DATE ISSUED AUG 8 1983

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SELECTED PUBLICATIONS RELEVANT TO THE SPACE REACTOR MATERIALS PROGRAM

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DEPARTMENT OF ENERGY

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Information Division

SELECTED PUBLICATIONS RELEVANT TO THE SPACE REACTOR MATERIALS PROGRAM

D. C. Michelson, J. M. Fielden, A. C. Jordan, and E. B. Lewis

Space Reactor Materials Information Center
Information Center Complex

NOTICE: This document contains information of a preliminary nature. It is subject to revision or correction and therefore does not represent a final report.

Date of Issue — August 1983

Prepared by the
Oak Ridge National Laboratory
Oak Ridge, Tennessee 37830
operated by
UNION CARBIDE CORPORATION
for the
U.S. DEPARTMENT OF ENERGY
Under Contract No. W-7405-eng-26

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ABSTRACT

This bibliography of nearly 700 citations relevant to space nuclear reactor systems has been prepared by the Space Reactor Materials Information Center of Oak Ridge National Laboratory. Entries are arranged alphabetically by corporate affiliation and indexed by corporate affiliation, author, and permuted title. All references are assigned a relevance number. Plans for further cultivation of this database are outlined.

INTRODUCTION

A key objective of the Space Reactor Materials Symposium is to identify and locate unique materials data needed by the designer, safety analyst, and materials engineer for space nuclear reactor systems. Some of these data exist in the nearly 700 citations provided in this bibliography. These data will become part of a computerized Space Reactor Materials Database as soon as they can be processed. Other relevant data undoubtedly exist in both published and unpublished form. Please review the attached bibliography and supply us with bibliographic citations or, preferably, hard copies of relevant reports issued by your organization. These materials should be sent to the following address:

Space Reactor Materials Information Center
Building 2001, P.O. Box X
Oak Ridge National Laboratory
Oak Ridge, Tennessee 37830

Citation Form and Indexes

Bibliographic citations are arranged alphabetically by corporate affiliation. Within each corporate affiliation group, reports are listed alphabetically by last name of first author. Those reports not yet identified by corporate affiliation are cited at the end of the bibliographic listing. Each reference has been assigned a relevance number; "1" designates very relevant documents; "2" indicates less relevant reports.

Each bibliographic citation is indexed by corporate affiliation, author, and permuted title.

Services

The Space Reactor Materials Information Center plans to provide several services of interest to managers, scientists, and engineers associated with the Space Reactor Materials Project. It is anticipated that a computerized bibliographic database will be accessible by October 1983. By January 1984 this database is expected to contain most

literature of relevance, and by April 1984 an annotated indexed bibliography of these entries should be available.

A computerized numeric database will also be implemented during October 1983. This database will be built up as rapidly as reports can be obtained and abstracted. Later, these data will be evaluated by a committee of experts to provide consensus values for designers and other users. Specialized packages of correlated and evaluated data will be provided to authorized users during FY 1984 and FY 1985.

Correspondence and inquires should be addressed to the attention of D. C. Michelson at the address given above [FTS 626-7758, Commercial (615) 576-7758].

<1>
CORPORATE AFFILIATION: Aerojet General Corporation
AUTHOR: Stewart, I.J.
TITLE: Machinability of Tungsten, Interim Report No. 1: Sawing and Abrasive Cutoff Characteristics
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Report No. 367, 1962, January

<2>
CORPORATE AFFILIATION: AiResearch Manufacturing Company of Arizona, Phoenix, AZ
AUTHOR: Harper, A.
TITLE: Study of Reactor Brayton Power Systems for Nuclear Electric Spacecraft
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: JPL-31-3321, 1979, September

<3>
CORPORATE AFFILIATION: AiResearch Manufacturing Company, Torrance, CA
AUTHOR: Strumpf, H.J.
TITLE: Ceramic Heat Pipes for High-Temperature Heat Recovery
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: Proceedings of the 16th Intersociety Energy Conversion Engineering Conference, Atlanta, GA, August 9-14, 1981, Vol. 1, Technologies for the Transition, Paper No. 819312, 1981

<4>
CORPORATE AFFILIATION: Allegheny Ludlum Steel Corporation, Pittsburgh, PA
AUTHOR: Turner, F.S.
TITLE: Tantalum Alloy Tubing Development Program
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: RTD-8-109(1), 1963, October

<5>
CORPORATE AFFILIATION: Argonne National Laboratory, Argonne, IL
TITLE: Annual Report for 1963, Metallurgy Division
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ANL-6677, °

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CORPORATE AFFILIATION: Argonne National Laboratory, Argonne, IL
AUTHOR: Kelman, L.R.; Wilkinson, W.D.; Yaggee, F.L.
TITLE: Resistance of Materials to Attack by Liquid Metals
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ANL-4417, 1950, July

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CORPORATE AFFILIATION: Argonne National Laboratory, Argonne, IL
AUTHOR: Natesan, K.
TITLE: Interactions Between Structural Materials and Liquid Metals at Elevated Temperatures
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: Metallurgical Transactions, Volume 6A, pp. 1143-1153, 1975, June

<8>
CORPORATE AFFILIATION: Argonne National Laboratory, Argonne, IL
AUTHOR: Shimotake, H.; Stalica, N.R.; Hesson, J.C.
TITLE: Corrosion of Refractory Metals by Liquid Bismuth, Tin, and Lead at 1000 C
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Trans. Am. Nucl. Soc. 10:141-142, 1967

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CORPORATE AFFILIATION: Argonne National Laboratory, Argonne, IL
AUTHOR: Smith, D.L.; Natesan, K.
TITLE: Influence of Nonmetallic Impurity Elements on the Compatibility of Liquid Lithium with Potential CTR Containment Materials
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Nuclear Technology, Volume 22, pp. 392-404, 1974, June

<10>
CORPORATE AFFILIATION: Argonne National Laboratory, Argonne, IL
AUTHOR: Wilkinson, W.D.; Yagee, F.L.
TITLE: Attack on Metals by Lithium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ANL-4490, 1950

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CORPORATE AFFILIATION: Arizona State University, College of Engineering and Applied Science, Tempe, AZ
AUTHOR: Morris, J.F.
TITLE: SP-100 Evolutions from SPAR Concepts
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Air Force AFWAL TM- , Arizona State University ERC-R-82040 (transmitted September 1982), to be published, °

<12>
CORPORATE AFFILIATION: Arizona State University, College of Engineering and Applied Science, Tempe, AZ
AUTHOR: Morris, J.F.
TITLE: Direct-Energy-Conversion Implications of Space Nuclear Reactors
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: Proceedings of the 17th Intersociety Energy Conversion Engineering Conference, 1982, August

<13>
CORPORATE AFFILIATION: Arizona State University, College of Engineering and Applied Science, Tempe, AZ
AUTHOR: Morris, J.F.
TITLE: Ultralloys for Nuclear Thermionic Conversion
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: 18th Intersociety Energy Conversion Engineering Conference, 1983, August

<14>
CORPORATE AFFILIATION: Arizona State University, College of Engineering and Applied Sciences, Tempe, AZ
AUTHOR: Morris, J.F.
TITLE: Tungsten, Rhenium Alloys in Space Nuclear Reactors
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Air Force AFWAL TM- , Arizona State University ERC-R-82005 (transmitted October 1981), to be published

<15>
CORPORATE AFFILIATION: Atomics International, Canoga Park, CA
AUTHOR: Burdi, F.G.
TITLE: SNAP Technology Handbook - Volume I - Liquid Metals
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NAA-SR-8617, 1964

<16>
CORPORATE AFFILIATION: Babcock and Wilcox Company, Lynchburg, VA
AUTHOR: Dana, A.W.; Baker, O.H.; Ferguson, M.
TITLE: Investigation of Constant Temperature, Forced Circulation Liquid Lithium Systems
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: BW-5528, 1952

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CORPORATE AFFILIATION: Babcock and Wilcox Company, Lynchburg, VA
AUTHOR: Elrod, H.G.; Fouse, R.R.; Richards, P.B.
TITLE: Erosion and Heat Transfer with Molden Lithium
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: BW-5217, 1951

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CORPORATE AFFILIATION: Baikov Institute of Metallurgy, Russia
AUTHOR: Kornilov, I.I.; Glazova, V.V.; Ruda, G.I.
TITLE: Formation of Hf(6)O and Hf(3)O Compounds in the Hafnium-Oxygen System
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: Izv. Akad, Nauk. SSR. Neorg. Mater. 4(12):2106-2109, 1968

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CORPORATE AFFILIATION: Battelle Columbus Laboratories, Columbus, OH
AUTHOR: Heestand, R.I.; Jones, R.A.; Wright, J.R.; Kizer, D.E.
TITLE: Preparation of Refractory Cermet Structures for Lithium Compatibility Testing
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA CR-121130, 1973

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CORPORATE AFFILIATION: Battelle Memorial Institute, Columbus, OH
AUTHOR: Allen, B.C.; Wilcox, B.A.
TITLE: The Influence of Zirconium on Dynamic Strengthening of Niobium Alloys
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: Journal of the Less Common Metals, Vol. 13, pp. 186-192, 1967, August

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CORPORATE AFFILIATION: Battelle Memorial Institute, Columbus, OH
AUTHOR: DeMastry, J.A.
TITLE: Corrosion Studies of Tungsten, Molybdenum, and Rhenium in Lithium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Nuclear Applications, Vol. 3, p. 127, 1967, February

<22>
CORPORATE AFFILIATION: Battelle Memorial Institute, Columbus, OH
AUTHOR: DeMastry, J.A.; Greenauer, N.M.
TITLE: Investigation of High-Temperature Refractory Metals and Alloys for Thermonic Converters
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: AFPL-Tr-65-29, 1965

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CORPORATE AFFILIATION: Battelle Memorial Institute, Columbus, OH
AUTHOR: Raines, G.E.; Weaver, C.V.; Stang, J.H.
TITLE: Corrosion and Creep Behavior of Tantalum in Flowing Sodium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: BMI-1284, 1958, August

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CORPORATE AFFILIATION: Battelle Memorial Institute, Columbus, OH
AUTHOR: Rudman, P.S.
TITLE: Solution Strengthening in Refractory Metal Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Refractory Metals and Alloys IV-Research and Development, Metallurgical Society Conference, Volume 41, Gordon and Breach Science

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Publishers, pp. 351-368, 1967

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CORPORATE AFFILIATION: Battelle Memorial Institute, Columbus, OH
AUTHOR: Schmidt, F.F., et al.
TITLE: Investigation of the Properties of Tantalum and Its Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: WADD-TR-59-13; DDC No. AD-236957, 1960, March

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CORPORATE AFFILIATION: Battelle Memorial Institute, Defense Metals Information Center, Columbus, OH
TITLE: The Engineering Properties of Molybdenum and Molybdenum Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: DMIC Report 190, 163, September

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CORPORATE AFFILIATION: Battelle Memorial Institute, Defense Metals Information Center, Columbus, OH
TITLE: Diffusion Rates and Solubilities of Interstitials in Refractory Metals
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: DMIC Memorandum 50, 1960, April

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CORPORATE AFFILIATION: Battelle memorial Institute, Defense Metals Information Center, Columbus, OH
TITLE: Machining of Superalloys and Refractory Metals
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: DMIC Memorandum 134, 1961, October

<29>
CORPORATE AFFILIATION: Battelle Memorial Institute, Defense Metals Information Center, Columbus, OH
TITLE: The Engineering Properties of Columbium and Columbium Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: DMIC Report 188, 1963, September

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CORPORATE AFFILIATION: Battelle Memorial Institute, Defense Metals Information Center, Columbus, OH
TITLE: The Engineering Properties of Tantalum and Tantalum Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: DMIC Report 189, 1963, September

<31>
CORPORATE AFFILIATION: Battelle Memorial Institute, Defense Metals Information Center, Columbus, OH
TITLE: The Engineering Properties of Tungsten and Tungsten Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: DMIC Report 191, 1963, September

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CORPORATE AFFILIATION: Battelle Memorial Institute, Defense Metals Information Center, Columbus, OH
AUTHOR: Amateau, M.F.
TITLE: The Effect of Molten Alkali Metals in Containment Metals and Alloys at High Temperatures
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: DMIC-169, 1969

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CORPORATE AFFILIATION: Battelle Memorial Institute, Defense Metals Information Center, Columbus, OH
AUTHOR: Barth, V.
TITLE: Physical and Mechanical Properties of Tungsten and Tungsten-Base Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: DMIC-127, 1960, March

<34>
CORPORATE AFFILIATION: Battelle Memorial Institute, Defense Metals Information Center, Columbus, OH
AUTHOR: Bartlett, E.S.; Hauck, J.A.
TITLE: Physical and Mechanical Properties of Columbium and Columbium - Base Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: DMIC-125, 1960, February

<35>
CORPORATE AFFILIATION: Battelle Memorial Institute, Defense Metals Information Center, Columbus, OH
AUTHOR: Bartlett, E.S.; Van Echo, J.A.
TITLE: Creep of Columbium Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: DMIC-170, 1963, June

<36>
CORPORATE AFFILIATION: Battelle Memorial Institute, Defense Metals Information Center, Columbus, OH
AUTHOR: English, J.J.
TITLE: Binary and Ternary Phase Diagrams of Columbium, Molybdenum, Tantalum, and Tungsten
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: DMIC 152, 1961, April

<37>
CORPORATE AFFILIATION: Battelle

<37> CONT.
Memorial Institute, Defense Metals Information Center, Columbus, OH
AUTHOR: Henning, H.J.; Baulger, F.W.
TITLE: Notes on the Forging of Refractory Metals
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: DMIC-143, 1961, December

<38>
CORPORATE AFFILIATION: Battelle Memorial Institute, Defense Metals Information Center, Columbus, OH
AUTHOR: Ratliff, J.; Gibeaut, W.; Ogden, H.
TITLE: Tungsten Research and Development Review, 1960-1962
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: DMIC Report 193, 1963, October

<39>
CORPORATE AFFILIATION: Battelle Memorial Institute, Defense Metals Information Center, Columbus, OH
AUTHOR: Schmidt, F.C.; Ogden, H.R.
TITLE: The Engineering Properties of Tantalum and Tantalum Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: DMIC-189, 1963, September

<40>
CORPORATE AFFILIATION: Battelle Memorial Institute, Defense Metals Information Center, Columbus, OH
AUTHOR: Schmidt, F.F.
TITLE: Tantalum and Tantalum Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: DMIC 133, 1960, July

<41>
CORPORATE AFFILIATION: Battelle Memorial Institute, Defense Metals Information Center, Columbus, OH
AUTHOR: Schmidt, F.F.; Ogden, H.R.
TITLE: The Engineering Properties of Molybdenum and Molybdenum Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: DMIC-190, 1963

