. D. Usp. Fiz. Nauk (1983) 140, 137-51
- 51 Study of interactions of interstitial atoms with a tungsten surface by field ion microscopy Gerasimenko, V. I. Dranova, Z. I. Mikhailovskii, I. M. Fiz. Tverd. Tela (Leningrad) (1983) 25, 2456-61

Atom Probe Field-Ion Microscopy Bibliography for 1983

- 52 Evaluation of a liquid metal ion source for secondary ion mass spectrometry Gnaser, H. Ruedenauer, F. G. Nucl. Instrum. Methods Phys. Res. (1983) 218, 303-6
- 53 Surface diffusion Gomer, R. Vacuum (1983) 33, 537-42
- 54 Field emission studies of surface diffusion of adsorbates Gomer, R. NATO Adv. Sci. Inst. Ser., Ser. B (1983) 86, Surf. Mobilities Solid Mater., 127-59
- 55 Field ion microscopy and atom probe microanalysis of semiconductor materials Grovenor, C. R. M. Cerezo, A. Smith, G. D. W. Conf. Ser. - Inst. Phys. (1983) 67, Microsc. Semicond. Mater., 109-14
- 56 Investigations of metal-silicon interfaces by time-of-flight atom probe Grovenor, C. R. M. Smith, G. D. W. Mater. Res. Soc. Symp. Proc. (1983) 14, Defects Semicond., 429-33
- 57 Early stages of the decomposition of alloys Haasen, P. Ber. Bunsenges. Phys. Chem. (1983) 87, 201-7
- 58 Physikalische metallkunde in Göttingen mit neuen mikroskopischen methoden Haasen, P. Forschung in der Bundesrepublik Deutschland, DFG, Verlag Chemie, Weinheim (1983) 113
- 59 Metallic glasses Haasen, P. J. Non-Crystalline Solids (1983) 56, 191-200
- 60 Photo-field emission energy distributions of single crystal tungsten Haavig, D. L. 1983, 176, Univ. Microfilms Int., Order No. DA8407545
- 61 Gold-silicon-beryllium liquid metal ion source for maskless ion implantation Hashimoto, H. Miyauchi, E. Utsumi, T. Jpn. J. Appl. Phys. (1983) 22, 225-6
- 62 Atom-probe microanalysis of tungsten carbide (WC)-cobalt-based cemented carbides Hellsing, M. Henjered, A. Nordén, H. Andrén, H.-O. Sci. Hard Mater., (Proc. Int. Conf.) Viswanadham, R. K., Rowcliffe, D. J., and Gurland, J., eds., (1983), 931-45, Plenum, New York, NY

Atom Probe Field-Ion Microscopy Bibliography for 1983

- 63 Field emission ion source of molecular cesium ions Helm, H.
Moller, R. Rev. Sci. Instrum. (1983) 54, 837-40
- 64 A controlled specimen preparation technique for interface studies with atom-probe field-ion microscopy Henjered, A.
Nordén, H. J. Phys. E, Sci. Instrum. (1983) 16, 617-9
- 65 Atom-probe microanalysis and field-ion microscopy of titanium carbide (TiC) coatings on cemented carbides Henjered, A.
Nordén, H.
Kjellsson, L.
Skogsmo, J. EURO CVD Four, Proc. Eur. Conf. Chem. Vap. Deposition, 4th, Bloem, J., Verspui, G., and Wolff, L. R., eds., (1983), 91-6, Philips Cent. Manuf. Technol., Eindhoven, Neth.
- 66 The composition of the chromium depleted zone in an austenitic stainless steel, an atom-probe study Henjered, A.
Nordén, H.
Thorvaldsson, T.
Andrén, H.-O. Scr. Metall. (1983) 17, 1275-80
- 67 Atomic resolution studies of equilibrium and nonequilibrium solute atom segregation effects by atom probe field ion microscopy Herschitz, R. 1983, 291, Univ. Microfilms Int., Order No. DA8328589
- 68 A quantitative atom-probe field-ion microscope study of the compositions of dilute cobalt-niobium and cobalt-iron alloys Herschitz, R.
Seidman, D. N. Surf. Sci. (1983) 130, 63-88
- 69 Effects of local field variations on the contrast of a field-ion microscope Homeier, H. H. H.
Kingham, D. R. J. Phys. D, Appl. Phys. (1983) 16, L115-20
- 70 Electric field ionization from deep trapping levels in amorphous selenium Hoshino, Y. J. Non-Cryst. Solids (1983) 59-60, 945-8
- 71 Measuring method for electric field ionization from trapping levels Hoshino, Y.
Arishima, K. J. Phys. E (1983) 16, 427-30
- 72 A field emitter etching facility with good reproducibility Huebner, H. Optik (Stuttgart) (1983) 63, 179-83
- 73 Impregnated-electrode type liquid metal ion source Ishikawa, J.
Takamori, T.
Takagi, T. Proc. Int. Ion Eng. Congr., Takagi, T., ed., (1983) 1, 349-54, Int. Ion Eng. Congr., Kyoto, Japan
- 74 Mass-separated microbeam system with a liquid-metal-ion source Ishitani, T.
Umemura, K.
Tamura, H. Nucl. Instrum. Methods Phys. Res. (1983) 218, 363-7

Atom Probe Field-Ion Microscopy Bibliography for 1983

- 75 Atomic structure of copper-gold alloy in a field-ion microscope Ivchenko, V. A.
Syutkin, N. N. Fiz. Tverd. Tela (Leningrad) (1983) 25, 3049-54
- 76 Some observations of silver overlayers on rhenium by field emission microscopy Jones, J. P.
Al-Rawi, O. Z. Vide, Couches Minces (1983) 38, 233-5
- 77 Computer simulation of liquid metal ion source optics Kang, N. K.
Swanson, L. W. Appl. Phys. (1983) A30, 95-104
- 78 Electric field ionization of foil-excited Rydberg states of fast heavy ions Kanter, E. P.
Schneider, D.
Vager, Z. Phys. Rev. A (1983) 28, 1193-4
- 79 Reply to comment on "Temperature dependence of the silicon field evaporation voltage" Kellogg, G. L. Surf. Sci. (1983) 131, L421-2
- 80 Field evaporation of silicon and field desorption of hydrogen from silicon surfaces Kellogg, G. L. Phys. Rev. B, Condens. Matter (1983) 28, 1957-64
- 81 The interaction of hydrogen with silicon surfaces: a field ion microscope and pulsed-laser atom-probe study Kellogg, G. L. J. Vac. Sci. Technol. A (1983) 1, 1125-9
- 82 Temperature dependence of the silicon field evaporation voltage Kellogg, G. L. Surf. Sci. (1983) 124, L55-9
- 83 Charge state of ions in liquid metal field ion sources Kingham, D. R. Appl. Phys. (1983) A31, 161-4
- 84 Liquid metal ion sources - mass spectroscopic study of gallium, indium, tin, gold, lead, and bismuth Komuro, M. Proc. Int. Ion Eng. Congr., Takagi, T., ed., (1983) 1, 337-48, Int. Ion Eng. Congr., Kyoto, Japan
- 85 Focused ion beam using a triode gun Komuro, M. Proc. - Electrochem. Soc. (1983) 83-2, Proc. Symp. Electron Ion Beam Sci. Technol., Int. Conf., 10th, 385-95
- 86 Field ionization of Rydberg atoms: a semiclassical treatment of complex energy states in intense electric fields Korsch, H. J.
Moehlenkamp, R. Z. Phys. A (1983) 314, 267-73

Atom Probe Field-Ion Microscopy Bibliography for 1983

- 87 Field-emission properties of thin tantalum and tantalum-niobium foils Kotov, V. D.
Tolstikova, L. P.
Savitskii, E. M.
Burov, I. V.
Litvak, L. N.
Krivda, V. V.
Issled. Primen. Splavorugoplavkikh Met., Savitskii, E. M., ed., 1983, 118-19, Izd. Nauka, Moscow, USSR
- 88 Investigation of metal-gas surface reactions in atomic resolution (with FIM-FILM) Krautz, E.
Haiml, G.
Beitr. elektronenmikroskop. direktabb. oberfl. (1983) 16
- 89 FIM-investigations of molecular hydrogen, molecular nitrogen, and molecular oxygen interactions with the niobium surface Krautz, E.
Haiml, G.
Symp. Surf. Sci., Braun, P., ed., (1983), 264-9, Tech. Univ. Wien, Inst. Allgemeine Phys., Vienne, Austria
- 90 Field-emission microscopy and mass-spectroscopy of carbon fibers Ksenofontov, V. A.
Mikhailovskii, I. M.
Kul'ko, V. B.
SP-TP (1983) 22, 1583-88
- 91 The energy spectrum of electrons field emitted from carbon fiber micropoint cathodes Latham, R. V.
Wilson, D. A.
J. Phys. D (1983) 16, 455-63
- 92 Atom-probe analysis of interfaces and grain boundaries in stainless steel welds Leisch, M.
Contrib. - Symp. Surf. Sci., Braun, P., ed., (1983), 277-81, Tech. Univ. Wien, Inst. Allgemeine Phys., Vienna, Austria
- 93 Field-ionization kinetic measurements using wire emitters Levsen, K.
Hilt, E.
Goldenfeld, I.
Int. J. Mass Spectrom. Ion Phys. (1983) 51, 347-51
- 94 Formation of nickel subcarbonyls from nickel and carbon monoxide Liang, D. B.
Abend, G.
Block, J. H.
Kruse, N.
Surf. Sci. (1983) 126, 392-6
- 95 Field-emission and explosive-emission processes in vacuum discharges Litvinov, E. A.
Mesyats, G. A.
Proskurovskii, D. I.
Usp. Fiz. Nauk (1983) 139, 265-302
- 96 Field ion microscope. I. Atom probe field ion microscope Lu, H.
Zhenkong Kexue Yu Jishu (1983) 3, 244-50
- 97 Introduction to experimental techniques in field ion microscopy Lu, H.
Wuli (1983) 12, 38-42

Atom Probe Field-Ion Microscopy Bibliography for 1983

- 98 Statistics of the atom-by-atom dissection of planes in an atom-probe field-ion microscope: The number of atoms detected per plane Macrander, A. T.
Yamamoto, M.
Seidman, D. N. Rev. Sci. Instrum.
(1983) 54, 1077-84
- 99 Recent advances in electric field emission deposition sprayers Mahony, C.
Gowland, L.
Prewett, P. D. Conf. Ser. - Inst. Phys.
(1983) 66,
Electrostatics, 191-6
- 100 Energy spread measurements on a liquid metal ion source Mair, G. L. R.
Forbes, R. G.
Latham, R. V.
Mulvey, T. Microcircuit Eng. '83,
(Proc. Microcircuit
Eng. Conf.), Ahmed, H.,
Cleaver, J. R. A., and
Jones, G. A. C., eds.,
171-8, Academic,
London, UK
- 101 Beam-energy distribution measurements of liquid gallium field-ion sources Mair, G. L. R.
Grindrod, D. C.
Mousa, M. S.
Latham, R. V. J. Phys. D (1983) 16,
L209-13
- 102 The ionization of hydrogen and helium atoms by static and microwave electric fields Mariani, D. R. 1983, 236, Univ.
Microfilms Int., Order
No. DA8413103
- 103 The oxidation of rhodium - platinum. A study by field-ion microscopy and imaging atom probe techniques McCabe, A. R.
Smith, G. D. W. Platinum Metals Review
(1983) 27, 19-25
- 104 Adsorption of hafnium on tungsten Meclewski, R. Acta Univ. Wratislav.,
Mat., Fiz., Astron.
(1983) 27, 119-22
- 105 An atom probe study of the aging of iron-nickel-carbon martensite Miller, M. K.
Beaven, P. A.
Brenner, S. S.
Smith, G. D. W. Metall. Trans. A (1983)
14, 1021-4
- 106 Use of a modified paraxial formalism for particle beam dynamics: application to liquid metal ion sources Miskovsky, N. M.
Cutler, P. H.
Feuchtwang, T. E. J. Vac. Sci. Technol. B
(1983) 1, 1129-31
- 107 Mass spectrometry of a field ionization generated cesium beam Mitterauer, J. Int. J. Mass Spectrom.
Ion Phys. (1983) 46,
19-22
- 108 Selective silicon and beryllium implantation in gallium arsenide using a 100 kV mass-separating focused ion beam system with a gold-silicon-beryllium liquid metal ion source Miyauchi, E.
Arimoto, H.
Hashimoto, H.
Utsumi, T. J. Vac. Sci. Technol. B
(1983) 1, 1113-6

Atom Probe Field-Ion Microscopy Bibliography for 1983

- 109 A 100 kV maskless ion-implantation system with a gold-silicon-beryllium liquid metal ion source for III-V compound semiconductors Miyachi, E.
Arimoto, H.
Hashimoto, H.
Furuya, T.
Utsumi, T. Jpn. J. Appl. Phys.
(1983) 22, 287-8
- 110 Resolution of copper atoms in a GP(1) zone in aluminum-copper by FIM and determination of the GP(1) structure Mori, T.
Wada, M.
Kita, H.
Uemori, R.
Horie, S.
Sato, A.
Nishikawa, O. Jpn. J. Appl. Phys.
(1983) 22, 203-5
- 111 Atom-probe analysis of lanthanum hexaboride Murakami, K.
Adachi, T.
Kuroda, T.
Nakamura, S.
Komoda, O. Shinku (1983) 26,
461-5
- 112 An atom-probe analysis of lanthanum hexaboride (LaB₆) (001) plane Murakami, K.
Adachi, T.
Kuroda, T.
Nakamura, S.
Komoda, O. Surf. Sci. (1983) 124,
L25-30
- 113 Atom probe field-ion microscope and microchemical analysis of steels and other ferrous alloys Nakamura, S. Tetsuo Hagane (1983)
69, 1101-8
- 114 Reduced evaporation field by the field induced dipoles of physisorbed He, Ne and H₂ Nishikawa, O. Surf. Sci. (1983) 131,
239-44
- 115 Adsorption phenomena and the reactions at interfaces as observed by atom-probe Nishikawa, O. Kotai Butsuri (1983) 18,
681-9
- 116 Field emission-field ion microscope and atom-probe study of metal-metal interfaces Nishikawa, O. Acta Univ. Wratislav.,
Mat., Fiz., Astron.
(1983) 27, 19-29
- 117 Atom-probe field ion microscope mass spectrometer Nishikawa, O. Shinku (1983) 26,
147-58
- 118 Direct analysis of adsorbed atoms and molecules by atom probe Nishikawa, O. Hyomen (1983) 21,
309-20
- 119 Field desorption Nishikawa, O. Oyo Butsuri (1983) 52,
36

Atom Probe Field-Ion Microscopy Bibliography for 1983

- 120 Atom-probe study of the initial stage of silicide formation Nishikawa, O.
Tsunashima, Y.
Nomura, E.
Wada, M.
Horie, S.
Shibata, M.
Yoshimura, T.
Uemori, R. Surf. Sci. (1983) 126,
529-33
- 121 Atom-probe study of the early stage of silicide formation.
I. Tungsten-silicon system Nishikawa, O.
Tsunashima, Y.
Nomura, E.
Horie, S.
Wada, M.
Shibata, M.
Yoshimura, T.
Uemori, R. J. Vac. Sci. Technol. B
(1983) 1, 6-9
- 122 Atom-probe study of hydrogen chemisorption on iron and nickel Nishikawa, O.
Yoshimura, T.
Shibata, M. Surf. Sci. (1983) 133,
15-28
- 123 Atom-probe study of hydrogen physisorption on aluminum and copper Nishikawa, O.
Yoshimura, T.
Shibata, M. Surf. Sci. (1983) 124,
440-50
- 124 Improvement of a pulse generator for the atom-probe: doubling of pulse-voltage Nomura, E.
Horie, S.
Nishikawa, O. Jpn. J. Appl. Phys.
(1983) 22, 162-4
- 125 Magnesium ion emission from gallium-magnesium liquid metal ion source Okamura, S.
Taguchi, T.
Hiyamizu, S. Proc. Int. Ion Eng.
Congr., Takagi, T.,
ed., (1983) 3,
1739-42, Int. Ion Eng.
Congr., Kyoto, Japan
- 126 Field-emission-current fluctuations from a (100) vicinal plane of tungsten with adsorbed xenon molecules Okano, T. Jpn. J. Appl. Phys.
(1983) 22, 1496-501
- 127 Intense emission of metal ions from gallium oxide in the field desorption mode Okuyama, F. Int. J. Mass Spectrom.
Ion Processes (1983)
55, 119-22
- 128 Growth of chromium needle crystals induced by field electron emission Okuyama, F. Jpn. J. Appl. Phys.
(1983) 22, 245-51

Atom Probe Field-Ion Microscopy Bibliography for 1983

- 129 Structure of g.p. zones in an Al-1.7 at. % Cu alloys aged for 14 years at room temperature Osamura, K.
Murakami, Y.
Abe, T.
Hirano, K. Acta Metall. (1983) 31,
1669-73
- 130 Surface energy of cubic zirconium nitride single crystals Oshcherin, B. N.
Tkachenko, V. A.
Pautov, D. M. Poverkhnost (1983)
109-16
- 131 Stable field electron emission from a tungsten tip under the ultrahigh vacuum of 10^{-10} Pa Oshima, C.
Souda, R.
Aono, M.
Ishizawa, Y. Appl. Phys. Lett. (1983)
43, 611-2
- 132 Field emission capability of cathodic filaments formed during a discharge in hexacarbonyltungsten vapors Ovsyannikov, N. P.
Shuppe, G. N. Radiotekh. Elektron.
(Moscow) (1983) 28,
197-9
- 133 Direct visualization of unstained nucleic acids on a metal substrate Panitz, J. A. Ultramicroscopy (1983)
11, 161-6
- 134 A quantitative study of vacancy defects in quenched tungsten by combined field-ion microscopy and electrical resistometry Park, J. Y.
Huang, H. C. W.
Siegel, R. W.
Balluffi, R. W. Philos. Mag. A (1983)
48, 397-419
- 135 Quantitative study of vacancy defects in quenched tungsten by combined field-ion microscopy and electrical resistometry Park, J. Y.
Huang, H. C. W.
Siegel, R. W.
Balluffi, R. W. Report, 1983,
DOE/ER/05002-31,
Order No. DE83006040,
41
- 136 Computerized electron-beam linewidth measuring and inspection: a new tool Pomposo, T. F.
Coates, V. J. ASTM Spec. Tech.
Publ. (1983) 804,
Silicon Process, 501-8
- 137 Direct determination of a radiation damage profile with atomic resolution in ion-irradiated platinum Pramanik, D.
Seidman, D. N. Appl. Phys. Lett. (1983)
43, 639-41
Report, 1983, DOE/-
ER/03518-107, Order
No. DE83014982, 12
- 138 Atomic resolution observations of nonlinear depleted zones in tungsten irradiated with metallic diatomic molecular ions Pramanik, D.
Seidman, D. N. J. Appl. Phys. (1983)
54, 6352
- 139 The irradiation of tungsten with metallic diatomic molecular ions: atomic resolution observations of depleted zones Pramanik, D.
Seidman, D. N. Nuclear Instrum.
Methods (1983) 209,
453-60

Atom Probe Field-Ion Microscopy Bibliography for 1983

- 140 Ions from liquid gold. Field emission systems for applications in high technology Prewett, P. D. Gold Bull. (1983) 16, 34-40
- 141 Liquid metal ion sources for lithography. Some recent advances Prewett, P. D. McMillan, D. J. Jefferies, D. K. Mair, G. L. R. Proc. SPIE-Int. Soc. Opt. Eng. (1983), Electron-Beam, X-Ray, Ion-Beam Tech. Submicron Lithogr. 393, 120-8
- 142 An automatic control and timing unit for a time-of-flight mass spectrometer Reinmüller, H. J. Phys. E, Sci. Instrum. (1983) 16, 1228-33
- 143 Photoinduced field emission from metallic surfaces Reifenberger, R. Report (1983), DOE/ER/10464-4, Order No. DE84000872, 12
- 144 Fabrication of tungsten wire needles Roder, A. Report (1983), SLAC-TN-83-7, Order No. DE83012025, 3
- 145 Principles of field desorption mass spectrometry. (Review) Röllgen, F. W. Springer Ser. Chem. Phys. (1983) 25, Ion Form. Org. Solids, 2-13
- 146 Use of a synthesis method in the development of field-emission cathodes with preset properties Rybakov, Y. L. Vasichev, B. N. Izv. Akad. Nauk SSSR, Ser. Fiz. (1983) 47, 1091-4
- 147 A numerical analysis of the Poschenrieder lens in conjunction with a time-of-flight atom-probe Sakai, A. Sakurai, T. J. Appl. Phys. (1983) 23, 93-6
- 148 Field ion microscopy of silicon Sakata, T. Block, T. H. Symp. Surf. Sci., Braun, P., ed., (1983), 186-91, Tech. Univ. Wien, Inst. Allgemeine Phys., Vienna, Austria
- 149 Field evaporation of silicon surfaces Sakata, T. Block, J. H. Surf. Sci. (1983) 130, 313-25
- 150 Semiconductor field ion micrographs Sakurai, T. Sakata, T. Jimbo, A. Jpn. J. Appl. Phys. (1983) 22, 775-6
- 151 An interpretation for FEM patterns of a hydrogen-adsorbed tungsten tip and its application to hydrogen adsorption on single-crystal planes Sato, M. J. Phys. C (1983) 16, 5701-13

Atom Probe Field-Ion Microscopy Bibliography for 1983

- 152 Emitter for field ionization and field electron emission Soeretal, G. Int. J. Mass Spectrom. Ion Phys. (1983) 46, 289-92
- 153 A fundamental study of the effects of applied electric fields on gas-solid (dielectric) adsorption Someshwar, A. V. (1983), 241, Univ. Microfilms Int., Order No. DA8315510
- 154 Field emission cathode array development for high-current-density applications Spindt, C. A. Holland, C. E. Stowell, R. D. Appl. Surf. Sci. (1983) 16, 268-76
- 155 A field emission e-beam system for nanometer lithography Stephan, D. Kratschmer, E. Beneking, H. J. Vac. Sci. Technol. B (1983) 1, 1011-13,
- 156 A rearranged structure on a rhenium surface Surma, S. Blaszkiewicz, M. Meclewski, R. Gubernator, W. Phys. Status Solidi A (1983) 80, 269-76
- 157 An FIM study of a rhenium surface in the presence of hydrogen and helium gases Surma, S. Blaszkiewicz, M. Meclewski, R. Gubernator, W. Acta Univ. Wratislav., Mat., Fiz., Astron. (1983) 27, 81-100
- 158 Liquid metal ion sources: mechanism and applications Swanson, L. W. Proc. Int. Ion Eng. Congr., Takagi, T., ed., (1983) 1, 325-35, Int. Ion Eng. Congr., Kyoto, Japan
- 159 Liquid metal ion sources: mechanism and applications Swanson, L. W. Nucl. Instrum. Methods Phys. Res. (1983) 218, 347-53
- 160 The role of field emission in submicron electron beam testing Swanson, L. W. Tuggle, D. Li, J. Z. Thin Solid Films (1983) 106, 241-55
- 161 Field-ion microscopy of a copper-palladium alloy Syutkin, N. N. Ivchenko, V. A. Noritsyn, S. I. Telegin, A. B. Fiz. Met. Metalloved. (1983) 56, 728-32
- 162 Field ion imaging of atoms in palladium alloys Syutkin, N. N. Ivchenko, V. A. Noritsyn, S. I. Fiz. Tverd. Tela (Leningrad) (1983) 25, 3055-60

Atom Probe Field-Ion Microscopy Bibliography for 1983

- 163 The Frenkel thermal-field emission in europium gallium sulfide (EuGa_2S_4) single crystals Tagiev, O. B.
Niftiev, G. M.
Askerov, I. M. Phys. Status Solidi A (1983) 78, K43-6
- 164 Microstructure, retained austenite and mechanical properties of experimental 0.3% carbon steels Thomas, G.
Sarikaya, M.
Smith, G. D. W.
Barnard, S. J. Proc. Conf. on Advances in the Physical Metallurgy and Applications of Steels, Liverpool, UK, The Metals Society, London (1983) 284, 251-65
- 165 Sputtering of ordered nickel-aluminium alloys (I. Introduction and preferential sputtering of Ni_3Al) Thomas, M. P.
Ralph, B. Surf. Sci. (1983) 124, 129-50
- 166 Sputtering of ordered nickel-aluminium alloys (II. Preferential sputtering of NiAl single crystals and discussion) Thomas, M. P.
Ralph, B. Surf. Sci. (1983) 124, 151-61
- 167 Field emitters made of refractory metal nitrides Tkachenko, V. A.
Pautov, D. M.
Komyak, N. I.
Ivanov, S. A. Zh. Tekh. Fiz. (1983) 53, 2081-7
- 168 Field-emission liquid aluminum ion source Torii, Y.
Yamada, H. Proc. Int. Ion Eng. Congr., Takagi, T., ed., (1983) 1, 363-8, Int. Ion Eng. Congr., Kyoto, Japan
- 169 An aluminum liquid metal ion source with prolonged lifetime using a sintered boride emitter Torii, Y.
Yamada, H. Jpn. J. Appl. Phys. (1983) 22, 444-6
- 170 The time-of-flight atom probe and field ion microscopy Tsong, T. T. Pure Appl. Phys. (1983) 43, Appl. At. Collision Phys., 4, 379-406
- 171 Time-of-flight atom-probe field ion microscope analysis of thin films: surface segregation of alloys and early stages of silicide formation Tsong, T. T. Nucl. Instrum. Methods Phys. Res. (1983) 218, 383-90
- 172 Correlation between pair interactions of adsorbed atoms and adsorption layer superstructure formation Tsong, T. T. Phys. Scr. (1983) T4, 17-21

Atom Probe Field-Ion Microscopy Bibliography for 1983

- 173 FIM studies of surface migration of single adatoms and diatomic clusters with and without a driving force Tsong, T. T. NATO Adv. Sci. Inst. Ser., Ser. B (1983) 86, Surf. Mobilities Solid Mater., 109-26
- 174 Pulsed-laser atom-probe FIM study of solid surfaces Tsong, T. T. Kinkus, T. J. Phys. Scr. (1983) T4, 201-3
- 175 Summary abstract: pulsed-laser time of flight atom-probe FIM study of surface reactivities Tsong, T. T. Kinkus, T. J. J. Vac. Sci. Technol. A (1983) L, 1135
- 176 Field induced and surface catalyzed formation of novel ions: a pulsed-laser time-of-flight atom-probe study Tsong, T. T. Kinkus, T. J. Ai, C. F. J. Chem. Phys. (1983) 78, 4763-75
- 177 Pulsed-laser stimulated field desorption of gas molecules and field evaporation of metal atoms Tsong, T. T. Kinkus, T. J. McLane, S. B. J. Chem. Phys. (1983) 78, 7497-8
- 178 Early stages of silicide formation on tungsten, nickel, and platinum surfaces, an atom probe and field ion microscope study Tsong, T. T. Wang, S. C. Liu, F. H. Cheng, H. Ahmad, M. J. Vac. Sci. Technol. B (1983) L, 915-22
- 179 Clustering capability of field emission ion thruster Valentian, D. Bugeat, J. P. Acta Astronaut. (1983) 10, 697-701
- 180 Study of the character of the instability of field emission from point cathodes Vasin, V. A. Nevrovskii, V. A. Radiotekhn. Elektron. (Moscow) (1983) 28, 1163-8
- 181 Polarization dependence of photoexcitation in photofield emission Venus, D. Lee, M. J. G. Surf. Sci. (1983) 125, 452-72
- 182 Effect of hydrogen on the evaporation field of metals Wada, M. Uemori, R. Nishikawa, O. Surf. Sci. (1983) 134, 17-29
- 183 Applications of focused ion beams Wagner, A. Nucl. Instrum. Methods Phys. Res. (1983) 218, 355-62
- 184 The role of alloy constituents in high speed steels Wang, R. Andrén, H.-O. Dunlop, G. L. Acta Univ. Oul. Ser. C (1983) 26, 67-72
- 185 Nucleation and growth of γ' -precipitates in Ni-14 at. % Al Wendt, H. Haasen, P. Acta Metall. (1983) 31, 1649-59

Atom Probe Field-Ion Microscopy Bibliography for 1983

- 186 Observations of the decomposition of alloys by means of an atom probe Wendt, H.
Zhu, F.
Haasen, P.
- Phase Transform.
Cryst. Amorphous
Alloys, (Pap. Discuss.
Meet.), Mordike, B. L.,
ed., (1983), 105-12,
Dtsch. Ges. Metallkd.,
Oberursel, FRG
- 187 High resolution mass spectrometry of liquid metal ion sources Wilkens, B.
Venkatesan, T.
- J. Vac. Sci. Technol. B
(1983) 1, 1132-6
- 188 Field emission electric propulsion: additional propellants: further tests on indium and alloys Wilson, P. D.
Stewart, D.
- Report (1983) R664,
ESA-CR(P)-1767, Order
No. N84-15186, 60
- 189 Field emission electric propulsion. Further testing of mercury as propellant Wilson, P. D.
et al
- Report, 1983,
IRA-83-P-6,
ESA-CR(P)-1829 Order
No. N84-21629, 35
- 190 On the possibility of emitter temperature estimation from field-electron-emission energy distribution measurements Workowski, C. J.
- J. Phys. D (1983) 16,
445-53
- 191 Anomaly of the thermal-field emission and total-energy distribution of the (012), (013), and (023) tungsten faces Wysocki, J. K.
- Phys. Rev. B, Condens.
Matter (1983) 28,
834-41
- 192 Single atom mass analysis by atom-probe field-ion microscopy Yamamoto, M.
Aono, S.
Sakata, Y.
Nenno, S.
- Technol. Rep. Osaka
Univ. (1983) 33, 257-62
- 193 The quantitative compositional analysis and field-evaporation behavior of ordered nickel-molybdenum (Ni_4Mo) on an atomic plane-by-plane basis: an atom-probe field-ion microscope study Yamamoto, M.
Seidman, D. N.
- Surf. Sci. (1983) 129,
281-300
- 194 Space-time formulation for the dynamic image potential: application to photoassisted field emission Young, R. A.
- Solid State Commun.
(1983) 45, 263-6
- 195 Preparation and use of activated wires by pyridine Zahran, N. F.
Helal, A. I.
Hindawi, S. K.
Youssef, M. A.
- Indian J. Phys. A
(1983) 57A, 240-9
- 196 Effect of a magnetic field and the initial cathode temperature on explosive (electron) emission Zhukov, V. M.
Aksenov, M. S.
Fursei, G. N.
- Zh. Tekh. Fiz. (1983)
53, 1787-90

Atom Probe Field-Ion Microscopy Bibliography for 1983

- 197 Prebreakdown effects and critical current densities of autoemission in the nanosecond range Zhukov, V. M. Aksenov, M. S. Fursei, G. N. *Zh. Tekh. Fiz.* (1983) **53**, 1588-93

1984

Atom Probe Field-Ion Microscopy Bibliography for 1984

- 1 Flashing temperature dependence of field electron emission from titanium carbide single crystals Adachi, H.
Fujii, K.
Zaima, S.
Shibata, Y.
Otani, S. Shinku (1984) 27,
658-66
- 2 Surface segregation and diffusion kinetics study of a platinum-iridium alloy using the time-of-flight atom-probe field-ion microscope Ahmad, M.
Tsong, T. T. Appl. Phys. Lett. (1984)
44, 40-2
- 3 Micro ion beams for fabrication Ahmed, H. Vacuum (1984) 34, 41
- 4 A study of the temperature dependence of a surface catalyzed and field enhanced formation of triatomic hydrogen and ammonia on metal surfaces Ai, C. F.
Tsong, T. T. J. Chem. Phys. (1984)
81, 2845-54
- 5 Field-promoted and surface-catalyzed formation of triatomic hydrogen and ammonia on transition metal surfaces: a pulsed-laser imaging atom-probe study Ai, C. F. 1984, 122, Univ.
Microfilms Int., Order
No. DA8419566
- 6 Field-promoted and surface-catalyzed formation of triatomic hydrogen and ammonia on transition metal surfaces: a pulsed-laser imaging atom-probe study Ai, C. F.
Tsong, T. T. Surf. Sci. (1984) 138,
339-60
- 7 Interpretation of field ion images of tungsten silicides Aleksandrov, L. N.
Bogomolov, B. K.
Gerasimenko, N. N. Fiz. Osnovy
Poluprovod.
Tenzometrii,
Novosibirsk (1984)
61-75
- 8 The diffusivity of ^3He atoms in perfect tungsten crystals Amano, J.
Seidman, D. N. J. of Appl. Phys.
(1984) 56, 983-92
- 9 FIM-atom probe studies of early stage decomposition in copper-titanium alloys Alvensleben, L. v.
Wagner, R. Decompos. Alloys, Proc.
Acta-Skr. Metall. Conf.,
2nd, Haasen, P., ed.,
(1984) 143-8
- 10 Liquid metal ion sources. Beam focusing system Anazawa, N.
Aihara, R. Oyo Butsuri (1984) 53,
193-4