<42>
CORPORATE AFFILIATION: Battelle Memorial Institute, Defense Metals Information Center, Columbus, OH
AUTHOR: Schmidt, F.F.; Ogden, H.R.
TITLE: The Engineering Properties of Tantalum and Tantalum Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: DMIC 189; (Available from DDC as AD-426344), 1963, September

<43>
CORPORATE AFFILIATION: Battelle Memorial Institute, Defense Metals Information Center, Columbus, OH
AUTHOR: Schmidt, F.F.; Ogden, H.R.
TITLE: The Engineering Properties of Tungsten and Tungsten Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: DMIC 191; (Available from DDC as AD-425547), 1963, September

<44>
CORPORATE AFFILIATION: Battelle Memorial Institute, Defense Metals Information Center, Columbus, OH
AUTHOR: Schmidt, F.F.; Ogden, H.R.
TITLE: The Engineering Properties of Columbium and Columbium Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: DMIC-188, 1963, September

<45>
CORPORATE AFFILIATION: Battelle Memorial Institute, Defense Metals Information Center, Columbus, OH
AUTHOR: Stang, J.H.; Simmons, E.M.; DeMastry, J.A.; Genco, J.M.
TITLE: Compatibility of Liquid and Vapor Alkali Metals with Construction Materials
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: DMIC-227, 1966

<46>
CORPORATE AFFILIATION: Battelle Memorial Institute, Defense Metals Information Center, Columbus, OH
AUTHOR: Weare, N.E.; Monroe, R.E.
TITLE: Welding and Brazing of Molybdenum
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: DMIC-108; p. 3, 1959, March

<47>
CORPORATE AFFILIATION: Battelle Pacific Northwest Laboratories, Richland, WA
AUTHOR: Atteridge, D.G.; Charlot, L.A.; Johnson, A.B.; Remark, J.F.; Westerman, R.E.
TITLE: Effects of Helium Implanted by Tritium Decay on the High Temperature Mechanical Properties of Niobium
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: BNWL-SA-5422; CONF-751026--25; International Conference on Radiation Effects and Tritium Technology for Fusion Reactors, Gatlinburg, TN, 1975, October

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CORPORATE AFFILIATION: Brookhaven National Laboratory, Upton, NY
TITLE: Progress Report, Nuclear Engineering Department, Brookhaven National Laboratory,

<48> CONT.
September 1-December 31, 1961
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: BNL-705; p. 48, 1962, March

<49>
CORPORATE AFFILIATION: Brookhaven National Laboratory, Upton, NY
AUTHOR: Romano, A.; Fleitman, A.; Klamut, C.
TITLE: The Behavior of Refractory Metals and Alloys in Boiling Sodium and Other Boiling Alkali Metals
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: BNL-10723, 1966

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CORPORATE AFFILIATION: Brookhaven National Laboratory, Upton, NY
AUTHOR: Romano, A.; Fleitman, A; Klamut, C.
TITLE: Behavior of Refractory Metals and Alloys in Boiling Sodium and Other Boiling Alkali Metals
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Symposium on Alkali Metal Coolants, Corrosion Studies, and System Operating Experience, Vienna, Austria, p. 663, 1967

<51>
CORPORATE AFFILIATION: Bureau of Mines, Albany Metallurgy Research Center, Albany, OR
AUTHOR: Lowery, R.R.; Asai, G.
TITLE: An Evaluation of W-25 Re Produced by Arc Melting and Power Metallurgy
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: USBM-RC-1274; 74 pp., 1968

<52>
CORPORATE AFFILIATION: Cabot Corporation, KBI Division, Reading, PA
AUTHOR: Shuker, F.S.
TITLE: Refractory Metals for Heavy-Duty Corrosion Resistance
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: °

<53>
CORPORATE AFFILIATION: Chalmers University of Technology, Goetburg, Sweden
AUTHOR: Ott, A.; Lodding, A.
TITLE: Inter-Diffusion of Li-Isotopes in Liquid Lithium Metal
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: Z. Naturforschg. 20a(12):1578-1582, 1965

<54>
CORPORATE AFFILIATION: Chalmers University of Technology, Goetburg, Sweden
AUTHOR: Ott, A.; Lunden, A.
TITLE: Thermal Diffusion of Isotopes in Pure Molten Lithium Metal
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: Z. Naturforschg. 19a(6):822-823, 1964

<55>
CORPORATE AFFILIATION: Cornell University, Ithaca, NY
AUTHOR: Newton, C.; Olson, D.L.
TITLE: A Chemical-mechanical Polish for Tungsten
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Metallography, Vol. 1, pp. 249-250, 1968

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CORPORATE AFFILIATION: Engelhard Industries, Incorporated, Edison, NJ
TITLE: Electromotive Force vs Temperature for W-3Re/W-25Re Thermocouples
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Engelhard Industries, Inc., Research and Development Division - Final Evaluation of November 1, 1965, 1965, November

<57>
CORPORATE AFFILIATION: Fansteel Incorporated, Baltimore, MD
AUTHOR: Mash, D.R.; Bauer, D.W.; Schussler, M.
TITLE: Fabricating the Refractory Metals, Part II: Methods Used to Make Parts
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Metal Progress, Vol. 99, No. 3, pp. 60-66, 1971, March

<58>
CORPORATE AFFILIATION: Fansteel Incorporated, Baltimore, MD
AUTHOR: Schussler, M.
TITLE: Current Columbium Alloy Processing Technology
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Space Shuttle Materials, Society of Aerospace Material & Process Engineers (SAMPE), 1971

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CORPORATE AFFILIATION: Fansteel Incorporated, North Chicago, IL
AUTHOR: Bates, V.T.
TITLE: Tensile Properties of Fansteel "291" Metal-Recrystallized Sheet
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: Fansteel Research Report, 1966, December

<60>
CORPORATE AFFILIATION: Fansteel Incorporated, North Chicago, IL
AUTHOR: Davis, V.C.
TITLE: Elevated Temperature Tensile Properties of Recrystallized Nb-1Zr

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RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: Fansteel Research Report, 1966, December

<61>
CORPORATE AFFILIATION: General Electric Company, Cincinnati, OH
AUTHOR: Conway, J.B.; Fagella, P.N.
TITLE: Creep-Rupture Data For The Refractory Metals to High Temperatures
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Gordon and Breach Publishers, 1971

<62>
CORPORATE AFFILIATION: General Electric Company, Cincinnati, OH
AUTHOR: Conway, J.B.; Flagella, P.N.
TITLE: AEC Fuels and Materials Development Program Progress Report No. 78
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: GEMP-1010; p. 17, 1968

<63>
CORPORATE AFFILIATION: General Electric Company, Cincinnati, OH
AUTHOR: Ekvall, R.A.; Frank, R.G.; Young, W.R.
TITLE: T-111 Alloy Cracking Problems During Processing and Fabrication
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-SP-245; pp. 221-260, 1970

<64>
CORPORATE AFFILIATION: General Electric Company, Cincinnati, OH
AUTHOR: Frank, R.G.; Miketta, D.N.; Kearns, W.H.; Young, W.R.; Hand, R.B.
TITLE: Potassium Corrosion Test Loop Development Topical Report No. 2: Material and Process Specifications for Refractory Alloy and Alkali Metals
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: R66SD3007, 1965, December

<65>
CORPORATE AFFILIATION: General Electric Company, Cincinnati, OH
AUTHOR: Glynn, C.E.
TITLE: Machinability of Columbium (FS 85 Alloy)
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Technical Memorandum No. 74-65, 1974, March

<66>
CORPORATE AFFILIATION: General Electric Company, Cincinnati, OH
AUTHOR: Hand, R.B.
TITLE: Alkali Metal Purification and Handling for Advanced Space Power Systems
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Proceedings of the Fifth Annual Intersociety Energy Conversion Engineering Conference, Las Vegas, NV, September, 1970, 1970

<67>
CORPORATE AFFILIATION: General Electric Company, Cincinnati, OH
AUTHOR: Harrison, R.W.
TITLE: Stabilization of Carbon and Nitrogen in Stainless Steel and Its Effect on Mass Transfer in a Stainless Steel-Cb-1Zr-Potassium System
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA CR-806, 1967, June

<68>
CORPORATE AFFILIATION: General Electric Company, Cincinnati, OH
AUTHOR: Harrison, R.W.
TITLE: Compatibility of Biaxially Stressed D-43 Alloy with Refluxing Potassium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-CR-807, 1967, June

<69>
CORPORATE AFFILIATION: General Electric Company, Cincinnati, OH
AUTHOR: Harrison, R.W.
TITLE: Snap-8 Refractory Boiler Development - Corrosion of Oxygen Contaminated Tantalum in NaK
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA CR-1850, 1971, July

<70>
CORPORATE AFFILIATION: General Electric Company, Cincinnati, OH
AUTHOR: Harrison, R.W.; Hendrixson, W.H.
TITLE: Compatibility of Columbium Base Alloys with Lithium Fluoride
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA CR-1526, 1970, March

<71>
CORPORATE AFFILIATION: General Electric Company, Cincinnati, OH
AUTHOR: Hoffman, E.E.; Holowach, J.
TITLE: Cb-1Zr Thermal Convection Loop, Potassium Corrosion Test Development - Topical Report No. 5
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Contract R67-SD-3016, 1967, June

<72>
CORPORATE AFFILIATION: General Electric Company, Cincinnati, OH
AUTHOR: Lyon, T.F.
TITLE: Potassium Corrosion Test Loop Development: Purification and Analysis of Helium for the Welding Chamber
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA CR-54168, 1954

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CORPORATE AFFILIATION: General

<73> CONT.
Electric Company, Cincinnati, OH
AUTHOR: Lyon, T.F.
TITLE: Purification and Analysis of Helium for the Welding Chamber
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-CR-54158, 1965, July

<74>
CORPORATE AFFILIATION: General Electric Company, Cincinnati, OH
AUTHOR: Miketta, D.N.; Frank, R.G.
TITLE: Materials Specifications for Advanced Refractory Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-CR-54761, 1965, October

<75>
CORPORATE AFFILIATION: General Electric Company, Cincinnati, OH
AUTHOR: Young, W.R.
TITLE: Fabrication of T-111 Test Loop Systems
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-SP-245, °

<76>
CORPORATE AFFILIATION: General Electric Company, Cincinnati, OH
AUTHOR: Zipkin, N.A.
TITLE: Alkali Metal Rankine Cycle Power Systems for Electric Propulsion
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: J. Spacecraft, Vol. 4, No. 7, pp. 852-858, °

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CORPORATE AFFILIATION: General Electric Company, Idaho Falls, ID
AUTHOR: Bond, J.A.; Gutstein, M.U.
TITLE: Component and Overall Performance of an Advanced Rankine Cycle Test Rig
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Presented at the 1971 Intersociety Energy Conversion Engineering Conference, Boston, MA, 1971, August

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CORPORATE AFFILIATION: General Electric Company, Missiles and Space Division, Idaho Falls, ID
AUTHOR: Bond, J.A.; Converse, G.L.
TITLE: Vaporization of High Temperature Potassium in Forced Convection at Temperatures from 1800-2100 Degrees F
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: R66SD3016; General Electric Missiles and Space Division, 1966, November

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CORPORATE AFFILIATION: General Electric Company, Missiles and Space Division, Idaho Falls, ID
AUTHOR: Bond, J.A.; Converse, G.L.
TITLE: Vaporization of High-Temperature Potassium in Forced Convection at Vapor Temperatures from 1800 degrees F to 2100 degrees F
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA CR-843, 1967, July

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CORPORATE AFFILIATION: General Electric Company, Missiles and Space Division, Idaho Falls, ID
AUTHOR: Bond, J.A.; Gutstein, G.L.
TITLE: Components and Overall Test Performance of an Advanced Rankine Cycle Test Rig
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: GESP-607

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CORPORATE AFFILIATION: General Electric Company, Nuclear Systems Programs, Cincinnati, OH
AUTHOR: Brandenberg, G.P.
TITLE: Evaluation of T-111, Ta-10W, and Cb-1Zr Alloy Filler Materials in T-111 Alloy Multipass Tube Welds
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: GESP-385, 1970

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CORPORATE AFFILIATION: General Electric Company, Nuclear Systems Programs, Cincinnati, OH
AUTHOR: Brandenburg, G.; Engle, L.B.
TITLE: Determination of Biaxial Creep Strength of T-111 Alloy
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA CR-72846, 1971, August

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CORPORATE AFFILIATION: General Electric Company, Nuclear Systems Programs, Cincinnati, OH
AUTHOR: Brandenburg, G.P.; Harrison, R.W.
TITLE: Capsule Tests of Advanced Tantalum Alloys in Flowing Lithium and Refluxing Potassium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: GESP-694, 1972, January

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CORPORATE AFFILIATION: General Electric Company, Nuclear Systems Programs, Cincinnati, OH
AUTHOR: Brandenburg, G.P.; Hoffman, E.E.; Smith, J.P.
TITLE: Pumped Lithium Loop Test to Evaluate Advanced Refractory Metal Alloys and Simulated Nuclear Test Elements
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA CR-134527, 1974, January

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CORPORATE AFFILIATION: General Electric Company, Nuclear Systems

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Programs, Cincinnati, OH
AUTHOR: Dotson, L.E.
TITLE: Emittance Coating Studies on Cb-1Zr Alloy
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: R61FPD571, 1962, March

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CORPORATE AFFILIATION: General Electric Company, Nuclear Systems Programs, Cincinnati, OH
AUTHOR: Dotson, L.E.; Hand, R.B.
TITLE: Purification, Analysis, and Handling of Sodium and Potassium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: R66SD3012, 1966, June

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CORPORATE AFFILIATION: General Electric Company, Nuclear Systems Programs, Cincinnati, OH
AUTHOR: Engel, L.B., Jr.
TITLE: Determination of Biaxial Creep Strength of T-111 Tantalum Alloy
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: GESP-237; NASA CR-72541, 1969, June

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CORPORATE AFFILIATION: General Electric Company, Nuclear Systems Programs, Cincinnati, OH
AUTHOR: Engel, L.B., Jr.; Frank, R.F., Jr.
TITLE: Evaluation of High-Strength Columbium Alloys for Alkali Metal Containment
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-CR-54226, 1964

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CORPORATE AFFILIATION: General Electric Company, Nuclear Systems Programs, Cincinnati, OH
AUTHOR: Harrison, R.W.; Hoffman, E.E.
TITLE: Contamination of Tantalum and Tantalum Alloys in Low Pressure Oxygen Environments
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: GESP-18, 1968

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CORPORATE AFFILIATION: General Electric Company, Nuclear Systems Programs, Cincinnati, OH
AUTHOR: Harrison, R.W.; Hoffman, E.E.; Davies, R.L.
TITLE: Recent Materials Compatibility Studies in Refractory Metal-Alkali Metal Systems for Space Power Applications
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: GESP-452, 1970

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CORPORATE AFFILIATION: General Electric Company, Nuclear Systems Programs, Cincinnati, OH
AUTHOR: Harrison, R.W.; Hoffman, E.E.; Smith, J.P.
TITLE: T-111 Rankine System Corrosion Test Loop
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA CR-134816 (Volume I); 278 pp., 1975, June

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CORPORATE AFFILIATION: General Electric Company, Nuclear Systems Programs, Cincinnati, OH
AUTHOR: Harrison, R.W.; Holowach, J.
TITLE: Refractory Metal Valves for 1900 degrees F Service in Alkali Metals Systems
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: GESP-508, 1970, April

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CORPORATE AFFILIATION: General Electric Company, Nuclear Systems Programs, Cincinnati, OH
AUTHOR: Harrison, R.W.; Holowach, J.
TITLE: High Temperature Alkali Metal Value Test Program
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-CR-1810, 1970, April

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CORPORATE AFFILIATION: General Electric Company, Nuclear Systems Programs, Cincinnati, OH
AUTHOR: Harrison, R.W.; Holowach, J.
TITLE: Refractory Metal Valves for 1900 Degrees F Service in Alkali Metal Systems
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA CR-1810, 1971, May

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CORPORATE AFFILIATION: General Electric Company, Nuclear Systems Programs, Cincinnati, OH
AUTHOR: Hoffman, E.E. (ed.)
TITLE: Potassium Corrosion Test Loop Development
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA CR-54735, 1965

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CORPORATE AFFILIATION: General Electric Company, Nuclear Systems Programs, Cincinnati, OH
AUTHOR: Hoffman, E.E. (Ed.)
TITLE: Potassium Corrosion Test Loop Development
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-CR-5843, 1965

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CORPORATE AFFILIATION: General Electric Company, Nuclear Systems Programs, Cincinnati, OH
AUTHOR: Hoffman, E.E.; Harrison, R.W.
TITLE: The Compatibility of

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Refractory Metals with Liquid Metals
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Refractory Metal Alloys: Metallurgy and Technology. I. Machlin, R.T. Begley, and E.D. Weisert, eds., Plenum Press, pp. 251-287, 1968

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CORPORATE AFFILIATION: General Electric Company, Nuclear Systems Programs, Cincinnati, OH
AUTHOR: Hoffman, E.E.; Harrison, R.W.
TITLE: The Compatability of Refractory Metals with Liquid Metals
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: GESP-15, 1968, April

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CORPORATE AFFILIATION: General Electric Company, Nuclear Systems Programs, Cincinnati, OH
AUTHOR: Hoffman, E.E.; Harrison, R.W.
TITLE: The Compatibility of Refractory Metals With Liquid Metals
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Symposium on Metallurgy and Technology of Refractory Metals Alloys, Sponsored by the Metallurgical Society of AIME and the National Aeronautics and Space Administration, Washington, D.C., 1968, April

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CORPORATE AFFILIATION: General Electric Company, Nuclear Systems Programs, Cincinnati, OH
AUTHOR: Hoffman, E.E.; Holowach, J.
TITLE: Cb-1Zr Sodium Thermal Convection Loop
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA CR-1097, 1968, September

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CORPORATE AFFILIATION: General Electric Company, Nuclear Systems Programs, Cincinnati, OH
AUTHOR: Hoffman, E.E.; Holowach, J.
TITLE: Cb-1Zr Rankine System Corrosion Test Loop Development Topical Report No. 7
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA CR-1509, 1970, June

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CORPORATE AFFILIATION: General Electric Company, Nuclear Systems Programs, Cincinnati, OH
AUTHOR: Nichols, H.E.; Fink, R.W.; Zimmerman, W.F.
TITLE: Three-Stage Potassium Vapor Turbine - Fabrication and Assembly - Final Report
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: GESP-223; NASA CR-72501, 1969

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CORPORATE AFFILIATION: General Electric Company, Nuclear Systems Programs, Cincinnati, OH
AUTHOR: Peterson, J.R.
TITLE: High Performance 'Once-Through' Boiling of Potassium in Single Tubes at Vapor Temperatures From 1500 degrees F to 1750 degrees F
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-CR-842, 1967, August

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CORPORATE AFFILIATION: General Electric Company, Nuclear Systems Programs, Cincinnati, OH
AUTHOR: Peterson, J.R.
TITLE: Computer Program for the Thermal Design of Two-Fluid 'Once-Through' Potassium Boiler
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: Nuclear Systems Programs, MSD, General Electric Company, prepared for NASA under Contract NAS 3-9426, 1968, December

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CORPORATE AFFILIATION: General Electric Company, Nuclear Systems Programs, Cincinnati, OH
AUTHOR: Semmel, J.W., Jr.; Young, W.R.; Kearns, W.H.
TITLE: Alkali Metals Boiling and Condensing Investigations, Vol. II, Materials Support, Final Report, January 1, 1961, to June 30, 1962
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: GE-73-FPD-66; pp. 21-41, 1963, January 14

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CORPORATE AFFILIATION: General Electric Company, Nuclear Systems Programs, Cincinnati, OH
AUTHOR: Smith, J.P.; Hoffman, E.E.
TITLE: Advanced Refractory Alloy Corrosion Loop Program
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA CR-72853, 1971, February

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CORPORATE AFFILIATION: General Electric Company, Nuclear Systems Programs, Cincinnati, OH
AUTHOR: Thompson, S.R.
TITLE: Investigation of the Cracking in T-111 Alloy Tubing Associated with Spot Tack Welding
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: GESP-384, 1970

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CORPORATE AFFILIATION: General Electric Company, Space Division, Cincinnati, OH

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AUTHOR: Amos, J.C.
TITLE: Advanced Rankine Cycle Potassium Boiler Development Program, Volume II - Facility Checkout and Design Point Demonstration
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA CR-135452; 192 pp., 1975, November

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CORPORATE AFFILIATION: General Electric Company, Space Division, Cincinnati, OH
AUTHOR: Deane, C.W.
TITLE: Advanced Rankine Cycle Potassium Boiler Development Program, Volume III - Potassium Boiler Condenser: Experimental Results
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-CR-135453; 66 pp., 1975, November

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CORPORATE AFFILIATION: General Electric Company, Space Power and Propulsion Section, Cincinnati, OH
AUTHOR: Eckard, S.E.
TITLE: Potassium Vapor Turbine Test Facility
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA CR-924, °

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CORPORATE AFFILIATION: General Electric Company, Space Power and Propulsion Section, Cincinnati, OH
AUTHOR: Nichols, H.E.; Fink, R.W.
TITLE: Mechanical Design & Development of a Two-Stage Potassium Turbine
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA CR-923, °

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CORPORATE AFFILIATION: General Electric Company, Space Power and Propulsion Section, Cincinnati, OH
AUTHOR: Nichols, H.E.; Fink, R.W.; Moor, B.L.
TITLE: Power Train for Three-Stage Potassium Test Turbine - Final Design
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA CR-73411

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CORPORATE AFFILIATION: General Electric Company, Space Power and Propulsion Section, Cincinnati, OH
AUTHOR: Nichols, H.E.; Fink, R.W.; Zimmerman, W.F.
TITLE: Design of a Three-Stage Potassium Vapor Turbine - Mechanical Design
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA CR-72250

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CORPORATE AFFILIATION: General Electric Company, Space Power and Propulsion Section, Cincinnati, OH
AUTHOR: Rossbach, R.J.; Wesling, G.C.
TITLE: Two-Stage Potassium Test Turbine: I-Fluid Dynamic Design and Performance
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA-CR-922, 1968, February

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CORPORATE AFFILIATION: General Electric Company, Space Power and Propulsion Section, Cincinnati, OH
AUTHOR: Rossbach, R.J.; Wesling, G.C.; Lemond, W.F.
TITLE: Design of a Three-State Potassium Turbine - Fluid Dynamic Design
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA-CR-72249, °

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CORPORATE AFFILIATION: General Electric Company, Space Power and Propulsion Section, Cincinnati, OH
AUTHOR: Wettach, R.H. (Ed.)
TITLE: Rankine Cycle Test Facility Study: Technical Data. Final Report.
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA-CR-54972, 1966

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CORPORATE AFFILIATION: General Electric Company, Space Power and Propulsion Section, Cincinnati, OH
AUTHOR: Zimmerman, W.F.; Hand, R.B.; Engleby, D.S.; Semmel, J.W., Jr.
TITLE: Two-Stage Potassium Test Turbine, Vol. IV, Material Support
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA CR-925, 1968, February

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CORPORATE AFFILIATION: General Electric Company, Space Power and Propulsion Section, Cincinnati, OH
AUTHOR: Zimmerman, W.F.; Semmel, J.W.; Engleby, D.S.; Hand, R.B.
TITLE: Materials Support of Performance and Endurance Tests
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA CR-925, °

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CORPORATE AFFILIATION: Group Research Centre, Birmingham, England
AUTHOR: McAda, G.D.
TITLE: The Influence of Carbide and Boride Additions on the Creep Strength of Niobium Alloys
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: Journal of the Institute of Metals, Volume 96(1), pp. 13-16, 1968, January

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CORPORATE AFFILIATION: Gulf General Atomic Company, San Diego, CA
AUTHOR: Holland, J.W.
TITLE: Thermionic Fuel Element Development Status Summary
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: CONF-720613-P2; pp. 465-477, 1972

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CORPORATE AFFILIATION: Gulf General Atomic Company, San Diego, CA
AUTHOR: Horner, M.; Grebtez, J.; Kay, J., Jr.
TITLE: Multicell Thermionic Fuel Element Fabrication Technology
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: Proceedings of the 3rd International Conference on Thermionic Electrical Power Generation, Juelich, Federal Republic of Germany, June 5, 1972, (pp. 491-500), 1972, June

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CORPORATE AFFILIATION: Gulf General Atomic Company, San Diego, CA
AUTHOR: Yang, L.
TITLE: Nuclear Fuel Systems for Space Power Application
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: AFOSR Space Prime Power Conference, 1982, February

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CORPORATE AFFILIATION: Gulf General Atomic Company, San Diego, CA
AUTHOR: Yang, L.; Bruce, R.
TITLE: Fabrication and Life Testing of Thermionic Converters
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA CR-121180, 1973, June

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CORPORATE AFFILIATION: Gulf General Atomic Company, San Diego, CA
AUTHOR: Yang, L.; Chin, J.
TITLE: Developmental Status of Thermionic Materials
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: 7th Intersociety Energy Conversion Engineering Conference, San Diego, CA, September 25, 1972, (pp. 1041-1049), 1972

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CORPORATE AFFILIATION: Gulf General Atomic Company, San Diego, CA
AUTHOR: Yang, L.; Hudson, R.W.
TITLE: Development of Chemically Vapor Deposited Rhenium Emitters of (0001) Preferred Crystal Orientation
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA CR-121143, 1973, February

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CORPORATE AFFILIATION: Gulf General Atomic Company, San Diego, CA
AUTHOR: Yang, L.; Johnson, H.O.
TITLE: Examination of UC-ZrC After Long Term Irradiation at Thermionic Temperature
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-CR-120995; GULF-GA-A-12237; 150 pp., 1972, December

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CORPORATE AFFILIATION: Gulf General Atomic Company, San Diego, CA
AUTHOR: Yates, M.E.; Fitzpatrick, G.O.; Schwarzer, D.E.
TITLE: Thermionic Fuel Element Testing at Gulf General Atomic
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: CONF-720613-P-2; pp. 479-489, 1972

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CORPORATE AFFILIATION: Institut fur Werkstoff-Forschung, Porz-Wahn, Germany
AUTHOR: Majdic, M.; Wirth, G.
TITLE: Uber das Rekristallisationsverhalten Einer mit Thorium-Oxid Dispersiongehärteten Wolfram-Rhenium-Legierung im Vergleich zu Reinem Wolfram (Recrystallization Behavior of a Thorium Oxide-Dispersion-Hardened Tungsten - Rhenium Alloy in Comparison with Pure Tungsten)
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Journal of Less-Common Metals, Volume 24(4), pp. 341-367, 1971, August

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CORPORATE AFFILIATION: International Atomic Energy Agency, Vienna, Austria
AUTHOR: Rosenblum, L.; Scheuermann, C.M.; Moss, T.A.
TITLE: Space-Power-System Material Compatibility Tests of Selected Refractory Metal Alloys with Boiling Potassium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Alkali Metal Coolants, International Atomic Energy Agency, Vienna, p. 699, 1967

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CORPORATE AFFILIATION: International Atomic Energy Agency, Vienna, Austria
AUTHOR: Semmel, J.W., Jr.; Engel, L.B., Jr.; Frank, R.G.; Harrison, R.W.
TITLE: Carbon Mass Transfer in Multimetallic Systems Containing Potassium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Alkali Metal Coolants, International Atomic Energy Agency, Vienna, p. 181, 1967

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CORPORATE AFFILIATION: International Atomic Energy Agency, Vienna, Austria
AUTHOR: Yaggee, F.L.; Gilbert, E.R.
TITLE: Effect of Sodium Exposure on the Mechanical Properties of Potential Fuel Jacket Alloys at 550 degrees to 700 degrees C
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Alkali Metal Coolants, International Atomic Energy Agency, Vienna, p. 216, 1967

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CORPORATE AFFILIATION: International Harvester Company, San Diego, CA
AUTHOR: Klein, M.J.; Metcalfe, A.G.
TITLE: Effects of Solutes in Binary Niobium Alloys on Creep Strength
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Metallurgical Transactions, Volume 4 (10), pp. 2441-2448, 1973, October

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CORPORATE AFFILIATION: Kawecki Berylco Industries, Incorporated
TITLE: Columbium (Niobium)
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Bulletin 313-PD1, 1977, August

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CORPORATE AFFILIATION: Kernforschungsanglage Juelich Gmbh, Federal Republic of Germany
TITLE: Proceedings of 3rd International Conference on Thermionic Electrical Power Generation
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: CONF-720613-P1, 1972, June

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CORPORATE AFFILIATION: Lawrence Radiation Laboratory, Livermore, CA
AUTHOR: Cowles, J.O.; Pasternak, A.D.
TITLE: Lithium Properties Related to Use as a Nuclear Reactor Coolant
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: UCRL-50647, 1969, April