Atom Probe Field-Ion Microscopy Bibliography for 1984

- 11 Accurate measurements of electron energies by field-emitter referencing Anderson, C. R.
Lee, R. N. *J. Electron Spectrosc. Relat. Phenom.* (1984) 34, 173-98
- 12 On the charge state of tungsten ions in the pulsed-field atom probe Andrén, H.-O.
Henjered, A.
Kingham, D. R. *Surf. Sci.* (1984) 138, 227-36
- 13 Palladium-nickel-silicon-beryllium-boron liquid metal ion source for maskless ion implantation Arimoto, H.
Takamori, A.
Miyauchi, E.
Hashimoto, H. *Jpn. J. Appl. Phys.* (1984) 23, 165-6
- 14 LMIS energy broadening interpretation supported by HV-TEM observations Assayag, G. B.
Sudraud, P. *J. de Phys.* (1984) 45-C9, 223
- 15 Switching and other nonlinear phenomena associated with prebreakdown electron emission currents Athwal, C. S.
Latham, R. V. *J. Phys. D* (1984) 17, 1029-43
- 16 Flicker noise of germanium emitters with atomically cleaned surface Bakhtizin, R. Z.
Gots, R. Z.
Il'yasov, R. G. *Poverkhnost* (1984) 54-61
- 17 Field dependence of the photo field-emission current from tungsten Bakhtizin, R. Z.
Yumaguzin, Y. M. *Poverkhnost* (1984) 49-53
- 18 The polarizability of iridium neutral atoms and their van der Waals interaction with a tungsten surface measured by F.I.M. Bardon, J.
Audiffren, M. *J. de Phys.* (1984) 45-C9, 245-9
- 19 The anisotropy of the surface energy of nickel measured by TEM of field emitters Barsotti, T.
Bermond, J. M.
Drechsler, M. *J. de Phys.* (1984) 45-C9, 43-6
- 20 A measurement of the surface energy anisotropy of nickel by transmission electron microscopy of field emitter crystals Barsotti, T.
Bermond, J. M.
Drechsler, M. *Surf. Sci.* (1984) 146, 467-79
- 21 A liquid cesium field ion source for space propulsion Bartoli, C.
Rohden, H. v.
Thompson, S. P.
Blommers, J. *J. Phys. D* (1984) 17, 2473-83
- 22 Recent developments in high-current liquid metal ion sources for space propulsion Bartoli, C.
Rohden, H. v.
Thompson, S. P.
Blommers, J. *Vacuum* (1984) 34, 43-6

Atom Probe Field-Ion Microscopy Bibliography for 1984

- 23 The spectral density functions of the adsorption system K-(112)W Beben, J.
Kleint, C.
Meclewski, R. J. de Phys. (1984) 45-
C9, 13-6
- 24 Electron excitation energy transport in donor-acceptor pairs in an external electromagnetic field Belousov, A. V.
Keloglu, O. Y.
Kovarskii, V. A.
Sinyavskii, E. P. Fiz. Tverd. Tela
(Leningrad) (1984) 26,
2096-103
- 25 LMIS energy broadening interpretation supported by HV-TEM observations Benassayag, G.
Sudraud, P. J. de Phys. (1984) 45-
C9, 223-6
- 26 A preliminary study of surface self-diffusion and evaporation of a semiconductor (GaP) Binh, V. T.
Maas, A.
Drechsler, M. J. de Phys. (1984) 45-
C9, 23-7
- 27 Size and shape of crystal faces on heated metal tips Binh, V. T.
Drechsler, M. J. de Phys. (1984) 45-
C9, 29-37
- 28 Phase composition and long-range order in γ' phase of a nickel-base single crystal superalloy CMSX2: an atom probe study Blavette, D.
Bostel, A. Acta Metall. (1984) 32,
811-6
- 29 Partitioning of alloying elements in a nickel base superalloy containing niobium and molybdenum: an atom-probe study Blavette, D.
Bostel, A.
Bouet, M. J. de Phys. (1984) 45-
C9, 379-84
- 30 Atom probe: study of long range order in $L1_2$ -type precipitates Blavette, D.
Menand, A. C. R. Acad. Sci., Ser. 2
(1984) 298, 865-70
- 31 Time-of-flight atom probe Bobkov, A. F.
Karpikhin, I. L.
Kasatkin, V. A.
Lazarev, N. E.
Suvorov, A. L. Prib. Tekh. Eksp.
(1984) 2, 190-4
- 32 The determination of diffusion tensors in surface diffusion by the fluctuation method (theory) Bowman, D. R.
Gomer, R.
Mutalib, K.
Tringides, M. Surf. Sci. (1984) 138,
581-98
- 33 Conversion of field ionization kinetics data to unimolecular rate constant functions. A simple numerical approach Brand, W. A.
Stockloev, J.
Walther, H. J. Int. J. Mass Spectrom.
Ion Processes (1984)
59, 1-20
- 34 Atom probe field-ion microscopy studies of modulated structures Brenner, S. S.
Miller, M. K.
Soffa, W. A. NATO ASI Ser., Ser. E
(1984) 83, Modulated
Struct. Mater., 309-23

Atom Probe Field-Ion Microscopy Bibliography for 1984

- 35 Phase separation and coarsening in Fe-Cr-Co alloys Brenner, S. S.
Camus, P. P.
Miller, M. K.
Soffa, W. A. Acta Metall. (1984) 32,
1217-27
- 36 An imaging atom probe study Bronsveld, P. M.
Elswijk, H.
Bolt, P. J.
Dubben, G. J.
De Hosson, J. T. M. J. de Phys. (1984) 45-
C9, 423-8
- 37 A compilation of mass spectra from liquid metal sources Broughton, D.
Clampitt, R. Vacuum (1984) 34, 275-9
- 38 A combined AEM/FIM study of precipitation in an Fe-25 at. % Be alloy Burke, M. G.
Miller, M. K.
Brenner, S. S.
Soffa, W. A. Anal. Electron Microsc., Proc. Workshop, Williams, D. B. and Joy, D. C., eds., 1984, 157-60, San Francisco Press, San Francisco, CA
- 39 Quantification of interconnected microstructures by FIM Camus, P. P.
Soffa, W. A.
Brenner, S. S.
Miller, M. K. J. de Phys. (1984) 45-
C9, 265-8
- 40 An electronic and computer system for an automated atom probe Cerezo, A.
Godfrey, T. J.
Moore, A. J. W.
Smith, G. D. W. J. de Phys. (1984) 45-
C9, 315-21
- 41 On the atomic structure and optical constants of (001) tantalum Ceyer, S.
Melmed, A. J.
Carroll, J. J.
Craham, W. R. Surf. Sci. (1984) 144,
L444
- 42 The FIM100 - performance of a commercial atom probe system Cerezo, A.
Smith, G. D. W.
Waugh, A. R. J. de Phys. (1984) 45-
C9, 329-35
- 43 Aging of Fe-Ni-C martensite Chang, L.
Cerezo, A.
Smith, G. D. W.
Miller, M. K.
Burke, M. G.
Brenner, S. S.
Taylor, K. A.
Abe, T.
Olson, G. B. J. de Phys. (1984) 45-
C9, 409-16

Atom Probe Field-Ion Microscopy Bibliography for 1984

- 44 The silicon effect in the tempering of martensite in steels Chang, L.
Smith, G. D. W. J. de Phys. (1984) 45-C9, 397-401
- 45 New integrated liquid gallium ion source Chen, C.
Wang, C.
Zhang, L.
Ma, X.
Li, J. Bandaoti Xuebao (1984) 5, 550-3
- 46 Thermal characteristics of field emission cathode produced from carbon fiber Cherepanov, A. Y.
Sheshin, E. P. Fiz. Yavleniya v Priborakh Elektron. i Lazer. Tekhn., M., (1984) 14-20
- 47 On the use of curve intersection formalisms in field evaporation theory Chibane, K.
Forbes, R. G. J. de Phys. (1984) 45-C9, 99-104
- 48 Solution of Laplace's equation for a rigid conducting cone and planar counter-electrode: comparison with the solution to the Taylor conical model of a field emission LMIS Chung, M.
Cutler, P. H.
Feuchtwang, T. E.
Miskovsky, N. M. J. de Phys. (1984) 45-C9, 145-52
- 49 Use of variational equations to analyze equilibrium and stability of an electrostatically stressed conducting fluid: application to a cuspidal model of an LMIS Chung, M.
Cutler, P. H.
Feuchtwang, T. E.
Kazes, E.
Miskovsky, N. M. J. de Phys. (1984) 45-C9, 153-9
- 50 Epitaxial crystal growth of HCP metals on BCC metals: dysprosium on tungsten Ciszewski, A.
Melmed, A. J. J. Crystal Growth (1984) 69, 253
- 51 Surface self-diffusion of dysprosium and gadolinium Ciszewski, A.
Melmed, A. J. Surf. Sci. (1984) 145, L509
- 52 Epitaxial crystal growth of gadolinium on tungsten Ciszewski, A.
Melmed, A. J. Surf. Sci. (1984) 145, L471
- 53 Epitaxial growth and some properties of samarium crystals on tungsten Ciszewski, A.
Melmed, A. J. J. de Phys. (1984) 45-C9, 39-42
- 54 Microscopy and lithography with liquid-metal ion sources Cleaver, J. R. A. Conf. Ser. - Inst. Phys. (1984) 68, Electron Microsc. Anal., 1983, 461-6
- 55 Multiquantum vibrational transitions during resonance tunneling of electrons Dalidchik, F. I. Zh. Eksp. Teor. Fiz. (1984) 87, 1384-99

Atom Probe Field-Ion Microscopy Bibliography for 1984

- 56 Effect of ordered adsorption on electron field emission of metals Dalidechik, F. I.
Slonim, V. Z. Fiz. Tverd. Tela
(Leningrad) (1984) 26,
1061-7
- 57 Observation of the transition from impact-ionization-dominated to field-ionization-dominated impurity breakdown in silicon Dargys, A.
Zurauskas, S. Solid State Commun.
(1984) 52, 139-42
- 58 Electric field ionization of phosphorus atoms in silicon Dargys, A.
Zurauskas, S. Fiz. Tekh. Poluprovodn.
(Leningrad) (1984) 18,
595-9
- 59 Energy distribution of free space field ionization: application to field strength calibration De Castilho, C. M. C.
Kingham, D. R. J. de Phys. (1984) 45-C9, 77-82
- 60 Charge emission from interface states at silicon grain boundaries by thermal emission and thermionic-field emission - Part I: Theory De Groot, A. W.
Card, H. C. IEEE Trans. Electron Devices (1984) ED-31,
1365-9
- 61 Charge emission from interface states at silicon grain boundaries by thermal emission and thermionic-field emission - Part II: Experiment De Groot, A. W.
Card, H. C. IEEE Trans. Electron Devices (1984) ED-31,
1370-6
- 62 Thermionic-field emission from interface states at grain boundaries in silicon De Groot, A. W.
McGonigal, G. C.
Thomson, D. J.
Card, H. C. J. Appl. Phys. (1984)
55, 312-17
- 63 A field-ion microscope/imaging atom probe for in situ surface studies Done, S.
Walls, J. M. Inst. Phys. Conf. Ser.
(1984) 68, Electron Microsc. Anal., (1983)
495-8
- 64 Photon induced field desorption experiments with laser and synchrotron radiation Drachsel, W.
Weigmann, U.
Jaenicke, S.
Block, J. H. Proc. 2nd Int.
Workshop, Schloss.
Elmau, Bayern, Brenig,
W. and Menzel, D.,
eds., Springer Ser.
Surf. Sci. (1984) 4,
245-50
- 65 Study of the interaction of interstitial atoms with grain boundaries in tungsten by a field-ion microscopic method Dranova, Z. I.
Mikhailovskii, I. M. Fiz. Met. Metalloved.
(1984) 57, 551-7

Atom Probe Field-Ion Microscopy Bibliography for 1984

- 66 Direct observation of electric field induced surface atomic displacements using the field ion microscope Eaton, H. C.
Bayuzick, R. J. Rev. Sci. Instrum.
(1984) 55, 547-50
- 67 Structure and composition of the phases that precipitate out during aging of the martensite of Fe-Ni-V alloys Ednreal, A. F.
Dmitriev, V. B.
Kudryavtsev, A. N.
Rusanenko, V. V. Sov. Phys. Dokl. (1984)
29, 760
- 68 A study of the electric field dependence of the photoinduced field emission current from tungsten Egert, C. M.
Reifenberger, R. Surf. Sci. (1984) 145,
159-74
- 69 Electron-stimulated field desorption of diatomic and triatomic hydrogen Ernst, N.
Block, J. H. Phys. Rev. B, Condens.
Matter (1984) 29,
7092-5
- 70 Triatomic hydrogen(⁺¹) formation during the field desorption of hydrogen Ernst, N.
Bozdech, G.
Kato, S.
Block, J. H. J. de Phys. (1984) 45-
C9, 231-7
- 71 A combined field electron and field ion microscope Ernst, N.
Ehrlich, G. J. de Phys. (1984) 45-
C9, 293-6
- 72 Computational models of liquid metal ion sources Evans, G. A.
Macgregor, M. D.
Smith, R. Vacuum (1984) 34,
47-50
- 73 A field ion microscope - imaging atom probe study of the underpotential deposition of copper on platinum Everett, K. G.
Walck, S. D.
Schmid, G. M.
Hren, J. J. Surf. Sci. (1984) 145,
L475-80
- 74 A study of defects produced in tungsten by 800-MeV protons using field ion microscopy Farnum, D. J.
Sommer, W. F.
Inal, O. T. J. Nucl. Mater. (1984)
123, 996-1001
- 75 Comments on the theory of the resolution in the scanning tunneling microscope (STM) and the structure of the tunneling barrier Feuchtwang, T. E.
Cutler, P. H.
Kazes, E. J. de Phys. (1984) 45-
C9, 111-8
- 76 Direct observation of three-body interactions in adsorbed layers: Re on W(110) Fink, H.-W.
Ehrlich, G. Phys. Rev. Lett. (1984)
52, 1532

Atom Probe Field-Ion Microscopy Bibliography for 1984

- 77 Lattice steps and adatom binding on W(211) Fink, H.-W.
Ehrlich, G. Surf. Sci. (1984) 143,
125-44
- 78 On the shape of a liquid-metal field-ion emitter Forbes, R. G. J. de Phys. (1984) 45-
C9, 161-6
- 79 Derivation of bonding distance and vibration frequency from field evaporation experiments Forbes, R. G.
Chibane, K.
Ernst, N. Surf. Sci. (1984) 141,
319-40
- 80 Dynamics of the explosive emission process Fursei, G. N.
Lupekhin, S. M.
Polyakov, M. A.
Baskin, L. M.
Shirochin, L. A. Dokl. Akad. Nauk SSSR
(1984) 276, 866-9
(Phys.)
- 81 Ion beam lithography Gamo, K.
Namba, S. Ultramicroscopy (1984)
15, 261-70
- 82 Analysis of the energy broadening of liquid metal ion sources Gesley, M. A.
Larson, D. L.
Swanson, L. W.
Hinrichs, C. H. Proc. SPIE-Int. Soc.
Opt. Eng. (1984) 471,
Electron-Beam, X-Ray,
Ion-Beam Tech. Sub-micrometer Lithogr. 3,
66-74
- 83 A determination of the low work function planes of lanthanum hexaboride Gesley, M.
Swanson, L. W. Surf. Sci. (1984) 146,
583-99
- 84 Electric conductivity of a semiconductor bicrystal in the case of tunnel charge transfer Glot, A. B. Fiz. Tekh. Poluprovodn.
(Leningrad) (1984) 18,
194-7
- 85 Field ionization of gas at a metal surface Glowacki, M. Postepy Fiz. (1984) 35,
127-41
- 86 Application of a liquid metal ion source to secondary ion mass spectrometry Gnaser, H. Fresenius' Z. Anal.
Chem. (1984) 319,
719-23
- 87 Some recent results in surface diffusion Gomer, R. J. de Phys. (1984) 45-
C9, 3-8
- 88 Some recent results in surface diffusion studies by the fluctuation method Gomer, R. Jerusalem Symp.
Quantum Chem.
Biochem. (1984) 17,
Dyn. Surf., 203-13
- 89 Influence of shank profile on laser heating of a field emitter Hadley, K. W.
Donders, P. J.
Lee, M. J. G. J. Appl. Phys. (1984)
57, 2617

Atom Probe Field-Ion Microscopy Bibliography for 1984

- 90 Surface segregation of Cu-Ni alloys Hashizume, T.
Jimbo, A.
Sakurai, T. J. de Phys. (1984) 45-
C9, 435-6
- 91 Microprocessor-aided remoulding of field emitters Hasselbach, F.
Nicklaus, M. J. Phys. E, Sci.
Instrum. (1984) 17, 782
- 92 Electrochemical generation of silver emitter for field desorption Helal, A. I.
Zahran, N. F.
Badawy, W. A. Egypt. J. Phys. (1984)
15, 175-8
- 93 Field desorption and reactions of silane on tungsten at high electric fields Helal, A. I.
Zahran, N. F.
Block, J. H. Int. J. Mass Spectrom.
Ion Processes (1984)
61, 247-59
- 94 Atom-probe results support the skeleton model for tungsten carbide (WC)-cobalt Henjered, A.
Hellsing, M.
Andrén, H.-O.
Nordén, H. J. de Phys. (1984) 45-
C9, 349-53
- 95 An atomic resolution study of homogeneous radiation-induced precipitation in a neutron irradiated W-10 at. % Re alloy Herschitz, R.
Seidman, D. N. Acta Metall. (1984) 32,
1141-54
- 96 An atomic resolution study of radiation-induced precipitation in a neutron-irradiated W-25 at. % Re Alloy Herschitz, R.
Seidman, D. N. Acta. Metall. (1984) 32,
1155-71
- 97 APFIM studies of segregation and solute-defect interactions in metals Hess, D. R.
Al-Saleh, K.
Murakami, K.
Sakurai, T.
Pickering, H. W. Microbeam Anal. (1984)
19, 65-7
- 98 Observations on the microstructure and magnetization of AlNiCo permanent magnets Hetherington, M. G.
Cerezo, A.
Jakubovics, J. P.
Smith, G. D. W. J. de Phys. (1984) 45-
C9, 429-34
- 99 Electron field emission from copper with various thicknesses of oxide film Heylen, A. E. D.
Guile, A. E.
Morgan, D. V. IEE Proc. A, Phys.
Sci., Meas. Instrum.,
Manage. Educ., Rev.
(1984) 131, 111-7
- 100 Spectral analysis of atom-probe field-ion microscope composition profiles using Fourier techniques Hill, S. A.
Ralph, B. Metallography (1984)
17, 175-89
- 101 Field ion microscope studies on Guinier-Preston zones in aluminum alloys Hirano, K. Cryst. Res. Technol.
(1984) 19, 1273-8

Atom Probe Field-Ion Microscopy Bibliography for 1984

- 102 G.P. zones in Al-5 at. % Ag alloy observed by field-ion microscope Hono, K.
Hirano, K. Scr. Metall. (1984) 18, 945-50
- 103 Field-ion microscopy and atom-probe mass spectroscopy of sulfur on the (111) plane of nickel Hren, J. J.
Kellogg, G. L. Surf. Sci. (1984) 147, 349-55
- 104 Experiment on the dynamics of tunneling through metal oxide barriers Huebner, H. J. de Phys. (1984) 45-C9, 279-83
- 105 Micro-segregation of chromium in Fe-Cr alloy Igata, N.
Sato, S.
Ando, T.
Doi, H.
Nishikawa, K.
Shibata, M. J. de Phys. (1984) 45-C9, 403-8
- 106 Radiation effects in materials: field-ion microscope characterizations Inai, O. T.
Sommer, W. F. Natl. SAMPE Tech. Conf. (1984) 16, Hi-Tech. Rev., 1984, 215-27
- 107 Impregnated-electrode-type liquid metal ion source Ishikawa, J.
Takagi, T. J. Appl. Phys. (1984) 56, 3050-6
- 108 Development of boron liquid-metal ion source Ishitani, T.
Umemura, K.
Hosoki, S.
Takayama, S.
Tamura, H. J. Vac. Sci. Technol. A (1984) 2, 1365-9
- 109 Development of boron and phosphorus liquid-metal ion sources Ishitani, T.
Umemura, K.
Kawanami, Y.
Tamura, H. J. de Phys. (1984) 45-C9, 191-6
- 110 LMI source. Emitted-ion species Ishitani, T. Oyo Butsuri (1984) 53, 189-90
- 111 Development of phosphorus liquid-metal-ion source Ishitani, T.
Umemura, K.
Tamura, H. Jpn. J. Appl. Phys. (1984) 23, 330-2
- 112 Diffusion of transition adatoms on perfect and stepped transition metal surfaces from binding energy calculations Jardin, J. P.
Desjonquères, M. C.
Spanjaard, D. J. de Phys. (1984) 45-C9, 9-12

Atom Probe Field-Ion Microscopy Bibliography for 1984

- 113 An atom-probe study of iron-titanium alloys Jimbo, A.
Hashizume, T.
Sakurai, T.
Al-Saleh, K.
Pickering, H. W. J. de Phys. (1984) 45: C2, 417-22
- 114 The effect of substrate temperature on the behaviour of gold and silver on the 100 tungsten plane Joag, D. S.
Jones, J. P. J. de Phys. (1984) 45: C2, 59-64
- 115 Field ion microscopic observations of lanthanum boride (LaB_6) on tungsten Joag, D. S.
Kanitkar, P. L.
Kanitkar, M. M.
Shukla, V. N. Bull. Mater. Sci. (1984) 6, 573-7
- 116 Gallium liquid metal ion sources for ion microbeam units Kahn, A.
Naehring, F. Beitr. Tag. Mikrosonde, 6th, Roeder, A., Daebritz, S., and Kuechler, L., eds., 1984, 99100, Phys. Ges. DDR, Berlin, GDR
- 117 A high-resolution field ion microscopic study of iron-nickel-boron ($(\text{Fe}_{40}\text{Ni}_{40}\text{B}_{20})$) metallic glass imaged at liquid hydrogen temperature Kanitkar, M. M.
Shukla, V. N.
Kanitkar, P. L.
Joag, D. S. Solid State Commun. (1984) 50, 817-9
- 118 The determination of grain-boundary segregation profiles in boron-containing austenitic stainless steels using TEM, AP and IAP Karlsson, L.
Nordén, H. J. de Phys. (1984) 45: C2, 391-6
- 119 The carbon monoxide oxidation reaction on rhodium: a pulsed-laser and imaging atom-probe study Kellogg, G. L. J. de Phys. (1984) 45: C9, 365-70, and SAND-84-0861C, Order No. DE84016223, 7
- 120 In situ cleaning of nickel field-ion surfaces by neon ion bombardment Kellogg, G. L. J. Vac. Sci. Technol. A (1984) 2, 1597-8
- 121 Measurement of activation energies for field evaporation of tungsten ions as a function of electric field Kellogg, G. L. Phys. Rev. B, Condens. Matter (1984) 29, 4304-12
- 122 Orientation dependence of surface energy change on ordering in Ni_4Mo alloy Kingetsu, T.
Yamamoto, M
Nenno, S. Surf. Sci. (1984) 145, L547-50
- 123 Equilibrium Degree of order in the near-surface of a D_{1_a} type A_4B ordering alloy Kingetsu, T.
Yamamoto, M.
Nenno, S. Surf. Sci. (1984) 145, 101-20

Atom Probe Field-Ion Microscopy Bibliography for 1984

- 124 Surface energy and equilibrium shape of $D1_a$ type A_4B ordering alloy Kingetsu, T.
Yamamoto, M.
Nenno, S. Surf. Sci. (1984) 144,
402-28
- 125 In defense of the Taylor cone model: application to liquid metal ion sources Kingham, D. R.
Bell, A. E. J. de Phys. (1984) 45-
C9, 139-44
- 126 Resolution of field-ion microscopy versus scanning tunneling microscopy for obtaining surface charge density corrugations Kingham, D. R.
Garcia, N. J. de Phys. (1984) 45-
C9, 119-24
- 127 Mechanisms of ion formation in liquid metal ion sources Kingham, D. R.
Swanson, L. W. J. de Phys. (1984) 45-
C9, 133-8
- 128 Shape of a liquid metal ion source. A dynamic model including fluid flow and space-charge effects Kingham, D. R.
Swanson, L. W. Appl. Phys. A (1984)
A34, 123-32
- 129 A theoretical model of a liquid metal ion source Kingham, D. R.
Swanson, L. W. Vacuum (1984) 34,
941-5
- 130 A field ion microscopy study of initial stages of phase transformation in maraging Fe-Ni-Mo alloys Kirienko, V. I.
Ednreal, A. F.
Bukhtoyarov, Y. A. Phys. Metals (1984) 5,
281-287
- 131 Some uses of autoemission for a study of interaction on the surface of transition metals Knor, Z. Mekhanizm Kataliza,
Novosibirsk (1984) Ch
2, 41-57
- 132 LMI source. Energy distribution Komuro, M. Oyo Butsuri (1984) 53,
191-2
- 133 Point ion sources based on field ionization Komuro, M.
Hiroshima, H.
Shimizu, H.
Ono, M.
Ichimura, S.
Murakami, H.
Sato, M. Denshi Gijutsu Sogo
Kenkyusho Chosa
Hokoku (1984) 209,
1-92
- 134 Field ion microscopic investigations of niobium, tantalum and palladium interactions with reactive gases Krautz, E.
Haiml, G. J. de Phys. (1984) 45-
C9, 257-62
- 135 Adsorption of nitric oxide on platinum studied by pulsed field desorption mass spectrometry Kruse, N.
Kessler, T.
Abend, G.
Block, J. H. J. de Phys. (1984) 45-
C9, 227-30

Atom Probe Field-Ion Microscopy Bibliography for 1984

- 136 Model studies, by field desorption, on the reaction of carbon monoxide and molecular hydrogen on cobalt Kruse, N.
Abend, G.
Block, J. H. Chem. Eng. Tech.
(1984) 56, 610-1
- 137 Interaction of carbon monoxide with transition metals, studied by field desorption mass spectrometry Kruse, N.
Abend, G.
Drachsel, W.
Block, J. H. Proc. 8th Int. Congress
on Catalysis, Berlin,
FRG (1984) 2, 105-16
- 138 A mass-spectrometric investigation of the incorporation of organic matter into electrodeposits Leisch, M.
Rendulic, D. Z. Metall Kunde Bd
(1984) 75, 459
- 139 Atom probe analysis of addition agent behavior in electrodeposition Leisch, M.
Rendulic, K. D. J. de Phys. (1984) 45-
C9, 477-81
- 140 High spatial resolution SIMS with the UC-HRL scanning ion microprobe Levi-Setti, R.
Wang, Y. L.
Crow, G. J. de Phys. (1984) 45-
C9, 197-205
- 141 Numerical calculation of the temperature evolution and profile of the field ion emitter in the pulsed-laser time-of-flight atom probe Liu, H. F.
Tsong, T. T. Rev. Sci. Instrum.
(1984) 55, 1779-84
- 142 Early stage decomposition of nickel-36 at. % copper-9 at. % aluminum. An atom-probe FIM study Liu, Z. G.
Wagner, R. J. de Phys. (1984) 45-
C9, 441-6
- 143 Potential distribution in metal-vacuum-metal planar barriers containing spherical protrusions or inclusions Lucas, A. A.
Vigneron, J. P.
Bono, J.
Cutler, P. H.
Feuchtwang, T. E.
Good, Jr., R. H.
Huang, Z. J. de Phys. (1984) 45-
C9, 125-32
- 144 Hydrogen adsorption on (110) tungsten at 30 K: an atom-probe field-ion microscope study Macrander, A. T.
Seidman, D. N. Surf. Sci. (1984) 147,
451-65
- 145 An atom-probe field-ion microscope study of 200-eV molecular hydrogen ($^1\text{H}_2^+$) ions implanted in tungsten at 29 K Macrander, A. T.
Seidman, D. N. J. Appl. Phys. (1984)
56, 1623-9
- 146 Field-emission deposition: ion-assisted deposition using liquid metal sources Mahony, C.
Prewett, P. D. Vacuum (1984) 34,
301-4
- 147 An analytical expression for the current-voltage characteristics of capillary type liquid metal ion sources Mair, G. L. R. J. de Phys. (1984) 45-
C9, 173-7

Atom Probe Field-Ion Microscopy Bibliography for 1984

- 148 Theoretical determination of current-voltage curves for liquid metal ion sources Mair, G. L. R. J. Phys. D (1984) 17, 2323-30
- 149 Heating effects in a liquid metal ion source Mair, G. L. R. Aitken, K. L. J. Phys. D (1984) 17, L13-7
- 150 Fundamentals of liquid metal ion sources: experiment, theory and applications Mair, G. L. R. Mulvey, T. Scanning Electron Microsc. (1984) IV, 1531-40
- 151 Energy spreads in field evaporation and liquid-metal ion sources Mair, G. L. R. Mulvey, T. Forbes, R. G. J. de Phys. (1984) 45-C9, 179-82
- 152 Emission mechanisms in the liquid metal ion source: a review Marriott, P. Riviere, J. C. Report, (1984), AERE-R-11294, Order No. N85-12675/3/GAR, 69
- 153 Performance of a time-of-flight atom probe Martin, C. Blavette, D. Sarrau, J. M. Rev. Phys. Appl. (1984) 19, 27-31
- 154 Quantitation of metal ions by field desorption mass spectrometry Matsumoto, I. GC-MS News (1984) 12, 70-1
- 155 Surface structure and composition changes on platinum-rhodium alloy catalysts McCabe, A. R. Smith, G. D. W. J. de Phys. (1984) 45-C9, 483-8
- 156 Surface structure, surface composition and reactivity of platinum-rhodium alloy catalysts: investigation by field ion microscopy, atom probe and electron microscopy McCabe, A. R. Smith, G. D. W. Proc. 8th Intl. Congress on Catalysis, Berlin (1984) 4, 73-84, Verlag Chemie, Berlin
- 157 The complementary use of atom probe field ion microscopy and analytical transmission electron microscopy for the study of a nickel-base superalloy Melmed, A. J. Twigg, M. E. Klein, R. Kaufman, M. J. Fraser, H. L. J. de Phys. (1984) 45-C9, 373-8
- 158 An approach to realism in field ion microscopy via zone electropolishing Melmed, A. J. Carroll, J. J. J. Vac. Sci. Technol. A (1984) 2, 1388

Atom Probe Field-Ion Microscopy Bibliography for 1984

- 159 Rare-earth crystal growth from the vapor: Eu/Re and Eu/W Melmed, A. J.
Maurice, V.
Frank, O.
Block, J. H. J. de Phys. (1984) 45-
C9, 47-52
- 160 Isotopic variations in field evaporation charge-state of boron ions Menand, A.
Kingham, D. R. J. Phys. D (1984) 17,
203-8
- 161 Field evaporation charge state of boron ions: a temperature effect study Menand, A.
Martin, C.
Sarrau, J. M. J. de Phys. (1984) 45-
C9, 95-8
- 162 Analysis of HV-pulses from krypton and relay pulsers Mertens, P.
Kell, B.
Krueger-Elencwajg, H. J. de Phys. (1984) 45-
C9, 323-7
- 163 The computer-controlled field ion microscope with atom-probe at the Hahn-Meitner-Institute Mertens, P.
Vidic, U.
Becker, H. J. de Phys. (1984) 45-
C9, 309-13
- 164 Field ion microscopic study of the core configuration of $\frac{1}{2}[111]$ slip dislocations in tungsten Mikhailovskii, I.
Ksenofontov, V. A. Fiz. Tverd. Tela
(Leningrad) (1984) 26,
33-7
- 165 Field ionization of deep centers in thermal silicon dioxide of silicon-silicon dioxide structures Mikhailovskii, I.
Epov, A. E. Pis'ma Zh. Tekh. Fiz.
(1984) 10, 416-9
- 166 Imaging atom probe computer experiments Miller, M. K. J. de Phys. (1984) 45-
C9, 337-42
- 167 Long term thermal aging of type CF 8 stainless steel Miller, M. K.
Bentley, J.
Brenner, S. S.
Spitznagel, J. A. J. de Phys. (1984) 45-
C9, 385-90
- 168 FIM/atom probe study of irradiated pressure vessel steels Miller, M. K.
Brenner, S. S. Res. Mech. (1984) 10,
161-8
- 169 Atom probe field-ion microscopy studies of triaxially modulated microstructures in iron-beryllium alloys Miller, M. K.
Brenner, S. S.
Burke, M. G.
Soffa, W. A. Scr. Metall. (1984) 18,
111-6
- 170 The atom probe - a direct technique for kinetic measurements Miller, M. K.
Brenner, S. S.
Camus, P. P.
Soffa, W. A. Kinet. Aggregation
Gelation, Proc. Int.
Top. Conf., Family,
Fereydoon, Landau,
D. P., ed., 1984, 63-6,
North-Holland,
Amsterdam, Neth.