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CORPORATE AFFILIATION: Lawrence Radiation Laboratory, Livermore, CA
AUTHOR: Pitts, J.H. (Ed.); Walter, C.E. (Ed.)
TITLE: Conceptual Design of a 10-MW Nuclear Rankine System for Space Power
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: UCRL-50382, 1968, January

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CORPORATE AFFILIATION: Lawrence Radiation Laboratory, Livermore, CA
AUTHOR: Tardiff, G.E.
TITLE: Corrosion Damage to a Tungsten-25 AT. Percent Rhenium 30 AT. Percent Molybdenum Containment Alloy After Exposure to Flowing Lithium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: UCID-15356, 1968

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CORPORATE AFFILIATION: Lawrence Radiation Laboratory, Livermore, CA
AUTHOR: Werner, R.W.; Carlson, G.A.
TITLE: Heat Pipe Radiator for a 50 MW(t) Space Power Plant
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: UCRL-50294, 1967, June

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CORPORATE AFFILIATION: Lockheed Missiles and Space Company, Palo Alto, CA
AUTHOR: Packer, C.M.; Perkins, R.A.
TITLE: Modified Fused Silicide Coatings for Tantalum (Ta-10W) Re-Entry Heat Shields
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA CR-120877, 1973, April

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CORPORATE AFFILIATION: Lockheed Missiles and Space Company, Palo Alto, CA
AUTHOR: Perkins, R.A.
TITLE: The Effect of Thermal - Mechanical Treatments on the Structure and Properties of Refractory Metals
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Refractory Metal Alloys - Metallurgy and Technology, Plenum Press, pp. 85-121, 1960

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CORPORATE AFFILIATION: Los Alamos National Laboratory, Los Alamos, NM
AUTHOR: Buden, D.
TITLE: The Acceptability of Reactors in Space
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Proceedings of the 16th Intersociety Energy Conversion Engineering Conference, Atlanta, GA, August 9-14, 1981, Vol. 1, Technologies for the Transition, Paper No. 819160, 1981

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CORPORATE AFFILIATION: Los Alamos National Laboratory, Los Alamos, NM
AUTHOR: Fly, G.
TITLE: A Compact, Efficient Thermoelectric Module for a Space Reactor
RELEVANCE NUMBER: 1

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PUBLICATION DESCRIPTION: Proceedings of the 16th Intersociety Energy Conversion Engineering Conference, Atlanta, GA, August 9-14, 1981, Vol. 1, Technologies for the Transition, Paper No. 819166, 1981

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CORPORATE AFFILIATION: Los Alamos National Laboratory, Los Alamos, NM
AUTHOR: Lundberg, L.
TITLE: An Evaluation of Molybdenum and Its Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: CONF-810614--51; LA-UR-81-4100; AIAA 16th Thermophysics Conference, Palo Alto, CA, Jun 23, 1981, 1981, June

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CORPORATE AFFILIATION: Los Alamos National Laboratory, Los Alamos, NM
AUTHOR: Meier, K.L.; Martinez, H.E.; Runyan, J.E.
TITLE: Development of Space Reactor Core Heat Pipes
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Proceedings of the 16th Intersociety Energy Conversion Engineering Conference, Atlanta, GA, August 9-14, 1981, Vol. 1, Technologies for the Transition, Paper No. 819163, 1981

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CORPORATE AFFILIATION: Los Alamos Scientific Laboratory, Los Alamos, NM
TITLE: Reactor Technology
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: LA-8561-PR; p. 13, 1980, April-June

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CORPORATE AFFILIATION: Los Alamos Scientific Laboratory, Los Alamos, NM
AUTHOR: Bowers, H.I.; Ferguson, W.E.
TITLE: Structural Materials in LASL Liquid Sodium Systems
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: IMD Special Report Series No. 12, Nuclear Metallurgy, AIME, IX, 1963

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CORPORATE AFFILIATION: Los Alamos Scientific Laboratory, Los Alamos, NM
AUTHOR: Buden, D.; Bennett, G.; Cooper, K.; Davidson, K.; Koenig, D.; Lundberg, L.; Malenfant, R.; Martz, H.; Ranken, W.; Riley, R.; Schilling, F.
TITLE: Selection of Power Plant Elements for Future Reactor Space Electric Power Systems
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: LASL LA-7858, 1979, September

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CORPORATE AFFILIATION: Los Alamos Scientific Laboratory, Los Alamos, NM
AUTHOR: Buden, D.; Ranken, W.A.; Koenig, D.F.
TITLE: Space Nuclear Reactor Power Plants
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: LA-8223-MS, 1980, January

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CORPORATE AFFILIATION: Los Alamos Scientific Laboratory, Los Alamos, NM
AUTHOR: Cotter, T.P.; Deverall, J.; Erickson, G.F.; Grover, C.M.; Keddy, E.S.; Kemme, J.E.; Salmil, E.W.
TITLE: Status Report on Theory and Experiments on Heat Pipes at Los Alamos
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: LADC-7206, 1965

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CORPORATE AFFILIATION: Los Alamos Scientific Laboratory, Los Alamos, NM
AUTHOR: Furnish, J.
TITLE: Effects of Neutron Radiation or Radiation Damage on Niobium Alloys -- A Bibliography
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: LA-4387, 1970, March

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CORPORATE AFFILIATION: Los Alamos Scientific Laboratory, Los Alamos, NM
AUTHOR: Kemme, J.E.; Keddy, E.S.; Phillips, J.R.
TITLE: Performance Investigations of Liquid Metal Heat Pipes for Space and Terrestrial Applications
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: 3rd International Heat Pipe Conf., Palo Alto, CA, 1978, May

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CORPORATE AFFILIATION: Los Alamos Scientific Laboratory, Los Alamos, NM
AUTHOR: Koenig, D.; Ranken, W.; Salmi, E.
TITLE: Heat Pipe Reactors for Space Power Applications
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Journal of Energy, Volume 1(4), pp. 237-243; AIAA Conference on Future Aerospace Power Systems, Paper A77-23910, 1977, March

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CORPORATE AFFILIATION: Los Alamos Scientific Laboratory, Los

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Alamos, NM
AUTHOR: Lundberg, L.B.
TITLE: A Critical Evaluation of Molybdenum and its Alloys for Use in Space Reactor Core Heat Pipes
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: LA-8685-MS, 1981, January

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CORPORATE AFFILIATION: Los Alamos Scientific Laboratory, Los Alamos, NM
AUTHOR: Lundberg, L.B.; Martinez, H.E.
TITLE: Fabrication of High Temperature (1400-1700 K) Molybdenum Heat Pipes
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Proceedings of the 15th IECEC, Seattle, WA, 1980, August

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CORPORATE AFFILIATION: Los Alamos Scientific Laboratory, Los Alamos, NM
AUTHOR: Murphy, D.J.; Ferguson, W.E.; Hanks, G.S.
TITLE: Critical Strain in High Purity Tantalum and Tantalum-Tungsten Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: LA-2871, 1963, June

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CORPORATE AFFILIATION: Max-Planck-Institut fuer Metallforschung, Stuttgart, Federal Republic of Germany
AUTHOR: Fromm, E.; Jehn, H.
TITLE: Reactions of Niobium and Tantalum with Gases at High Temperatures and Low Pressures
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Vacuum, Vol. 19, No. 4, pp. 191-197, 1969

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CORPORATE AFFILIATION: McDonnell Douglas Aeronautics Company, St. Louis, MO
AUTHOR: Davis, J.W.
TITLE: Economic Impact of Using Refractory Metals for Fusion Reactors
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: COO-4247-1, 1977, October

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CORPORATE AFFILIATION: McDonnell Douglas Astronautics Company, St. Louis, MO
AUTHOR: Pionke, L.J.; Davis, J.W.
TITLE: Technical Assessment of Niobium Alloys Data Base for Fusion Reactor Applications
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: COO-4247-2, 1979, August

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CORPORATE AFFILIATION: McDonnell Douglas Corporation
AUTHOR: Jackson, R.E.
TITLE: Tantalum System Evaluation
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Interim Technical Report No. 4, 1967

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CORPORATE AFFILIATION: McDonnell Douglas Corporation
AUTHOR: Woolf, J.E.
TITLE: Electrochemical Deburring of Moybdenum, Aluminum and Stainless Steel
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Report No. 478, 1962, October

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CORPORATE AFFILIATION: Metcut Research Associates Incorporated
AUTHOR: Zlatin, N.; Field, M.; Gould, J.
TITLE: Machining of Refractory Materials
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ASD-TR-7-532a(VII); Phase II, Technical Engineering Report, 1962, August

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CORPORATE AFFILIATION: Metcut Research Associates Incorporated
AUTHOR: Zlatin, N.; Field, M.; Gould, J.V.
TITLE: Machining of Refractory Materials
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ASD TR-7-532a (IX); Phase II, Technical Engineering Report, 1963, February

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CORPORATE AFFILIATION: Metcut Research Associates Incorporated, Cincinnati, OH
AUTHOR: Nowikowski, L.J.; Field, M.; Zlatin, N,
TITLE: Machining of Refractory Materials
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ASD Interim Report No. 7-532a (VI), Phase II, 1962, April

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CORPORATE AFFILIATION: Metcut Research Associates Incorporated, Cincinnati, OH
AUTHOR: Nowikowski, L.J.; Zlatin, N.; Field.M
TITLE: Machining of Refractory Materials
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: AMC-TR-7-532a(III); Phase II, Technical Engineering Report, 1961, August

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CORPORATE AFFILIATION: Metcut Research Associates Incorporated, Cincinnati, OH
AUTHOR: Nowikowski, L.J.; Zlatin, N.; Field, M.
TITLE: Machining of Refractory Materials
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ASD Interim Report 7-5322(V), 1962, February

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CORPORATE AFFILIATION: Metcut Research Associates Incorporated, Cincinnati, OH
AUTHOR: Nowikowski, L.J.; Zlatin, N.; Field, M.; Gould, J.V.
TITLE: Machining of Refractory Materials
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: AMC TR-7-532a (I); Phase I, Technical Engineering Report, 1961, January

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CORPORATE AFFILIATION: Metcut Research Associates Incorporated, Cincinnati, OH
AUTHOR: Nowikowski, L.J.; Zlatin, N.; Field, N.
TITLE: Machining of Refractory Materials
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ASD TR070532a (IV); Phase II, Technical Engineering Report, 1961, November

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CORPORATE AFFILIATION: Mines Safety Appliances Research Corporation
AUTHOR: Tepper, F.; Greer, J.
TITLE: Factors Affecting the Compatibility of Liquid Cesium with Containment Materials
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ASD-TDR-63-824, Part I, 1963, September

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Jet Propulsion Laboratory, Pasadena, CA
AUTHOR: Hays, L.G.
TITLE: Corrosion of Niobium-1% Zirconium Alloy and Yttria by Lithium at High Flow Velocities
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: JPL TR 32-1233; NASA-CR-90513, 1967, December

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Jet Propulsion Laboratory, Pasadena, CA
AUTHOR: Hays, L.G.; O'Conner, D.
TITLE: A 2000 D F Lithium Erosion and Component Performance Experiment
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-32-1150, 1967

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Jet Propulsion Laboratory, Pasadena, CA
AUTHOR: Phillips, W.M.
TITLE: Some Alkali Metal Corrosion Effects in a Rankine Cycle Test Loop
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: CONF-691007; Draley, J.E.(ed.), Corrosion By Liquid Metals, Plenum Press, New York, pp. 217-250; Corrosion by Liquid Metals Conference, Philadelphia, PA

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Jet Propulsion Laboratory, Pasadena, CA
AUTHOR: Phillips, W.M.
TITLE: Some Alkali Metal Corrosion Effects in a Rankine Cycle Test Loop
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: Corrosion by Liquid Metals, ed. by J.E. Draley and J.R. Weeks, Plenum Press, New York, pp. 197-216, 1970

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Jet Propulsion Laboratory, Pasadena, CA; Los Alamos Scientific Laboratory, Los Alamos, NM
TITLE: Progress Report for February, March, April and May, 1977. JPL/LASL Heat Pipe/Thermionic Reactor Technology Development Program
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: 1977, June

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Langley Research Center, Hampton, VA
AUTHOR: Foster, L.R.; Stein, B.A.
TITLE: Tensile Properties and Sheet-Bending Fatigue Properties of Some Refractory Metals at Room Temperature
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA-TN-D-1592, 1963, January

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
TITLE: NASA-AEC Liquid-Metals Corrosion Meeting, Lewis Research Center October 2-3, 1963

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RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA SP-41; Vol. I, pp. 189-197, 1964

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
TITLE: Analysis of Oxygen in Potassium
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA TM X-1085, 1965

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
TITLE: Future Orbital Power Systems Technology Requirements
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA-CP-2058; N-79-10122, 1978, September

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Barrett, C.A.
TITLE: Absorption Rate Sticking Probabilities for Oxygen on Columbium and Dilute Columbium-Zirconium Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TN D-4885, 1968, November

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Barrett, C.A.
TITLE: Controlled Oxygen Additions to Refractory Metals
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TM X-1799, 1969, May

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Barrett, C.A.; Rosenblum, L.
TITLE: Vacuum Requirements for High Temperature Testing of Columbium Alloy Systems and Components
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TM X-1268; pp. 213-218, 1966, August

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Bowles, K.J.
TITLE: Vapor Pressure of Potassium to 2170 K
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA TN D-4535, 1968, May

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Buzzard, R.J.
TITLE: Effect of Grain Size on Creep Properties of a Tungsten-25 Percent Rhenium-30 Atomic Percent Molybdenum Alloy from 982 to 2204 Degrees C
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TN D-6285, 1971

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Buzzard, R.J.; Metroka, R.R.
TITLE: Effect of Nitrogen on the Tensile Properties and Structure of T-111 (Tantalum - 8-Percent-Tungsten - 2-Percent-Hafnium)
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TN D-6999, 1973

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Buzzard, R.J.; Metroka, R.R.
TITLE: Effect of Nitrogen on the Tensile Properties and Structure of T-111 (Tantalum - 8-Percent-Tungsten - 2-Percent-Hafnium) Tubing
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TN D-6999, 1973

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Caves, R.M.
TITLE: Evaluation of Vapor-Deposited Claddings on Tungsten-Uranium Dioxide Composites
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA TM X-1449, 1967

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Davies, R.L.; Moorhead, P.E.
TITLE: Properties and Fabrication of Refractory Alloys for Isotope Containment
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: Nuclear

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Metallurgy 14:196-210, 1969

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Davis, W.F.; Graab, J.W.; Merkle, E.J.
TITLE: Comparison of a Modified Kjeldahl and Vacuum Fusion Techniques for Determination of Nitrogen in Tantalum Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TM X-2035, 1970