Atom Probe Field-Ion Microscopy Bibliography for 1984

- 171 Morphological interpretation of modulated microstructures Miller, M. K.
Burke, M. G.
Brenner, S. S. J. de Phys. (1984) 45-C9, 239-44
- 172 A TEM/FIM study of modulated microstructures in the iron-beryllium system Miller, M. K.
Burke, M. G.
Brenner, S. S.
Soffa, W. A. Anal. Electron Microsc., Proc. Workshop, Williams, D. B. and Joy, D. C., eds., 1984, 182-4, San Francisco Press, San Francisco, CA
- 173 Identification of a B32 metastable precipitate in the Fe-Be system Miller, M. K.
Burke, M. G.
Brenner, S. S.
Soffa, W. A.
Alexander, K. B.
Laughlin, D. E. Scr. Metall. (1984) 18, 285-90
- 174 An exact solution of Laplace's equation for cuspidal geometry. Application to liquid metal ion sources Miskovsky, N. M.
Cutler, P. H.
Feuchtwang, T. E. Appl. Phys. A (1984) A33, 205-7
- 175 Derivation of a modified paraxial formalism for two-dimensional trajectories in electron and ion sources of nonsimple geometries Miskovsky, N. M.
Cutler, P. H.
Feuchtwang, T. E. Appl. Phys. A (1984) A33, 113-20
- 176 Field emission and field ionization in a liquid metal cesium field-effect source Mitterauer, J. J. de Phys. (1984) 45-C9, 185-90
- 177 Effects of gallium ion irradiation from a liquid metal ion source Moore, V. J.
Prewett, P. D. Vacuum (1984) 34, 189-91
- 178 Mobility of sodium on the (110) face of tungsten Morin, R. J. de Phys. (1984) 45-C9, 17-21
- 179 Microalloyed pearlitic steels for the wire industry; mechanisms of alloy element redistribution and strengthening processes in chromium-vanadium eutectoid steels Mottishaw, T. D.
Smith, G. D. W. Proc. Intl. Conf. on Technology and Applications of High Strength Low Alloy (HSLA) Steels, Philadelphia, PA, Korchynsky, M., ed., ASM (1984) 163-75
- 180 Layer-by-layer analysis of charge state distribution of field-evaporated ions from the tungsten(011) plane Murakami, K.
Adachi, T.
Kuroda, T.
Nakamura, S. Surf. Sci. (1984) 140, L253-8

Atom Probe Field-Ion Microscopy Bibliography for 1984

- 181 Direct comparison of performances of TOF atom-probe FIM in the linear and energy-compensated mode Murakami, K.
Adachi, T.
Kuroda, T.
Nakamura, S. Rev. Sci. Instrum.
(1984) 55, 635-7
- 182 Field ion microscopy Nanis, L. Compr. Treatise
Electrochem., White,
R. E., ed. (1984) §,
457-74, Plenum, New
York, NY
- 183 Mechanistic studies by field ionization kinetics Nibbering, N. M. M. Mass Spectrom. Rev.
(1984) 3, 445-77
- 184 Atom-probe study of aluminum-gallium arsenide interfaces Nishikawa, O.
Kaneda, O.
Shibata, M.
Nomura, E. J. de Phys. (1984) 45-C9, 459-64
- 185 Erroneous composition of gallium arsenide mass-analyzed by atom-probes Nishikawa, O.
Kawada, H.
Nagai, Y.
Nomura, E. J. de Phys. (1984) 45-C9, 465-70
- 186 Field ion microscope and atom-probe mass spectrometer Nishikawa, O. Densi Kenbikyo (1984)
18, 140-7
- 187 Atom-probe study of aluminum-gallium exchange reaction at aluminum-gallium arsenide interfaces Nishikawa, O.
Kaneda, O.
Shibata, M.
Nomura, E. Phys. Rev. Lett. (1984)
53, 1252-5
- 188 Atom-probe study of silicide formation at nickel/silicon interfaces Nishikawa, O.
Shibata, M.
Yoshimura, T.
Nomura, E. J. Vac. Sci. Technol. B
(1984) 2, 21-3
- 189 Direct electron-microscopic observation of dynamics of the formation of a tungsten based multipoint field-emission cathode Nosov, A. A.
Ovsyannikov, N. P.
Shuppe, G. N. Zh. Tekh. Fiz. (1984)
54, 372-4
- 190 A study of a palladium adlayer on tungsten Okuno, K.
Kim, H. Oyo Butsuri (1984) 53,
1095-102
- 191 The effect of extraction voltage and beam voltage of a liquid metal ion source focused beam system on the current density in a focused spot Orloff, J. Scanning Electron
Microsc. (1984) 1541-6

Atom Probe Field-Ion Microscopy Bibliography for 1984

- 192 Stable titanium carbide field emitter Oshima, C.
Souda, R.
Otani, S.
Ishizawa, Y. Oyo Butsuri (1984) 53,
206-11
- 193 Carbon-fiber field emission cathodes for an electron microscope Osipov, N. I. Prib. Tekh. Eksp. (1984) 199-201
- 194 Biomolecular adsorption and the LIFE detector Panitz, J. A. J. de Phys. (1984) 45-C9, 285-91
- 195 Field-electron emission microscopy as a probe of biomolecular adsorption from solution Panitz, J. A. J. Appl. Phys. (1984) 56, 3319-23
- 196 Point-projection microscopy Panitz, J. A. Analysis of Organic and Biological Surface, Echlin, P., ed., John Wiley & Sons, NY, 1984, 171-90
- 197 The energy spread of ions from gold liquid metal ion sources as a function of source parameters Papadopoulos, S.
Barr, D.
Brown, W. L.
Wagner, A. J. de Phys. (1984) 45-C9, 217-22
- 198 Thermal decomposition in copper-nickel-iron alloys - I. Field ion microscope and atom probe investigation Piller, J.
Wagner, W.
Wollenberger, H.
Mertens, P. Decompos. Alloys, Proc. Acta-Skr. Metall. Conf., 2nd, Haasen, P., Gerald, V., Wagner, R., and Ashby, M. F., eds., 1984, 156-64, Pergamon, Oxford, UK
- 199 Effect of an electron current on electromechanical effect in whiskers Pogorel'skii, M. M. Vakuum. i Gazorazryad. Elektron., Ryazan, (1984) 120-2
- 200 Focused ion beam systems for materials analysis and modification Prewett, P. D. Vacuum (1984) 34, 931-9
- 201 A liquid metal source of caesium ions for secondary ion mass spectrometry Prewett, P. D.
Jefferies, D. K.
McMillan, D. J. Vacuum (1984) 34, 107-11
- 202 Applications of coatings produced by field emission deposition Prewett, P. D.
Mahony, C. Vacuum (1984) 34, 385-90
- 203 Photo field-emission spectroscopy of optical transitions in the band structure of rhenium Radon, T.
Kleint, C. Surf. Sci. (1984) 144, 638-50

Atom Probe Field-Ion Microscopy Bibliography for 1984

- 204 Transient-current study of field-assisted emission from shallow levels in silicon Rosencher, E.
Mosser, V.
Vincent, G. Phys. Rev. B, Condens. Matter (1984) 29, 1135-47
- 205 A measurement of surface diffusion across steps (Pd or W) Roux, H.
Piquet, A.
Uzan, R.
Drechsler, M. Surf. Sci. (1984) 141, 301-18
- 206 Liquid metal ion sources for scanning SIMS Rüdenauer, F. G. Springer Ser. Chem. Phys. (1984) 36, Second. Ion Mass Spectrom., SIMS 4, 133-7
- 207 Field evaporation Sakai, A. Oyo Butsuri (1984) 53, 183-8
- 208 A numerical analysis of the Poschenrieder lens in conjunction with a time-of-flight atom probe Sakai, A.
Sakurai, T. Jpn. J. Appl. Phys. (1984) 23, 93-6
- 209 Single atom detectability of a ToF atom-probe Sakurai, T.
Hashizume, T.
Jimbo, A. J. de Phys. (1984) 45-C9, 343-7
- 210 An atom-probe study of III-V compound semiconductors Sakurai, T.
Hashizume, T.
Jimbo, A.
Sakata, T. J. de Phys. (1984) 45-C9, 453-8
- 211 High-performance, focusing-type, time-of-flight atom probe with a channeltron as a signal detector Sakurai, T.
Hashizume, T.
Jimbo, A. Appl. Phys. Lett. (1984) 44, 38-40
- 212 Microréateur: application à la microscopie ionique et à la sonde atomique Sarrau, J. M.
Menand, A. J. Inter. d'études sur le vide et la cryogénie (1984) Grenoble, Le Vide supp. 221, 99, 24-7
- 213 Field effects in molecular ion formation by the thermospray technique Schmelzeisen-Redeker, G.
Giessmann, U.
Röllgen, F. W. J. de Phys. (1984) 45-C9, 297-302
- 214 Field ion appearance spectroscopy at silicon surfaces Schmidt, W. A.
Lovisa, M. F.
Block, J. H. J. de Phys. (1984) 45-C9, 263-4
- 215 Field ion microscopy of barium adatoms on tungsten points Schwankner, R. Prax. Naturwiss., Chem. (1984) 33, 297-304

Atom Probe Field-Ion Microscopy Bibliography for 1984

- 216 Localized field ion emission using adsorbed hydrogen films on [110]-oriented tungsten field emitters Schwoebel, P.
Hanson, G. J. Appl. Phys. (1984) 56, 2101-5
- 217 Details of an imaging atom probe Seshadri, V. R.
Neelakantan, K.
Mohandas, E.
Raghunathan, V. S. Bull. Mater. Sci. (1984) 6, 569-72
- 218 Effect of thermionic cathodes evaporation products on high voltage vacuum breakdown Sinha, M. K.
Lin, T. Y. J. de Phys. (1984) 45-
C9, 303-7
- 219 Microanalysis of titanium carbide (TiC) and aluminum oxide coatings on cemented carbides Skogsmo, J.
Henjered, A.
Nordén, H. J. de Phys. (1984) 45-
C9, 447-51
- 220 The sputtering of field electron emitters by self-generated positive ions Smith, R. J. Phys. D (1984) 17, 1045-53
- 221 Atom probe studies of the decomposition spectrum in alloys Soffa, W. A.
Brenner, S. S.
Miller, M. K. Decompos. Alloys, Proc. Acta-Ser. Metall. Conf., 2nd, Haasen, P., ed., (1984) 227-32, Pergamon, Oxford, UK
- 222 Electron field emission from glassy carbon Speidel, R.
Behringer, U.
Brauchle, P.
Franz, W. Optik (Stuttgart) (1984) 67, 47-57
- 223 Recent progress in low-voltage field-emission cathode development Spindt, C. A.
Holland, C. E.
Stowell, R. D. J. de Phys. (1984) 45-
C9, 269-78
- 224 Effects of nitrogen and helium ion implantation on uniaxial tensile properties of 316 SS foils Spitznagel, J. A.
Hall, B. O.
Doyle, N. J.
Jayrom, R.
Wallace, R. W.
Townsend, J. R.
Miller, M. K. Proc. Mat. Res. Soc. Sym., Ion Impl. and Ion Beam Proc. of Mater. (1987) 27, 597-601
- 225 Surface states and adsorption in an external electric field Steslicka, M.
Radny, M. J. de Phys. (1984) 45-
C9, 65-70

Atom Probe Field-Ion Microscopy Bibliography for 1984

- 226 High resolution microanalytical study of precipitation in a powder metallurgical high speed steel Stiller, K.
Svensson, L.-E.
Howell, P. R.
Wamg, R.
Andrén, H.-O.
Dunlop, G. L. Acta Metall. (1984) 32,
1457-67
- 227 31st International Field Emission Symposium, Paris, France, J. de Phys. (1984) 45-C9 Sudrand, P.
Ballongue, P. (1984) (Editions de Physique, Les Ulis Cedex, France)
- 228 Structure of a palladium-copper-silver alloy studied in a field ion microscope Syutkin, N. N.
Ivchenko, V. A.
Noritsyn, S. I. Fiz. Met. Metalloved. (1984) 57, 776-81
- 229 The use of an LMIS and argon ion sputtering in studies of thin film strain gauges Taylor, A. G.
Thurstans, R. E.
Oxley, D. P. Vacuum (1984) 34,
321-5
- 230 Neutral emissions from liquid metal ion sources Thompson, S. P. Vacuum (1984) 34,
223-8
- 231 Artifacts in high resolution SIMS: the contribution of the ion source Thompson, S. P.
Drummond, I. W.
Finbow, D. C. Vacuum (1984) 34,
947-51
- 232 The dynamics of liquid metal ion sources Thompson, S. P.
Prewett, P. D. J. Phys. D (1984) 17,
2305-21
- 233 Energy spread measurement in field electron microscopy Troyon, M.
Jiang, J. Y. J. de Phys. (1984) 45-C9, 155-6
- 234 Pulsed-laser stimulated field evaporation of silicon. A photoexcitation effect and cluster ion formation Tsong, T. T. J. de Phys. (1984) 45-C9, 83-7
- 235 Pulsed-laser-stimulated field ion emission from metal and semiconductor surfaces: a time-of-flight study of the formation of atomic, molecular, and cluster ions Tsong, T. T. Phys. Rev. B, Condens. Matter (1984) 30,
4946-61
- 236 Formation of multiaatomic cluster ions of silicon in pulsed-laser stimulated field desorption Tsong, T. T. Appl. Phys. Lett. (1984)
45 1149-51
- 237 The early stages of silicide formation on metal and silicon surfaces, time-of-flight atom-probe studies of atomic structures and compositions Tsong, T. T. Mater. Res. Soc. Symp. Proc. (1984) 25, Thin Films Interfaces II,
363-74

Atom Probe Field-Ion Microscopy Bibliography for 1984

- 238 The kinetics of field adsorption Tsong, T. T. Surf. Sci. (1984) 140, 377-92
- 239 Energy distributions of pulsed-laser field-desorbed gaseous ions and field-evaporated metal ions: a direct time-of-flight measurement Tsong, T. T. Kinkus, T. J. Phys. Rev. B, Condens. Matter (1984) 29, 529-42
- 240 Methods for a precision measurement of ionic masses and appearance energies using the pulsed-laser time-of-flight atom probe Tsong, T. T. Liou, Y. McLane, S. B. Rev. Sci. Instrum. (1984) 55, 1246-54
- 241 A precision measurement of absolute ionic masses and energies of field emitted ions Tsong, T. T. McLane, S. B. Liou, Y. J. de Phys. (1984) 45-C9, 71-5
- 242 A microanalytical study of secondary precipitation in RSR 143 using atom-probe field-ion microscopy and analytical transmission electron microscopy Twigg, M. E. Melmed, A. J. Klein, R. Kaufman, M. J. Fraser, H. L. Superalloys Proc. Int. Symp., 5th, Gell, M., ed., (1984) 631-6, Metall. Soc. AIME, Warrendale, PA
- 243 A microanalytical study of secondary precipitation in a nickel-base superalloy with use of atom-probe field ion microscopy and analytical transmission electron microscopy Twigg, M. E. Melmed, A. J. Klein, R. Kaufman, M. J. Fraser, H. L. Anal. Electron Microsc., Proc. Workshop, Williams, D. B. and Joy, D. C., eds., (1984) 185-8, San Francisco Press, San Francisco, CA
- 244 A study of nickel-copper ion (NiCu^{n+}) and nickel-gold ion (NiAu^{n+}) ($n < 10$) clusters obtained by field evaporation Van de Walle, J. Joyes, P. Sudraud, P. J. de Phys. (1984) 45-C9, 211-6
- 245 Ionization of highly excited helium atoms in an electric field Van de Water, W. Mariani, D. R. Koch, P. M. Phys. Rev. A (1984) 30, 2399-412
- 246 Thermal dissolution of face-specific aluminum-oxide layers in the presence of electric fields - observation of compensation effects Vanselow, R. J. de Phys. (1984) 45-C9, 53-7
- 247 Field ionization evidence of excited molecules Vasilyev, N. M. Knor, Z. Chem. Phys. Lett. (1984) 108, 623-6
- 248 Probe-hole FEM and TDS studies of nitric oxide adsorbed on individual tungsten planes Viturro, R. E. Folman, M. Jerusalem Symp. Quantum Chem. Biochem. (1984) 17, Dyn. Surf., 271-85

Atom Probe Field-Ion Microscopy Bibliography for 1984

- 249 On the thermally activated field evaporation of surface atoms Wada, M. J. de Phys. (1984) 45-C9, 89-94
- 250 On the thermally activated field evaporation of surface atoms Wada, M. Surf. Sci. (1984) 145, 451-65
- 251 FIM observation of GP(2) zone in an aluminum-copper alloy Wada, M. Kita, H. Mori, T. Nishikawa, O. J. de Phys. (1984) 45-C9, 251-5
- 252 FIM and atom-probe studies of the nickel-gallium arsenide interface Wada, M. Kita, H. Nishikawa, O. J. de Phys. (1984) 45-C9, 471-6
- 253 FIM/IAP/TEM studies of hydrogen in metals Walck, S. D. Hren, J. J. J. de Phys. (1984) 45-C9, 355-60
- 254 Diffusion of hydrogen into the (110) plane of a tungsten field emitter at low temperatures Wang, S. C. Gomer, R. Surf. Sci. (1984) 141, L304-12
- 255 SIMS with very high spatial resolution using liquid metal ion sources Waugh, A. R. Bayly, A. R. Anderson, K. Springer Ser. Chem. Phys. (1984) 36, Second. Ion Mass Spectrom., SIMS 4, 138-40
- 256 The application of liquid metal ion sources to SIMS Waugh, A. R. Bayly, A. R. Anderson, K. Vacuum (1984) 34, 103-6
- 257 In situ ion milling of field ion specimens using a liquid metal ion source Waugh, A. R. Payne, S. Worrall, G. M. Smith, G. D. W. J. de Phys. (1984) 45-C9, 207-9
- 258 Field ionization and field desorption stimulated by synchrotron radiation Weigmann, W. Drachsel, W. Jaenicke, S. Block, J. H. J. de Phys. (1984) 45-C9, 105-10
- 259 Field ion microscope and atom probe techniques in the study of decomposition processes Wendt, H. Decompos. Alloys, Proc. Acta-Scri. Metall. Conf., 2nd, Haasen, P., ed., (1984) 133-8, Pergamon, Oxford, UK.

Atom Probe Field-Ion Microscopy Bibliography for 1984

- 260 Atom probe studies of nucleation in alloys Wendt, H.
Liu, Z.
Haasen, P. Decompos. Alloys, Proc.
Acta-Scr. Metall. Conf.,
2nd, Haasen, P., ed.,
(1984) 127-32,
Pergamon, Oxford, UK
- 261 Field desorption of sucrose studied by combined optical microscopy and mass spectrometry Wong, S. S.
Giessmann, U.
Karas, M.
Röllgen, F. W. Int. J. Mass Spectrom.
Ion Processes (1984)
56, 139
- 262 Utilization of the Boltzmann tail of TED for the calculation of the "absolute" work function and local field strength in FEM Wysocki, J. K. Surf. Sci. (1984) 137,
506-14
- 263 Stability of field emission current Xie, X.
Li, F.
Li, W. Zhenkong Kexue Yu
Jishu (1984) 4, 244-9
- 264 Statistics on field ionization of individual imaging helium gas atoms in field-ion microscopy Yamamoto, M.
Sakata, Y.
Nenno, S. Technol. Rep. Osaka
Univ. (1984) 34, 239-45
- 265 A study of AlNiCo magnets by atom probe field ion microscopy Zhu, F.
Alvensleben, L. v.
Haasen, P. Scr. Metall. (1984) 18,
337-42
- 266 FIM atom probe studies of permanent magnets Zhu, F.
Wendt, H.
Alvensleben, L. v.
Haasen, P. IEEE Trans. Magn.
(1984) MAG-20, 5 Pt.
2, 1619-21
- 267 Atom probe FIM study of G.P. zone and γ'' -phase in an aged copper-2.1 wt. % beryllium alloy Zhu, F.
Mertens, P.
Wollenberger, H. J. de Phys. (1984) 45-
C9, 361-4
- 268 Atom probe field ion microscopy of the decomposition of iron-chromium-cobalt magnet alloys Zhu, F.
Wendt, H.
Haasen, P. Decompos. Alloys, Proc.
Acta-Scr. Metall. Conf.,
2nd, Haasen, P., ed.,
(1984) 139-42
- 269 Field ionization of phosphorus atoms in silicon Zurauskas, S.
Dargys, A. Phys. Status Solidi B
(1984) 121, 385-91

1985

Atom Probe Field-Ion Microscopy Bibliography for 1985

- 1 Approach to a stable field emission electron source Adachi, H. Scanning Electron Microsc. (1985) 473-87
- 2 Ion beam lithography at nanometer dimensions Adesida, I. J. Vac. Sci. and Technol. (1985) 133, 45-9
- 3 Spectroscopy of field ionization states of atomic systems (spektroskopiya avtoionizatsionnykh sostoyanii atomnykh sistem) Aglitskii, F. V. 1985, 159, (Energoatomizdat, Safranova, U. I. Moscow, USSR)
- 4 Compositional variations in the near surface layers, an atom-probe study of cosegregation of sulfur in platinum-rhodium and platinum-iridium alloys Ahmad, M. J. Chem. Phys. (1985) 83, 388-96
- 5 A nonmonotonic concentration depth profile of platinum-rhodium alloys: a surface segregation study using the atom-probe field ion microscope Ahmad, M. J. Vac. Sci. Technol. A (1985) 3, 806-8
- 6 Compositional variation in the near surface layers: an atom probe study of surface segregation in alloys Ahmad, M. 1985, 81, Univ. Microfilms Int., Order No. DA8515992
- 7 A nonmonotonic compositional variation in the near surface layers: surface segregation of Pt-Rh alloys Ahmad, M. Surf. Sci. (1985) 142, L7-12
- 8 Mass spectrometry of the tungsten-silicon system Aleksandrov, L. N. Phys. Status Solidi A (1985) 88, K15-8
- 9 A note on the Taylor cone Allen, J. E. J. Phys. D (1985) 18, L59-62
- 10 MC precipitates in stabilized austenitic stainless steels Andrén, H.-O. Stainless Steels '84, Inst. Metals, London (1984) 91
- 11 Beam-foil lifetime measurements for gallium(Ga II) and gallium(Ga III) using a field-emission ion source Ansbacher, W. Can. J. Phys. (1985) 63, 1330-3
- 12 Formation of submicron isolation in GaAs by implanting a focused boron ion beam emitted from a Pd-Ni-Si-Be-B LM ion source Arimoto, H. J. Vac. Sci. Technol. (1985) B3, 54
- Takamori, A.
- Miyauchi, E.
- Hashimoto, H.

Atom Probe Field-Ion Microscopy Bibliography for 1985

- 13 Field-induced electron emission from artificially produced carbon sites on broad-area copper and niobium electrodes Athwal, C. S.
Bayliss, K. H.
Calder, R.
Latham, R. V. IEEE Trans. Plasma Sci. (1985) PS-13, 226-9
- 14 Space-time correlation functions of the flicker noise of field current from silicon Bakhtizin, R. Z.
Gots, S. S.
Tlyauberdin, A. I. Radiotekh. Elektron. (Moscow) (1985) 30, 1638-42
- 15 Adsorption of sulfur on a molybdenum field emitter Baldinger, T.
Bechtold, E. Surf. Sci. (1985) 159, 406-24
- 16 Liquid metal ion sources Barofsky, D. F. ACS Symp. Ser. (1985) 291, Desorption Mass Spectrom., 113-24
- 17 The spatial distribution and spectral characteristics of field-induced electron emission sites on broad-area high voltage electrodes Bayliss, K. H.
Latham, R. V. Vacuum (1985) 35, 211-7
- 18 The application of liquid metal ion sources to ion-microprobe secondary ion mass spectroscopy Bayly, A. R.
Waugh, A. R.
Vohralik, P. Spectrochim. Acta. (1985) 40B, 717-23
- 19 Mechanisms of liquid metal ion source operation Bell, A. E.
Swanson, L. W. Nucl. Instrum. Methods Phys. Res. B (1985) B10-11, 783-7
- 20 A field emission E-beam system for nanometer lithography Beneking, H. Nanometer Struct. Electron., Proc. Int. Symp. Yamamura, Y., Fujisawa, T., and Namba, S., eds., 1985, 65-73, Ohmsha, Tokyo, Japan and Microelectron. Eng. (1985) 2, 65-73
- 21 The Nottingham effect of a super conducting metal Bergeret, H.
Septier, A.
Drechsler, M. Phys. Rev. (1985) 31B, 149-53
- 22 Field-ion microscope atom probe studies of metallic glasses Bhatti, A. R.
Cantor, B.
Joag, D. S.
Smith, G. D. W. Philos. Mag. B (1985) 52, L63-9
- 23 Experimental focused ion beam system using a gaseous field ion source Blackwell, R. J.
Kubby, J. A.
Lewis, G. N.
Siegel, B. M. J. Vac. Sci. Technol. B (1985) 3, 82-6

Atom Probe Field-Ion Microscopy Bibliography for 1985

- 24 Atom-probe microanalysis of a nickel-base superalloy Blavette, D.
Bostel, A.
Sarrazin, J. M. Metall. Trans. A (1985)
16A, 1703-11
- 25 La sonde atomique: une nouvelle méthodes de microanalyses quantitative à haute résolution spatiale Blavette, D.
Menand, A.
Sarrazin, J. M. Revue de Métallurgie
(1985) 491
- 26 Sputtered layers of iron-rich and boron-rich $Fe_{1-x}B_x$ investigated with an imaging atom probe Bolt, P. J.
Hoving, W.
Bronsveld, P. M.
De Hosson, J. T. M. Rapidly Quenched Met.,
Proc. Int. Conf., 5th,
Steeb, S. and
Warlimont, H., eds.,
(1985) 1, 505-8,
North-Holland,
Amsterdam, Neth.
- 27 Effect of the forming process on the structure of carbon field emitters Bondarenko, B. V.
Bakanova, E. S.
Cherepanov, A. Y.
Sheshin, E. P. Radiotekh. Elektron.
(Moscow) (1985) 30,
2234-8
- 28 A successful liquid metal ion source: the ideal requirements Bozack, M. J.
Swanson, L. W.
Orloff, J. Scanning Electron
Microsc. (1985) 1339-45
- 29 Traversal time for tunneling Buettiker, M.
Landauer, R. Festkoerperprobleme
(1985) 25, 711-7
- 30 Pulsed laser atom probe analysis of gallium arsenide and indium arsenide Cerezo, A.
Grovenor, C. R. M.
Smith, G. D. W. Appl. Phys. Lett. (1985)
46, 567-9
- 31 Gallium doping of silicon MBE layers using a liquid metal ion source Chrenko, R. M.
Turner, L. G.
Schowalter, L. J. Proc. - Electrochem.
Soc. (1985) 85-7,
Silicon Mol. Beam
Epitaxy, 179-83
- 32 Oxidation of ruthenium studied by pulsed field desorption mass spectrometry Cocke, D. L.
Abend, G.
Block, J. H. Langmuir (1985) 1,
507-9
- 33 Production and characterization of pulsed large-area homogenous electron beams D'Anna, E.
Leggieri, G.
Luches, A.
Nassisi, V.
Perrone, A.
Perrone, M. R.
Simmini, R. Vacuum (1985) 35,
19-23
- 34 Concerning the mechanism of ion formation in field desorption Derrick, P. J.
Nguyen, T. T.
Rogers, D. E. C. Org. Mass Spectrom.
(1985) 20, 690

Atom Probe Field-Ion Microscopy Bibliography for 1985

- 35 Observation of doubly charged triatomic cluster ions in field evaporation Drachsel, W.
Jentsch, T.
Gingerich, K. A.
Block, J. H. Surf. Sci. (1985) 156,
173-82
- 36 Photon-induced field desorption experiments with laser and synchrotron radiation Drachsel, W.
Weigmann, U.
Jaenicke, S.
Block, J. H. Springer Ser. Surf. Sci. (1985) 4, Desorption Induced Electron. Transitions, DIET 2,
245-50
- 37 Analysis of faces on micro-crystals Drechsler, M. Surf. Sci. (1985) 162,
755-63
- 38 Effects preceding the transition of a p-type semiconductor from field electron emission to explosive emission Egorov, N. V. Zh. Tekh. Fiz. (1985) 55, 628-31
- 39 Diffusion and interaction of adatoms Ehrlich, G. Springer Ser. Surf. Sci. (1985) 2, Struct. Surf.,
375-88
- 40 Rhenium on W(110): structure and mobility of higher clusters Fink, H-W.
Ehrlich, G. Surf. Sci. (1985) 150,
419-29
- 41 Theory of high-field electron transport in silicon dioxide Fischetti, M. V.
DiMaria, D. J.
Brorson, S. D.
Theis, T. N.
Kirtley, J. R. Phys. Rev. B, Condens. Matter (1985) 31,
8124-42
- 42 Seeing atoms: the origins of local contrast in field-ion images Forbes, R. G. J. Phys. D (1985) 18,
973-1018
- 43 Field electron emission properties of titanium carbide single crystals Fujii, K.
Zaima, S.
Shibata, Y.
Adachi, H.
Otani, S. J. Appl. Phys. (1985) 57, 1723-8
- 44 Linear high-voltage ramp generator for use in selective field ionization of Rydberg atoms Fuqua, W. L., III
MacAdam, K. B. Rev. Sci. Instrum. (1985) 56, 385-8
- 45 Field emission and vacuum breakdown Fursey, G. N. IEEE Trans. Electr. Insul. (1985) EL-20,
659-70

Atom Probe Field-Ion Microscopy Bibliography for 1985

- 46 Fabrication and resist exposure characteristics of 50 keV nanometer e-beam lithography system Gamo, K.
Yamashita, K.
Emoto, F.
Namba, S.
Samoto, N.
Shimizu, R. J. Vac. Sci. Technol. B (1985) 3, 117-20
- 47 Spectral analysis of adsorbate induced field-emission flicker noise Gesley, M. A.
Swanson, L. W. Phys. Rev. B, Condens. Matter (1985) 32, 7703-12
- 48 Nature of diffusion coefficients and their relation to field emission noise Gesley, M. A.
Swanson, L. W. Surf. Sci. (1985) 159, 496-508
- 49 FIM observation of ultrathin polymer films - a new approach to polyethylene breakdown problems Gluchowski, S.
Surma, S.
Karpowicz, A. Acta Univ. Wratislav., Mat., Fiz., Astron. (1985) 46, Surf. Res., 131-4
- 50 Temperature dependence of the field-ionization mass spectra of alcohols. Model behavior of thermally excited molecules on the surface of the field emitter Gnatyuk, S. P.
Grishin, N. N.
Petrov, A. A. Zh. Org. Khim. (1985) 21, 2283-9
- 51 Lateral interaction energy evaluation for adsorbed atoms Golubev, O. L. Fiz. Tverd. Tela (Leningrad) (1985) 27, 3127-9
- 52 Recent developments in the study of semiconductors by atom probe microanalysis Grovenor, C. R. M.
Cerezo, A.
Smith, G. D. W. Inst. Phys. Conf. Ser. (1985) 76, Microsc. Semicond. Mater., 423-8
- 53 Atom probe analysis of native oxides and the thermal oxide/silicon interface Grovenor, C. R. M.
Cerezo, A.
Smith, G. D. W. Mater. Res. Soc. Symp. Proc. (1985) 37, Layered Struct., Epitaxy, Interfaces, 199-204
- 54 Phase separation and loss of ductility in amorphous Ti₅₀Be₄₀Zr₁₀ and Ni₆₁Nb₃₉ Grüne, R.
Öhring, M
Wagner, R.
Haasen, P. Rapidly Quenched Met., Proc. Int. Conf., 5th, Steeb, S. and Warlimont, H., eds., (1985) 1, 761, North-Holland, Amsterdam, Neth.
- 55 Conditioning process of electropolished electrodes by field emission current in vacuum Gruszka, H.
Moscicka-Grzesiak, H. IEEE Trans. Electr. Insul. (1985) EI-20, 705-8

Atom Probe Field-Ion Microscopy Bibliography for 1985

- 56 Application of analytical field-ion microscopy to the decomposition of alloys Haasen, P. Wagner, R. Annu. Rev. Mater. Sci. (1985) 15, 43-78
- 57 The early stages of the decomposition of alloys Haasen, P. Metall. Trans. A (1985) 16A, 1173-84
- 58 Focused Ga⁺ beam direct implantation for Si device fabrication Hamadeh, H. Corelli, J. C. Steckl, A. J. J. Vac. Sci. Technol. (1985) B3, 91-3
- 59 Computer simulation of semiconductor field ion images Hashimoto, J. Sakai, A. Jimbo, A. Sakurai, T. Shinku (1985) 28, 631-5
- 60 Summary abstract: surface segregation of Cu-Ni alloys Hashizume, T. Jimbo, A. Sakurai, T. J. Vac. Sci. Technol. (1985) 3, 818
- 61 Performance of a microchannel plate ion detector in the energy range 3-25 KeV Hellsing, M. Karlsson, L. Andrén, H.-O. Nordén, H. J. Phys. E, Sci. Instrum. (1985) 18, 920
- 62 Atomic resolution observations of solute-atom segregation effects and phase transitions in stacking faults in dilute cobalt alloys I. Experimental results Herschitz, R. Seidman, D. N. Acta Metall. (1985) 33, 1547-63
- 63 Atomic resolution observation of solute-atom segregation effects and phase transitions in stacking faults in dilute cobalt alloys II. Analyses and discussion Herschitz, R. Seidman, D. N. Acta Metall. (1985) 33, 1565-76
- 64 Solute-atom segregation and two-dimensional phase transitions in stacking faults: an atom-probe field-ion microscope study Herschitz, R. Seidman, D. N. Brokman, A. J. de Phys (1985) C4, 451-64
- 65 Radiation-induced precipitation in fast-neutron irradiated tungsten-rhenium alloys: an atom-probe field-ion microscope study Herschitz, R. Seidman, D. N. Nucl. Instrum. Methods Phys. Res., Sect. B (1985) B7-8, 137-42
- 66 A model of field induced electron emission from ionically-conducting glasses Hibbert, D. B. Roberts, T. M. Bhote, S. H. J. Phys. D, Appl. Phys. (1985) 18, 1833-42

Atom Probe Field-Ion Microscopy Bibliography for 1985

- 67 Study of precipitation and segregation on an atomic scale of 11 at. % Cr-1 at. % Mo heat resisting steel by atom-probe and TEM Igata, N.
Sato, S.
Ando, T.
Hashizume, T.
Sakurai, T. Report, 1985, Order No. AD-A161590/5/GA-R, 11
- 68 Radiation effects in materials: field-ion microscope characterizations Inal, O. T.
Sommer, W. F. SAMPE J. (1985) 21, 42, 44-6, 48-9, 95
- 69 Isotope effect on boron ions emitted from a liquid-metal-ion source Ishitani, T.
Umemura, K.
Kawanami, Y. J. Phys. D (1985) 18, 163-8
- 70 Mass and energy analyses of gallium-indium liquid-metal-ion sources Ishitani, T.
Umemura, K.
Tamura, H. Jpn. J. Appl. Phys. (1985) 24, 451-4
- 71 Focusing column for helium field ion source Itakura, T.
Horiuchi, K.
Yamamoto, S. Microelectron. Eng. (1985) 3, 153-60
- 72 High-field electron drift velocity measurements in gallium phosphide Johnson, R. H.
Eknayan, O. J. Appl. Phys. (1985) 58, 1402-3
- 73 Liquid-metal ion source study of critical sizes of multiple charged positive ions Joyes, P.
Van de Walle, J. J. Phys. B, At. Mol. Phys. (1985) 18, 3805-10
- 74 Distribution of metal-metal neighbors in metallic glass using field ion microscopy Kanitkar, M. M.
Shukla, V. N.
Kanitkar, P. L.
Joag, D. S. Rapidly Quenched Met., Proc. Int. Conf., 5th, Steeb, S. and Warlimont, H., eds., (1985) 1, 513-6, North-Holland, Amsterdam, Neth.
- 75 Composition and crystallography of nitride precipitates in an austenitic stainless steel containing niobium and vanadium Karlsson, L.
Henjered, A.
Andrén, H.-O.
Nordén, H. Mater. Sci. and Technol. (1985) 1, 337
- 76 Submicron pattern fabrication by focused ion beams Kato, T.
Morimoto, H.
Saitoh, K.
Nakata, H. J. Vac. Sci. Technol. (1985) B3, 50-53
- 77 High resolution investigation of influence of boron on fine-scale intergranular microstructure of 316L stainless steel Karlsson, L.
Nordén, H. Stainless Steels '84, Inst. Metals, London (1985) 85

Atom Probe Field-Ion Microscopy Bibliography for 1985

- 78 Direct observations of the (1×2) surface reconstruction on the platinum(110) plane Kellogg, G. L. Phys. Rev. Lett. (1985) 55, 2168-71
- 79 Single atom surface diffusion of sulfur on nickel(111) Kellogg, G. L. J. Chem. Phys. (1985) 83, 852-4
- 80 The oxidation of rhodium field-emitter surfaces during the carbon monoxide oxidation reaction Kellogg, G. L. J. Catal. (1985) 92, 167-72
- 81 Initial stages of oxide formation on rhodium field emitters Kellogg, G. L. Phys. Rev. Lett. (1985) 54, 82-5
- 82 Technology of the preparation of carbon field emitters Khatapova, R. M. Demskaya, L. L. Romanova, V. K. Prib. Tekh. Eksp. (1985) 205-7
- 83 Field emitters for CWIKSCAN-type scanning electron microscopes Khatapova, R. M. Romanova, V. K. Demskaya, L. L. Gushchin, V. A. Prib. Tekh. Eksp. (1985) 203-4
- 84 Behavior of gallium atoms on a tungsten surface Kim, H. Okuno, K. J. Vac. Sci. Technol. A (1985) 3, 2215-7
- 85 Nucleation of the $D1_a$ type ordered phase in the near surface of A_4B alloy Kingetsu, T. Yamamoto, M. Nenno, S. Surf. Sci. (1985) 154, 189-211
- 86 Temperature dependence of surface free energy of Ni_4Mo alloy Kingetsu, T. Yamanoto, M. Nenno, S. Surf. Sci. (1985) 151, L161-5
- 87 Resolution and contrast in the field ion microscope Kingham, D. R. Homeier, H. H. H. De Castilho, C. M. C. Surf. Sci. (1985) 152-153, 55-62
- 88 Focused ion beams from liquid metal ion sources: theory and applications Kingham, D. R. Mifsud, V. J. Mater. Res. Soc. Symp. Proc. (1985) 45, Ion Beam Processes Adv. Electron. Mater. Device Technol., 241-6
- 89 Field adsorption of inert gas atoms on the tungsten surface - a pulsed-laser atom-probe study Kinkus, T. J. Tsong, T. T. J. Vac. Sci. Technol. A (1985) 3, 1521-4
- 90 A study of field adsorption of inert gases on the tungsten surface with the pulsed-laser time-of-flight atom probe Kinkus, T. J. 1985, 80, Univ. Microfilms Int., Order No. DA8526035

Atom Probe Field-Ion Microscopy Bibliography for 1985

- 91 High brightness electrostatically focused field emission electron gun for free electron laser applications Kirkpatrick, D. A.
Shefer, R. E.
Bekeli, G. J. Appl. Phys. (1985) 57, 5011-6
- 92 Precise studies of static electric field ionization Koch, P. M.
Van de Water, W.
Mariani, D. R. At. Excitation Recomb.
External Fields, Proc.
Workshop At. Spectra
Collisions External
Fields, Nayfeh, M. H.
and Clark, C. W., eds.,
1985, 235-49, Gordon &
Breach, New York, NY
- 93 A study of zirconium-(oxygen)-tungsten and tungsten field emitters in an electron source at high vacuum conditions Koenig, H. G.
Koops, H. Microcircuit Eng. 84
(Proc. Microcircuit
Eng. 84 Conf.),
Heuberger, A. and
Beneking, H., eds.,
1985, 195-202,
Academic, London, UK
- 94 Field emission from band gap states Kolar, M.
Davison, S. G. J. Vac. Sci. Technol. A
(1985) 3, 392-7
- 95 Field ion microscopic investigations of gas interactions with tantalum and niobium surfaces Krautz, E.
Haiml, G. Proc. Obertraun,
Symp. Surf. Sci. (1985)
2, 113-8
- 96 Field ion microscopic investigations of dislocations and grain boundaries of refractory metals in atomic resolution Krautz, E.
Haiml, G. Proc. 11th Inter.
Plane Seminar (1985)
1, 201-9
- 97 Interaction of cyanogen with platinum single crystal surfaces, studied by pulsed field desorption mass spectrometry Kruse, N.
Abend, G.
Block, J. H. Z. Phys. Chem.
(Munich) (1985) 144,
1-8
- 98 Interaction of carbon monoxide with transition metals, studied by field desorption mass spectrometry Kruse, N.
Abend, G.
Drachsel, W.
Block, J. H. Int. Congr. Catal.,
(Proc.), 8th (1985) 3,
III 105-16, Verlag
Chemie, Weinheim,
France
- 99 A focused ion beam system for sub-micron lithography Kurihara, K. J. Vac. Sci. Technol.
(1985) B3, 41-4
- 100 Observation for crystal surface of tungsten <110> field emitter tip by SEM Kuroda, K.
Hosoki, S.
Komoda, T. J. Electron Microsc.
(1985) 34, 179-82

Atom Probe Field-Ion Microscopy Bibliography for 1985

- 101 Field emission microscope study of mercury, sodium iodide, and iodine coadsorbed on tungsten Kuroda, T.
Nakamura, S.
Washimi, H.
Mima, H. Shinku (1985) 28,
685-92
- 102 Study on coadsorption of mercury and sodium iodide on tungsten surface by field emission microscopy Kuroda, T.
Washimi, H. Surf. Sci. (1985) 151,
L191-202
- 103 Measurement of the charge state distribution of field evaporated ions originating from alloys Leisch, M. Surf. Sci. (1985) 159,
L445-9
- 104 Initial stages of iridium-semiconductor compound formation: a field-ion microscope study of interface atomic structures Liu, H. F.
Liu, H. M.
Tsong, T. T. Phys. Rev. Lett. (1985)
56, 65
- 105 Growth of thin single crystal nickel silicide (NiSi_2) films on silicon surfaces, a field ion microscope study Liu, H. F.
Liu, H. M.
Tsong, T. T. Appl. Phys. Lett. (1985)
47, 524-6
- 106 Formation of nitrogen ion (N^{3+}) in pulsed-laser stimulated field desorption of nitrogen from metal surfaces Liu, W.
Tsong, T. T. Surf. Sci. (1985) 151,
251-9
- 107 Liquid metal sources in ion microscopy and secondary ion mass spectrometry Mair, G. L. R.
Mulvey, T. Scanning Electron Microsc. (1985) 959-71
- 108 Energy spread of ions from gallium liquid metal ion sources at low emission currents Mayer, H. P. Appl. Phys. Lett. (1985)
47, 1247-8
- 109 Electric field ionization of highly excited rubidium atoms McMillian, G. B. 1985, 111, Univ.
Microfilms Int., Order
No. DA8517223
- 110 Theory of metal surface field evaporation McMullen, E. R. 1985, 159, Univ.
Microfilms Int., Order
No. DA8515173
- 111 Study of thermal behavior of a metallic glass ($\text{Fe}_{40}\text{Ni}_{38}\text{Mo}_4\text{B}_{18}$) by TEM (transmission electron microscopy), FIM (field ion microscopy) and atom probe analysis Menand, A.
Cumbre, F.
Vigier, P. Scr. Metall. (1985) 19,
1189-93
- 112 Evidence for the quantum mechanical tunneling of boron ions Menand, A.
Kingham, D. R. J. Phys. C (1985) 18,
4539-47

Atom Probe Field-Ion Microscopy Bibliography for 1985

- 113 Measurement of characteristic wavelengths in modulated microstructures by field-ion microscopy Miller, M. K.
Burke, M. G.
Brenner, S. S. J. Microscopy (1985)
139, 41-7
- 114 Derivation of the condition for onset of instabilities of a conducting fluid surface under electrostatic stress: application to liquid metal ion sources Miskovsky, N. M.
Cutler, P. H.
Kazes, E. J. Vac. Sci. Technol. B
(1985) 3, 202-6
- 115 Studies of a thin-film field-emission cathode for use in merged electron-ion beam experiments Mitchell, R. E.
Mitchell, J. B. A.
McGowan, J. W. J. Phys. E, Sci.
Instrum. (1985) 18,
1031-6
- 116 Contribution of light holes to thermionic field emission in silicon and germanium Mitin, V. V. Phys. Rev. B, Condens.
Matter (1985) 31,
2584-7
- 117 Diffusion and compressibility of sodium on the (110) plane of tungsten Morin, R. Surf. Sci. (1985) 155,
187-202
- 118 Compared mobilities of Cs and Na on W(110) at low coverage Morin, R. Surf. Sci. (1985) 162,
109-13
- 119 Auger analysis of platinum field emitters Mundschau, M.
Vanselow, R. Surf. Sci. (1985) 155,
121-31
- 120 Luminescence and field emission associated with heating and cooling of pyroelectric materials: pyroelectroluminescence Nambi, K. S. V.
Rao, S. M. D.
Chougaonkar, M. P. Nucl. Tracks Radiat.
Meas. (1985) 10, 243-7
- 121 On the field-ion microscopy of metallic glass Nordentoft, L. Philos. Mag. B (1985)
52, L21-4
- 122 Characterization of substances in thin films Ohtsubo, T. Kagaku Kogyo (1985)
36, 872-80
- 123 Measurement of field-emission current-fluctuations by digital autocorrelation of electron-counting Okano, T.
Honda, T.
Tuzi, Y. Jpn. J. Appl. Phys.
(1985) 24, L764-6
- 124 Field desorption processes of palladium adlayers on tungsten(011) and (112) Okuno, K.
Kim, H. W. Jpn. J. Appl. Phys.
(1985) 24, 1581-2
- 125 Field desorption behavior of oxides of Group III metals Okuyama, F.
Uchiyama, T.
Kojima, S. Int. J. Mass Spectrom.
Ion Processes (1985)
67, 1-10

Atom Probe Field-Ion Microscopy Bibliography for 1985

- 126 Emission of positive ions from potassium chloride and sodium chloride crystals exposed to high electric fields Okuyama, F.
Wong, S. S.
Röllgen, F. W. Surf. Sci. (1985) 151, L131-6
- 127 The prospects of field emission for e-beam inspection Orloff, J.
Swanson, L. W.
Li, J. Z. J. Vac. Sci. Technol. B (1985) 3, 224-6
- 128 Design of a 100 kV, high resolution focused ion beam column with a liquid metal ion source Orloff, J.
Sudraud, P. Microelectron Eng. (1985) 3, 161-5
- 129 Biomolecular deposition on multiple field-emitter tips Panitz, J. A. Rev. Sci. Instrum. (1985) 56, 572
- 130 High-field techniques Panitz, J. A. Methods Exp. Phys. (1985) 22, Solid State Phys., 349-423
- 131 A deposition technique for the imaging and analysis of protein interactions with metal and semiconductor surfaces Panitz, J. A.
Andrews, C. L.
Bear, D. G. J. Electron Microsc. Tech. (1985) 2, 285-92
- 132 Study of metal and semiconductor surfaces using field ion microscopy Park, T. S.
Sohn, K. S.
Chung, C. I. Chinese J. Physics (1985) 23, 171-80
- 133 Hydrogen absorption in metals: a field ion microscopy study Pickering, H. W. Report, 1985, DOE/-ER/10430-T2
Order No. DE85010299, 87
- 134 On distribution of boron in carbon steels Polanschuetz, W. Scr. Metall. (1985) 19, 159-63
- 135 Electrohydrodynamically driven large-area liquid-metal ion sources Pregenzer, A. L. J. Appl. Phys. (1985) 58, 4509-11
- 136 Liquid metal ion sources for FIB applications: current status and future prospects Prewett, P. D. Proc. SPIE-Int. Soc. Opt. Eng. (1985) 537, Electron-Beam, X-Ray, Ion-Beam Tech. Submicrometer Lithogr. 4, 126-37
- 137 Liquid metal ion sources for FIB microfabrication systems - recent advances Prewett, P. D.
Kellogg, E. M. Nucl. Instrum. Methods Phys. Res. (1985) B6, 135-42
- 138 In-channel clusters: rhenium on W(211) Reed, D. A.
Ehrlich, G. Surf. Sci. (1985) 151, 143-55

Atom Probe Field-Ion Microscopy Bibliography for 1985

- 139 Formation of droplets on silicon surfaces bombarded by indium from a capillary type liquid metal ion source Rüdenauer, F. G.
Steiger, W.
Wieser, E.
Groetzschel, R.
Naehring, F. Vacuum (1985) 35, 315-20
- 140 Atom-probe field ion microscopy: principle and applications Sakurai, T.
Hashizume, T.
Jimbo, A.
Hyomen, K. Hyomen Kagaku (1985) 6, 222-32
- 141 A stable high-brightness electron gun with zirconium/tungsten tip for nanometer lithography. I. Emission properties in Schottky- and thermal field-emission regions Samoto, N.
Shimizu, R.
Hashimoto, H.
Tamura, N.
Gamo, K.
Namba, S. Jpn. J. Appl. Phys. (1985) 24, 766-71
- 142 Field emission electric propulsion: further studies on cold cathode electron emitters Sanchez, F. R.
Galan, L.
Adell, L.
Romero, J. A.
Diaz, R. Report, 1985,
ESA-CR(P)-150, 41
- 143 Beam current stability from localized emission sites in a field ion source Schwoebel, P. R.
Hanson, G. R. J. Vac. Sci. Technol. B (1985) 3, 214-9
- 144 Field emission microscopy of refractory conducting crystals Shrednik, V. N. Zh. Vses. Khim. O-va. im. D. I. Mendeleeva (1985) 30, 543-50
- 145 Microanalysis of wear resistant coatings Skogsmo, J.
Nordén, H. Proc. 5th Eur. Conf. CVD, Carlsson, K.-O. and Lindström, J., eds., Univ. of Uppsala, Uppsala, Sweden (1985) 364-70
- 146 The interaction of nitric oxide, ethanedinitrile, and molecular nitrogen with molybdenum surfaces studied by field emission microscope Solymosi, F.
Bugyi, L. Mater. Sci. Monogr. (1985) 28B, React. Solids, 911-3
- 147 The zirconium-oxygen-tungsten-field emission cathode in the low temperature mode Speidel, R.
Brauchle, P.
Kramer, B.
Schwab, U. Optik (Stuttgart) (1985) 71, 172-7
- 148 Prebreakdown conduction in vacuum gaps under switching impulse excitations Srinivasa, K. V.
Nagabhushana, G. R. IEEE Trans. Electr. Insul. (1985) EI-20, 691-5

Atom Probe Field-Ion Microscopy Bibliography for 1985

- 149 The role of aging reactions in the hydrogen embrittlement susceptibility of an HSLA steel Stevens, M. F.
Bernstein, I. M. Metall. Trans. A (1985)
16, 1879
- 150 Field-ion microscope with plasma preparation of specimen surface Suvorov, A. L.
Bobkov, A. F.
Zaitsev, S. V.
Kasatkin, V. A. Instrum. Exper. Tech.
(1985) 28, 1448
- 151 Pulsed field evaporation of a tungsten(011) plane Suvorov, A. L.
Lazarev, N. E.
Bobkov, A. F.
Zaitsev, S. V. Poverkhnost (1985)
69-76
- 152 Microanalysis of fine precipitates in a two-pass C-Mn submerged arc weld metal Svensson, L.-E.
Henjered, A. Mat. Sci. Technol.
(1985) 1, 1094
- 153 Microduplex structure of a palladium-copper-silver alloy in a field ion microscope Syutkin, N. N.
Ivchenko, V. A.
Noritsyn, S. I.
Telegin, A. B. Fiz. Met. Metalloved.
(1985) 60, 607-12
- 154 Tight-binding approach to field desorption: nitrogen on iron(111) Tomanek, D.
Kreuzer, H. J.
Block, J. H. Surf. Sci. (1985) 157,
L315-22
- 155 Method of ion reaction time amplification in time-of-flight mass and energy analysis Tsong, T. T. J. Appl. Phys. (1985)
58, 2404
- 156 Orientational and isotope effects in field dissociation by atomic tunneling of compound ions Tsong, T. T. Physical Rev. Lett.
(1985) 55, 2826
- 157 Formation of silicon and water cluster ions in pulsed-laser stimulated field desorption Tsong, T. T. J. Vac. Sci. Technol. B
(1985) 3, 1425-30
- 158 Some aspects of field emission and field ion microscopy Tsong, T. T. J. Electron Microsc.
Tech. (1985) 2, 229-45
- 159 Atom-probe and field ion microscope studies of the atomic structure and composition of overlayers on metal surfaces Tsong, T. T.
Ahmad, M. Springer Ser. Surf. Sci.
(1985) 2, Struct. Surf.,
389-96
- 160 Cluster-ion formation in pulsed-laser-stimulated field desorption of condensed materials Tsong, T. T.
Liou, Y. Phys. Rev. B, Condens.
Matter (1985) 32,
4340-57

Atom Probe Field-Ion Microscopy Bibliography for 1985

- 161 Time-of-flight energy and mass analysis of metal-helide ions and their formation and dissociation Tsong, T. T.
Liou, Y. Physical Rev. Lett. (1985) 55, 2180
- 162 Emission characteristics of the zirconium oxide (ZrO)/tungsten thermal field electron source Tuggle, D. W.
Swanson, L. W. J. Vac. Sci. Technol. B (1985) 3, 220-3
- 163 Five millinewton field emission thruster testing Valentian, D.
Bugeat, J. P. Acta Astronaut. (1985) 12, 361-7
- 164 Remarkable periodicity of germanium Ge_n^{p+} ions ($n/p \sim 25$, $1 \leq p \leq 4$) formed by the liquid-metal ion-source technique Van de Walle, J.
Joyes, P. Phys. Rev. B, Condens. Matter (1985) 32, 8381-3
- 165 Study of germanium (Ge_n^{p+}) ions ($n/p \sim 25$, $1 \leq p \leq 4$) produced by liquid metal ion sources Van de Walle, J.
Joyes, P. C. R. Acad. Sci., Ser. 2 (1985) 301, 251-4
- 166 Sample positioner and deflection energy analyzer for measurements of photofield emission Venus, D.
Lee, M. J. G. Rev. Sci. Instrum. (1985) 56, 1206-11
- 167 FIM observation of GP zones in an aluminum-4% copper alloy Wada, M.
Kita, H.
Mori, T. Acta Metall. (1985) 33, 1631-6
- 168 Comparative FIM, SANS and TEM study of the copper 2 at. % cobalt decomposition Wagner, W.
Piller, J.
Degischer, H. P.
Wollenberger, H. Z. Metallkd. (1985) 76, 693-700
- 169 FIM/IAP/TEM studies of ion implanted nickel emitters Walck, S. D.
Hren, J. J. Mater. Res. Soc. Symp. Proc. (1985) 41, Adv. Photon Part. Tech. Charact. Defects Solids, 325-30
- 170 Diffusion of hydrogen, deuterium, and tritium on the (110) plane of tungsten Wang, S. C.
Gomer, R. J. Chem. Phys. (1985) 83(8), 4193-209
- 171 A Monte Carlo calculation of the virtual source size for a liquid metal ion source Ward, J. W. J. Vac. Sci. Technol. B (1985) 3, 207-13
- 172 Atom probe field ion microscopy of the decomposition of Cu-2.7 at. % Co Wendt, H.
Haasen, P. Scr. Metall. (1985) 19, 1053-8
- 173 A high resolution mass-energy spectrometer for the study of liquid metal ion sources Wilkens, B. Nucl. Instrum. Methods Phys. Res. (1985) A236, 340-2

Atom Probe Field-Ion Microscopy Bibliography for 1985

- 174 Atomic interactions in silicon-metal complexes on tungsten(110) Wrigley, J. D.
Ehrlich, G. Mater. Res. Soc. Symp. Proc. (1985) 48, Appl. Mater. Charact., 47-53
- 175 Characteristics of silicon removal by fine focused gallium ion beam Yamaguchi, H.
Shimase, A.
Haraichi, S.
Miyauchi, T. J. Vac. Sci. Technol. (1985) B3(1), 71-4
- 176 An atom-probe FIM study of the short-range order in an nickel-molybdenum (Ni_4Mo) alloy Yamamoto, M.
Hashizume, T.
Sakurai, T. Scr. Metall. (1985) 19, 357-60
- 177 Order-disorder transformations in Ni_3Mo and $Ni_3(Mo,X)$ alloys under electron irradiation Yamamoto, M.
Nenno, S.
Honma, Y. In Situ Experiments with High Voltage Electron Microscopes (1985), Osaka Univ.
- 178 Structures observed in electron spectra produced by field ionization of swift atomic hydrogen and helium Rydberg projectiles traversing carbon foils Yamazaki, Y.
Oda, N. Phys. Rev. A (1985) 32, 1260-3
- 179 Characteristics of a liquid metal ion source Zhou, F.
Ma, M.
Wang, W.
Hua, M. Nucl. Instrum. Methods Phys. Res. (1985) B6, 143-5
- 180 Mass spectrography of field evaporation of ions from solutions Zolotoi, N. B.
Karpov, G. V.
Skurat, V. E. Mass-Spektrom. Khim. Kinet., Tal'roze, V. L., ed., 1985, 289-303, Nauka, Moscow, USSR

1986

Atom Probe Field-Ion Microscopy Bibliography for 1986

- 1 An atom-probe analysis of aluminum-lithium alloys Abe, T.
Hono, K.
Hashizume, T.
Jimbo, A.
Carinci, G. M.
Hess, D. R.
Satoh, T.
Hirano, K.
Sakurai, T.
Pickering, H. W. J. de Phys. (1986) 47-C2, 185-90
- 2 Approach to a stable field emission electron source Adachi, H. Shinku (1986) 29, 13-25
- 3 Pulse laser atom probe study of gallium phosphide Adachi, T.
Kuroda, T.
Nakamura, S. J. de Phys. (1986) 47-C2, 293-6
- 4 AP-FIM study of silicon oxide and silicon-silicon oxide interface Adachi, T.
Tomita, M.
Kuroda, T.
Nakamura, S. J. de Phys. (1986) 47-C2, 315-9
- 5 An atom-probe study of compositional variations in the near-surface layers of binary alloys Ahmad, M.
Tsong, T. T. J. de Phys. (1986) 47-C2, 375-9
- 6 Principles and applications of field ion microscopy Ai, C. F.
Tsong, T. T. Instr. Today (1986) 7, 56
- 7 Atom probe field ion microscopy Ai, C. F.
Tsong, T. T. Instr. Today (1986) 7, 84
- 8 A study of surface catalyzed and field enhanced formation of H_3 and NH_3 on metal surfaces Ai, C. F.
Tsong, T. T. J. de Phys. (1986) 47-C2, 347-51
- 9 Stark effect and field ionization of atomic hydrogen Alijah, A.
Broad, J. T.
Hinze, J. J. Phys. B, At. Mol. Phys. (1986) 19, 2617-27
- 10 Performance of an energy compensator with a large acceptance angle Andrén, H.-O. J. de Phys. (1986) 47-C2, 483-8
- 11 Atom-probe analysis of Zircaloy Andrén, H.-O.
Mattsson, L.
Rolander, U. J. de Phys. (1986) 47-C2, 191-6
- 12 Laser-stimulated desorption of ions in strong electric field Antonov, V. S.
Letokhov, V. S.
Moskovets, E. V. Izv. Akad. Nauk SSSR, Ser. Fiz. (1986) 50, 690-4

Atom Probe Field-Ion Microscopy Bibliography for 1986

- 13 Emission stability of gold-silicon-beryllium liquid-metal ion source in various gas environments Arimoto, H.
Miyauchi, E.
Hashimoto, H. Jpn. J. Appl. Phys.,
Part 2 (1986) 25,
L567-8
- 14 Field emission flicker noise from small regions of germanium emitters with atomically clean surface Bakhtizin, R. Z. J. de Phys. (1986) 47-
C2, 161-3
- 15 Peculiarities of nonequilibrium (pulsed) fluctuation spectra in semiconductor field emitters Bakhtizin, R. Z.
Gots, S. S.
Zaripov, R. F. Radiotekh. Elektron.
(Moscow) (1986) 31,
1232-5
- 16 Atom probe analysis of passive films on iron Bauer, G.
Leisch, M. J. de Phys. (1986) 47-
C2, 189-94
- 17 Simulation of density fluctuation of potassium adatoms on W(112) Beben, J.
Rogowska, J.
Wojciechowski, K. F. J. de Phys. (1986) 47-
C2, 145-8
- 18 Field-emission flicker noise from potassium adsorbed on W(111) bounded and unbounded surface diffusion by spectral analysis Beben, J.
Kleint, C.
Meclewski, R. Appl. Phys. A (1986)
A40, 79-84
- 19 Beam brightness from a relativistic, field-emission diode with a velvet covered cathode Bekefi, G.
Shefer, R. E.
Tasker, S. C. Nucl. Instrum. Methods
Phys. (1986) A250, 91-4
- 20 Focused droplet beam from a gold liquid metal ion source Benassayag, G.
Orloff, J.
Swanson, L. W. J. de Phys. (1986) 47-
C2, 389-97
- 21 Multatomic cesium ions during field desorption Bernatskii, D. P.
Vlasov, Y. A.
Pavlov, V. G. Pis'ma Zh. Tekh. Fiz.
(1985) 12, 805-8
- 22 Comparison of the spectral behavior of potassium crystals and potassium multilayers on tungsten Biernat, T. Acta Univ. Wratislav.,
Mat., Fiz., Astron.
(1986) 47, Surf. Res.,
Proc. Solid State Surf.
Phys. Symp., 1984,
109-24
- 23 Noise spectra and temperature dependence of field emission flicker noise: potassium multilayers on tungsten Biernat, T.
Kleint, C. Acta Phys. Pol. A
(1986) A69, 507-16
- 24 Cross-correlation of the field emission flicker noise from coadsorption layers tungsten(110) potassium-nickel Blaszczyzyn, R. J. de Phys. (1986) 47-
C2, 151-6

Atom Probe Field-Ion Microscopy Bibliography for 1986

- 25 Cross-correlation functions across tungsten (112) from potassium submonolayers Blaszczyzyn, R. Acta Univ. Wratislav., Mat., Fiz., Astron. (1986) 47, Surf. Res., Proc. Solid State Surf. Phys. Symp., 1984, 65-80
- 26 Cross-correlation functions across tungsten(112) of current fluctuations from potassium submonolayers: surface diffusion or soliton propagation mechanism? Blaszczyzyn, R. Kleint, C. Surf. Sci. (1986) 171, 615-31
- 27 Cross-correlation measurements of field emission flicker noise from coadsorption layers potassium-nickel/tungsten Blaszczyzyn, R. Kleint, C. J. de Phys. (1986) 47-C2, 393-7
- 28 Field electron emission properties of the sulfur-nickel system Blaszczyzynowa, M. Blaszczyzyn, R. Meclewski, R. J. de Phys. (1986) 47-C2, 105-9
- 29 FIM atom-probe investigation of the interphase boundary of a nickel-base superalloy Blavette, D. Bostel, A. Surf. Sci. (1986) 177, L994-8
- 30 A new detection system for an atom probe FIM Blavette, D. Bostel, A. Sarrau, J. M. J. de Phys. (1986) 47-C2, 473-7
- 31 An atom probe investigation of the role of rhenium additions in improving creep resistance of nickel-base superalloys Blavette, D. Caron, P. Khan, T. Scr. Metall. (1986) 20, 1395-400
- 32 Preliminary study of order-disorder reaction in a nickel-iron-aluminum ($Ni_3Fe_{0.76}Al_{0.24}$) alloy by means of atom-probe techniques Blavette, D. Chambreland, S. J. de Phys. (1986) 47-C2, 227-32
- 33 Field-ion microscopy and atom probe in materials science Blavette, D. Menand, A. Ann. Chim. (Paris) (1986) 11, 321-84
- 34 A statistical model for deriving the microstructure parameters of finely dispersed systems from atom-probe analyses Blavette, D. Chambreland, S. J. de Phys. (1986) 7-C7, 503-8
- 35 Surface reactions investigated by field desorption Block, J. H. Kruse, N. Abend, G. Microbeam Anal. (1986) 21, 389-98