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: English, R.E.
TITLE: Comment on Heat Pipe Reactors for Space Power Applications
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Journal of Energy, Volume 2(3), pp. 191-192, 1978, May

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: English, R.E.
TITLE: Goals of Thermionic Program for Space Power
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TM-82616, 1981, May

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Gahn, R.F.
TITLE: Technique for Recovery of Alkali-Metal Reaction Products
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA TN D-4310, 1968, January

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Gahn, R.F.
TITLE: Determination of Oxygen in Lithium by the Vacuum Distillation Method
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA TN D-5197, 1969, May

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Gahn, R.F.
TITLE: Techniques for Lithium Removal from 1040 Degrees C Aged Tantalum Alloy, T-111
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA TM X-2775, 1973, April

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Gahn, R.F.; Rosenblum, L.
TITLE: Accuracy of Three Methods for Determination of Oxygen in Potassium at Concentration Less than 20 Parts Per Million
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA TN D-3239, 1966, August

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Garfinkle, M.
TITLE: Room-Temperature Tensile Behavior of (100) Oriented Tungsten Single Crystals with Rhenium in Dilute Solid Solution
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA TN D-3190, 1966, January

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Garfinkle, M.
TITLE: Proportional Limit Stress of Tungsten Single Crystals
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: Trans. AIME, Vol. 236, pp. 1373-1374, 1966, September

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Garfinkle, M.
TITLE: Effect of Rhenium Alloying on Lattice Dilation of the Group VIA Refractory Metals
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: Met. Trans., Vol. 1, pp. 1062-1063, 1970, April

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Garfinkle, M.; Witzke, W.R.; Klopp, W.D.
TITLE: Superplasticity in Tungsten-Rhenium Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TN D-4728, 1968, August

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Garlick, R.G.
TITLE: Effect of Orientation on Ductile to Brittle Transition of Tungsten Single Crystals
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA TM X-1252, 1966, July

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Garlick, R.G.; Probst, H.B.
TITLE: Investigation of Room-Temperature Slip in Zone-Melted Tungsten Single Crystals
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: Trans. AIME, Vol. 230, pp. 1120-1125, 1964, August

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Gluyas, R.E.; Lietzke, A.F.
TITLE: Materials Technology Program for a Compact Fast Reactor for Space Power
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TM X-67869, 1971

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Gluyas, R.E.; Watson, G.K.
TITLE: Materials Technology for an Advanced Space Power Nuclear Reactor Concept: Program Summary
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-TN-D-7909; N-75-18402; E-7893, 1975, March

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Grisaffe, S.J.
TITLE: A Review of Some Current NASA-Lewis Sponsored Coating Research
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA TM X-52782, 1970

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Grisaffe, S.J.; Merutka, J.P.; Levine, S.R.
TITLE: A Status Review of Lewis Research Center Sponsored Protection System Development
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA TM X-52977, 1970

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Hall, R.; Raffo, P.; Witzke, W.; Klopp, W..
TITLE: Carbide Strengthening of Tungsten and Molybdenum Alloys, Aerospace Structural Materials
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA Lewis Research Center Conference, 1969, November

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Hall, R.W.; Raffo, P.L.; Witzke, W.R.
TITLE: Carbide Strengthening of Tungsten and Molybdenum Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA SP-227, pp. 163-172, 1970

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Hall, R.W.; Titran, R.H.
TITLE: Creep Properties of Columbium Alloys in Very High Vacuum
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Technical Reprint 15-63 Presented at Symposium on Application of Refractory Metals, Los Angeles, CA, °

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Hall, R.W.; Titran, R.H.
TITLE: Creep Properties of Columbium Alloys in Very High Vacuum
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Refractory Metals and Alloys III: Applied Aspects, R.I. Jaffee (Ed.), Gordon and Breach, New York, pp. 885-900, 1966

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Haller, H.; Lieblein, S.; Lindow, B.
TITLE: Analysis and Evaluation of a

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Vapor Chamber Fin-Tube Radiator for High Power Rankine Cycles
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA-TN-D-2836, 1965, May

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Heller, J.; Moss, T.; Barna, G.
TITLE: Study of a 300-Kilowatt Rankine Cycle Advanced Nuclear - Electric Space - Power System
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TMX-1919, 1969, November

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Heller, J.A.; Moss, T.A.; Barna, G.J.
TITLE: Study of a 300 kWe Rankine Cycle Advanced Nuclear-Electric Space Power System
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: Proceedings of the Fourth Intersociety Energy Conversion Engineering Conference, September 22-26, 1969, Washington, DC, p. 465, 1969

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Hickman, C.W., Jr.
TITLE: Corrosion Product of the Tantalum-Interstitial Oxygen-Potassium System at 1800 Degrees F (1255 K)
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TN D-4213, 1967, December

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Klann, J.L.; Wintucky, W.T.
TITLE: Status of the 2- to 15 kWe Brayton Power System and Potential Gains from Component Improvements
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA TM X-67835; Intersociety Energy Conversion Engineering Conference, New York: Society of Automotive Engineers, Inc., pp. 195-201, 1971

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Klopp, W.; Witzke, W.
TITLE: Mechanical Properties of a Tungsten--23.4-Percent Rhenium--0.27-Percent Hafnium--Carbon Alloy
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TN-D-6328; N-71-23982; Journal of Less-Common Metals, Volume 24, 1971

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Klopp, W.D.
TITLE: Review of Ductilizing of Group VIA Elements by Rhenium and Other Solutes
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TN D-4955, 1968, December

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Klopp, W.D.; Raffo, P.L.
TITLE: Effects of Purity and Structure on Recrystallization Grain Growth, Ductility, Tensile, and Creep Properties of Arc-Melted Tungsten
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TN D-2503, 1964, November

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Klopp, W.D.; Raffo, P.L.; Witzke, W.R.
TITLE: Strengthening of Molybdenum and Tungsten Alloys with HfC
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Journal of Metals 23(6):27-38, 1971, June

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Klopp, W.D.; Witzke, W.R.
TITLE: Mechanical Properties and Recrystallization Behavior of Electron-Beam Melted Tungsten Compared with Arc-Melted Tungsten
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TN D-3232, 1966, January

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Klopp, W.D.; Witzke, W.R.
TITLE: Mechanical Properties of

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Arc-Melted
Tungsten-Rhenium-Hafnium-Carbon
Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TN
D-5348, 1969, July

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CORPORATE AFFILIATION: National
Aeronautics and Space
Administration, Lewis Research
Center, Cleveland, OH
AUTHOR: Klopp, W.D.; Witzke, W.R.
TITLE: Mechanical Properties of a
Tungsten-23.4 Percent
Rhenium-0.27 Percent
Hafnium-Carbon Alloy
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TN
D-6308, 1971, April

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CORPORATE AFFILIATION: National
Aeronautics and Space
Administration, Lewis Research
Center, Cleveland, OH
AUTHOR: Klopp, W.D.; Witzke, W.R.
TITLE: Mechanical Properties of
Electron Beam Melted Molybdenum
and Dilute Molybdenum Rhenium
Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA
TMX-2576, 1972

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CORPORATE AFFILIATION: National
Aeronautics and Space
Administration, Lewis Research
Center, Cleveland, OH
AUTHOR: Klopp, W.D.; Witzke, W.R.;
Raffo, P.L.
TITLE: Effects of Grain Size on
Tensile and Creep Properties of
Arc-Melted and Electron-Beam
Melted Tungsten at 2250 Degrees
and 2140 Degrees F
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Trans.
AIME, Vol. 233, pp. 1860-1866,
1965, October

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CORPORATE AFFILIATION: National
Aeronautics and Space
Administration, Lewis Research
Center, Cleveland, OH
AUTHOR: Klopp, W.D.; Witzke, W.R.;
Raffo, P.L.
TITLE: Mechanical Properties of
Dilute Tungsten-Rhenium Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TN
D-3483, 1966, September

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CORPORATE AFFILIATION: National
Aeronautics and Space
Administration, Lewis Research
Center, Cleveland, OH
AUTHOR: Krasner, M.H.; Davison,
H.W.; Diaguila, A.J.
TITLE: Conceptual Design of a
Compact Fast Reactor for Space
Power
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA TM
X-67859, 1971

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CORPORATE AFFILIATION: National
Aeronautics and Space
Administration, Lewis Research
Center, Cleveland, OH
AUTHOR: Levine, S.R.; Grisaffe, S.J.
TITLE: Coated Columbium Thermal
Protection Systems - An
Assessment of Technological
Readiness
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA TM
X-2858, 1973

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CORPORATE AFFILIATION: National
Aeronautics and Space
Administration, Lewis Research
Center, Cleveland, OH
AUTHOR: Maag, W.L.; Mattson, W.F.
TITLE: Lining Metal Tubes by Creep
Forming
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA TM
X-2347, 1971

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CORPORATE AFFILIATION: National
Aeronautics and Space
Administration, Lewis Research
Center, Cleveland, OH
AUTHOR: Metroka, R.R.
TITLE: Fabrication of Uranium
Mononitride Compacts
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION:
NASA-TN-D-5876--, 1970

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CORPORATE AFFILIATION: National
Aeronautics and Space
Administration, Lewis Research
Center, Cleveland, OH
AUTHOR: Moore, T.J.; Moorhead, P.E.;
Bowles, K.J.
TITLE: Specifications for Cleaning,
Fusion Welding, and Postheating
Tantalum and Columbium Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION:
NASA-TM-X-67879-, 1971, July

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CORPORATE AFFILIATION: National
Aeronautics and Space
Administration, Lewis Research
Center, Cleveland, OH
AUTHOR: Moore, T.J.; Watson, G.K.
TITLE: Evaluation of Welding
Techniques for Tungsten-Uranium
Dioxide Composites
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA TM
X-1405, 1967

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CORPORATE AFFILIATION: National
Aeronautics and Space

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Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Morris, J.A.
TITLE: The NASA Thermionic-Conversion (TEC-ART) Program
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: IEEE Trans. Plasma Sci., vol. PS-6; pp. 180-190, 1978, June

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Morris, J.F.
TITLE: High-Temperature, High-Power-Density Thermionic Energy Conversion for Space
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA TM X-73844, 1977, November

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Morris, J.F.
TITLE: The NASA Thermionic-Conversion (TEC-ART) Program
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA-TM-X-73610; IEEE Transactions on Plasma Science (COPS), Volume PS-6(2), pp. 180-190, 1978, June

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Morris, J.F.
TITLE: Optimize Out-of-Core Thermionic Energy Conversion for Nuclear Electric Propulsion
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA-TM-73892; IEEE Conference on Plasma Science (COPS), 1978, May

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Morris, J.F.
TITLE: Thermionic Energy Conversion (TEC) Topping Thermoelectrics
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: DOE-NASA-1062-8; NASA-TM-81677; CONF-810527--1; International Conference on Plasma Science, Santa Fe, NM, May 18, 1981, 1981, May

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Moss, T.A.
TITLE: Recent Advances in Refractory Alloys for Space Power Systems
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA SP-245, 1969, June

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Moss, T.A.; Davies, P.L.; Barna, G.J.
TITLE: Refractory-Alloy Requirements for Space Power Systems
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-SP-245; pp. 1-18, °

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Petrasek, D.W.
TITLE: High-Temperature Strength of Refractory Metal Wires and Consideration for Composite Applications
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA TN D-6881, 1972, August

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Petrasek, D.W.; Signorelli, R.A.
TITLE: Stress-Rupture and Tensile Properties of Refractory Metal Wires at 2000 Degrees and 2200 Degrees F (1093 Degrees and 1204 Degrees C)
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA TN D-5139, 1969, April

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: R. Breitwieser
TITLE: An Out-of-Core Thermionic-Converter System for Nuclear Space Power
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: CONF-720613-P1; pp. 189-208, 1972

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Raffo, P.L.
TITLE: Yielding and Fracture in Tungsten and Tungsten-Rhenium Alloys

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RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TN D-4567, 1968, May

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Raffo, P.L.
TITLE: Exploratory Study of Mechanical Properties and Heat Treatment of Molybdenum-Hafnium-Carbon Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TN D-5025, 1969, February

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Raffo, P.L.
TITLE: Dynamic Strain Aging in Carbide Strengthened Molybdenum Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TN D-5355, 1969, July

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Raffo, P.L.
TITLE: Thermomechanical Processing of Molybdenum-Hafnium-Carbon Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TN D-5645, 1970, February

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Raffo, P.L.
TITLE: Thermomechanical Processing of a Molybdenum Alloy Using Hydrostatic Extrusion
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Met. Trans., Vol. 1, pp. 2967-2969, 1970, October

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Raffo, P.L.; Hehemann, R.F.
TITLE: Grain Growth in Dilute Tungsten-Boron Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TN D-2649, 1965, March

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Raffo, P.L.; Klopp, W.D.
TITLE: Influence of Boron Additions on Physical and Mechanical Properties of Arc-Melted Tungsten and Tungsten - 1 Percent Tantalum Alloy
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TN D-3247, 1966, February

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Raffo, P.L.; Klopp, W.D.
TITLE: Mechanical Properties of Tungsten Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TN D-3248, 1966, February

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Raffo, P.L.; Klopp, W.D.; Witzke, W.R.
TITLE: Mechanical Properties of Arc-Melted and Electron-Beam Melted Tungsten-Base Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TN D-2561, 1965, January

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Raffo, P.L.; Witzke, W.R.
TITLE: Creep of Powder Metallurgy Rhenium at 0.43 to 0.72 Tm
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Trans. AIME, Vol. 243, pp. 889-890, 1969, April

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Rosenblum, L.; Scheuermann, C.M.; Moss, T.A.
TITLE: Space-Power-Systems Material Compatibility Tests of Selected Refractory Metal Alloys with Boiling Potassium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TM X-52242, 1966

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Rubenstein, L.S.
TITLE: Effects of Composition and Heat Treatment on

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High-Temperature Strength of Arc-Melted Tungsten-Hafnium-Carbon Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TN D-4379, 1968, February

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Scheuermann, C.M.
TITLE: Corrosion of Refractory Alloys by Refluxing Potassium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-TM-X-52136-, 1965

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Scheuermann, C.M.; Barrett, C.A.
TITLE: Compatibility of Columbium and Tantalum Tubing Alloys with Refluxing Potassium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-TN-D-3429--, 1966, May

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Sinclair, J.H.
TITLE: Compatibility Tests of Materials for a Lithium-Cooled Space Power Reactor Concept
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-TN-D-7259--, 1973, May

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Stecura, S
TITLE: Apparent Solubilities of Commercially Pure and Oxygen-Doped Tantalum and Niobium in Liquid Potassium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-TN-D-5875--, 1970, July