Atom Probe Field-Ion Microscopy Bibliography for 1986

- 36 33rd International Field Emission Symposium, Berlin, FRG, J. de Phys. (1986) 47-C7. Block, J. H.
Schmidt, W. A.
Miller, M. K.
Editors
(1986) Les Editions de Physique, Les Ulis, France
- 37 Time-of-flight atom probe Bobkov, A. F.
Karpikhin, I. L.
Kasatkin, V. A.
Lazarev, H. E.
Suvorov, A. L.
IET (1986) 2, 190-4
- 38 Field ionization of high velocity neutral species. Rydberg states in noble gas atoms the measurement of translational energy loss in neutralization-reionization mass spectra Bordas-Nagy, J.
Holmes, J. L.
Mommers, A. A.
Org. Mass Spectrom. (1986) 21, 629-36
- 39 A software package for atom probe users Bostel, A.
Bouet, M.
Sarrau, J. M.
J. de Phys. (1986) 47-C7, 521-4
- 40 The wettability of liquid metal ion sources Bozack, M. J.
Swanson, L. W.
Bell, A. E.
J. de Phys. (1986) 47-C2, 115-20
- 41 Materials considerations in liquid metal ion source development Bozack, M. J.
Swanson, L. W.
Bell, A. E.
J. de Phys. (1986) 47-C2, 95-100
- 42 Temperature effects in matrix assisted field desorption mass spectrometry Bramer-Weger, E.
Wong, S. S.
Subhan, M.
Röllgen, F. W.
J. de Phys. (1986) 47-C7, 441-5
- 43 Initial studies of boron-doped and alloyed Ni₃Al Brenner, S. S.
Sieloff, D.
Burke, M. G.
J. de Phys. (1986) 47-C2, 215-20
- 44 Applications of atom-probe field-ion microscopy to segregation and clustering studies in materials science Burke, M. G.
Brenner, S. S.
Microbeam Anal. (1986) 21, 363-9
- 45 A microstructural study of cobalt-20 wt. % chromium-10 wt. % aluminum using APFIM and TEM Burke, M. G.
Caola, J. R.
J. de Phys. (1986) 47-C7, 245-9
- 46 A combined TEM/FIM examination of field emission as a FIM specimen preparation technique Burke, M. G.
Sieloff, D. D.
Brenner, S. S.
J. de Phys. (1986) 47-C7, 459-62

Atom Probe Field-Ion Microscopy Bibliography for 1986

- 47 Microstructural investigation of irradiated pressure vessel steel weld metal Burke, M. G.
Brenner, S. S. J. de Phys. (1986) 47-C2, 239-44
- 48 Correlation between fracture mechanical and atom probe investigations on metallic glass ribbon Calvo, M.
Menand, A.
Osterstock, F.
Chermant, J. L. Mater. Res. Soc. Symp. Proc. (1986) 58, Rapidly Solidified Alloys Their Mech. Magn. Prop., 127-30
- 49 Atom probe field ion microscopy investigation of decomposition in iron-chromium and iron-chromium-cobalt alloys Camus, P. P. (1986) 197, Univ. Microfilms Int., Order No. DA8709244
- 50 Best image conditions in field ion microscopy Castilho, C. M. C.
Kingham, D. R. J. de Phys. (1986) 47-C2, 23-9
- 51 Calculations of field ionization in the field ion microscope Castilho, C. M. C.
Kingham, D. R. Surf. Sci. (1986) 173, 75-96
- 52 Field ion energy deficit calculations for liquid metal ion sources Castilho, C. M. C.
Kingham, D. R. J. Phys. D, Appl. Phys. (1986) 19, 147-56
- 53 Electrostatics of insulators charged by incident electrons beams Cazaux, J. J. Microsc. Spectrosc. Electron. (1986) 11, 293-312
- 54 Introduction to charging effects of insulators by incident electron beams Cazaux, J. Microbeam Anal. (1986) 21, 527-31
- 55 Pulsed laser atom probe analysis of III-V compound semiconductors Cerezo, A.
Grovenor, C. R. M.
Smith, G. D. W. J. de Phys. (1986) 47-C2, 309-14
- 56 Pulsed laser atom probe analysis of semiconductor materials Cerezo, A.
Grovenor, C. R. M.
Smith, G. D. W. J. Microsc. (Oxford) (1986) 141, 155-70
- 57 Geometrical analysis of field-ion images Chandrasekharaiah, M. N. J. de Phys. (1986) 47-C2, 437-42
- 58 Aging and tempering of ferrous martensites Chang, L.
Smith, G. D. W.
Olson, G. B. J. de Phys. (1986) C2-47, 265-75
- 59 Hydrogen on rhodium(110): the absence of a H-induced surface reconstruction Christmann, K.
Ehsasi, M.
Block, J. H.
Hirschwald, W. Chem. Phys. Lett. (1986) 131, 192-6

Atom Probe Field-Ion Microscopy Bibliography for 1986

- 60 The study of ruthenium oxidation by pulsed field desorption mass spectrometry Chuah, G. K. Cocke, D. L. Kruse, N. Abend, G. Kessler, T. Block, J. H. J. de Phys. (1986) 47-C2, 359-63
- 61 A study of the decomposition reaction of methanol over ruthenium field emitter surfaces Chuah, G. K. Kruse, N. Abend, G. Block, J. H. J. de Phys. (1986) 47-C7, 435-40
- 62 An electrohydrodynamic analysis of the equilibrium shape and stability of stressed conducting fluids: application to LMIS Chung, M. Cutler, P. H. Feuchtwang, T. E. Kazes, E. Miskovsky, N. M. J. de Phys. (1986) 47-C7, 351-8
- 63 A liquid metal ion source for organic secondary ion mass spectrometry: tandem mass spectrometry of steroid glucuronides Cole, R. B. (1986), 273, Univ. Microfilms Int., Order No. DA8628215
- 64 An FIM-atom probe and TEM study of Alnico permanent magnetic material Cowley, S. A. Hetherington, M. G. Jakubovics, J. P. Smith, G. D. W. J. de Phys. (1986) 47-C7, 211-6
- 65 The effects of gravitational and hydrostatic pressure on the equilibrium shape of a conducting fluid in an electric field: application to liquid metal ion sources Cutler, P. H. Chung, M. Feuchtwang, T. E. Kazes, E. J. de Phys. (1986) 47-C2, 87-93
- 66 Response to 'a note on the taylor cone' Cutler, P. H. Feuchtwang, T. E. Kazes, E. Chung, M. Miskovsky, N. M. J. Phys. D, Appl. Phys. (1986) 19, L13-8
- 67 Cross-correlation function from potassium submonolayers on tungsten (110) Dabrowski, A. M. Acta Univ. Wratislav., Mat., Fiz., Astron. (1986) 47, Surf. Res., 57-64
- 68 Cross-correlation function of field emission flicker noise from potassium tungsten(110): interpretation by adparticle surface diffusion Dabrowski, A. M. Kleint, C. Surf. Sci. (1986) 172, 372-84

Atom Probe Field-Ion Microscopy Bibliography for 1986

- 69 Energy distribution of field emission electrons from germanium, p-Ge Danil'tsev, N. V.
Mileshkina, N. V. Fiz. Tverd. Tela
(Leningrad) (1986) 28,
3533-6
- 70 Comparative TEM, FIM and SANS study of the copper-2 at. % cobalt decomposition Degischer, H. P.
Piller, J.
Wagner, W.
Wollenberger, H. Springer Proc. Phys.
(1986) 10, At. Transp.
Defects Met. Neutron
Scattering, 94-8
- 71 Effects of heat treatment on the mechanical properties of a high-chromium nickel-based superalloy (IN939) Delargy, K. M.
Shaw, S. W. K.
Smith, G. D. W. Mat. Sci. Technol.
(1986) 2, 1031-6
- 72 Effect of thermal-field ionization of impurities on the formation of S-shape current-voltage characteristics. II. Analysis of experimental dependences Derikot, N. Z.
Peka, G. P.
Smolyar, A. N. Ukr. Fiz. Zh. (Russ.
Ed.) (1986) 31, 1558-61
- 73 Thermal field emission and thermal photofield emission from tungsten (110) Donders, P. J.
Lee, M. J. G. Surf. Sci. (1986) 175,
197-214
- 74 Irradiance dependence of photofield emission from tungsten Donders, P. J.
Lee, M. J. G. Surf. Sci. (1986) 167,
141-9
- 75 The faces on microcrystals (field emitters, catalyst particles) Drechsler, M. J. de Phys. (1986) 47-C2, 389-91
- 76 Evolution of grain boundaries in very clean metal tips Drechsler, M.
Bermond, J. M. Surf. Sci. (1986) 178,
496-508
- 77 Profiles of tilted tip crystals Drechsler, M.
LaPorte, D. J. de Phys. (1986) 47-C2, 443-9
- 78 In situ scanning electron microscopy of the morphological evolution of metal tips Drechsler, M.
Ramdani, S. J. de Phys. (1986) 47-C2, 171-5
- 79 Rotation of grains of metal tips (annihilation of grain boundaries) Drechsler, M.
Ramdani, S. J. de Phys. (1986) 47-C2, 177-81
- 80 Transmission electron microscope and atom probe study of ferritic steel welds Dubben, G.
Chandrasekharaiyah, M. N.
Beyer, J.
Kolster, B. H. J. de Phys. (1986) 47-C2, 251-7

Atom Probe Field-Ion Microscopy Bibliography for 1986

- 81 Field adsorption of helium on tungsten Ernst, N.
Drachsel, W.
Li, Y.
Block, J. H.
Kreuzer, H. J. Phys. Rev. Lett. (1986)
57, 2686-9
- 82 Atom-probe spectroscopy of field adsorbed helium and neon Ernst, N.
Drachsel, W.
Li, Y.
Bozdech, G.
Block, J. H. J. de Phys. (1986) 47-
C7, 7-9
- 83 Field-ion microscopy Ernst, N.
Ehrlich, G. Topics in Current Physics 40, Microscop. Methods in Metals, U. Gonser, ed., (1986) 75
- 84 Field ion- and electron-emission measurements on single metal clusters: rhenium on tungsten(110) Ernst, N.
Ehrlich, G. J. de Phys. (1986) 47-
C2, 47-51
- 85 Hot-electron emission through dielectric charged surfaces in vacuum Esaev, D. G.
Sivitsa, S. P. Pis'ma Zh. Tekh. Fiz. (1986) 12, 1063-7
- 86 Study of anomalous ionization Eselevich, V. G.
Fainshtein, V. G. Fiz. Plazmy (Moscow) (1986) 12, 242-50
- 87 Atom binding at overlayers: rhenium on tungsten(211) Fink, H. W.
Ehrlich, G. Surf. Sci. (1986) 173, 128-37
- 88 Field ion energy deficits in the atom probe FIM Forbes, R. G. J. de Phys. (1986) 47-
C2, 31-6
- 89 Towards a unified theory of helium field ionization phenomena Forbes, R. G. J. de Phys. (1986) 47-
C2, 3-10
- 90 Derivation of an activation energy formula in the context of charge draining Forbes, R. G.
Chibane, K. J. de Phys. (1986) 47-
C7, 65-70
- 91 Direct observation of surface atomic reconstruction by pulsed-laser heating Gao, Q.
Tsong, T. T. Phys. Lett. A (1986)
117, 132-6
- 92 Direct observation of atomic steps in the surface reconstruction of the platinum (110) plane Gao, Q.
Tsong, T. T. Phys. Rev. Lett. (1986)
57, 452-5
- 93 Field emission energy distribution study of laser-induced thermal effects Gao, Y.
Reifenberger, R. J. Vac. Sci. Technol. A (1986) 4, 1289-93

Atom Probe Field-Ion Microscopy Bibliography for 1986

- 94 The atom probe analysis of a cast duplex stainless steel Godfrey, T. J.
Smith, G. D. W. *J. de Phys.* (1986) 47-C7, 217-22
- 95 Extensions of the field-emission fluctuation method for the determination of surface diffusion coefficients Gomer, R. *Appl. Phys. A* (1986) A39, 1-8
- 96 The effect of finite resolution on the determination of diffusion coefficients by the field emission fluctuation method Gomer, R.
Auerbach, A. *Surf. Sci.* (1986) 167, 493-501
- 97 Adsorption of O₂ on Pd(110) Goschnick, J.
Wolf, M.
Grunze, M.
Unertl, W. N.
Block, J. H.
Loboda-Cackovic, J. *Surf. Sci.* (1986) 178, 831-41
- 98 Phenomenological modeling of radiation embrittlement in light water reactor vessels with atom probe and statistical analysis Grant, S. P.
Earp, S. L.
Brenner, S. S.
Burke, M. G. *Proc. Int. Symp. Environ. Degrad. Mater. Nucl. Power Syst.-Water React., 2nd* (1986), 385-92, Am. Nucl. Soc., La Grange Park, IL
- 99 The microchemistry of the silica/silicon interface Grovenor, C. R. M. *Mater. Res. Soc. Symp. Proc.* (1986) 53, Semicond. Insul. Thin Film Transistor Technol., 301-10
- 100 Pulsed laser atom probe analysis of stoichiometry variations in gallium aluminum arsenide Grovenor, C. R. M.
Cerezo, A.
Smith, G. D. W. *Mater. Res. Soc. Symp. Proc.* (1986) 54, Thin Films-Interfaces Phenom., 633-7
- 101 Spinodal decomposition of Ni-Ti Grüne, R.
Haasen, P. *J. de Phys.* (1986) 47-C2, 259-64
- 102 Ordering in metallic alloys by FIM-atom probe techniques Grüne, R.
Hütten, A.
Alvensleben, L. v. *J. de Phys.* (1986) 47-C7, 295-300
- 103 Atom-probe study of G.P. zones in titanium-copper alloys Hadjadj, L.
Menand, A.
Blavette, D. *J. de Phys.* (1986) 47-C7, 281-7

Atom Probe Field-Ion Microscopy Bibliography for 1986

- 104 Dynamical enhanced electron emission and discharges at contaminated surfaces Halbritter, J. Appl. Phys. A (1986) A39, 49-57
- 105 Detection efficiency of flared-type microchannel plates applied for TOF atom-probe FIM Hasegawa, Y. J. de Phys. (1986) 47-C7, 509-13
Hashizume, T.
Sakurai, T.
Mizushima, Y.
- 106 A study of G.P. zones in aluminum-copper alloys by atom-probe FIM Hashizume, T. J. de Phys. (1986) 47-C2, 171-7
Hono, K.
Hasegawa, Y.
Hirano, K.
Sakurai, T.
- 107 Atom-probe study of surface segregation of nickel-copper alloys Hashizume, T. J. de Phys. (1986) 47-C2, 381-7
Sakurai, T.
Pickering, H. W.
- 108 Atom-probe investigation of III-V semiconductors: comparison of voltage-pulse and laser-pulse modes Hashizume, T. Rev. Sci. Instrum. (1986) 57, 1378-80
Hasegawa, Y.
Kobayashi, A.
Sakurai, T.
- 109 The absolute detection efficiency of a channelplate electron multiplier Hashizume, T. J. de Phys. (1986) 47-C2, 425-30
Sakurai, T.
- 110 Microprocessor controlled remolding of field emitters Hasselbach, F. J. de Phys. (1986) 47-C7, 453-8
Nicklaus, M.
Zeuner, K.
- 111 Field emission of electrons from a liquid alloy surface Hata, K. J. de Phys. (1986) 47-C7, 375-80
Nishigaki, S.
Watanabe, M.
Noda, T.
Tamura, H.
Watanabe, H.
- 112 Decomposition kinetics in the superalloy Nimonic PE16 and the system nickel-aluminum-titanium investigated by TEM, FIM and SANS Hein, W. Springer Proc. Phys. (1986) 10, At. Transp. Defects Met. Neutron Scattering, 89-93
Degischer, H. P.
Jensen, D. J.
Strecker, H.
Wagner, W.
Wahl, R. P.
Wollenberger, H.

Atom Probe Field-Ion Microscopy Bibliography for 1986

- 113 Determination of the binder phase composition in tungsten carbide-cobalt (WC-Co) cemented carbides Hellsing, M. Andrén, H.-O. Proc. 2nd Int. Conf. Sci. Hard Mater., Inst. Phys. Conf. Ser. 75 (1986) 311-20, Almond, E. A., et al, eds., Adam Hilger, Bristol, England and Boston, MA
- 114 Field adsorption and desorption of hydrogen on tungsten(110) - an atom-probe study Hellsing, M. Hellsing, B. Surf. Sci. (1986) 176, 249-60
- 115 Detection efficiency in atom-probe time-of-flight mass spectrometry Hellsing, M. Karlsson, L. J. Phys. E, Sci. Instrum. (1986) 19, 276-81
- 116 The presence of cobalt at WC/WC interfaces Henjered, A. Hellsing, M. Andrén, H.-O. Nordén, H. Proc. 2nd Int. Conf. Sci. Hard Mater., Inst. Phys. Conf. Ser. 75 (1986) 303-9, Almond, E. A., et al, eds., Adam Hilger, Bristol, England and Boston, MA
- 117 Quantitative microanalysis of carbide/carbide interfaces in WC-Co-base cemented carbides Henjered, A. Hellsing, M. Andrén, H.-O. Nordén, H. Mater. Sci. Technol. (1986) 2, 847
- 118 Construction and computer interfacing of an atom probe and its application to the study of two metal systems Hess, D. R. (1986) 345, Univ. Microfilms Int., Order No. DA8623755
- 119 Statistical analysis of atom probe data Hetherington, M. G. Cerezo, A. Hyde, J. Smith, G. D. W. Worrall, G. M. J. de Phys. (1986) 47-C7, 495-501
- 120 Comments on "Miscibility gap in Fe-Ni-Al and Fe-Ni-Al-Co systems" and "Role of alloying elements in phase decomposition in alnico magnet alloys" by Hao et al. Hetherington, M. G. Smith, G. D. W. Jakubovics, J. P. Metall. Trans. (1986) 17A, 1629-31
- 121 Development of boron and phosphorus liquid metal ion sources for the focused ion beam system Higuchi-Rusli, R. (1986) 288, Univ. Microfilms Int., Order No. DA8700137

Atom Probe Field-Ion Microscopy Bibliography for 1986

- 122 Field ion microscopy of the II-VI-semiconductors zinc oxide and cadmium selenide
 Hoffmann, D.
 Drachsel, W.
 Block, J. H.
 Stepanova, A.
 J. de Phys. (1986) 47-C7, 59-64
- 123 A preliminary study of Al-Li alloys using atom-probe field ion microscopy and transmission electron microscopy
 Hono, K.
 Abe, T.
 Hess, D. R.
 Pickering, H. W.
 Howell, P. R.
 Hasegawa, Y.
 Sakurai, T.
 Sano, N.
 Hirano, K.
 Aluminum Alloys - Phys. and Mech. Properties, (Int'l Conf., Va.) Starke, Jr., E. A., Sanders, T. H., Spangler, G. E., Mara, P. V., and Bonewitz, R. A., eds., (1986) 1, 621
- 124 A study of multi-layer G.P. zones in an aluminum-1.7 at. % copper alloy by atom-probe FIM
 Hono, K.
 Hashizume, T.
 Hasegawa, Y.
 Hirano, K.
 Sakurai, T.
 Scr. Metall. (1986) 20, 487-92
- 125 An atom-probe field ion microscopic study of G.P. zones in Al-Cu alloys
 Hono, K.
 Hashizume, T.
 Hasegawa, Y.
 Satoh, T.
 Hirano, K.
 Sakurai, T.
 Aluminum Alloys - Phys. and Mech. Properties, (Int'l Conf., Va.) Starke, Jr., E. A., Sanders, T. H., Spangler, G. E., Mara, P. V., and Bonewitz, R. A., eds., (1986) 1, 635
- 126 Evidence of multi-layer GP zones in Al-1.7 at. % Cu alloy
 Hono, K.
 Tetsuro, S.
 Hirano, K.-I.
 Philos. Mag. A (1986) 53, 495-504
- 127 APFIM study of antiphase and grain boundaries in Ni₃Al
 Horton, J. A.
 Miller, M. K.
 Microbeam Anal. (1986) 21, 378-81
- 128 A TEM-APFIM investigation of boron-doped Ni₃Al
 Horton, J. A.
 Miller, M. K.
 J. de Phys. (1986) 47-C2, 209-14
- 129 Long range order in homogenized Alnico 5
 Hütten, A.
 Grüne, R.
 Scr. Metall. (1986) 20, 551-4
- 130 FIM-atom probe investigations of permanent magnetic materials
 Hütten, A.
 Haasen, P.
 J. de Phys. (1986) 47-C7, 205-9

Atom Probe Field-Ion Microscopy Bibliography for 1986

- 131 Surface segregation in a Fe-5 at. % Cr alloy Igata, N.
Sato, S.
Ando, T.
Hashizume, T.
Jimbo, A.
Sakurai, T. J. de Phys. (1986) 47-
C2, 371-4
- 132 A study of precipitation and segregation on an atomic scale in 11 at. % chromium-1 at. % molybdenum heat-resistant steel by atom-probe and TEM Igata, N.
Sato, S.
Ando, T.
Hashizume, T.
Sakurai, T.
Pickering, H. W. J. de Phys. (1986) 47-
C2, 233-8
- 133 Phase transition studies through field-ion microscopy Inal, O. T.
Pak, H. R.
Karnowsky, M. M. Microbeam Anal. (1986)
21, 357-60
- 134 Impregnated-electrode-type liquid metal ion source Ishikawa, J. Oyo Butsuri (1986) 55,
1162-6
- 135 Field emission properties of surface-processed titanium carbide <110> field emitter Ishizawa, Y.
Aoki, S.
Oshima, C.
Otani, S. Shinku (1986) 29,
578-84
- 136 Impregnated-electrode-type liquid metal ion source Ishikawa, J.
Takagi, T. Vacuum (1986) 36,
825-31
- 137 An atom-probe study of molybdenum-carbon reaction Ishikawa, Y.
Takahashi, K.
Yoshimura, T. J. de Phys. (1986) 47-
C2, 365-70
- 138 Threshold effect of oxygen electroadsorption on the individual faces of germanium crystals in a field-emission microscope Ivanov, V. G.
Smirnova, T. P.
Fursei, G. N. Poverkhnost (1986)
128-30
- 139 Observation of the defective structure of Cu₃Au alloy in a field ion microscope Ivchenko, V. A.
Syutkin, N. N. Fiz. Met. Metalloved.
(1986) 61, 575-82
- 140 Field-assisted photodesorption of ions from metal and semiconductor surfaces Jaenicke, S.
Ciszewski, A.
Drachsel, W.
Weigmann, U.
Tsong, T. T.
Pitts, R. J.
Block, J. H.
Menzel, D. J. de Phys. (1986) 47-
C2, 343-8

Atom Probe Field-Ion Microscopy Bibliography for 1986

- 141 An atom-probe study of semiconductor-metal interfaces Jimbo, A.
Hashizume, T.
Sakata, T.
Sakurai, T. J. de Phys. (1986) 47-C2, 321-7
- 142 Stabilizing effect of emitted charges on the cone-like shapes of electrified menisci Joffre, G. H.
Cloupeau, M. J. de Phys. (1986) 47-C2, 359-64
- 143 Energetic distribution of molecular ions produced in a liquid metal ion source Joyes, P.
Van de Walle, J. J. J. de Phys. (1986) 47-C2, 821-7
- 144 Chemisorption induced surface segregation in Cu-Ni alloys Kamiya, I.
Hashizume, T.
Sakai, A.
Sakurai, T.
Pickering, H. W. J. de Phys. (1986) 47-C2, 195-201
- 145 Field electron emission from metallic glass Kanitkar, M. M.
Joag, D. S. J. de Phys. (1986) 47-C2, 127-32
- 146 Grain boundary segregation of boron, an experimental and theoretical study Karlsson, L.
Nordén, H. J. de Phys. (1986) 47-C2, 257-62
- 147 Non-equilibrium grain boundary segregation of boron in austenitic stainless steels and nickel Karlsson, L.
Nordén, H. Proc. 4th Jap. Inst. Met. Int. Symp. (1986)
- 148 FIM observation of ultrathin polymer films Karpowicz, A.
Surma, S.
Gluchowski, S. Acta Univ. Wratislav.,
Mat., Fiz., Astron.
(1986) 48, Surf. Res.,
Proc. Semin. Surf.
Phys., 9th, 1985,
229-34
- 149 Atom-probe study of polypyrrole: distribution of dopants and oxygen Kato, H.
Uchikoga, S.
Nishikawa, O. J. de Phys. (1986) 47-C2, 429-34
- 150 Field ion microscope observations of surface reconstruction of platinum(100) and iridium(100) Kellogg, G. L. Surf. Sci. (1986) 171, L1021-7
- 151 Oxide formation and reduction on rhodium surfaces Kellogg, G. L. Surf. Sci. (1986) 171, 359-76

Atom Probe Field-Ion Microscopy Bibliography for 1986

- 152 Direct observations of surface chemical and structural changes resulting from the CO oxidation reaction on rhodium Kellogg, G. L. J. Vac. Sci. Technol. A (1986) 4, 1419
- 153 Field-ion microscope observations of surface self-diffusion and atomic interactions on platinum Kellogg, G. L. Microbeam Anal. (1986) 21, 399-402
- 154 Oxide formation on rhodium field emitter surfaces and its reduction by carbon monoxide Kellogg, G. L. J. de Phys. (1986) 47-C₂, 353-7
- 155 Surface self-diffusion of Pt on the Pt(311) plane Kellogg, G. L. J. de Phys. (1986) 47-C₂, 331-6
- 156 Interpretation of high-speed ramped field desorption spectra of NO on platinum Kessler, T.
Abend, G.
Kruse, N.
Block, J. H. J. de Phys. (1986) 47-C₂, 407-12
- 157 Theory of surface structure determination by field-ion microscopy: comparison with scanning tunneling microscopy Kingham, D. R. Microbeam Anal. (1986) 21, 403-4
- 158 A simple theoretical model of field evaporation Kingham, D. R. J. de Phys. (1986) 47-C₂, 11-6
- 159 Theoretical investigation of liquid metal ion sources: field and temperature dependence of ion emission Kingham, D. R.
Swanson, L. W. Appl. Phys. A (1986) A41, 157-69
- 160 Development of a high density finite set of uniform field emitters on a thin film glass substrate Kitzmann, G. A. J. de Phys. (1986) 47-C₂, 79-83
- 161 Interpretation of cross-correlation measurements of adsorbate layers Kleint, C. Acta Univ. Wratislav., Mat., Fiz., Astron. (1986) 47, Surf. Res., Proc. Solid State Surf. Phys. Symp., 1984, 81-101
- 162 Resolution of work function patches on atomically rough surfaces Knor, Z. Surf. Sci. (1986) 169, L317-20
- 163 Adsorption on the surface of ionic crystals and the effect of applied electric field Korol, E. N.
Posudievskii, O. Y. Surf. Sci. (1986) 169, 104-22

Atom Probe Field-Ion Microscopy Bibliography for 1986

- 164 Imaging of densely packed planes and rows by field ionization via adsorbed atoms Koziol, C.
Faulian, K.
Bauer, E.
Kreuzer, H. J.
Nath, K. Surf. Sci. (1986) 169,
275-88
- 165 Surface self-diffusion of erbium Kozlowski, G.
Ciszewski, A.
Swiech, W. J. de Phys. (1986) 47-
C2, 337-40
- 166 Study of lanthanum on tungsten field emitter Kozlowski, G.
Swiech, W.
Surma, S. J. de Phys. (1986) 47-
C7, 101-3
- 167 Optimal conditions for field ion microscopic investigations of grain boundaries of metals and alloys Krautz, E.
Haiml, G. J. de Phys. (1986) 47-
C7, 183-8
- 168 Field ion microscopic investigations of lattice imperfections of refractory metals at low and high temperatures Krautz, E. High Temp. - High Pressures (1986) 18,
319-27
- 169 Field adsorption and evaporation Kreuzer, H. J.
Nath, K. J. de Phys. (1986) 47-
C2, 3-6
- 170 Study of the fine structure of a rearranged microcrystal surface with pulsed field-emission microscopy Krotevich, D. N.
Ptitsyn, V. E.
Fursei, G. N. Fiz. Tverd. Tela
(Leningrad) (1986) 28,
3722-4
- 171 A comparison of nitric oxide interaction with stepped platinum and ruthenium field emitter surfaces Kruse, N.
Abend, G.
Block, J. H. J. de Phys. (1986) 47-
C7, 341-6
- 172 Formation of ruthenium-subcarbonyls by reaction of carbon monoxide with ruthenium field emitter surfaces Kruse, N.
Abend, G.
Block, J. H.
Gillet, E.
Gillet, M. J. de Phys. (1986) 47-
C2, 87-92
- 173 Low-temperature evaporation of niobium-tin (Nb_3Sn) compound in an electric field Ksenofontov, V. A.
Kul'ko, V. B.
Kutsenko, P. A. Metallofizika (Akad.
Nauk Ukr. SSR, Otd.
Fiz.) (1986) 8, 96-9
- 174 Atomic configuration of nuclei of mixed dislocations $\frac{1}{2}(111)$ in niobium-zirconium alloy Ksenofontov, V. A.
Mikhailovskii, I. M. Metallofizika (Akad.
Nauk Ukr. SSR, Otd.
Fiz.) (1986) 8, 65-8
- 175 Conical equipotential substrate for liquid metal sources Kubby, J. A.
Siegel, B. M. J. de Phys. (1986) 47-
C2, 107-14

Atom Probe Field-Ion Microscopy Bibliography for 1986

- 176 High resolution structuring of emitter tips for the gaseous field ionization source Kubby, J. A.
Siegel, B. M. J. Vac. Sci. Technol. B
(1986) 4, 120-5
- 177 Role of tip structure in scanning tunneling microscopy Kuk, Y.
Silverman, P. J. Appl. Phys. Lett. (1986)
48, 1597-9
- 178 The enrichment of Ni at a dislocation in Ni-plated W Lai, Z. H.
Nordén, H.
Eaton, H. C. J. de Phys. (1986) 47-C7, 269-73
- 179 Spatially correlated breakdown events initiated by field electron emission in vacuum and high-pressure sulfur hexafluoride Latham, R. V.
Bayliss, K. H.
Cox, B. M. J. Phys. D, Appl. Phys.
(1986) 19, 219-31
- 180 Hot electron emission from composite metal-insulator micropoint cathodes Latham, R. V.
Mousa, M. S. J. Phys. D, Appl. Phys.
(1986) 19, 699-713
- 181 Current limiting of field emitter array cathodes Lee, K. J. (1986) 205, Univ.
Microfilms Int., Order No. DA8628359
- 182 Microbeam imaging at micron and submicron resolution Legge, G. J. F.
McKenzie, C. D.
Mazzolini, A. P.
Sealock, R. M.
Jamieson, D. N.
O'Brien, P. M.
McCallum, J. C.
Allan, G. L.
Brown, R. A. Nucl. Instrum. Methods
Phys. Res. (1986) B15,
669-74
- 183 "Atom-probe field-ion microscopy of the decomposition of copper-2.7 at. % cobalt." Comments LeGoues, F. K.
McDevitt, T. L.
Aaronson, H. I. Scr. Metall. (1986) 20,
1305-10
- 184 Discussion of "The early stages of the decomposition of alloys" LeGoues, F. K.
Aaronson, H. I. Met. Trans. A (1986)
17A, 742
- 185 The investigation of field ionization process of helium gas above the separate surface atoms of tungsten emitters Lenkow, W. E.
Glowacki, M. S. J. de Phys. (1986) 47-C7, 47-51
- 186 A hydrogen field ion source with focusing optics Lewis, G. N.
Paik, H.
Mioduszewski, J.
Siegel, B. M. J. Vac. Sci. Technol. B
(1986) 4, 116-9

Atom Probe Field-Ion Microscopy Bibliography for 1986

- 187 A comparison of the performance of a low voltage microprobe for two thermal field emitters Li, J. Z. (1986) 189, Univ. Microfilms Int., Order No. DA8613127
- 188 Interaction of hydrogen and nitrogen on iron, investigated by pulsed laser atom probe Li, Y. Drachsel, W. Block, J. H. Okuyama, F. J. de Phys. (1986) 47-C7, 413-8
- 189 Alloy carbide precipitation in a high cobalt-nickel secondary hardening steel Liddle, J. A. Smith, G. D. W. Olson, G. B. J. de Phys. (1986) 47-C7, 211-6
- 190 Analysis of the distribution of atoms of chromium-manganese steel components by Möessbauer spectroscopy and field-ion microscopy Litvinov, V. S. Poptsov, M. V. A. Fiz. Met. Metalloved. (1986) 61, 361-4
- 191 Direct observation of reaction intermediates in catalytic synthesis of ammonia Liu, W. Tsong, T. T. Surf. Sci. (1986) 165, L26-30
- 192 Early stages of metal-silicon (germanium) compound formation: a FIM study of interfacial atomic structures Liu, H. F. Liu, H. M. Tsong, T. T. J. de Phys. (1986) 47-C7, 327-32
- 193 Initial stages of iridium-semiconductor compound formation and the interface atomic structures: a field ion microscope study Liu, H. F. Liu, H. M. Tsong, T. T. Surf. Sci. (1986) 171, 501-14
- 194 Atomic structures at iridium monisilicide iridium-germanium(IrGe)-iridium(001) interfaces Liu, H. F. Liu, H. M. Tsong, T. T. Appl. Phys. Lett. (1986) 47-C2, 1661-3
- 195 Growth of thin single-crystal nickel silicide ($NiSi_2$) films on silicon surfaces. A field ion microscope study Liu, H. F. Liu, H. M. Tsong, T. T. J. de Phys. (1986) 47-C2, 315-9
- 196 Numerical calculation of the temperature distribution and evolution of the field-ion emitter under pulsed and continuous-wave laser irradiation Liu, H. F. Liu, H. M. Tsong, T. T. J. Appl. Phys. (1986) 59, 1334-40
- 197 Initial stages of iridium-semiconductor compound formation: a field-ion microscope study of interface atomic structures Liu, H. F. Liu, H. M. Tsong, T. T. Phys. Rev. Lett. (1986) 56, 65-8

Atom Probe Field-Ion Microscopy Bibliography for 1986

- 198 Current-voltage curves in liquid metal ion sources Mair, G. L. R. Vacuum (1986) 36, 847-50
- 199 Some aspects of liquid metal ion sources Mair, G. L. R. Mulvey, T. J. Microsc. (Oxford) (1986) 142, 191-200
- 200 Studies with a capillary liquid metal ion source Mair, G. L. R. Thoms, S. J. Phys. D, Appl. Phys. (1986) 19, L203-6
- 201 A liquid metal ion source analysis system Marriott, P. J. Phys. D, Appl. Phys. (1986) 19, L115-9
- 202 Electric-field ionization of laser-excited Rydberg atoms in a magnetic field Martin, N. L. S. MacAdam, K. B. J. Phys. B, At. Mol. Phys. (1986) 19, 2435-42
- 203 Investigation of a liquid gallium ion source at low emission currents Mayer, H. P. Gaukler, K. H. J. de Phys. (1986) 47-C2, 365-70
- 204 The mechanism of reconstruction of rhodium-platinum catalyst gauzes McCabe, A. R. Smith, G. D. W. Pratt, A. S. Platinum Metals Review (1986) 30, 54-62
- 205 A scanning tunneling microscope for surface modification McCord, M. A. Pease, R. F. W. J. de Phys. (1986) 47-C2, 485-91
- 206 Field emission microscopy trends and perspectives Melmed, A. J. Chem. and Physics of Solid Surf. VI, Vanselow, R. and Howe, R., eds., Springer Verlag, Berlin (1986)
- 207 Progress in understanding atomic structure of the icosahedral phase Melmed, A. J. Kaufman, M. J. Fowler, H. A. J. de Phys. (1986) 47-C2, 35-40
- 208 Long-range icosahedral symmetry in a metallic phase observed by field-ion microscopy Melmed, A. J. Klein, R. J. de Phys. (1986) 47-C2, 287-90
- 209 Icosahedral symmetry in a metallic phase observed by field-ion microscopy Melmed, A. J. Klein, R. Phys. Rev. Lett. (1986) 56, 1478-81
- 210 Effects of a gold shank-overlayer on the field ion imaging of silicon Melmed, A. J. Schmidt, W. A. Block, J. H. Naschitzki, M. Lovisa, M. J. de Phys. (1986) 47-C2, 333-6
- 211 Temperature dependence of iridium field evaporation rate Menand, A. Blavette, D. J. de Phys. (1986) 47-C2, 17-20

Atom Probe Field-Ion Microscopy Bibliography for 1986

- 212 Atom probe study of titanium base alloys: preliminary results Menand, A. Chambrelard, S. Martin, C. J. de Phys. (1986) 47-C2, 197-202
- 213 Synchrotron radiation applied to surface science Menzel, D. J. de Phys. (1986) 47-C7, 339-42
- 214 Image processing of FIM and IAP micrographs Miller, M. K. J. de Phys. (1986) 47-C7, 477-82
- 215 Atom-probe field ion microscopy Miller, M. K. Microbeam Anal. (1986) 21, 343-7
- 216 APFIM studies of phase transformations Miller, M. K. Microbeam Anal. (1986) 21, 370-4
- 217 The ORNL atom probe Miller, M. K. J. de Phys. (1986) 47-C2, 493-8
- 218 The ORNL atom probe software package Miller, M. K. J. de Phys. (1986) 47-C2, 499-504
- 219 Comparison of site occupation determinations by APFIM and AEM Miller, M. K. Bentley, J. J. de Phys. (1986) 47-C7, 463-8
- 220 Microstructural characterization of primary collant pipe steel Miller, M. K. Bentley, J. J. de Phys. (1986) 47-C7, 239-44
- 221 32nd International Field Emission Symposium (Wheeling, W. Va.), J. de Phys. (1986) 47-C2 (1986) (Les Editions de Physique, Les Ulis, France)
- 222 Site occupation determinations by APFIM for hafnium, iron, and cobalt in Ni₃Al Miller, M. K. Horton, J. A. Scr. Metall. (1986) 20, 1125-30
- 223 An atom probe field ion microscope study of boron decorated boundaries in Ni₃Al Miller, M. K. Horton, J. A. Scr. Metall. (1986) 20, 789-92
- 224 Boron distribution at boundaries in rapidly solidified Ni₃Al Miller, M. K. Horton, J. A. J. de Phys. (1986) 47-C7, 263-8
- 225 A comparison of characteristic distance measurements by AP, TEM, and SANS Miller, M. K. Horton, L. L. Spooner, S. J. de Phys. (1986) 47-C2, 409-14

Atom Probe Field-Ion Microscopy Bibliography for 1986

- 226 Microanalytical investigations of light water reactor materials using the atom probe Miller, M. K.
Spitznagel, J. A.
Brenner, S. S.
Burke, M. G. Proc. Int. Symp.
Environ. Degrad.
Mater. Nucl. Power
Syst.-Water React.,
2nd (1986), 523-8
- 227 Field emission electric propulsion: emission characteristic of slit emitters Mitterauer, J. J. de Phys. (1986) 47-C7, 399-404
- 228 The enrichment of phosphorus near Mo₂C precipitates in steel Möller, R.
Brenner, S. S.
Grabke, H. J. J. de Phys. (1986) 47-C2, 277-80
- 229 The effect of molybdenum on the grain boundary segregation of phosphorus in steel Möller, R.
Brenner, S. S.
Grabke, H. J. Scr. Metall. (1986) 20, 587-92
- 230 On the temperature distribution in a tip and a loop of FIM under the influence of gas molecules Morikawa, H.
Iwatsu, F.
Terao, T. J. Vac. Soc. Jpn. (1986) 29, 328-33
- 231 Hot-electron emission from composite metal-insulator microemitters Mousa, M. S.
Latham, R. V. J. de Phys. (1986) 47-C7, 139-44
- 232 Analysis of field emitter surfaces by very high resolution Auger electron spectroscopy Mundschau, M.
Vanselow, R. J. de Phys. (1986) 47-C7, 121-6
- 233 Phosphorus on platinum-field electron emission microscopy studies Mundschau, M.
Vanselow, R. Surf. Sci. (1986) 166, L131-5
- 234 Impurity segregation and adsorption of catalytic support material on platinum. Investigations by field emission microscopy Mundschau, M. V. (1986) 252, Univ. Microfilms Int., Order No. DA8617371
- 235 An atom-probe analysis of the lanthanum hexaboride(001) plane. II. Effect of hydrogen gas atmosphere Murakami, K.
Adachi, T.
Kuroda, T.
Nakamura, S. Surf. Sci. (1986) 176, 327-35
- 236 Round-robin atom-probe experiment: preliminary results in Japan Nakamura, S. J. de Phys. (1986) 47-C2, 459-64
- 237 Quantitative compositional analysis with atom-probe field-ion microscope and its application to metallurgy Nakamura, S. Nippon Kinzoku Gakkai Kaiho (1986) 25, 680-7
- 238 Atom-probe study of metal-silicon carbide interfaces Nakamura, S.
Hasegawa, Y.
Hashizume, T.
Sakurai, T. J. de Phys. (1986) 47-C7, 309-14

Atom Probe Field-Ion Microscopy Bibliography for 1986

- 239 Atom-probe analysis of silicon monocarbide Nakamura, S.
Hashizume, T.
Hasegawa, Y.
Sakurai, T. Surf. Sci. (1986) 172,
L551-4
- 240 Sputtering of a FIM specimen by imaging gases Nakamura, S.
Hashizume, T.
Sakurai, T. J. de Phys. (1986) 47-
C2, 431-6
- 241 Field adsorption of rare gases Nath, K.
Kreuzer, H. J.
Anderson, A. B. Surf. Sci. (1986) 176,
261-83
- 242 Do tunneling electrons probe the image interaction Nguyen, H. Q.
Feuchtwang, T. E.
Cutler, P. H. J. de Phys. (1986) 47-
C2, 37-44
- 243 Field emission from broad-area niobium cathodes: effects of high-temperature treatment Niedermann, P.
Sankararaman, N.
Noer, R. J.
Fischer, O. J. Appl. Phys. (1986)
59, 892-901
- 244 Atom-probe study of semiconductors and conducting polymers Nishikawa, O. Microbeam Anal. (1986)
21, 351-6
- 245 Atom-probe study of a conducting polymer: the oxidation of polypyrrole Nishikawa, O.
Kato, H. J. Chem. Phys. (1986)
85, 6758-64
- 246 Atom-probe study of conducting polymer: polypyrrole Nishikawa, O.
Kato, H. J. de Phys. (1986) 47-
C7, 203-8
- 247 Mass analysis of gallium arsenide and gallium phosphide by the combined atom-probe Nishikawa, O.
Nomura, E.
Kawada, H.
Oida, K. J. de Phys. (1986) 47-
C7, 297-303
- 248 Pulsed-laser atom-probe study of silicon, gallium arsenide and gallium phosphide Nishikawa, O.
Nomura, E.
Yanagisawa, M.
Nagai, M. J. de Phys. (1986) 47-
C7, 303-8
- 249 Atom-probe mass analysis with a signal height discriminating timer Nishikawa, O.
Oida, K.
Tomitori, M. J. de Phys. (1986) 47-
C7, 515-20
- 250 Pulsed-laser atom-probe study of aluminum-gallium arsenide interfaces Nishikawa, O.
Yanagisawa, M.
Nagai, M. J. de Phys. (1986) 47-
C7, 303-8
- 251 Electron field emission from intentionally introduced particles on extended niobium surfaces Noer, R. J.
Niedermann, P.
Sankararaman, N.
Fischer, O. J. Appl. Phys. (1986)
59, 3851-60

Atom Probe Field-Ion Microscopy Bibliography for 1986

- 252 Field emission limiting densities of submicron point emitters grown by different methods Nosov, A. A.
Nosova, D. I.
Ovsyannikov, N. P.
Chadaev, N. N. Radiotekh. Elektron. (Moscow) (1986) 31, 1466-7
- 253 FIM-atom probe studies of the decomposition in the metallic glass nickel-palladium-phosphorus ($\text{Ni}_{45}\text{Pd}_{35}\text{P}_{20}$) Öhring, M.
Haasen, P. J. de Phys. (1986) 47-C2, 275-80
- 254 Use of a compact cesium gun together with a liquid metal ion source for high sensitivity submicron SIMS Okutani, T.
Shinomiya, T.
Ohshima, M.
Noda, T.
Tamura, H.
Watanabe, H. Springer Ser. Chem. Phys. (1986) 44, Second, Ion Mass Spectrom., SIMS 5, 139-41
- 255 High-field crystal growth Okuyama, F. J. de Phys. (1986) 47-C2, 75-80
- 256 An AP-FIM study on metastable phases in aluminum-silver binary alloy Osamura, K.
Nakamura, T.
Kobayashi, A.
Hashizume, T.
Sakurai, T. Acta Metall. (1986) 34, 1563-70
- 257 Protein removal from tungsten field-emitter tips Panitz, J. A.
Sandison, D. R. J. de Phys. (1986) 47-C2, 401-7
- 258 On the energy distribution of clusters from liquid gold ion sources Papadopoulos, S.
Barr, D. L.
Brown, W. L. J. de Phys. (1986) 47-C2, 101-6
- 259 Field emission microscopy of gallium arsenide Patel, C. J. de Phys. (1986) 47-C2, 53-8
- 260 Electron emission during the evaporation of readily ionizable additives from the cathode Paton, B. E.
Gvozdetskii, V. S.
Vasenin, Y. L. Avtom. Svarka (1986) 11, 1-3
- 261 Mass-spectral investigation of indium liquid-metal ion sources Pustovit, A. N.
Zhila, V. I. Zh. Tekh. Fiz. (1986) 56, 2255-8
- 262 Photo field emission Radon, T. Acta Univ. Wratislav., Mat., Fiz., Astron. (1986) 47, Surf. Res., Proc. Solid State Surf. Phys. Symp., 1984, 49-56

Atom Probe Field-Ion Microscopy Bibliography for 1986

- 263 High-field corrosion observed in a field ion microscopic study Ramanathan, D.
Vijendran, P. J. de Phys. (1986) 47-
C1, 425-8
- 264 Metallurgy and microfabrication applications of gold-silicon-beryllium liquid-metal field-ion sources Reich, D. F.
Fray, D. J.
Evasion, A. F.
Cleaver, J. R. A.
Ahmed, H. Microelectron Eng. (1986) 5, 171-8
- 265 The investigation of field adsorption and diffusion of helium on the surface of tungsten by AP-FIM Ren, D. J. de Phys. (1986) 47-
C1, 157-60
- 266 Method for an accurate calibration of the flight-time-focused time-of-flight atom probe Ren, D.
Tsong, T. T.
McLane, S. B. Rev. Sci. Instrum. (1986) 57, 2543-6
- 267 Effect of optical diffraction on laser heating of a field emitter Robins, E. S.
Lee, M. J. G.
Langlois, P. Can. J. Phys. (1986) 64, 111-7
- 268 Hans D. Beckey and his contribution to the development of mass spectrometry Röllgen, F. W. J. de Phys. (1986) 47-
C1, 73-4
- 269 Matrix effects in negative-ion field desorption mass spectrometry Röllgen, F. W.
Daehling, P.
Bramer-Weger, E.
Okuyama, F.
Subhan, M. Org. Mass Spectrom. (1986) 21, 623-7
- 270 A method for sharpening FIM-specimens Rolander, U. J. de Phys. (1986) 47-
C1, 449-52
- 271 Field-ion microscopy and atom-probe microanalysis of niobium-tin (Nb_3Sn) wires Rose, J. D.
Goringe, M. J.
Smith, G. D. W.
Moore, A. J. W. J. de Phys. (1986) 47-
C2, 281-5
- 272 Electron optical column for high speed nanometric lithography Saitou, N.
Hosoki, S.
Okumura, M.
Matsuzaka, T.
Matsuoka, G.
Ohyama, M. Microelectron Eng. (1986) 5, 123-31
- 273 Computer simulation of field-ion images of quasicrystals Sakai, A.
Hashimoto, J.
Sakurai, T.
Osawa, K.
Ninomiya, T. J. de Phys. (1986) 47-
C2, 469-75

Atom Probe Field-Ion Microscopy Bibliography for 1986

- 274 An analysis of field evaporation using interatomic potentials Sakai, A.
Sakurai, T. J. de Phys. (1986) 47-C2, 17-21
- 275 An atom-probe compositional study of palladium-silicon interfaces Sakata, T.
Hasegawa, Y.
Kobayashi, A.
Sakurai, T. J. de Phys. (1986) 47-C7, 321-6
- 276 Determination of the detection efficiency of a channelplate electron multiplier Sakurai, T.
Hashizume, T. Rev. Sci. Instrum. (1986) 57, 236
- 277 Surface segregation of nickel-copper binary alloys studied by an atom-probe Sakurai, T.
Hashizume, T.
Kobayashi, A.
Sakai, A.
Hyodo, S.
Kuk, Y.
Pickering, H. W. Phys. Rev. B, Condens. Matter (1986) 34, 8379-90
- 278 Microscopic structures of metastable phases in Al-Ag binary alloys Sakurai, T.
Jimbo, A.
Hashizume, T.
Sakai, A.
Osamura, K.
Nakamura, T. J. de Phys. (1986) 47-C2, 179-83
- 279 Atom-probe study of metastable phases in an Al-3 wt. % - Li-0.12 wt. % - Zr alloy Sakurai, T.
Kobayashi, A.
Hasegawa, Y.
Sakai, A.
Hono, K.
Pickering, H. W. J. de Phys. (1986) 47-C7, 287
- 280 Atomistic study of metastable phases in an aluminum-3% lithium-0.12% zirconium alloy Sakurai, T.
Kobayashi, A.
Hasegawa, Y.
Sakai, A.
Pickering, H. W. Scr. Metall. (1986) 20, 1131-6
- 281 Field-emission studies of the adsorption of mercury on tungsten at 295 K Saleh, J. M. J. de Phys. (1986) 47-C7, 111-5
- 282 Characterization of enhanced field emission sites on niobium surfaces due to heat treatment Sankararaman, N.
Fischer, O.
Niedermann, P.
Noer, R. J. J. de Phys. (1986) 47-C7, 133-8

Atom Probe Field-Ion Microscopy Bibliography for 1986

- 283 Computerized imaging system for field ion microscopy Schiller, T.
Weigmann, U.
Jaenicke, S.
Block, J. H. J. de Phys. (1986) 47-C2, 479-84
- 284 Field ion appearance spectroscopy at silicon surfaces Schmidt, W. A.
Lovisa, M. F. J. de Phys. (1986) 47-C7, 157-65
- 285 Negative ion imaging in field ion microscopy Schmitz, R.
Buetfering, L.
Röllgen, F. W. J. de Phys. (1986) 47-C2, 53-7
- 286 Secondary ion mass spectrometer with liquid metal field ion source and quadrupole mass analyzer Schroeer, J. M.
Puretz, J. Springer Ser. Chem. Phys. (1986) 44, Second. Ion Mass Spectrom., SIMS 5, 142-5
- 287 Rapid characterization of biomaterials by field ionization Schulten, H. R.
Halket, J. M. Org. Mass Spectrom. (1986) 21, 613-22
- 288 Field ion emission from adsorbed films - hydrogen and xenon Schwoebel, P. R.
Hanson, G. R. J. de Phys. (1986) 47-C2, 121-31
- 289 Mechanical and electronic aspects of a field ion source for beam applications Schwoebel, R. P.
Hanson, G. R. J. de Phys. (1986) 47-C2, 167
- 290 Cathode bombardment stimulated microstructure growth - average ion energy Schwoebel, P. R.
Hanson, G. R. J. de Phys. (1986) 47-C2, 59-66
- 291 Field-ion microscopy: atom-probe microanalysis Seidman, D. N. Encyclopedia of Mat. Sci. and Eng. (1986) 3, 1741
- 292 Field-ion microscopy: observation of radiation effect Seidman, D. N. Encyclopedia of Mat. Sci. and Eng. (1986) 3, 1744
- 293 Chemistry on an atomic scale of solid-state processes Seidman, D. N. Microbeam Anal. (1986) 21, 348-50
- 294 Atom probe field-ion microscopy of conventionally cast and melt-spun nickel aluminide alloys containing boron and hafnium Sieloff, D. D.
Brenner, S. S.
Burke, M. G. J. de Phys. (1986) 47-C7, 289-93
- 295 Planar magnetron sputtering of titanium nitride on high speed steel Skogsmo, J.
Lindblad, P.
Nordén, H. J. de Phys. (1986) 47-C7, 251-5

Atom Probe Field-Ion Microscopy Bibliography for 1986

- 296 Microanalysis of the interface region between titanium carbide and substrate in CVD coated cemented carbides Skogsmo, J.
Henjered, A.
Nordén, H.
Stjernberg, K.-G. Proc. 2nd Int. Conf. Sci. Hard Mater., Inst. Phys. Conf. Ser., Almond, E. A., Brookes, C. A., and Warren, R., eds., (1986) 75, 767-9, Adam Hilger, Bristol, England and Boston, MA
- 297 Field ion microscopy and atom probe microanalysis Smith, G. D. W. Mat. Characterization Handbook, Metals Handbook (1986) 10(9), 583-602
- 298 Electron-beam microrecorder with field-emission gun Speidel, R.
Benner, G. Optik (Stuttgart) (1986) 73, 138-45
- 299 The measurements of surface migration activation energy for edge positioned atoms of tungsten (011) plane Stepien, Z. M.
Kukulka, J.
Lenkow, W. J. de Phys. (1986) 47-C7, 165-8
- 300 Field-emission properties of the annealed (011) tungsten plane Stepien, Z. M.
Lenkow, W.
Kukulka, J. Acta Univ. Wratislav., Mat., Fiz., Astron. (1986) 48, Surf. Res., Proc. Semin. Surf. Phys., 9th, 1985, 207-11
- 301 The effect of carbon bearing gases and secondary electron bombardment on a liquid metal ion source Sudraud, P.
Orloff, J.
Benassayag, G. J. de Phys. (1986) 47-C7, 381-7
- 302 Determination of path profiles of ions implanted by an atomic probe Suvorov, A. L.
Bobkov, A. F.
Lazarev, N. E. Instrum. Exper. Tech. (1986) 29, 935
- 303 Field-ion microscope with plasma preparation of specimen surface Suvorov, A. L.
Bobkov, A. F.
Zaitsev, S. V.
Kasatkin, V. A. Instrum. Exper. Tech. (1986) 28, 1448
- 304 Ordering of atoms in γ' particles of nickel-15 at. % aluminum alloy by FIM Suzuki, T.
Tachikake, A.
Miyagawa, Y.
Nishi, Y.
Yajima, E. J. de Phys. (1986) 47-C2, 221-5

Atom Probe Field-Ion Microscopy Bibliography for 1986

- 305 On the mechanism of liquid metal ion sources Swanson, L. W.
Kingham, D. R. Appl. Phys. A (1986)
A41, 223-32
- 306 Field-emission microscopy of silicon whiskers Swiech, W.
Zebrowski, J.
Gubernator, W.
Meclewski, R.
Kol'chenko, N. Acta Univ. Wratislav.,
Mat., Fiz., Astron.
(1986) 48, Surf. Res.,
Proc. Semin. Surf.
Phys., 9th, 1985,
199-206
- 307 Field-emission microscopy of the early ordering stages and decomposition of the palladium-copper-silver alloy Syutkin, N. N.
Ivchenko, V. A.
Telegin, A. B.
Volkov, A. Y. Fiz. Met. Metalloved.
(1986) 62, 965-9
- 308 A study of surface segregation of a type 304 stainless steel by atom-probe Takahashi, K.
Ishikawa, Y.
Yoshimura, T.
Nishikawa, O. J. de Phys. (1986) 47-C2, 233-7
- 309 Theoretical approach to field desorption. Tight binding calculation of molecular nitrogen on iron(111) Tomanek, D.
Kreuzer, H. J.
Block, J. H. J. de Phys. (1986) 47-C2, 139-44
- 310 A study of ultra-fast ion reactions with femtosecond time resolution: field dissociation of metal helide ions by atomic tunneling Tsong, T. T. J. de Phys. (1986) 47-C2, 151-5
- 311 Observation of doubly charged diatomic cluster ions of a metal Tsong, T. T. J. Chem. Phys. (1986)
85, 639
- 312 Evidence of post field ionization and observation of novel features in the energy distribution of field evaporated ions Tsong, T. T. Surf. Sci. (1986) 177,
593-614
- 313 Evidence of post field ionization and observation of novel features in the energy distribution of field evaporated ions Tsong, T. T. J. de Phys. (1986) 47-C2, 11-6
- 314 Femtosecond resolution ultrafast ion reaction time measurement a pulsed-laser field desorption time-of-flight spectroscopy Tsong, T. T. AIP Conf. Proc. (1986)
146, Adv. Laser Sci. - 1, 610-1
- 315 Field dissociation by atomic tunneling of compound ions: isotope and orientational effects Tsong, T. T. J. de Phys. (1986) 47-C2, 81-6

Atom Probe Field-Ion Microscopy Bibliography for 1986

- 316 The time-of-flight atom-probe and its application to surface analysis and gas-surface interactions Tsong, T. T. Chem. and Phys. of Solid Surf. VI, Vanselow, R. and Howe, R., eds., Springer-Verlag, New York (1986), 285
- 317 Analysis of solid surfaces using a pulsed-laser time-of-flight atom-probe Tsong, T. T. Liu, Y. McLane, S. B. AIP Conf. Proc. (1986) 146, Adv. Laser Sci. - I, 732-3
- 318 Study of lath boundaries in tempered Mo steel Uemori, R. Tanino, M. J. Inst. Metals (Annual Meeting 1986), 508
- 319 Some applications of atom probe-field ion microscope to ferrous materials Uemori, R. Tanino, M. Bull. Jpn. Inst. Metals (1986) 25, 222
- 320 Boron and phosphorus ion emissions from a copper-phosphorus-platinum-boron liquid metal ion source Umemura, K. Ishitani, T. Tamura, H. Jpn. J. Appl. Phys., Part 2 (1986) 25, L885-7
- 321 Liquid metal ion source study of bismuth (Bi_nP^+) ions ($n/p \leq 14$, $p \leq 4$) Van de Walle, J. Joyes, P. J. de Phys. (1986) 47-C7, 371-4 and C. R. Acad. Sci., Ser. 2 (1986) 303, 653-6
- 322 Performance of silicon cold cathodes Van Gorkom, G. G. P. Hoeberichts, A. M. E. J. Vac. Sci. Technol. B (1986) 4, 108-11
- 323 Carbon on platinum: investigations by field emission microscopy Vanselow, R. Mundschau, M. J. de Phys. (1986) 47-C7, 117-9
- 324 Nucleation and orientation of graphite(0001) layers on platinum(110) Vanselow, R. Mundschau, M. Surf. Sci. (1986) 176, 701-8
- 325 Surface segregation on platinum studied by FEM and high-resolution AES Vanselow, R. Mundschau, M. Acta Univ. Wratislav., Mat., Fiz., Astron. (1986) 48, Surf. Res., Proc. Semin. Surf. Phys., 9th, 1985, 15-23
- 326 Photofield emission spectroscopy of surface electronic states of tungsten Venus, D. Lee, M. J. G. Surf. Sci. (1986) 172, 477-95
- 327 High-temperature field evaporation of thermal-field microprotrusions Vlasov, Y. A. Pavlov, V. G. Shrednik, V. N. Pis'ma Zh. Tekh. Fiz. (1986) 12, 548-52

Atom Probe Field-Ion Microscopy Bibliography for 1986

- 328 Field evaporation of iron and niobium in neon and hydrogen Wada, M.
Akaiwa, N.
Irumata, S.
Mori, T. J. de Phys. (1986) 47-
C7, 21-6
- 329 Effect of field-evaporation rate on quantitative atom-probe analysis Wagner, A.
Seidman, D. N. J. de Phys. (1986) 47-
C2, 415-24
- 330 The application of APFIM to early-state decomposition of the superalloy Nimonic PE16 Wagner, W.
Hein, W.
Degischer, H. P.
Wahl, R. P.
Wollenberger, H. Microbeam Anal. (1986)
21, 375-7
- 331 Extended depth profiling with the IAP Walck, S. D.
Buyuklimanli, T.
Hren, J. J. J. de Phys. (1986) 47-
C2, 451-8
- 332 FIM/IAP depth profiling of nitrogen-implanted field emitters Walck, S. D.
Hren, J. J. Microbeam Anal. (1986)
21, 361-2
- 333 Depth profiling of low energy ions implanted into metals using the field ion microscope/imaging atom probe Walck, S. D. (1986) 329, Univ.
Microfilms Int., Order
No. DA8704226
- 334 Recent developments in the application of liquid metal ion sources to SIMS Waugh, A. R.
Bayly, A. R.
Walls, M.
Vohralik, P.
Fathers, D. J. de Phys. (1986) 47-
C2, 133-6
- 335 Photon induced field desorption of hydrogen and noble gases from tungsten Weigmann, U.
Jaenicke, S.
Pitts, R.
Drachsel, W.
Block, J. H. J. de Phys. (1986) 47-
C2, 145-9
- 336 "Atom-probe field-ion microscopy of the decomposition of copper-2.7 at. % cobalt". Reply Wendt, H.
Haasen, P.
Al-Kassab, T.
Alvensleben, L. v.
Grüne, R.
Hütten, A.
Öhring, M. Scr. Metall. (1986) 20,
1311-2
- 337 Direct imaging of reconstructed iridium surfaces in the field ion microscope Witt, J.
Müller, K. J. de Phys. (1986) 47-
C7, 29-34
- 338 Direct observation of reconstructed surfaces in the field ion microscope Witt, J.
Müller, K. Appl. Phys. A (1986)
A41, 103-6

Atom Probe Field-Ion Microscopy Bibliography for 1986

- 339 Evidence for the iridium(100) surface reconstruction by field-ion microscopy Witt, J.
Müller, K. Phys. Rev. Lett. (1986)
57, 1153-6
- 340 Computer-aided measurement of FIM intensities Witt, J.
Müller, K. J. de Phys. (1986) 47-
C2, 465-70
- 341 Temperature dependence of the chemical properties of platinum-rhodium surfaces Wolf, R. M.
Dees, M. J.
Nieuwenhuys, B. E. J. de Phys. (1986) 47-
C7, 419-24
- 342 The quantitative analysis of copper in iron-based alloys Worrall, G. M.
Smith, G. D. W. J. de Phys. (1986) 47-
C2, 245-50
- 343 I. Field-induced hot-electron emission (FIHEE) from MIM microstructures Xu, N. S.
Latham, R. V. J. de Phys. (1986) 47-
C2, 67-72
- 344 II. Thermal and photo-assisted hot-electron emission from MIM microstructures Xu, N. S.
Latham, R. V. J. de Phys. (1986) 47-
C2, 73-7
- 345 A spatially resolved energy analysis of field-induced hot-electron emission (FIHEE) from MIM microstructures Xu, N. S.
Latham, R. V. J. de Phys. (1986) 47-
C7, 95-9
- 346 FIM observation of iron particles in copper - 1.5 wt. % iron alloy Yuchi, Y.
Wada, M.
Mori, T. J. de Phys. (1986) 47-
C7, 41-5
- 347 A model for strong field ionization Zakrzewski, J.
Zyczkowski, K. Acta Phys. Pol., A
(1986) A70, 807-10
- 348 An atom probe study of the decomposition of iron-chromium-cobalt permanent magnet alloys Zhu, F.
Haasen, P.
Wagner, R. Acta Metall. (1986) 34,
457-63
- 349 Field-ion microscopy and atom probing of Guinier-Preston zones and γ'' precipitates in copper-2.1 wt. % beryllium Zhu, F.
Mertens, P.
Wollenberger, H. Z. Metallkd. (1986) 77,
1-5
- 350 Experimental investigation of energy broadening in thermal field emission electron beams Zinzindohoue, P. Optik (Stuttgart) (1986)
74, 131-3