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Stecura, S.
TITLE: Solubilities of Molybdenum, Tungsten, Vanadium, Titanium, and Zirconium in Liquid Potassium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-TM-X-52694-, 1969

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Stecura, S.
TITLE: Solubilities of Vanadium, Titanium, and Zirconium in Liquid Potassium
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA-TN-D-5093--, 1969, March

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Stecura, S.
TITLE: Solubilities of Molybdenum and Tungsten in Liquid Potassium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-TN-D-5504--, 1969, October

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Stecura, S.
TITLE: Apparent Solubilities of Commercially Pure and Oxygen-Doped Tantalum and Niobium in Liquid Potassium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-TN-D-5875--, 1970, July

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Stecura, S.
TITLE: Recovery and Determination of Crystallographic Modifications of K_3TaO_4 and K_3NbO_4
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: Journal of Less-Common Metals, Vol. 25, pp. 1-10, 1971

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Stecura, S.
TITLE: Identification of a New Lithium Oxide, Li_3O_2
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA-TM-X-2888--, 1973, September

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Stecura, S.
TITLE: Observation of Oxide Particles Below the Apparent Oxygen Solubility Limit in

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Tantalum
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION:
NASA-TM-X-2889--, 1973, September

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Stephens, J.R.
TITLE: Strain Aging Effects in Tungsten Due to Carbon
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TM X-52000, 1964

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Stephens, J.R.
TITLE: Effects of Interstitial Impurities on the Low-Temperature Tensile Properties of Tungsten
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TN D-2287, 1964, June

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Stephens, J.R.
TITLE: Dislocation Structures in Slightly Strained Tungsten and Tungsten-Rhenium and Tungsten-Tantalum Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TN D-4094, 1967, August

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Stephens, J.R.
TITLE: Dislocation Structures in Single Crystal Tungsten and Tungsten Alloys
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA TN D-5493, 1969, October

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Stephens, J.R.
TITLE: Review of Deformation Behavior of Tungsten at Temperatures Less than 0.2 Absolute Melting Temperature
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION:
NASA-TM-X-2482--, 1972, January

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Stephens, J.R.
TITLE: Role of Hf and Zr in the Hydrogen Embrittlement of Ta and Cb Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TM X-68293, 1973

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Stephens, J.R.
TITLE: Effects of Long-Term Aging on Ductility of the Columbium Alloys C-103, Zc-1Zr, and Cb-752 and the Molybdenum Alloy Mo-TZM
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TN-D-8095, 1975, October

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Stephens, J.R.; Garlick, R.G.
TITLE: Compatibility of Tantalum, Columbium, and Their Alloys with Hydrogen in the Presence of a Temperature Gradient
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TN D-3546, 1966, August

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Stephens, J.R.; Witzke, W.R.
TITLE: Alloy Softening in Group VIA Metals Alloyed with Rhenium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TN D-7000, 1970, November

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Stephens, J.R.; Witzke, W.R.
TITLE: Alloy Softening in Group VIA Metals Alloyed with Rhenium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Journal of the Less-Common Metals 23:325-342, 1971, April

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Stephens, J.R.; Witzke, W.R.
TITLE: Alloy Hardening and Softening in Binary Molybdenum Alloys as Related to Electron Concentration
RELEVANCE NUMBER: 1

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PUBLICATION DESCRIPTION: Journal of the Less-Common Metals 29:371-388, 1972

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Stephens, J.R.; Witzke, W.R.
TITLE: Alloy Hardening and Softening in Binary Molybdenum Alloys as Related to Electron Concentration
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA TN D-6810, 1972, May

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Stone, P.L.
TITLE: Materials Technology Programs in Support of a Mercury Rankine Space Power System
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA TN D-7355, 1973, September

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Titran, R.H.
TITLE: Creep of Tantalum T-222 Alloy in Ultra-High Vacuum for Times up to 10,000 Hours
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TN D-4605, 1968, May

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Titran, R.H.; Hall, R.W.
TITLE: High-Temperature Creep Behavior of a Columbium Alloy, FS-85
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TN D-2885, 1965, June

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Titran, R.H.; Hall, R.W.
TITLE: Ultra-High Vacuum Creep Behavior of Columbium and Tantalum Alloys at 1000 and 2200 degrees F for Times Greater than 1000 Hours
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-TN-D-3222, 1966, January

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Titran, R.H.; Hall, R.W.
TITLE: Ultrahigh-Vacuum Creep Behavior of Columbium and Tantalum Alloys at 2000 Degrees and 2200 Degrees F for Times Greater than 1000 Hours
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Refractory Metals and Alloys IV-Research and Development. R.I. Jaffee et al., eds., Gordon and Breach Science publ., pp. 761-774; Metallurgical Society Conferences (Proceedings) 41:761-774, 1967

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Titran, R.H.; Klopp, W.D.
TITLE: Long Time Creep Behavior of Tantalum-10 Tungsten in High Vacuum
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TN D-6044, 1970, October

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Tower, L.K.
TITLE: Thermochemistry of Tantalum - Wall Cooling System with Lithium and Sodium Working Fluids
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TM X-2640, 1972

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Tower, L.K.
TITLE: Theoretical Analysis of Oxygen Diffusion at Startup in an Alkali Metal Heat Pipe with Gettered Alloy Walls
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TM X-2793, 1973, May

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Tower, L.M.
TITLE: Simplified Thermochemistry of Oxygen in Lithium and Sodium for Liquid Metal Cooling Systems
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TM X-2636, 1972

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CORPORATE AFFILIATION: National Aeronautics and Space

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Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Watson, G.K.
TITLE: Preliminary Evaluation of T-111 Clad UN Fuel Specimens from 2500-Hour 1040 degrees C (1900 degrees F) Lithium Loop Test
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TM X-52998, 1971

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Watson, G.K.; Stephens, J.R.
TITLE: Effect of Aging at 1040 Degrees C (1900 Degrees F) on the Ductility and Structure of a Tantalum Alloy, T-111
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TN D-6988, 1972, October

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Witzke, W.R.
TITLE: Effect of Alloying on Grain Refinement of Electron-Beam-Melted Tungsten
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TN D-3531, 1966, July

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Witzke, W.R.
TITLE: Composition Effects on Mechanical Properties of Tungsten-Rhenium-Hafnium-Carbon Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TN D-7210, 1973, April

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Witzke, W.R.; Raffo, P.L.
TITLE: Creep Behavior of Electron-Beam-Melted Rhenium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA TN D-6291, 1971, April

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Lewis Research Center, Cleveland, OH
AUTHOR: Zellars, G.R.; Barrett, C.A.
TITLE: Evaluation of the Results of a Round Robin Analysis for Oxygen in Potassium and Sodium
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA TN D-4971, 1968

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Scientific and Technical Information Division, Cleveland, OH
AUTHOR: Rosenblum, L.; Englund, D.R., Jr.; Hall, R.W.; Moss, T.A.; Scheuermann, C.M.
TITLE: VII Potassium Rankine System Materials Technology
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA SP-131, pp. 169-199, 1966

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Washington, DC
AUTHOR: Manson, S.V.
TITLE: A Review of the Alkali Metal Rankine Technology Program
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: Journal of Spacecraft and Rockets, Vol 5, No. 11, pp. 1249-1259, 1968, November

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Washington, DC
AUTHOR: Rosenblum, L.
TITLE: Potassium Rankine System Materials Technology
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA SP-131; p. 185, 1966

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CORPORATE AFFILIATION: National Aeronautics and Space Administration, Washington, DC
AUTHOR: Rosenblum, L.
TITLE: Oxidation of Columbium, Tantalum and Their Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-SP-131; pp. 170-187, 1966

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CORPORATE AFFILIATION: National Research Institute for Metals, Tokyo, Japan
AUTHOR: Yoda, R.; Itagaki, T.; Hamada, T.
TITLE: Some Properties of Tungsten-Rhenium Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Japan Institute of Metals Journal, Vol. 34, pp. 1092-1097, 1970, November

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CORPORATE AFFILIATION: National Research Laboratory, Washington, DC
AUTHOR: Ewing, C.T.
TITLE: High Temperature Properties of Sodium and Potassium, Seventh

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Progress Report for Period April 1 to June 30, 1962
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NRL-5844, 1962, August

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CORPORATE AFFILIATION: Naval Research Laboratory, Washington, DC
AUTHOR: Sandelin, J.W.; Birks, L.S.
TITLE: Texture Development and Crystal Perfection in Niobium (Columbium) Annealed at 2000 degrees C 1269-70
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: Transactions of the Metallurgical Society of AIME, 239, pp. 1269-70, 1967, August

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CORPORATE AFFILIATION: North American Aviation, Incorporated, Canoga Park, CA
AUTHOR: Chandler, W.T.; Hoffman, N.J.
TITLE: Effects of Liquid and Vapor Cesium on Container Metals
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ASD-TRD-965, 1963, March

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CORPORATE AFFILIATION: North American Aviation, Incorporated, Canoga Park, CA
AUTHOR: McKisson, R.L.; Eichelberger, R.L.; Dahleen, R.C.; Scarborough, J.M.; Argue, G.R.
TITLE: Solubility Studies of Ultra Pure Transition Elements in Ultra Pure Alkali Metals
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA-CR-610, 1966, October

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CORPORATE AFFILIATION: North American Aviation, Incorporated, Downey, CA
AUTHOR: Cygan, R.; Reed, E.
TITLE: Molybdenum Corrosion by Sodium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NAA-SR-161, 1951, November

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CORPORATE AFFILIATION: North American Aviation, Incorporated, Downey, CA
AUTHOR: Parkinson, W., Jr.
TITLE: Stability of Iron Toward Lithium at Elevated Temperatures under Cyclotron Irradiation
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NAA-SR-73, 1952

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
TITLE: Metals and Ceramics Division Annual Progress Report for Period Ending June 30, 1966
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ORNL-3970; p. 77, 1966, October

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
TITLE: Metals and Ceramics Division Annual Progress Report for Period Ending June 30, 1967
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ORNL-4170; p. 95, 1967, November

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Ammon, R.L.; Begley, R.T.; Eichinger, R.L.
TITLE: T-111 Cesium Natural Connection Loop
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: CONF-650411; p. 359, 1966

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Brasunas, A. de S.
TITLE: Interim Report on Static Liquid-Metal Corrosion
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ORNL-1647, 1954, May

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Carlander, R.
TITLE: The High-Temperature Corrosion Resistance of Hastelloy "B" and Molybdenum to Rubidium
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: ORNL CF-56-8-85, 1956, August

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Cook, W.H.
TITLE: Corrosion Resistance of Various Ceramics and Cermets to Liquid Metals
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: ORNL-2391, 1960

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Cunningham, J.F.
TITLE: Resistance of Metallic Materials to Corrosion Attack by High Temperature Lithium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ORNL-CF-51-7-135, 1951

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Day, R.B.; Brasunas, A. de S.

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TITLE: Testing and Examination of Thermal Convection Loops Operated with Lithium and Lead
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Y-F31-4, 1951

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: DeVan, J.H.
TITLE: Lithium and Potassium Corrosion Studies with Refractory Metals
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ORNL-TM-1673, 1966

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: DeVan, J.H.
TITLE: Compatibility of Structural Materials with Boiling Potassium
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: ORNL-TM-1361; pp. 41-57, 1966, April

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: DeVan, J.H.; DiStefano, J.R.; Jansen, D.H.
TITLE: Compatibility of Boiling Potassium with Refractory Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ORNL-3870; pp. 124-129, °

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: DeVan, J.H.; DiStefano, J.R.; Jansen, D.H.
TITLE: Compatibility of Refractory Metals with Boiling Alkali Metals
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Transactions of the American Nuclear Society, Vol. 8, No. 2, pp. 390-391, 1965

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: DeVan, J.H.; Litman, A.P.; DiStefano, J.R.; Sessions, C.E.
TITLE: Lithium and Potassium Corrosion Studies with Refractory Metals
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ORNL-TM-1673, 1966

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: DeVan, J.H.; Litman, A.P.; DiStefano, J.R.; Sessions, C.E.
TITLE: Lithium and Potassium Corrosion Studies with Refractory Metals
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ORNL-P-2655; CONF-6110; International Atomic Energy Agency Symposium on Corrosion Studies, and System Operating Experience, Vienna, Austria, p. 675, 1967

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: DeVan, J.H.; Sessions, C.E.
TITLE: Mass Transfer of Niobium-Base Alloys in Flowing Nonisothermal Lithium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Nuclear Applications, Vol. 3, No. 2, p. 102, 1967, February

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: DiStefano, J.R.
TITLE: Corrosion of Refractory Metals by Lithium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ORNL-3551, 1964, March

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: DiStefano, J.R.
TITLE: Mass-Transfer Effects in Some Refractory Metal-Alkali Metal-Stainless Steel Systems
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ORNL-4028, 1966, November

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: DiStefano, J.R.; DeVan, J.H.
TITLE: Refluxing Capsule Experiments with Refractory Metals and Boiling Alkali Metals
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Nuclear Applications and Technology 8(1):29-44, 1970, January

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: DiStefano, J.R.; Hoffman, E.E.
TITLE: Relation Between Oxygen Distribution and Corrosion in Some Refractory Metal-Lithium Systems
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ORNL-TM-327, 1962, October

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: DiStefano, J.R.; Hoffman, E.E.
TITLE: Corrosion Mechanisms in Refractory Metal-Alkali Metal

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RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ORNL-3424, 1963, August 30

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: DiStefano, J.R.; Hoffman, E.E.
TITLE: A Survey of the Compatibility of Some Potential Refractory-Metal Fuel Cladding Materials with Potassium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ORNL-TM-708; 22 pp., 1963, December

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: DiStefano, J.R.; Hoffman, E.E.
TITLE: Corrosion Mechanisms in Refractory Metal - Alkali Metal Systems
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Promsel, N.E.(Ed.), The Science and Technology of Tungsten, Tantalum, Molybdenum, Niobium and Their Alloys, Pergamon Press, London, pp. 257-288, 1964

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: DiStefano, J.R.; Hoffman, E.E.
TITLE: Corrosion Mechanisms in 'Refractory Metal-Alkali Metal' Systems
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ORNL-3424; Atomic Energy Review 2(1), 1964

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: DiStefano, J.R.; Litman, A.P.
TITLE: Effects of Impurities in Some Refractory Metal-Alkali Metal Systems
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Corrosion, Volume 20, pp. 392t-399t, 1964, December

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: DiStefano, J.R.; Moorhead, A.J.; Cole, N.C; McDonald, R.E.
TITLE: Development and Construction of a Molybdenum Test Stand
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ORNL-4874, 1972, December