1987

Atom Probe Field-Ion Microscopy Bibliography for 1987

- 1 Dissociation and rearrangements of molecular ions of sulfides, sulfoxides, and sulfones generated by a strong electric field Aleksankin, M. M.
Samchenko, I. P.
Fileleeva, L. I.
Nazarenko, V. A.
Pokrovskii, V. A.
Topchii, V. A. Teor. Eksp. Khim. (1987) 23, 172-81
- 2 Atom probe microanalysis of the gold-gallium arsenide interface Andrén, H.-O J. de Phys. (1987) 48-C6, 463-8
- 3 Laser-stimulated field desorption of molecular ions Antonov, V. S.
Letokhov, V. S.
Moskovets, E. V. Poverkhnost (1987) 44-50
- 4 Zinc and silicon ion emission from gold-zinc-silicon liquid metal ion source Arimoto, H.
Miyauchi, E.
Hashimoto, H. Jpn. J. Appl. Phys., Part 2 (1987) 26, L253-4
- 5 Effects of ambient gases on ion emission stability of liquid-metal ion sources Arimoto, H.
Miyauchi, E.
Hashimoto, H. J. Vac. Sci. Technol. B (1987) 5, 1368-71
- 6 Energy distribution of ion beam from various liquid metal ion sources Arimoto, H.
Miyauchi, E.
Hashimoto, H.
Komuro, M. J. de Phys. (1987) 48-C6, 147-52
- 7 Recent results of modeling of statistic characteristics of semiconductor field emission Bakhtizin, R. Z.
Ghots, S. S.
Chernin-Yakhnuk, I. M. J. de Phys. (1987) 48-C6, 203-9
- 8 Investigation of the high-energy edge of the field-electron distribution with respect to total energies from tungsten Bakhtizin, R. Z.
Yumaguzin, Y. M. Poverkhnost (1987) 51-5
- 9 Inelastic energy losses at electron tunneling through potential barriers Bakhtizin, R. Z.
Valeyev, V. G.
Kukharenko, Y. A. J. de Phys. (1987) 48-C6, 21-26
- 10 Gallium clusters from a liquid metal ion source Barr, D. L. J. Vac. Sci. Technol. B (1987) 5, 184-9
- 11 Surface diffusion of potassium on the tungsten (112) plane: analysis of field emission density functions Beben, J.
Kleint, C.
Meclewski, R. Z. Phys. B, Condens. Matter (1987) 69, 319-26
- 12 Anisotropy in surface diffusion of potassium on the W(112) region Beben, J.
Kleint, C.
Meclewski, R. J. de Phys. (1987) 48-C6, 545-50

Atom Probe Field-Ion Microscopy Bibliography for 1987

- 13 Investigation of thermal field microprotrusions in a field emission microscope with an energy analyzer Belogurov, S. V.
Ivanov, V. A.
Kirsanova, T. S.
Popov, V. A.
Tumareva, T. A. Poverkhnost (1987)
22-6
- 14 Close-spaced ion emission from gold and gallium liquid metal ion source Ben Assayag, G.
Sudraud, P.
Swanson, L. W. Surf. Sci. (1987) 181,
362-9
- 15 Combined atom-probe and electron microscopy characterization of fine scale structures in aged primary coolant pipe stainless steel Bentley, J.
Miller, M. K. Mater. Res. Soc. Symp.
Proc. (1987) 82,
Charact. Def. Mater.,
163
- 16 Evidence of electronic shell structure in rubidium clusters (Rb_N^+ ($N = 1-100$)) produced in a liquid-metal ion source Bhaskar, N. D.
Frueholz, R. P.
Klimcak, C. M.
Cook, R. A. Phys. Rev. B, Condens.
Matter (1987) 36,
4418-21
- 17 Ion milled tips for scanning tunneling microscopy Biegelsen, D. K.
Ponce, F. A.
Tramontana, J. C.
Koch, S. M. Appl. Phys. Lett. (1987)
50, 696-8
- 18 Field emission current fluctuations from clean tungsten field emitters in the built-up state Biernat, T.
Kleint, C. Appl. Surf. Sci. (1987)
27, 411-22
- 19 The application of atom probe in the study of nickel based superalloys Blavette, D.
Menand, A.
Bostel, A. Advanced Materials and
Processing Techniques
for Structural
Applications (1987)
- 20 On field emission from ultrathin films of semiconductors with effects of image forces Bose, M. K.
Majumdar, C.
Maity, A. B.
Chakravarti, A. N. Phys. Status Solidi B
(1987) 143, 113-20
- 21 Theoretical study of the stability of 5d dimers on W(211) and Ta(211) Bourdin, J. P.
Desjonquieres, M. C.
Ganachaud, J. P.
Spanjaard, D. Surf. Sci. (1987) 172,
L77-83
- 22 Comparison of TEM and APFIM in microstructural characterization and interpretation: an overview Burke, M. G.
Miller, M. K. J. Electron Microsc.
Technique (1987) 8,
201-13
- 23 Performance comparison of electrostatic lenses for field emission ion and electron sources Burghard, R. A.
Swanson, L.
Orloff, J. J. Vac. Sci. Technol. A
(1987) 5, 364-71

Atom Probe Field-Ion Microscopy Bibliography for 1987

- 24 Liquid metal ion sources. Mechanism of ionization. Experimental and theoretical studies of plasma of the liquid metal ion source
Burmii, Z. P.
Sikharulidze, G. G.
Vysokochist. Veshchestva (1987) 180-5
- 25 Atom probe analysis of solute clustering above a miscibility gap
Camus, P. P.
J. de Phys. (1987) 48-C6, 331-6
- 26 Atom probe FIM studies of β -precipitates in Ni-12 at. % Be alloy
Cao, Y. N.
Liu, Z. G.
Duan, F.
Scr. Metall. (1987) 21, 1201-5
- 27 Resolution of the field ion microscope
Castilho, C. M. C.
Kingham, D. R.
J. Phys. D, Appl. Phys. (1987) 20, 116-24
- 28 The effect of laser pulse shape on mass resolution in the pulsed-laser atom probe
Cerezo, A.
Smith, G. D. W.
J. Phys. E, Sci. Instrum. (1987) 20, 1392-4
- 29 The atom-probe in materials science research
Cerezo, A.
Smith, G. D. W.
Mater. Forum (1987) 10, 104-16
- 30 A FIM/AP investigation of a rapidly solidified aluminium-chromium alloy
Cerezo, A.
Shollock, B. A.
Smith, G. D. W.
J. de Phys. (1987) 48-C6, 287-92
- 31 Atom-probe investigation of the early stages of decomposition in a nickel-base superalloy
Chambreland, S.
Blavette, D.
Bouet, M.
J. de Phys. (1987) 48-C6, 361-6
- 32 Mobile ruthenium oxide species on platinum observed by pulsed field desorption mass spectrometry
Chuah, G. K.
Cocke, D. L.
Kruse, N.
Abend, G.
Block, J. H.
J. Catal. (1987) 108, 268-9
- 33 Electrostatic field effects on intermediates of catalytic surface reactions
Chuah, G. K.
Kruse, N.
Block, J. H.
Abend, G.
J. de Phys. (1987) 48-C6, 493-598
- 34 Long-lifetime, reliable liquid metal ion sources for boron, arsenic, and phosphorus
Clark, W. M., Jr.
Seliger, R. L.
Utlaut, M. W.
Bell, A. E.
Swanson, L. W.
Schwind, G. A.
Jergenson, J. B.
J. Vac. Sci. Technol. B (1987) 5, 197-202

Atom Probe Field-Ion Microscopy Bibliography for 1987

- 35 Low-voltage field emission from tungsten fiber arrays in a stabilized zirconia matrix Cochran, J. K.
Chapman, A. T.
Hill, D. N.
Lee, K. J. *J. Mater. Res.* (1987) 2, 322-8
- 36 Experimental and theoretical results of rectification measurements in an STM Cutler, P. H.
Feuchtwang, T. E.
Huang, Z.
Tsong, T. T.
Nguyen, H.
Lucas, A. A.
Sullivan, T. E. *J. de Phys.* (1987) 48-C6, 97-100
- 37 Power-dependence of strong-field ionization in an N-level system coupled to a continuum Deng, Z. *Physica B+C* (Amsterdam) (1987) 145, 59-68
- 38 Field ionization of the $n = 8-15$ states of sodium Dexter, J. L.
Gallagher, T. F. *Phys. Rev. A, Gen. Phys.* (1987) 35, 1934-6
- 39 Coulomb scattering in field and photofield emission Donders, P. J.
Lee, M. J. G. *Phys. Rev. B, Condens. Matter* (1987) 35, 6578-87
- 40 A tip oscillation phenomenon Drechsler, M.
Maas, A. *J. de Phys.* (1987) 48-C6, 215-8
- 41 Stable necks on metal tips Drechsler, M.
Ramdani, S.
Claverie, A.
Maas, A. *J. de Phys.* (1987) 48-C6, 209-14
- 42 Surface matter transport phenomena studied in situ on metal tips Drechsler, M.
Ramdani, S.
Maas, A. *Surf. Sci.* (1987) 189/190, 1976-84
- 43 Cold-cathode planar displays: the image of the future? Eckertova, L. Vesmir (1987) 66, 149-52
- 44 The local atomic structure of the icosahedral phase probed by field ion microscopy Elswijk, H. B.
Bronsved, P. M.
DeHosson, J. T. M. *J. de Phys.* (1987) 48-C6, 47-52
- 45 Comment on 'Evidence for post field ionization' by T. T. Tsong Ernst, N. *Surf. Sci.* (1987) 185, L511-2
- 46 Transport of a tubular relativistic electron beam through irregular cylindrical and coaxial waveguides in a strong longitudinal magnetic field Fedotov, A. V.
Shkvarunets, A. G. *Fiz. Plazmy (Moscow)* (1987) 13, 1068-74

Atom Probe Field-Ion Microscopy Bibliography for 1987

- 47 Investigation of the liquid metal ion source cluster beam constituents and their role in the properties of the deposited film Francois, M.
Pourrezaei, K.
Bahasadri, A.
Nayak, D. J. Vac. Sci. Technol. B (1987) 5, 178-83
- 48 Characteristics of liquid metal ion source for boron and arsenic Fukuda, H.
Gamo, K.
Namba, S. J. de Phys. (1987) 48-C6, 153-8
- 49 Dynamical image forces in three-layer systems and field emission Gabovich, A. M.
Rozenbaum, V. M.
Voitenko, A. I. Surf. Sci. (1987) 186, 523-49
- 50 Atomic structures of epitaxial overlayers of bcc iron on fcc rhodium surfaces Gao, Q. J.
Tsong, T. T. Surf. Sci. (1987) 191, L787-93
- 51 Direct observation of atomic steps and atomic structures in the reconstruction of Pt and Ir surfaces Gao, Q. J.
Tsong, T. T. J. Vac. Sci. Technol. A (1987) 5, 761
- 52 Emission parameters of low-index surfaces by a combined field and photofield emission method Gaudin, G. A.
Lee, M. J. G. Surf. Sci. (1987) 185, 283-98
- 53 Comment on "Numerical calculation of the temperature distribution and evolution of the field-ion emitter under pulsed and continuous-wave laser irradiation" Gipson, G. S. J. Appl. Phys. (1987) 62, 1510
- 54 Thermal roughening of tungsten surfaces studied by field emission Gong, Y. M.
Gomer, R. J. de Phys. (1987) 48-C6, 15-20
- 55 Phosphorus in antique iron music wire Goodway, M. Science (1987) 236, 927-32
- 56 Sticking probability of CO on an oxygen covered Pd(110) surface under reaction conditions Goschnick, J.
Grunze, M.
Loboda-Cackovic, J.
Block, J. H. Surf. Sci. (1987) 189/190, 137-46
- 57 Effects of the alloying elements Ti, Nb, Mo and V on the grain boundary segregation of P in iron and steels Grabke, H. J.
Moller, R.
Erhart, H.
Brenner, S. S. Surf. Interface Analysis (1987) 10, 202-9
- 58 A silicon field emitter array planar vacuum FET fabricated with microfabrication techniques Gray, H. F.
Campisi, G. J. Mater. Res. Soc. Symp. Proc. (1987) 76, Sci. Technol. Microfabr., 25-30

Atom Probe Field-Ion Microscopy Bibliography for 1987

- 59 Pulsed laser atom probe analysis of semiconductor materials Grovenor, C. R. M. Inst. Phys. Conf. (1987) 87, 665
Cerezo, A.
Liddle, J. A.
Smith, G. D. W.
- 60 Ionization of a classical hydrogen atom by a periodic impulsive electric field Grozdanov, T. P. J. Phys. B, At. Mol. Phys. (1987) 20, 3683-95
Taylor, H. S.
- 61 Virtual level field ionization spectroscopy Gunapala, S. D. Solid State Commun. (1987) 63, 1165-7
Karunasiri, R. P. G.
Coon, D. D.
- 62 Atom probe study of a Ti-10V-2Fe-3Al alloy: preliminary results Hadjadj, L. J. de Phys. (1987) 48-C6, 293-7
Menand, A.
Martin, C.
- 63 Analytical field ion microscopy as a standard method of alloy characterization in physical metallurgy Haasen, P. Z. Metallkd. (1987) 78, 757-66
Piller, J.
- 64 Atom-probe field-ion microscopy of micro-clusters in an Ni₄Mo alloy Hashizume, T. J. de Phys. (1987) 48-C6, 317-22
Yamamoto, M.
Sakurai, T.
- 65 Steady and explosion modes in electron modes in electron emission from liquid metal source Hata, K. J. de Phys. (1987) 48-C6, 177-82
Nishigaki, S.
Inoue, M.
Noda, T.
Tamura, H.
- 66 Stable field emission of electrons from liquid metal Hata, K. Jpn. J. Appl. Phys., Part 2 (1987) 26, L896-8
Ohya, R.
Nishigaki, S.
Tamura, H.
Noda, T.
- 67 Field ionization mass spectrometry of organic plasmas Hayashi, H. J. de Phys. (1987) 48-C6, 247-51
Iwai, H.
Okuyama, F.
- 68 Solute-atom segregation and two-dimensional phases at internal interfaces: atomic resolution observations Herschitz, R. Mater. Res. Soc. Symp. Proc. (1987) 82, Charact. Def. Mater., 415-22
Seidman, D. N.
Brokman, A.
- 69 On the statistical analysis of atom probe data Hetherington, M. G. J. de Phys. (1987) 48-C6, 559-64
Miller, M. K.
- 70 Models of field induced electron emission from electrolytic conductors Hibbert, D. B. J. de Phys. (1987) 48-C6, 3-8

Atom Probe Field-Ion Microscopy Bibliography for 1987

- 71 Development of boron liquid metal ion source for focused ion beam system Higuchi-Rusli, R. H.
Cadien, K. C.
Corelli, J. C.
Steckl, A. J. J. Vac. Sci. Technol. B
(1987) 5, 190-4
- 72 Development of test bed system for high melting temperature alloy fabrication and mass spectroscopy analysis of liquid metal ion beam source Higuchi-Rusli, R. H.
Corelli, J. C.
Steckl, A. J.
Cadien, K. C. J. Vac. Sci. Technol. A
(1987) 5, Pt. 3, 2073-6
- 73 Surface analysis of palladium boride liquid metal ion beam deposition on silicon single-crystal solid surface Higuchi-Rusli, R. H.
Corelli, J. C.
Steckl, A. J.
Jin, H. S. J. Vac. Sci. Technol. A
(1987) 5, Pt. 2, 1362-6
- 74 Atom-probe field-ion microscope studies on age-hardenable aluminum alloys Hirano, K. Mater. Sci. Forum
(1987) 13-14, 215-39
- 75 Atom-probe analysis of G. P. zones in an Al-1.7 at % Cu alloy Hono, K.
Sakurai, T.
Pickering, H. W. J. de Phys. (1987) 48-C6, 349-54
- 76 Initial stages of oxidation of copper and copper-iron alloy Hono, K.
Sakurai, T.
Pickering, H. W. J. de Phys. (1987) 48-C6, 505-10
- 77 Effect of tip size on STM images of graphite Horie, C.
Miyazaki, H. J. de Phys. (1987) 48-C6, 85-90
- 78 An atom probe study of boron segregation to line and planar defects in nickel-aluminum (Ni_3Al) Horton, J. A.
Miller, M. K. Mater. Res. Soc. Symp. Proc. (1987) 81,
High-Temp. Ordered Intermet. Alloys 2,
105-10
- 79 Atom probe analysis of grain boundaries in rapidly solidified Ni_3Al Horton, J. A.
Miller, M. K. Acta Metall. (1987) 35,
133-41
- 80 Field ion microscopy (FIM) and atom probe (AP) investigations of iron-neodymium-boron and related permanent magnets Hütten, A.
Haasen, P. J. Appl. Phys. (1987)
61, Pt. 2A, 3769-71
- 81 FIM-atom probe investigations of melt-spun iron-neodymium-boron ribbons Hütten, A.
Haasen, P. Scr. Metall. (1987) 21,
407-10

Atom Probe Field-Ion Microscopy Bibliography for 1987

- 82 Direct support by spot welding and chemical etching of compound semiconductor whisker Inoue, T.
Nakada, M. J. de Phys. (1987) 48-C6, 595-9
- 83 Impregnated-electrode-type liquid metal ion source Ishikawa, J.
Gotoh, Y.
Tsugi, H.
Takagi, T. Nucl. Instrum. Methods Phys. Res., Sect. B (1987) B21, 186-9
- 84 Field emission effect on the rise time of small spark-gap switches for nitrogen lasers Ishikawa, K.
Muto, S.
Matsuzawa, H.
Suganomata, S. J. Appl. Phys. (1987) 62, 1132-4
- 85 Ion-energy distributions in liquid-metal-ion sources Ishitani, T.
Kawanami, Y.
Ohnishi, T.
Umemura, K. Appl. Phys. A (1987) A44, 233-8
- 86 Movable needle type of liquid-metal-ion sources for boron and phosphorus ions Ishitani, T.
Umemura, K.
Aida, T. J. Vac. Sci. Technol. A (1987) 5, 2907-11
- 87 Ion formation in alloy liquid-metal-ion sources Ishitani, T.
Umemura, K.
Kawanami, Y. J. Appl. Phys. (1987) 61, 748-55
- 88 Singly- and doubly-charged ion formation in liquid-metal-ion sources Ishitani, T.
Umemura, K.
Kawanami, Y. J. de Phys. (1987) 48-C6, 159-64
- 89 New application of metal carbides Ishizawa, Y. Kino Zairyo (1987) 7, 13-20
- 90 Field emission properties of <110>-oriented carbide tips Ishizawa, Y.
Koizumi, M.
Oshima, C.
Otani, S. J. de Phys. (1987) 48-C6, 9-14
- 91 FEM observation of linear adatom clusters Ishizuka, K. J. de Phys. (1987) 48-C6, 537-42
- 92 New low impedance high intensity x-ray generator using field emission for biomedical diagnosis Isobe, H.
Sato, E.
Yanagisawa, T. J. de Phys. (1987) 48-C6, 127-32
- 93 Field-ion images of atoms in an ordered copper-gold (Cu_3Au) alloy doped with platinum, silver, and palladium Ivchenko, V. A.
Syutkin, N. N. Fiz. Tverd. Tela (Leningrad) (1987) 29, 2792-9

Atom Probe Field-Ion Microscopy Bibliography for 1987

- 94 Structure of the superdislocations of a copper-gold alloy in a field ion microscope Ivchenko, V. A.
Syutkin, N. N.
Kuznetsova, L. Y. Fiz. Met. Metalloved.
(1987) 64, 162-9
- 95 Field-ion microscopy of the antiphase boundary Ivchenko, V. A.
Syutkin, N. N.
Kuznetsova, L. Y. Fiz. Met. Metalloved.
(1987) 63, 547-54
- 96 An attempt to image organic molecules with FIM Iwatsu, F.
Morikawa, H.
Terao, T. J. de Phys. (1987) 48
C6, 263-8
- 97 Field-assisted photodesorption of He, Ne, Ar, Kr and CO ions from W Jaenicke, S.
Weigmann, U.
Pitts, J. R.
Drachsel, W.
Block, J. H.
Menzel, D. Chem. Phys. (1987) 115,
381-9
- 98 Magnetic field emission during fracture of ferromagnetic materials Jagasivamani, V. Phys. Lett. A (1987)
123, 37-8
- 99 Field ionization and forced autoionization of diatomic lithium Janik, G. R.
Mullins, O. C.
Mahon, C. R.
Gallagher, T. F. Phys. Rev. A, Gen.
Phys. (1987) 35, 2345-8
- 100 APFIM study of the initial stages of aging in dilute uranium alloys Jenkins, B. A.
Edmonds, D. V. J. de Phys. (1987) 48
C6, 277-82
- 101 Atom probe microanalysis of weld metal in a submerged arc welded chromium-molybdenum steel Josefsson, B.
Kvist, A.
Andrén, H.-O. J. de Phys. (1987) 48
C6, 435-40
- 102 Valence state of cerium (Ce^{n+}) aggregates ($n \leq 10$) deduced from liquid metal ion source experiments Joyes, P.
Van de Walle, J. C. R. Acad. Sci., Ser. 2
(1987) 305, 761-4
- 103 Evidence for structural disorder in the icosahedral phase Kaufman, M. J.
Melmed, A. J. Philos. Mag. (1987) 84,
123
- 104 Surface diffusion and clustering of nickel atoms on the (110) plane of tungsten Kellogg, G. L. Surf. Sci. (1987) 187,
153-64
- 105 Compositional analysis of the rhodium metal-oxide interface by imaging atom-probe mass spectroscopy Kellogg, G. L. Appl. Phys. Lett. (1987)
51, 100-2
- 106 Field ion microscope observations of the reconstruction of platinum and iridium surfaces Kellogg, G. L. J. Vac. Sci. Technol. A
(1987) 5, Pt. 1, 747-50

Atom Probe Field-Ion Microscopy Bibliography for 1987

- 107 Ion signal calibration in the imaging atom-probe with an external, time-gated image intensifier Kellogg, G. L. Rev. Sci. Instrum. (1987) 58, 38-42
- 108 The mobility and structure of nickel atoms on the (100) plane of tungsten Kellogg, G. L. Surf. Sci. (1987) 192, L879
- 109 Pulsed-laser atom probe mass spectroscopy Kellogg, G. L. J. Phys. E: Sci. Instrum. (1987) 20, 125-36
- 110 Field ion microscope studies of surface reconstructions Kellogg, G. L. J. de Phys. (1987) 48-C6, 59-63
- 111 Field desorption of intermediates in the rhodium carbonyl formation reaction Kellogg, G. L. J. de Phys. (1987) 48-C6, 233-8
- 112 Field ion microscopy and imaging atom-probe mass spectroscopy of superconducting $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ Kellogg, G. L.
Brenner, S. S. Appl. Phys. Lett. (1987) 51, 1851
- 113 Metal-semiconductor interface Kim, H.
Okuno, K.
Sakurai, T. J. de Phys. (1987) 48-C6, 469-72
- 114 Ordering and disordering phenomena at/near the surface of DI_a type ordering alloys Kingetsu, T.
Yamamoto, M.
Nenno, S. J. de Phys. (1987) 48-C6, 373-8
- 115 Investigation of the structure of cerium films in a field emission microscope Kirsanova, T. S.
Tumareva, T. A.
Klimin, A. A.
Mirintsov, E. P. Poverkhnost (1987), 141-4
- 116 Field-emission electron statistics of tungsten and niobium at helium temperature Kocheryzhenkov, A. V.
Maslov, V. I.
Fursei, G. P. Fiz. Tverd. Tela (Leningrad) (1987) 29, 2471-2
- 117 Impurity segregation of stainless steel studied by atom-probe and Auger electron spectroscopy Koguchi, Y.
Takahashi, K.
Ishikawa, Y. J. de Phys. (1987) 48-C6, 411-6
- 118 Precise measurement of energy distribution in Ga LMIS Komuro, M.
Kato, T. J. de Phys. (1987) 48-C6, 141-6
- 119 Study of lanthanum on tungsten field emitter II Kozlowski, G.
Surma, S. J. de Phys. (1987) 48-C6, 27-31

Atom Probe Field-Ion Microscopy Bibliography for 1987

- 120 A comparative study of B2 - DO_3 ordered iron-aluminum alloys using atom probe-field ion microscopy and transmission electron microscopy Krause, H. J.
Wittig, E.
Frommeyer, G. Z. Metallkd. (1987) 78, 576-81
- 121 Microstructure investigations of metal surfaces with the field ion microscope and atom probe Krautz, E. Proc. Int. Conf., Aachen (1987) 3, 104-7
- 122 Field ion microscopy of lattice defects in metallic crystals Krautz, E. Optik (Stuttgart) (1987) 77, 35-8
- 123 Felionenmikroskopische Beiträge zur oberflächenforschung von metallen Krautz, E.
Haiml, G. Beitr. Elektronenmikroskop. Direktabb. Oberfl. (1987) 20, 137-46
- 124 Field evaporation Kreuzer, H. J.
Nath, K. Surf. Sci. (1987) 183, 591-608
- 125 Elemental steps during the catalytic decomposition of NO over stepped single crystal surfaces of platinum and ruthenium Kruse, N.
Block, J. H. Proc. Int. Symp. on Catalysis and Automotive Pollution Control, Brüssel/Belgien, Crucq, A. and Frennet, A., eds., Elsevier Sci., Amsterdam (1987), 173-86
- 126 Decomposition of methanol over Rh and Ru Kruse, N.
Chuah, G.-K.
Abend, G.
Cocke, D. L.
Block, J. H. Surf. Sci. (1987) 189/190, 832-41
- 127 Tip aspect dependence in angular confinement of electron emission from titanium/tungsten <001> field emitter Kuroda, K.
Hosoki, S.
Komoda, T. J. Electron Microsc. (1987) 36, 151-6
- 128 Field ion microscopic observation of ordering process in a CuPt alloy Kuwano, N.
Umeda, M.
Mukai, A.
Kawahara, N.
Oki, K. J. de Phys. (1987) 48-C6, 391-5
- 129 Dislocation-field mechanism of the electron and positive ion emission from the lithium fluoride single crystal fracture surface Lipson, A. G.
Kuznetsov, V. A.
Sakov, D. M.
Klyuev, V. A.
Toporov, Y. P.
Deryagin, B. V. Dokl. Akad. Nauk SSSR (1987) 294, 1161-4
(Phys. Chem.)

Atom Probe Field-Ion Microscopy Bibliography for 1987

- 130 Comment on "Numerical calculation of the temperature distribution and evolution of the field-ion emitter under pulsed and continuous-wave laser irradiation" Liu, H. F.
Tsong, T. T. J. Appl. Phys. (1986) 59, 1334
- 131 Reply to "Comment on 'Numerical calculations of the temperature distribution and evolution of the field-ion emitter under pulsed and continuous-wave laser irradiation' [J. Appl. Phys. 59, 1334 (1986)]" Liu, H. F.
Tsong, T. T. J. Appl. Phys. (1987) 62, 1511
- 132 Growth of well ordered rhodium overlayers on silicon surfaces: a field ion microscope study Liu, H. M.
Liu, H. F.
Tsong, T. T. Surf. Sci. (1987) 172, L71-6
- 133 Atomic structures of silicon surfaces and silicon-silicide interfaces Liu, H. M.
Tsong, T. T. Mater. Res. Soc. Symp. Proc. (1987) 94, Initial Stages Epitaxial Growth, 157-62
- 134 Atomic structures of several silicon surfaces: a direct field ion microscope observation Liu, H. M.
Tsong, T. T. J. Appl. Phys. (1987) 62, 1532-4
- 135 Direct observation of atomic structures and reconstructions of silicon surfaces: a field-ion-microscope study Liu, H. M.
Tsong, T. T.
Liou, Y. Phys. Rev. Lett. (1987) 58, 1535-7
- 136 Methanation on rhodium surfaces at low pressure and low temperature: a pulsed-laser imaging atom-probe study Liu, W.
Bao, C. L.
Ren, D. M.
Tsong, T. T. Surf. Sci. (1987) 180, 153-68
- 137 Chemisorption of CO and methanation on Rh surfaces at low temperature and low pressure, an atom-probe FIM study Liu, W.
Ren, D. M.
Bao, C. L.
Tsong, T. T. J. de Phys. (1987) 48-C6, 487-92
- 138 The microstructure of the precipitates in a Ni-Be alloy, as studied with atom-probe FIM Liu, Z. G.
Cao, Y. N.
Feng, D. J. de Phys. (1987) 48-C6, 343-8
- 139 Effect of size quantization on field emission from ultrathin films of degenerate wide-gap semiconductors Majumdar, C.
Bose, M. K.
Maity, A. B.
Chakravarti, A. N. Phys. Status Solidi B (1987) 141, 435-9
- 140 Angular resolved energy analysis of $^{69}\text{Ga}^+$ ions from a gallium liquid metal ion source Marriott, P. J. de Phys. (1987) 48-C6, 189-94

Atom Probe Field-Ion Microscopy Bibliography for 1987

- 141 FIM and atom-probe study of polymers Maruyama, T.
Hasegawa, Y.
Nishi, T.
Sakurai, T. J. de Phys. (1987) 48-C6, 269-74
- 142 Calculation of electrostatic lens system for liquid metal ion sources Mayer, H. P.
Gaukler, K. H. Optik (Stuttgart) (1987) 77, 129-34
- 143 Surface chemical changes of platinum-rhodium alloy catalysts during pretreatment and operation in ammonia oxidation McCabe, A. R.
Smith, G. D. W. "Precious Metals 1987"
Proc. 11th Intl. Precious Metals Inst. Conf., Brussels (1987), Vermeylen, G. and Verbreck, R., eds., I.P.M.I., Allentown, PA (1987), 607-18
- 144 Theory of field evaporation of the surface layer in jellium and other metals McMullen, E. R.
Perdew, J. P. Phys. Rev. B, Condens. Matter (1987) 36, 2598-606
- 145 BCC and FCC forms of Eu epitaxially grown on Re surfaces Melmed, A. J.
Maurice, V.
Frank, O.
Block, J. H. J. Crystal Growth (1987) 84, 123
- 146 Nucleation and growth of Cr on stepped surfaces with facets An FEEM study Melmed, A. J.
Shinn, N. D. J. de Phys. (1987) 48-C6, 33-8
- 147 Field ion microscopy and atom probe in metallurgy Menand, A.
Blavette, D. Spectra 2000 (1987) 118, 31-8
- 148 A study of precipitation in titanium-3% copper and titanium-3% copper-3% aluminum alloys by TEM and atom probe Menand, A.
Hadjadj, L.
Vassel, A. Scr. Metall. (1987) 21, 1295-300
- 149 The effects of local magnification and trajectory aberrations on atom probe analysis Miller, M. K. J. de Phys. (1987) 48-C6, 565-70
- 150 Determination of the site occupation probability and the degree of order by APFIM Miller, M. K. J. Microsc. (Oxford) (1987) 147, 159-67
- 151 Ultrahigh resolution chemical analysis with the atom probe Miller, M. K. Int. Materials Reviews (1987) 32, 221-40
- 152 The distribution of palladium in a Pd-modified 4130 steel Miller, M. K.
Brenner, S. S.
Burke, M. G. Metall. Trans. A (1987) 18A, 519

Atom Probe Field-Ion Microscopy Bibliography for 1987

- 153 Characterization of irradiated A533B pressure vessel steel weld Miller, M. K.
Burke, M. G. J. de Phys. (1987) 48-C6, 429-34
- 154 Characterization of irradiated model pressure vessel steels Miller, M. K.
Hoelzer, D. T.
Ebrahimi, F.
Hawthorne, J. R.
Burke, M. G. J. de Phys. (1987) 48-C6, 423-8
- 155 Direct observation of boron segregation to line and planar defects in Ni₃Al Miller, M. K.
Horton, J. A. J. de Phys. (1987) 48-C6, 379-84
- 156 Site occupation determinations in nickel-aluminum (Ni₃Al) by atom probe Miller, M. K.
Horton, J. A. Mater. Res. Soc. Symp. Proc. (1987) 81, High-Temp. Ordered Intermet. Alloys 2, 117-22
- 157 Ordering in Ni₄Mo: an APFIM/TEM/HVEM study Miller, M. K.
Kenik, E. A.
Zagula, T. A. J. de Phys. (1987) 48-C6, 385-90
- 158 Liquid metal ion sources as thrusters for electric space propulsion Mitterauer, J. J. de Phys. (1987) 48-C6, 171-6
- 159 Asymmetric atomic images of STM resulting from probing tips Mizutani, W.
Tokumoto, H.
Bando, H.
Shigeno, M.
Tanaka, M.
Onon, M.
Kajimura, K. J. de Phys. (1987) 48-C6, 73-8
- 160 An improvement of a tip preparation technique Morikawa, H.
Goto, K.
Iwatsu, F.
Terao, T. J. de Phys. (1987) 48-C6, 589-94
- 161 FIM observation on dilute Mo alloys Morikawa, H.
Teramoto, K.
Kohyama, A.
Terao, T.
Yashiro, Y. Bull. Nagoya Inst. Technol. (1987) 38, 233-7
- 162 Field emission from a new type of electron source Mousa, M. S. J. de Phys. (1987) 48-C6, 109-14
- 163 Study of field induced hot-electron emission using the composite microemitters with varying dielectric layer thickness Mousa, M. S. J. de Phys. (1987) 48-C6, 115-20