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Farrell, J.; Schaffhauser, A.C.; Stiegler, J.O.
TITLE: Recrystallization, Grain Growth, and the Ductile-Brittle Transition in Tungsten Sheet
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: J. Less-Common Metals 13, pp. 144-145; ORNL-P-2760, 1967

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Federer, J.I.
TITLE: Chemically Vapor Deposited Coatings, MSR Program Semiannual Progress Report
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: ORNL-4728; pp. 176-177, 1971, August

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Federer, J.I.
TITLE: Chemically Vapor Deposited Coatings, MSR Program Semiannual Progress Report
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: ORNL-4676; pp. 231-233, 1971, February

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Goldberg, G.
TITLE: The Effects of Trace Impurities of Moisture, Oxygen, Hydrogen, Nitrogen and Carbon Dioxide in Glove Box Atmospheres on the Analysis of the Alkali Metals
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: ORNL-TM-1357, 1965

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Harms, W.O.
TITLE: High-Temperature Materials
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ORNL-4170; Part II, 1967

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Harms, W.O.; Litman, A.P.
TITLE: Compatibility of Materials for Advanced Space Nuclear Power Systems
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ASME Paper 67-WA/AV-1, 1967

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Hendricks, J.W.; McElroy, D.L.
TITLE: High Temperature High Vacuum Thermocouple Drift Tests
RELEVANCE NUMBER: 2

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PUBLICATION DESCRIPTION:
ORNL-TM-833, 1964, August

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Hoffman, E.E.
TITLE: Solubility of Nitrogen and Oxygen in Lithium and Methods of Lithium Purification
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Symposium on Newer Metals, Special Technical Publication No. 272, American Society for Testing Materials, Philadelphia, Pa., pp. 195-206, 1959

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Hoffman, E.E.
TITLE: The Effects of Oxygen and Nitrogen on the Corrosion Resistance of Columbium to Lithium at Elevated Temperatures
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ORNL-2675; pp. 34-7, 1959, January

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Hoffman, E.E.
TITLE: Corrosion of Materials by Lithium at Elevated Temperatures
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ORNL-2674, 1959, March

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Hoffman, E.E.
TITLE: The Solubility of Nitrogen and Oxygen in Lithium and Methods of Lithium Purification
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ORNL-2894, 1960

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Hoffman, E.E.
TITLE: Corrosion of Materials by Lithium at Elevated Temperatures
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ORNL-2924, 1960, October

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Hoffman, E.E.; Manly, W.D.
TITLE: Comparison of Sodium, Lithium and Lead as Heat-Transfer Media from a Corrosion Standpoint
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Problems in Nuclear Engineering, Pergamon Press, New York, p. 133, 1957

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Inouye, H.
TITLE: The Oxidation of Columbium at Low Oxygen Pressures
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Columbium Metallurgy, Metall. Soc. Conf., Vol. 10, Interscience, 1960

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Inouye, H.
TITLE: Contamination of Refractory Metals by Residual Gases in Vacuums Below 1E-6 Torr
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ORNL-3674, 1964

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Inouye, H.
TITLE: Interactions of Refractory Metals with Active Gases in Vacua and Inert Gas Environments
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION:
CONF-680448; Machlin, I.(ed.) Refractory Metals and Alloys. Metallurgy and Technology, Plenum Press, New York, pp. 165-195; Symposium on the Metallurgy and Technology of Refractory Metal Alloys; Washington, DC, 1968

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Jansen, D.H.
TITLE: Niobium-1% Zirconium Boiling-Potassium Forced-Circulation Loop Test
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ORNL-4301, 1968, December

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Jansen, D.H.; Hoffman, E.E.
TITLE: Niobium - 1% Zirconium, Natural-Circulation, Boiling-Potassium Corrosion Loop Test
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ORNL-3603, 1964

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Kelly, K.J.; Hobart, E.W.; Bjork, R.G.
TITLE: Studies Concerning the Chemical State of Carbon, Nitrogen, and Oxygen in Alkali Metals
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION:
CONF-650411; AEC-NASA Liquid

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Metals Information Meeting, Gatlinburg, Tennessee, April 21, 1965, 1965

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Kelly, K.J.; Klamut, C.J.; Rosenblum, L.; Semmel, J.W., Jr.; Thurber, W.C.
TITLE: Corrosion of High-Temperature Materials in Alkali Metals
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Nucleonics, Vol. 22, No. 3, pp. 37-42, 1964, March

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Klueh, R.L.
TITLE: Penetration of Refractory Metals by Alkali Metals
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: CONF-691007; Draley, J.E.(ed.), Corrosion by Liquid Metals, New York: Plenum Press, pp. 177-196; Corrosion by Liquid Metals Conference, Philadelphia, PA

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Klueh, R.L.
TITLE: Interactions in Alkali Metal Solutions Containing Oxygen: 1. The Niobium-Oxygen-Potassium System
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ORNL-TM-2476, 1969, February

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Klueh, R.L.
TITLE: Penetration of Refractory Metals by Alkali Metals
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ORNL-TM-2836, 1970, April

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Klueh, R.L.
TITLE: Effect of Oxygen on Niobium-Sodium Compatibility
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Corrosion, Volume 27(8), pp. 342-346, 1971, August

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Litman, A.P.
TITLE: The Effect of Oxygen on the Corrosion of Niobium by Liquid Potassium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ORNL-3751, 1965

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Litman, A.P.; Strain, J.E.
TITLE: Determination of Oxygen in Alkali Metals
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: ORNL-3970; p. 82, 1966, October

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: McCoy, H.E.
TITLE: The Influence of Various Gaseous Environments on the Creep-Rupture Properties of Nuclear Materials Selected for High-Temperature Service
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: Corrosion of Reactor Materials, International Atomic Energy Agency, Vienna, p. 293, 1962

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: McCoy, H.E.
TITLE: Creep Properties of the Nb-1% Zr Alloy
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Journal of the Less-Common Metals, Volume 8, pp. 20-35, 1965

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: McCoy, H.E.
TITLE: An Evaluation of the Creep Properties of Cb-753 and a Comparison of This Alloy with Several Other Niobium - Base Alloys
RELEVANCE NUMBER: 1
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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: McCoy, H.E.
TITLE: Creep Properties of the Nb-1% Zr Alloy
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ORNL-TM-905, 1973

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: McDonald, R.E.; Leitten, C.F., Jr.
TITLE: Production of Refractory Metal Tube Shells by Extrusion and Flow-Turning Techniques
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: pp. 85-92 in Refractory Metals and Alloys

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AUTHOR: McDonald, R.E.; Reimann, G.A.
TITLE: Floating-Mandrel Extrusion of Tungsten and Tungsten-Alloy Tubing
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ORNL-4210, °

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Moorhead, A.J.; DiStefano, J.R.; McDonald, R.E.
TITLE: Fabrication Procedures for Unalloyed Molybdenum
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Nuclear Technology, Vol. 24, 1974, October

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Moorhead, A.J.; Slaughter, G.M.
TITLE: Welding Studies on Arc-Cast Molybdenum
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Weld. J. (N.Y.), submitted for publication, °

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Nicholson, E.L.
TITLE: Conceptual Design and Development Program for the Molybdenum Reductive Extraction Equipment Test Stand
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: ORNL-CF-71-7-2, 1971, July

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Page, J.P.
TITLE: The Annealing Behavior of Cold Worked Columbium
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: ORNL 2372, 1957, October

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Pawel, R.E.; Cathcart, J.V.; Campbell, J.J.
TITLE: Oxide Platelet Formation in Tantalum Single Crystals
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: Acta Metallurgica 10(2), pp. 149-60, 1962, February

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Roche, T.K.
TITLE: Effect of Degree of Vacuum on the Slow-Bend Creep Behavior of Columbium -0.6% Zirconium at 1000 degrees C
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: ORNL-3569, 1964, June

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Schaffer, W.F., Jr.; Nicholson, E.L.; McNeese, L.E.
TITLE: Quality Assurance Program Plan for the Molybdenum Reductive Extraction Equipment Test Stand
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: ORNL-CF-73-1-45, 1973, February

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Sessions, C.E.
TITLE: Corrosion of Advanced Refractory Alloys in Lithium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: CONF-650411; AEC-NASA Liquid Metals Information Meeting held in Gatlinburg, Tennessee, April 21-23, 1965, (pp. 143-148), 1965

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Sessions, C.E.; DeVan, J.H.
TITLE: Thermal Convection Loop Tests of Refractory Alloys in Lithium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ORNL-

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Sessions, C.E.; DeVan, J.H.
TITLE: Thermal Convection Loop Tests of Nb-1%Zr Alloy in Lithium at 1200 and 1300 Degrees C
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Nuclear Applications and Technology, Volume 9, pp. 250-259, 1970, August

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Stephenson, R.L.
TITLE: Comparative Creep-Rupture Properties of D-43 and B-66 Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ORNL-TM-944, 1964, November

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Stephenson, R.L.
TITLE: Creep-Rupture Properties of

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Unalloyed Tantalum, Ta-10% W, and T-111 Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION:
ORNL-TM-1994, 1967, December

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Stephenson, R.L.
TITLE: The Creep-Rupture Properties of Some Refractory Metal Alloys Part I - Effect of Heat Treatment on the Properties of the Niobium Base Alloy D-43
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Journal of the Less Common Metals, Volume 15, pp. 395-402, 1968

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Stephenson, R.L.
TITLE: The Creep-Rupture Properties of Some Refractory Metal Alloys, Part II - The Properties of the Niobium-Base Alloys FS-85 and Cb-752 and their Response to Heat Treatment
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Journal of the Less-Common Metals, Volume 15, pp. 403-414, 1968

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Stephenson, R.L.
TITLE: Comparative Creep-Rupture Properties of W-25% Re Consolidated by ARC Melting and Power Metallurgy Techniques
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION:
ORNL-TM-265; 15 pp., 1969

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Tennery, V.J.; Godfrey, T.G.; Potter, R.A.
TITLE: Synthesis, Characterization, and Fabrication of UN
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: ORNL-4608; NASA CR-72764, 1970, Dec.

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Tepper, F.; Greer, J.
TITLE: Factors Affecting the Compatibility of Liquid Cesium with Containment Metals
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION:
CONF-650411; AEC-NASA Liquid Metal Information Meeting p. 323, 1966

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Wiffen, F.W.
TITLE: Radiation Damage in CTR's
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION:
CONF-710624; Proceedings of the International Working Sessions on Fusion Reactor Technology, Oak Ridge National Laboratory, Oak Ridge, TN, pp. 140-174, 1971, July

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AUTHOR: Wiffen, F.W.
TITLE: The Effect of Alloying and Purity on the Formation and Ordering of Voids in B.C.C. Metals
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION:
CONF-710601; Radiation Induced Voids in Metals, U.S. Atomic Energy Agency, pp. 386-395, 1971, September

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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Wiffen, F.W.
TITLE: The Tensile Properties of Fast Reactor Neutron Irradiated B.C.C. Metal and Alloys
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION:
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CORPORATE AFFILIATION: Oak Ridge National Laboratory, Oak Ridge, TN
AUTHOR: Wiffen, F.W.
TITLE: Creep and Tensile Properties of Helium Injected Nb-1%Zr
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION:
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AUTHOR: Inouye, H.; Liu, C.T.
TITLE: Low-Pressure Oxidation of T-111 and Effect on Tensile Properties
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION:
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CORPORATE AFFILIATION: Pratt and Whitney Aircraft, Connecticut Advanced Nuclear Engineering Laboratory, Middletown, CT

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RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: PWAC-459, 1965

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CORPORATE AFFILIATION: Pratt and Whitney Aircraft, Connecticut Advanced Nuclear Engineering Laboratory, Middletown, CT
AUTHOR: Austin, G.W.
TITLE: Summary of Lithium Corrosion Investigation in Columbium-Zirconium Alloy Systems
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: PWAC-343, 1961

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CORPORATE AFFILIATION: Pratt and Whitney Aircraft, Connecticut Advanced Nuclear Engineering Laboratory, Middletown, CT
AUTHOR: Bourdon, P.A.; Lymperes, C.J.; Schenck, G.F.
TITLE: Columbium-1 Zirconium Alloy Lithium Corrosion Loop Tests, LCCKK-5, 6, 7, 8, 9
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: TIM-823, 1965

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CORPORATE AFFILIATION: Pratt and Whitney Aircraft, Connecticut Advanced Nuclear Engineering Laboratory, Middletown, CT
AUTHOR: Cleary, R.E.
TITLE: Corrosion Studies of Refractory Metals in Lithium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: CONF-650411; AEC-NASA Liquid Metals Information Meeting, Gatlinburg, Tennessee, April 21-23, 1965, 1965

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CORPORATE AFFILIATION: Pratt and Whitney Aircraft, Connecticut Advanced Nuclear Engineering Laboratory, Middletown, CT
AUTHOR: Cleary, R.E.; Blecherman, S.S.; Corliss, J.E.
TITLE: Solubility of Refractory Metals in Lithium and Potassium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: TIM-850, 1965

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CORPORATE AFFILIATION: Pratt and Whitney Aircraft, Connecticut Advanced Nuclear Engineering Laboratory, Middletown, CT
AUTHOR: Cummings, D.; Bunn, P.; Leavenworth, H.W.; Cleary, R.E.
TITLE: Internal Friction Study of Oxygen and Nitrogen Interactions with Columbium-Zirconium Alloys
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: PWAC-358, 1961

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CORPORATE AFFILIATION: Pratt and Whitney Aircraft, Connecticut Advanced Nuclear Engineering Laboratory, Middletown, CT
AUTHOR: Freed, M.S.; Kelly, K.J.
TITLE: Corrosion of Columbium Base and Other Structural Alloys in High Temperature Lithium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: PWAC-355, °

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CORPORATE AFFILIATION: Pratt and Whitney Aircraft, Connecticut Advanced Nuclear Engineering Laboratory, Middletown, CT
AUTHOR: Hobart, F.W.; Bjork, R.G.
TITLE: Validity of Determining Carbon in Lithium by Measurement of Acetylene Evolved on Hydrolysis
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: TIM-906, 1965

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CORPORATE AFFILIATION: Pratt and Whitney Aircraft, Connecticut Advanced Nuclear Engineering Laboratory, Middletown, CT
AUTHOR: Kapelner, S.; Maio, E.
TITLE: The Stability of Some Metallic Oxides, Carbides, and Nitrides to Liquid Lithium at 800 Degrees K and 1500 Degrees K
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: TIM-651, 1961

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CORPORATE AFFILIATION: Pratt and Whitney Aircraft, Connecticut Advanced Nuclear Engineering Laboratory, Middletown, CT
AUTHOR: Leavenworth, H.; Cleary, R.E.; Bratton, W.D.
TITLE: Solubility of Structural Metals in Lithium
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: PWAC-356, 1961