Atom Probe Field-Ion Microscopy Bibliography for 1987

- 164 Iridium surface reconstruction: a field ion microscopy study Müller, K.
Witt, J.
Schuetz, O. J. Vac. Sci. Technol. A (1987) 5, Pt. 1, 757-60
- 165 34th Int'l Field Emission Symposium, Osaka, Japan, 1987, J de Phys. (1987) 48-C6 Nakamura, S.
Nishikawa, O.
Miller, M. K.
Editors (1987) Les Editions de Physique, Les Ulis, France
- 166 Current-voltage characteristics of gold/gallium arsenide antimonide/gallium arsenide structures in light of the fluctuation theory of thermally stimulated field emission in Schottky barriers Nazhmudinov, K. G.
Polyanskaya, T. A. Fiz. Tekh. Poluprovodn. (Leningrad) (1987) 21, 1737-44
- 167 Atom-probe study of absorbed hydrogen in niobium Okuno, K.
Oida, K.
Yamashita, H.
Nishikawa, O. J. de Phys. (1987) 48-C6, 481-6
- 168 Atom-probe study of Al-Nb interfaces Okuno, K.
Yamashita, H.
Oida, K.
Nishikawa, O. J. de Phys. (1987) 48-C6, 511-6
- 169 Formation of tungsten borides studied by field ion microscopy Ohmae, N.
Nakamura, A.
Koike, S.
Umeno, M. J. Vac. Sci. Technol. A (1987) 5, Pt. 2, 1367-70
- 170 Effect of oxygen adsorption on adhesion of tungsten to gold studied by field ion microscopy Ohmae, N.
Umeno, M.
Tsubouchi, K. ASLE Trans. (1987) 30, 409-18
- 171 Ion beam generation by field ionization of laser-excited Rydberg atoms Oomori, T.
Ono, K.
Fujita, S.
Murai, Y. Appl. Phys. Lett. (1987) 50, 71-3
- 172 Comparison of optical design approaches for use with liquid metal ion sources Orloff, J. J. Vac. Sci. Technol. B (1987) 5, 175-7
- 173 Atom-probe analysis of G-P zones and precipitate composition in AlZnMg alloys Ortner, S. R.
Grovenor, C. R. M.
Smith, G. D. W. J. de Phys. (1987) 48-C6, 355-60

Atom Probe Field-Ion Microscopy Bibliography for 1987

- 174 Chemical composition of G.P. zones in Al-Ag alloys Osamura, K.
Nakamura, T.
Kobayashi, A.
Hashizume, T.
Sukurai, T. Scr. Metall. (1987) 21,
255-8
- 175 Electron tunneling used as a probe of protein adsorption at interfaces Panitz, J. A. ACS Symp. Ser. (1987)
343, Proteins
Interfaces, 422-34
- 176 Surface imaging by carbon monoxide field desorption Panitz, J. A.
Hren, J. J. J. Vac. Sci. Technol. A
(1987) 5, Pt. 2, 1032-5
- 177 Emission characteristics of liquid Pr ion sources Papadopoulos, S. J. de Phys. (1987) 48-C6, 195-200
- 178 Study on amorphous Ni_{77.5}Si_{7.9}B_{14.6} alloy by FIM and atom probe Park, T. S.
Chae, K. S.
Lee, W. S.
Lee, W. H. Sae Mulli (1987) 27,
278-83
- 179 Field emission microscopy of alloys: avtoionnaya mikroskopiya splavov Potapov, L. P.
Potapova, O. A. Metallu, Moscow,
USSR (1987) 191
- 180 A study of adsorption and diffusion of hydrogen in an austenitic stainless steel by AP-FIM Ren, D. M. J. de Phys. (1987) 48-C6, 453-8
- 181 Composition depth profiles of PtRh alloys in surface segregation and cosegregation with sulfur impurities Ren, D. M.
Tsong, T. T. Surf. Sci. (1987) 184,
L439-44
- 182 Field ion emission from liquid solutions: ion evaporation against electrohydrodynamic disintegration Röllgen, F. W.
Bramer-Weger, E.
Bütfering, L. J. de Phys. (1987) 48-C6, 252-6
- 183 Mass and energy spectra of a capillary-type indium liquid-metal ion source Ruedenauer, F. G.
Steiger, W.
Studnicka, H.
Pollinger, P. Int. J. Mass Spectrom.
Ion Processes (1987)
77, 63-74
- 184 Electron beam direct writing technology: system and process Saitou, N.
Okazaki, S.
Nakamura, K. Solid State Technol.
(1987) 30, 65-70
- 185 Field ion microscopy and the time-of-flight atom probe Sakurai, T.
Hasegawa, Y. Kotai Butsuri (1987) 22,
101-8

Atom Probe Field-Ion Microscopy Bibliography for 1987

- | | | | |
|-----|---|---|--|
| 186 | Combined field ion and scanning tunneling microscope | Sakurai, T.
Hashizume, T.
Kamiya, I.
Hasegawa, Y.
Sakai, A.
Kobayashi, A.
Matsui, J.
Takahashi, S.
Kono, E.
Watanabe, H. | J. de Phys. (1987) <u>48-C6</u> , 79-84 |
| 187 | Investigation of sulphur adsorption and growth on tungsten by field emission microscopy | Saleh, J. M. | J. de Phys. (1987) <u>48-C6</u> , 475-80 |
| 188 | Precipitation process of Al-Sc alloys | Sano, N.
Hasegawa, Y.
Hono, K.
Jo, H.
Hirano, K.
Pickering, H. W.
Sakurai, T. | J. de Phys. (1987) <u>48-C6</u> , 337-42 |
| 189 | Kinetics of spinodal reaction in the ferrite phase of a duplex stainless steel | Sassen, J. M.
Hetherington, M. G.
Godfrey, T. J.
Smith, G. D. W.
Pumphrey, P. H.
Akhurst, K. N. | Properties of Stainless Steels in Elevated Temperature Service (1987) Prager, M., ed., 65-78, Pub. Amer. Soc. Mech. Eng. |
| 190 | Repetitional type of field emission x-ray source having variable spectra | Sato, E.
Isobe, H.
Yanagisawa, T. | J. de Phys. (1987) <u>48-C6</u> , 121-6 |
| 191 | Control methods for the field emission x-ray spectra and their applications | Sato, E.
Isobe, H.
Yanagisawa, T. | J. de Phys. (1987) <u>48-C6</u> , 133-8 |
| 192 | Ion current characteristics of Ar field ionization source | Sato, M. | J. de Phys. (1987) <u>48-C6</u> , 183-8 |
| 193 | GP-zone of molybdenum in steel revealed by FIM-AP | Sato, S.
Nishikawa, O.
Igata, N. | J. de Phys. (1987) <u>48-C6</u> , 441-6 |
| 194 | Field-ion energy spectroscopy of gold overlayers on silicon | Schmidt, W. A.
Melmed, A. J.
Lovisa, M. F.
Naschitzki, M.
Block, J. H. | J. de Phys. (1987) <u>48-C6</u> , 461 |

Atom Probe Field-Ion Microscopy Bibliography for 1987

- 195 Studies of negative field ion microscopy with tetracyanoethylene Schmitz, R.
Okuyama, F.
Röllgen, F. W. J. de Phys. (1987) 48-C6, 257-62
- 196 Theoretical study of the field induced desorption Shima, N.
Tsukada, M. J. de Phys. (1987) 48-C6, 221-6
- 197 FIM/atom probe studies of boron-doped and alloyed nickel-aluminum (Ni_3Al) Sieloff, D. D.
Brenner, S. S.
Burke, M. G. Mater. Res. Soc. Symp. Proc. (1987) 81, High-Temp. Ordered Intermet. Alloys II, 87-97
- 198 Liquid metal ion sources. Mechanism of ionization. Mechanism of ionization during positive polarity of the emitter of a liquid metal ion source Sikharulidze, G. G.
Burmii, Z. P. Vysokochist. Veshchestva (1987) 171-9
- 199 On the feasibility of observing electron antibunching in a field-emission beam Silverman, M. P. Phys. Lett. A (1987) 120, 442-6
- 200 Microanalysis of the interface region between titanium carbide and substrate in CVD coated cemented carbides Skogsmo, J.
Henjered, A.
Nordén, H.
Stjernberg, K. G. Refractory and Hard Materials (1987) 6, 84-8
- 201 Quantitative study of solid state reactions by atom probe microanalysis Smith, G. D. W. J. de Phys. (1987) 48-C6, 517-22
- 202 A FIM/atom probe study of phase transformations in molybdenum steels Stark, I.
Smith, G. D. W. J. de Phys. (1987) 48-C6, 447-52
- 203 Field ion microscopy of 180-230 keV Xe^+ ion damage in tungsten Stiller, K. Rad. Effects (1987) 105, 53-71
- 204 Secondary hardening in high speed steels Stiller, K.
Karagöz, S.
Andréen, H.-O.
Fischmeister, H. J. de Phys. (1987) 48-C6, 405-10
- 205 Oxidation and the structure of the silicon/oxide interface Stoneham, A. N.
Grovenor, C. R. M.
Cerezo, A. Philos. Mag. B (1987) 55, 201
- 206 High voltage field ion microscope, its design and field calculation Tagawa, M.
Koike, S.
Inoue, N.
Ohmae, N.
Umeno, M. J. de Phys. (1987) 48-C6, 583-8

Atom Probe Field-Ion Microscopy Bibliography for 1987

- 207 Electric field distribution of electron emitter surfaces Tagawa, M.
Takenobu, S.
Omae, N.
Umeno, M. Appl. Phys. Lett. (1987) 50, 545-6
- 208 Microscopy: a means to study surface structures Takayanagi, K.
Tanishiro, Y.
Murooka, K. J. de Phys. (1987) 48-C6, 525-30
- 209 FIM observation on the reaction of metals (W, Mo) with n-octanol under an applied voltage Terao, T.
Iwatsu, F.
Morikawa, H.
Yashiro, Y. J. de Phys. (1987) 48-C6, 499-504
- 210 Reply to "Comment of N. Ernst on 'Evidence of post field ionization' by T. T. Tsong" Tsong, T. T. Surf. Sci. (1987) 185, L513-4
- 211 How atoms move in the (1 x 1) to (1 x 2) surface reconstruction of fcc (110) planes Tsong, T. T.
Gao, Q. Surf. Sci. (1987) 182, L257-62
- 212 (1 x 1) to (1 x 5) Surface reconstruction of iridium(001) by pulsed-laser heating: a field-ion-microscope study Tsong, T. T.
Gao, Q. Phys. Rev. B, Condens. Matter (1987) 35, 7764-6
- 213 Pulsed-laser atom-probe and field-ion microscope study of solid surfaces Tsong, T. T.
Liu, H. M.
Gao, Q. J.
Ren, D. M.
Liou, Y. J. Vac. Sci. Technol. B (1987) 5, 1530-4
- 214 The atomic structure of silicon and metal surfaces Tsong, T. T.
Liu, H. M.
Gao, Q. J.
Feng, D. L. J. de Phys. (1987) 48-C6, 41-6
- 215 Effect of the tip/sample-surface electronic states and the electron-phonon coupling on the tunneling current in STM Tsukada, M.
Shima, N.
Ohnishi, S.
Chiba, Y. J. de Phys. (1987) 48-C6, 91-6
- 216 Direct correlation of ion and electron microscopic images by digital image superpositioning Turner, L. K.
Ling, Y. C.
Bernius, M. T.
Morrison, G. H. Anal. Chem. (1987) 59, 2463-8
- 217 Study of ultrafine precipitates in low alloy steels Uemori, R.
Tanino, M. J. de Phys. (1987) 48-C6, 399-404

Atom Probe Field-Ion Microscopy Bibliography for 1987

- 218 Study of bismuth (Bi_nP^+) ions formed in liquid-metal ion sources Van de Walle, J.
Joyes, P. Phys. Rev. B, Condens. Matter (1987) 35, 5509-13
- 219 Silicon cold cathodes Van Gorkom, G. G. P.
Hoeberechts, A. M. E. Philips Tech. Rev. (1987) 43, 49-57
- 220 Current stability in a liquid-metal ion source Vladimirov, V. V.
Gorshkov, V. N. Zh. Tekh. Fiz. (1987) 57, 2155-63
- 221 Field evaporation of iron in neon and in hydrogen and its rate-controlling processes Wada, M.
Akaiwa, N.
Mori, T. Philos. Mag. A (1987) 55, 389-403
- 222 Orientation of an iron film formed on a spherical copper substrate: an FIM study Wada, M.
Uda, S.
Kato, M. J. de Phys. (1987) 48-C6, 65-70
- 223 Matrix composition of Zircaloy-4 Wadman, B.
Rolander, U.
Andrén, H.-O. J. de Phys. (1987) 48-C6, 299-304
- 224 A high-stability liquid metal ion source Wang, Y.
Zhang, Y.
Zheng, J. Zhenkong Kexue Yu Jishu (1987) 7, 12-7, 53
- 225 A time-of-flight mass spectrometer for SIMS and field ionised neutral analysis using a pulsed LMIS Waugh, A. R.
Kingham, D. R.
Richardson, C. H.
Goff, M. J. de Phys. (1987) 48-C6, 577-82
- 226 Study of the precipitation of copper particles in a ferrite matrix Worrall, G. M.
Buswell, J. T.
English, C. A.
Hetherington, M. G.
Smith, G. D. W. J. Nucl. Materials (1987) 148, 107-14
- 227 Formation and growth of clusters and ultra fine particles on solid surfaces Wu, Q. J. de Phys. (1987) 48-C6, 531-6
- 228 Field ionization of high-lying states of molecular hydrogen Xu, E. Y.
Helm, H.
Kachru, R. Phys. Rev. Lett. (1987) 59, 1096-9
- 229 Line dose dependence of silicon and gallium arsenide removal by a focused gallium ion beam Yamaguchi, H. J. de Phys. (1987) 48-C6, 165-70
- 230 Surface energy and equilibrium shape of L1_2 -type A_3B ordering alloys Yamamoto, M.
Fukada, T.
Nenno, S. J. de Phys. (1987) 48-C6, 323-8

Atom Probe Field-Ion Microscopy Bibliography for 1987

- 231 Atom probe FIM study of short range order in Ni rich Ni-W and Ni-Mo-W alloys Yamamoto, M.
Nenno, S.
Tada, J.
Fukuchi, T. J. de Phys. (1987) 48-C6, 367-72
- 232 Atom probe FIM study of an amorphous Pd-Si alloy Yamamoto, M.
Yao, H.
Nenno, S.
Ohnaka, I.
Furusako, T. J. de Phys. (1987) 48-C6, 311-6
- 233 An atom-probe study of passivated surface of a stainless steel Yoshimura, T.
Koguchi, Y.
Ishikawa, Y. J. de Phys. (1987) 48-C6, 417-22
- 234 Thin wire emitter for field ionization Zahran, N. F.
Hindawi, S. K.
Kamakhy, K. A.
Helal, A. I. Int. J. Mass Spectrom. Ion Processes (1987) 76, 55-63
- 235 Simple model for strong-laser-field ionization Zakrzewski, J.
Zyczkowski, K. Phys. Rev. A, Gen. Phys. (1987) 36, 4311-20
- 236 Photo-field emission from the (211) tungsten plane Zebrowski, J.
Kleint, C. Phys. Lett. A (1987) 121, 463-5
- 237 APFIM and FEM study of Mo-La alloy wire Zhang, Z.-X.
Jiao, J.-T.
Hu, D.-Q. J. de Phys. (1987) 48-C6, 283-6

ADDENDUM

Field-Ion Microscopy and Related Techniques, A Bibliography: 1951-78

1	Field emission [German]	Müller, E. W.	Ergel. Exact. Naturwiss (1951) <u>27</u> , 290
2	Technique of field ion microscopy	Brandon, D. G.	Platinum Metals Review (1962) <u>6</u> (3), 95
3	Field-ion microscope with improved image brightness	Garber, R. I. Dranova, Z.-I. Mikhailovskii, I. M. Chechel'nitskii, G. G.	Instrum. Exp. Tech. (1969) No. 1, 221
4	High-vacuum demountable ion projector for studying radiation damage	Kuznetsov, V. A. Kukavadze, G. M. Suvorov, A. L.	Instrum. Exp. Tech. (1969) No. 2, 435
5	Designs of ion projectors (review)	Suvorov, A. L.	Field-Ion and Electron Projectors (1969) No. 5, 1091
6	Image stability in an ion projector	Suvorov, A. L. Kukavadze, G. M.	Instrum. Exp. Tech. (1969) <u>11</u> (a)
7	A model system for the study of the surface properties of metal powders	Smith, G. D. W. Cranstoun, G. K. L.	Powder Metallurgy (1972) <u>15</u> , 101
8	Some developments in field ion microscopy and its applications	Bassett, D. W.	Surface and Defect Properties of Solids (1973) <u>2</u> , 34-68, Robert, M. W. and Thomas, J. M., eds., The Chemical Soc., London
9	The segregation of chromium to grain boundaries in tungsten	Howell, P. R. Fleet, D. E. Page, T. F. Ralph, B.	Proc. 3rd Int'l. Conf. on Strength of Metals and Alloys (1973) <u>1</u> , 149, The Institute of Metals, London
10	Autoionic microscope with an atomic probe	Mikhailovskii, I. M. Eres'ko, A. P. Kul'ko, V. B.	Instrum. Exp. Tech. (1973) <u>16</u> , 612
11	Solute segregation and grain boundary embrittlement of tungsten	Smith, D. A. Smith, G. D. W.	Proc. 3rd Int'l. Conf. on Strength of Metals and Alloys (1973) <u>1</u> , 144, The Institute of Metals, London

Field-Ion Microscopy and Related Techniques, A Bibliography: 1951-78

- 12 Completely metallic field-emission microscope for research on radiation defects during time of irradiation Bobkov, A. F.
Zabolotnyi, V. T.
Ivanov, L. I.
Kukavadze, G. M.
Mel'nikov, V. N.
Suvorov, A. L. Instrum. Exp. Tech.
(1974) No. 6, 1788
- 13 Autoionic microscopy of metallic coils Garber, R. I.
Geisherik, V. S.
Mikhailovskii, I. M.
Fedorova, L. I. Instrum. Exp. Tech.
(1974) No. 1, 257
- 14 Field ion microscopy of biomolecules Machlin, E. S.
Freilich, A.
Agrawal, D. C.
Burton, J. J.
Briant, C. L. J. Microscopy (1975)
104, 127
- 15 Field emission and field ion microscope study of Ga, In and Sn on W: structure, work function, diffusion and binding energy Nishikawa, O.
Saadat, A. R. Surface Sci. (1976) 60,
301
- 16 Surface analyses at the atomic level using the atom-probe Müller, E. W.
Krishnaswamy, S. V. Metal Surfaces (1977)
1, 21-48, Lee, L.-H.,
ed., Academic Press,
New York

APPENDIX

The reports and dissertations listed in the bibliography may generally be obtained through one of the following agencies:

National Technical Information
U.S. Department of Commerce
5285 Port Royal Road
Springfield, VA 22161 USA

Telephone: (703) 487-4650

University Microfilms Int.
Dissertation Information Service
300 North Zeeb Road
Ann Arbor, MI 48106 USA

Telephone: (800) 521-3042 (Toll Free)
or (313) 761-4700

INTERNAL DISTRIBUTION

- 1-2. Central Research Library
- 3. Document Reference Section
- 4-5. Laboratory Records Department
- 6. Laboratory Records, ORNL RC
- 7. ORNL Patent Section
- 8-10. Metals and Ceramics Records Office
 - 11. Alexander, K B
 - 12. Angelini, P
 - 13. Bentley, J
 - 14. Bloom, E E
 - 15. Emerson, L C
 - 16. Horton, J A
 - 17. Hulett, L D
 - 18. Kenik, E A
 - 19. Mantovani, J G
- 20-24. McDonald, A R
- 25-79. Miller, M K
 - 80. Mørre, K L
 - 81. Russell, K F
 - 82. Spooner, S
 - 83. Stiegler, J O

EXTERNAL DISTRIBUTION

- 84. Dr Ludolf v Alvensleben
Institut für Metallphysik
University of Göttingen
Hopitalstrasse 3/5
D-3400 Göttingen WGermany
- 85. Dr Hans-Olof Andrén
Chalmers University of Technology
Department of Physics
S-412 96 Göteborg Sweden
- 86. Dr Raoulf Z Bakhtizin
Department of Experimental Physics
Physical Faculty
Bashkir State University
450074 Ufa-74 Ul'Frunze 32 USSR
- 87. Dr David L Barr
AT&T Bell Laboratories
600 Mountain Avenue
Rm 1E-463A
Murray Hill NJ 07974 USA

88. Dr Janusz Beben
University of Wroclaw
Institute of Experimental Physics
Cybulskiego 36 50-205
Wroclaw Poland
89. Dr Henri Bergeret
Laboratory de l'Accelerateur Lineaire
Centre d'Orsay Batiment 220
Universite Paris-Sud P 116
91405 Orsay France
90. Dr Didier Blavette
UA 808 CNRS
Laboratory De Microscopie Ionique
UFR Sciences et Techniques
Mont St Aignan 76134 France
91. Prof Jochen H Block
Fritz-Haber Institut MPG
Faradayweg 4-6
D-1000 Berlin 33 WGermany
92. Dr M G Burke
Westinghouse R&D Center
1310 Beulah Road
Pittsburgh PA 15235 USA
93. Dr Patrick P Camus
Institute of Standards and Technology
Surface Science Division
Chemistry / B248
Gaithersburg MD 20899 USA
94. Mr Gary M Carinci
Dept of Materials Science and Eng
Mass Inst of Technology
Room 13-5134
Cambridge MA 02139 USA
95. Dr Alfred Cerezo
Department of Metallurgy
Oxford University
Parks Road
Oxford OX1 3PH Great Britain
96. Dr Gaik-Khuan Chuah
Department of Chemistry
National University of Singapore
10 Kent Ridge Crescent
Singapore 0511 Singapore

97. Dr Antoni Ciszewski
Institute Fur Experimental Physics
University of Wroclaw
Cybulskiego 36
50-205 Wroclaw Poland
98. Dr Catherine J Dalzell
Dept Mathematics & Statistics
Memorial University Newfoundland
St John's A1C 5S7
Newfoundland Canada
99. Dr Caio MC deCastilho
Instituto de Fisica- UFBA
Campus Universitario da Federacao
Salvador 40210
Bahia Brazil
100. Prof Michel Denizart
Laboratoire d'Optique Electronique
29 Rue Jeanne Marvig
31055 Toulouse France
101. Dr Wolfgang Drachsel
Fritz-Haber Institut MPG
Faradayweg 4-6
D-1000 Berlin 33 WGermany
102. Dr Michael Drechsler
CRMC2 CNRS
University d'Aix-Marseille
Campus Luminy Case 913
13288 Marseille France
103. Prof Gert Ehrlich
University of Illinois
Coordinated Science Laboratory
1101 West Springfield Ave
Urbana IL 61801-3082 USA
104. Dr Herman B Elswijk
University of Gronigen
Dept of Applied Physics
Nijenborgh 18 9747 AG
Groningen The Netherlands
105. Dr Norbert Ernst
Fritz-Haber Institut MPG
Faradayweg 4-6
D-1000 Berlin 33 WGermany

106. Dr Michael Fehringer
European Space Agency-ESTEC
Space Science Department-PO Box 299
Noordwijk 2200AG The Netherlands
107. Ms Dongli Feng
Pennsylvania State University
104 Davey Laboratory
University Park PA 16802 USA
108. Dr Richard G Forbes
University of Surrey
Dept of Elect & Elect Eng
Guildford Surrey GU2 5XH
Great Britain
109. Prof Georg H Frommeyer
MPI fur Eisenforschung
Max-Planck-Str 1
D-4000 Dusseldorf 1 WGermany
110. Mr Ricardo Garcia
Dept Fisica Matl Condensed C-III
University Autonoma de Madrid
Cantoblanco 28049
Madrid Spain
111. Dr E I Givargizov
Institute of Crystallography
of Academy of Science of USSR
Leninski Pr 59 Moscow 117333 USSR
112. Dr O L Golubev
AF IOFFE Physico Technology
Academy of Science of USSR
194024 Leningrad USSR
113. Dr Henry F Gray
Code 6844
Naval Research Laboratory
Washington DC 20375 USA
114. Mr Koichi Hata
Dept of Elect & Elect Eng
Toyohashi Univ of Technol
Hibarigaoka Tempaku-Cho
Toyohashi Aichi 440 Japan
115. Dr Mark G Hetherington
Department of Metallurgy
University of Oxford
Parks Road
Oxford OX1 3PH Great Britain

116. Dr Tohru Honda
The Institute of Industrial Science
The University of Tokyo
22-1 Roppongi 7 Chome Minato-ku
Tokyo 106 Japan
117. Prof John J Hren
North Carolina State University
Materials Science & Engineering
Box 7907
Raleigh NC 27695-7907 USA
118. Mr Zhihong Huang
Pennsylvania State University
104 Davey Laboratory Box 142
University Park PA 16802 USA
119. Dr V A Ivchenko
Electrophysics Institute
Ural Division Academy of Science
20 S Kovalevsky Str
Sverdlovsk 620219 USSR
120. Dr Stephan Jaenicke
Fritz-Haber Institut MPG
Faradayweg 4-6
D-1000 Berlin 33 WGermany
121. Dr R Jayaram
North Carolina State University
Materials Science & Engineering
Box 7907
Raleigh NC 27695-7907 USA
122. Mr Bertil Josefsson
Department of Physics
Chalmers University of Technology
S-412 96 Goteborg Sweden
123. Dr Gary L Kellogg
Sandia National Laboratories
Div 1134
PO Box 5800
Albuquerque NM 87185 USA
124. Dr Thomas J Kinkus
Institute of Metal Research
Academia Sinica
Wenhua Road 2-6
Shenyang 110015 PR China

125. Prof Hans J Kreuzer
Department of Physics
Dalhousie University
Halifax NS B3H 3J5 Canada
126. Mr Zonghe Lai
Department of Physics
Chalmers University of Technology
S-412 96 Goteborg Sweden
127. Ms Xia Li
Pennsylvania State University
104 Davey Laboratory
University Park PA 16802 USA
128. Mr Yung Liou
Pennsylvania State University
104 Davey Laboratory Box 142
University Park PA 16802 USA
129. Dr V G Litovchenko
Institute for Semiconductors
Academy of Science of UkrSSR
Prospect Nauki 45 Kiev 28 USSR
130. Mr Jiang Liu
Pennsylvania State University
104 Davey Laboratory Box 199
University Park PA 16802 USA
131. Prof Wu Liu
Physics Department
Huazhong Normal University
Wuhan Hubei PRChina
132. Mr Jean Francois Lizee
CEN Saclay
DPC BP 121
GIF sur Yvette 91191 Cedex
France
133. Dr Marcello F Lovisa
University of Illinois
Coordinated Science Laboratory
1101 West Springfield Ave
Urbana IL 61801-3082 USA
134. Prof Ryszard Meclewski
Institute of Experimental Physics
University of Wroclaw
Cybulskiego 36
50-205 Wroclaw Poland

135. Dr Allan J Melmed
Institute of Standards and Technology
Surface Science Division
Chemistry / B248
Gaithersburg MD 20899 USA
136. Dr Alain Menand
Laboratory de Microscopie Ionique
UA CNRS 808 University de Rouen
Faculte Des Sciences BP 118
Mt St Aignan 76134 France
137. Dr N M Miskovsky
Department of Physics
Pennsylvania State University
104 Davey Laboratory
University Park PA 16802 USA
138. Dr Roger Morin
IBM Zurich Research Laboratory
Saumerstrasse 4
CH-8803 Ruschlikon Switzerland
139. Dr Marwan S Mousa
Department of Natural Sciences
Mu'tah University POBox 7
Mu'tah / Al-Karak Jordan
140. Mr Hung Q Nguyen
Pennsylvania State University
Physics Department
104 Davey Laboratory
University Park PA 16802 USA
141. Prof Osamu Nishikawa
Dept Matl Science and Eng
Tokyo Institute of Technol
4259 Nagatsuta Midori-ku
Yokohama 227 Japan
142. Dr Hans F Nordén
Department of Physics
Chalmers University of Tech
412-96 Göteborg Sweden
143. Dr John A Panitz
Sandia National Laboratories
Laser Prod Div 1275
PO Box 5800
Albuquerque NM 87185 USA

144. Prof Tong-Soo Park
Department of Physics
Kyungpook National University
1370 Sangyukdong North Ku
Taegu 702-010 South Korea
145. Ms Eileen M Perry
Department of Chemistry
Texas A&M University
College Station TX 77843 USA
146. Dr A L Pregenzer
Sandia National Laboratories
Div 1231
PO Box 5800
Albuquerque NM 87185 USA
147. Mr Ulf AS Rolander
Department of Physics
Chalmers University of Technology
412 96 Göteborg Sweden
148. Dr Franz W Röllgen
Institut fur Physik Chemie
Universitat Bonn
Wegelerstrasse 12
D-5300 Bonn WGermany
149. Dr Paul R Schwoebel
Sandia National Laboratories
Division 1134
PO Box 5800
Albuquerque NM 87185 USA
150. Ms Donna Cowell Senft
University of Illinois
Coordinated Science Laboratory
1101 West Springfield Ave
Urbana IL 61801-3082 USA
151. Mr. Gordon M Shedd
Precision Engineering Center
North Carolina State University
Box 7918
Raleigh NC 27695 USA
152. Dr V N Shrednik
Ioffe Physical Technology Institute
of the USSR Academy of Science
Polytekhnicheskaya 26
194021 Leningrad USSR

153. Dr George DW Smith
Department of Metallurgy
University of Oxford
Parks Road
Oxford OX1 3PH Great Britain
154. Mr Capp A Spindt
SRI International
333 Ravenswood Avenue
Menlo Park CA 94025 USA
155. Dr John A Spitznagel
Westinghouse R&D Center
1310 Beulah Road
Pittsburgh PA 15235 USA
156. Dr Krystyna Stiller
Department of Physics
Chalmers University of Tech
41296 Göteborg Sweden
157. Dr Jacob Swens
University of Twente
Faculty of Mechanical Engin
Lab for Material Science
Enschede 7500 AE The Netherlands
158. Prof N N Syutkin
Electrophysics Institute
Ural Division Academy of Science
20 S Kovalevsky Str
Sverdlovsk 620219 USSR
159. Prof Tien T Tsong
Pennsylvania State University
104 Davey Laboratory
University Park PA 16802 USA
160. Ms Boel Wadman
Department of Physics
Chalmers University of Tech
412 96 Göteborg Sweden
161. Mr Goran L Wahlberg
Department of Physics
Chalmers University of Tech
412 96 Göteborg Sweden
162. Prof. Shicai Wang
University of Illinois
Materials Research Laboratory
104 South Goodwin
Urbana IL 61801-3082 USA

163. Mr Fumiya Watanabe
University of Illinois
Coordinated Science Lab 3-136A
1101 West Springfield Ave
Urbana IL 61801-3082 USA
164. Dr Pieter Willemse
University of Twente
Faculty of Mechanical Eng
Laboratory for Material Science
Enschede 7500 AE The Netherlands
175. Dr Ronald M Wolf
Gorlaeus Laboratory
Wassenaarseweg 76
PO Box 9502
2300 RA Leiden The Netherlands
176. Dr Anthony Wong
Gould Inc
Foil Division
35129 Curtis Blvd
Eastlake OH 44094 USA
177. Prof Masahiko Yamamoto
Dept of Matl Science & Engin
Osaka University
2-1 Yamadaoka Suita
Osaka 565 Japan
178. Department of Energy
Oak Ridge Operations Office
Assistant Manager for Energy
Research and Development
PO Box 2001
Oak Ridge TN 37831 USA
- 179-188. Department of Energy
Office of Scientific and
Technical Information
Office of Information Service
PO Box 62
Oak Ridge TN 37831 USA

For distribution by microfiche as shown in DOE/TIC-4500,
Distribution Category UC-404.