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CORPORATE AFFILIATION: Pratt and Whitney Aircraft, Connecticut Advanced Nuclear Engineering Laboratory, Middletown, CT
AUTHOR: Leavenworth, H.W.; Cleary, R.E.
TITLE: The Solubility of Ni, Cr, Fe, Ti, and Mo in Liquid Lithium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Acta Met. 9, pp. 519-20, 1961

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CORPORATE AFFILIATION: Pratt and Whitney Aircraft, Connecticut Advanced Nuclear Engineering Laboratory, Middletown, CT
AUTHOR: Lemar, H.K.
TITLE: Liquid-Metal Smoke Abatement

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PUBLICATION DESCRIPTION: PWAC-235, 1957

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AUTHOR: Rigney, D.V.; Kapelner, S.M.; Cleary, R.E.
TITLE: The Vapor Pressure of Lithium between 1307 and 1806 Degrees K
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: EIM-844, 1965

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CORPORATE AFFILIATION: Pratt and Whitney Aircraft, Connecticut Advanced Nuclear Engineering Laboratory, Middletown, CT
AUTHOR: Rigney, D.V.; Kapelner, S.M.; Cleary, R.E.
TITLE: The Electrical Resistivity of Lithium and Columbium-1 Zirconium Alloy to 1430 Degrees C
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: TIM-854, 1965

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CORPORATE AFFILIATION: Pratt and Whitney Aircraft, Connecticut Advanced Nuclear Engineering Labcratory, Middletown, CT
AUTHOR: Rigney, D.V.; Kapelner, S.M.; Cleary, R.F.
TITLE: The Viscosity of Lithium
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: TIM-849, 1965

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CORPORATE AFFILIATION: Pratt and Whitney Aircraft, Connecticut Advanced Nuclear Engineering Laboratory, Middletown, CT
AUTHOR: Wallace, M.J.
TITLE: Summary Report of Potential Liquid Metal Bearing Materials for SNAP-50/SPUR Pumps
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: PWAC-468, 1965

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CORPORATE AFFILIATION: Pratt and Whitney Aircraft, East Hartford, CT
TITLE: SNAP-50/SPUR Final Summary Report-Coolants and Working Fluids
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: PWAC-491, 1965

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CORPORATE AFFILIATION: Pratt and Whitney Aircraft, East Hartford, CT
AUTHOR: Austin, G.W.
TITLE: NaK Corrosion Investigation of Selected Bimetallic Systems
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: PWAC-342; 21 pp., 1961, June

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CORPORATE AFFILIATION: Pratt and Whitney Aircraft, East Hartford, CT
AUTHOR: Blecherman, S.S.; Hodel, J.
TITLE: The Compatibility of Structural and Turbo-Machinery Alloys in Boiling Potassium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: PWAC-501, 1965

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CORPORATE AFFILIATION: Pratt and Whitney Aircraft, East Hartford, CT
AUTHOR: Bourden, P.A.; Bleckermen, S.S.; Schenck, G.F.
TITLE: Columbium-1, Zirconium Alloy Forced Convection Lithium Slave Loop Test LCCDB-1
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: TIM-898, 1965

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CORPORATE AFFILIATION: Pratt and Whitney Aircraft, East Hartford, CT
AUTHOR: Harrison, R.W.
TITLE: Low Pressure Oxidation of Columbium -1 Zirconium
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: CNLM-5351, 1964

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CORPORATE AFFILIATION: Pratt and Whitney Aircraft, East Hartford, CT
AUTHOR: Limoncelli, E.H.
TITLE: Reaction Rate of Columbium -1 Zirconium Alloy with Oxygen at Low Pressures
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: TIM-901, 1965

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CORPORATE AFFILIATION: Rocketdyne, Canoga Park, CA
TITLE: Compatibility of Materials with High Temperature Potassium. Final Progress Report, April 1960 to December 1961
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: R-2617-4; pp. 11-37, 1961, December

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CORPORATE AFFILIATION: Rocketdyne, Canoga Park, CA
AUTHOR: Chandler, W.T.
TITLE: Alkali-Metal Corrosion Studies at Rocketdyne
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: TID-7626, Part 1; NASA-AEC Liquid Metals Corrosion Meeting, December 14-15, 1961, Brookhaven National

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Laboratory, 1962, April

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CORPORATE AFFILIATION: Solar, San Diego, CA
AUTHOR: Shoemaker, H.E.; Stetson, A.R.
TITLE: Silicide Coatings for Tantalum and Columbium Alloys. Final Summary Report, April 1, 1967-December 31, 1968
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-CR-72519, 1969, August

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CORPORATE AFFILIATION: Solar, San Diego, CA
AUTHOR: Warnock, R.V.; Stetson, A.R.
TITLE: Development of Fused Slurry Silicide Coatings for Tantalum Re-Entry Heat Shields
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA CR-121022, 1972, September

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CORPORATE AFFILIATION: Southern Research Institute, Birmingham, AL
TITLE: The Mechanical and Thermal Properties of Tungsten and TZM Sheet Produced in the Refractory Metal Sheet Rolling Program. Part 1.
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: 7563-1479-XII; (Available from DDC as AD-688631), 1966, August

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CORPORATE AFFILIATION: Space Nuclear Systems Office, Washington, DC
AUTHOR: Beard, D.S.
TITLE: The United States Thermionic Reactor Program
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Proceedings of the 3rd International Conference on Thermionic Electrical Power Generation, Juelich, Federal Republic of Germany, June 5, 1972 Juelich, FRG, (pp. 429-441); CONF-720613-P1, 1972, June

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CORPORATE AFFILIATION: Technische Hochschule Aachen (Germany, F.R.)
AUTHOR: Fritsch, R.
TITLE: Literature-survey on Machining of Molybdenum Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: 1975

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CORPORATE AFFILIATION: Thermacore Incorporated, Leola, PA
AUTHOR: Ernst, D.M.
TITLE: NEP Heat Pipe Radiators
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: CONF-790803; Proceedings of the 14th Annual IECEC Conference, Boston, MA, August 5, 1979, (pp. 1886-1889), 1979

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CORPORATE AFFILIATION: Thermacore, Incorporated, Leola, PA
AUTHOR: Ernst, D.M.
TITLE: Heat Pipes for NEP Spacecraft Radiators
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Proceedings of the 16th Intersociety Energy Conversion Engineering Conference, Atlanta, GA, August 9-14, 1981, Vol. 1, Technologies for the Transition, Paper No. 819164, 1981

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CORPORATE AFFILIATION: TRW Equipment Laboratories, Cleveland, OH
AUTHOR: Honeycutt, C.R.; Martin, T.F.; Sawyer, J.C.; Steigerwald, E.A.
TITLE: Elevated Temperature Fatigue of TZC Molybdenum Alloy Under High Frequency and High Vacuum Conditions
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA CR-72241, 1967, May

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CORPORATE AFFILIATION: TRW Equipment Laboratories, Cleveland, OH
AUTHOR: Sawyer, J.C.
TITLE: Design and Operation of Ultra-High Vacuum Creep Equipment
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Transactions Vacuum Metallurgy Conference. L.M. Bianchi, ed., American Vacuum Society, pp. 41-55, 1965

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CORPORATE AFFILIATION: TRW Equipment Laboratories, Cleveland, OH
AUTHOR: Sawyer, J.C.
TITLE: Generation of Long Time Creep Data of Refractory Alloys at Elevated Temperatures
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-CR-1115, 1967, June

<413>
CORPORATE AFFILIATION: TRW Equipment Laboratories, Cleveland, OH
AUTHOR: Sawyer, J.C.; Steigerwald, E.A.
TITLE: Generation of Long Time Creep Data of Refractory Alloys at Elevated Temperatures
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-CR-1115; TRW-ER-7203, 1968

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CORPORATE AFFILIATION: TRW Equipment Laboratories, Cleveland, OH
AUTHOR: Sheffler, K.D.
TITLE: Generation of Long Time Creep Data on Refractory Alloys at

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Elevated Temperatures
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Contract NASA-9439, Final Report; TRW ER-7442, 1970, January

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CORPORATE AFFILIATION: TRW Equipment Laboratories, Cleveland, OH
AUTHOR: Sheffler, K.D.
TITLE: Generation of Long Time Creep Data on Refractory Alloys at Elevated Temperatures
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA CR-72997, 1971, May

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CORPORATE AFFILIATION: TRW Equipment Laboratories, Cleveland, OH
AUTHOR: Sheffler, K.D.; Sawyer, J.C.
TITLE: Creep Behavior of T-111 Alloy Under the Influence of Continuously Varying Stresses
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-CR-134469, 1969, May

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CORPORATE AFFILIATION: TRW Equipment Laboratories, Cleveland, OH
AUTHOR: Sheffler, K.D.; Sawyer, J.C.; Steigerwald, E.A.
TITLE: Mechanical Behavior of Tantalum-Base T-111 Alloy at Elevated Temperature
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Transactions of the American Society for Metals 62(3):749-758, 1969

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CORPORATE AFFILIATION: TRW Equipment Laboratories, Cleveland, OH
AUTHOR: Sheffler, K.D.; Sawyer, J.C.; Steigerwald, E.A.
TITLE: Mechanical Behavior of Tantalum-Base Alloys at Elevated Temperature
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-CR-1436, 1969, September

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CORPORATE AFFILIATION: TRW Equipment Laboratories, Cleveland, OH
AUTHOR: Sheffler, K.D.; Sawyer, J.C.; Steigerwald, E.A.
TITLE: Creep Behavior of Refractory Alloys in Ultrahigh Vacuum
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-SP-245; pp. 75-125, 1970

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CORPORATE AFFILIATION: TRW Materials Technology Laboratories, Cleveland, OH
AUTHOR: Honeycutt, C.R.; Martin, T.F.; Sawyer, J.C.; Steigerwald, E.A.
TITLE: Elevated-Temperature Fatigue of TZC Molybdenum Alloy under High-Frequency and High-Vacuum Conditions
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Trans. ASM, Vol. 60, No. 3, pp. 450-458, 1967, September

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CORPORATE AFFILIATION: TRW Materials Technology Laboratories, Cleveland, OH
AUTHOR: Sawyer, J.C.; Steigerwald, E.A.
TITLE: Creep Properties of Refractory Metal Alloys in Ultrahigh Vacuum
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: J. Materials, Vol. 2, No. 3, pp. 341-361, 1967, June

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CORPORATE AFFILIATION: TRW Materials Technology Laboratories, Cleveland, OH
AUTHOR: Sheffler, K.D.; Doble, G.S.
TITLE: Influence of Creep Damage on the Low Cycle Thermal-Mechanical Fatigue Behavior of Two Tantalum Base Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-CR-121001, 1972, May

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CORPORATE AFFILIATION: TRW Materials Technology Laboratories, Cleveland, OH
AUTHOR: Sheffler, K.D.; Ebert, R.R.
TITLE: Generation of Long Time Creep Data on Refractory Alloys at Elevated Temperatures
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA CR-134481, 1973, September

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CORPORATE AFFILIATION: TRW Materials Technology Laboratories, Cleveland, OH
AUTHOR: Sheffler, K.D.; Sawyer, J.C.; Steigerwald, E.A.
TITLE: Mechanical Behavior of Tantalum-Base T-111 Alloy at Elevated Temperature
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-CR-1436, 1969

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CORPORATE AFFILIATION: TRW Materials Technology Laboratories, Cleveland, OH
AUTHOR: Sheffler, K.D.; Steigerwald, E.A.
TITLE: Generation of Long Time Creep Data on Refractory Alloys at Elevated Temperatures
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-CR-72391, 1967, December

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CORPORATE AFFILIATION: TRW Materials Technology Laboratories, Cleveland, OH
AUTHOR: Steigerwald, E.A.; Sheffler, K.D.; Sawyer, J.C.
TITLE: High Frequency Fatigue Properties of TZC and T-111 Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-SP-245; pp. 143-164, °

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CORPORATE AFFILIATION: Tsentral'nyi Nauchno-Issledovatel'skii Institute Cheroni Metallurgii, Moscow, Russia
AUTHOR: Golovanenko, S.
TITLE: Recrystallization of Tungsten Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Metallovedenie 1 Termicheskaya Obrabotka Metallov, Number 9, 1976, September

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CORPORATE AFFILIATION: U.S. Air Force, Aeronautical Systems Division
AUTHOR: Berghezan, A.; Fourbeux, A.
TITLE: Deformation and Annealing Substructure of Niobium Alloys and Their Relation to the Mechanical Properties and Precipitation Phenomena
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: ASD-TDR-63-324; Symposium on the Role of Substructure on the Mechanical Behavior of Materials, p. 437, 1963, April

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CORPORATE AFFILIATION: U.S. Air Force, Aeronautical Systems Division
AUTHOR: Bewley, J.G.
TITLE: Final Report on Development of Methods to Produce Columbium Alloy Cb-74 (Renumbered Haynes Alloy Cb-752) Sheet
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: ASD-TDR-63-201, 1963, January

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CORPORATE AFFILIATION: U.S. Air Force, Air Force Materials Laboratory, Wright-Patterson Air Force Base, OH
AUTHOR: Ostermann, F.; Bollenrath, F.
TITLE: On the Precipitation Behavior of Niobium Alloy D-43 (Nb-10W-1Zr-0.1C).
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: 6th Plansee Seminar, Vol. 1, Metallwerk Plansee AG, Reutte, Austria, 1968

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CORPORATE AFFILIATION: U.S. Air Force, Materials Laboratory, Wright-Patterson Air Force Base, OH
AUTHOR: Bonesteel, R.M.
TITLE: Recovery and Internal Oxidation of Columbium and Columbium Alloys
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: AFML-TR-66-253, 1966, August

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CORPORATE AFFILIATION: U.S. Air Force, Wright Air Development Division, Wright-Patterson Air Force Base, OH
AUTHOR: Ingram, A.G.
TITLE: Notch Sensitivity of Refractory Metals
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: WADD-TR-60-278, 1960, September

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CORPORATE AFFILIATION: U.S. Atomic Energy Commission, Washington, DC; U.S. Department of the Navy, Washington, DC
AUTHOR: Lyon, R.N. (Ed.)
TITLE: Liquid Metals Handbook, 2nd ed.
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: Report NAVEXOS-P-733 (rev.), 1952

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CORPORATE AFFILIATION: U.S. Department of Energy, Office of Advanced Nuclear Systems and Projects, Space and Terrestrial Systems Division, Washington, DC
AUTHOR: Bennett, G.L.; Lombardo, J.J.; Rock, B.J.
TITLE: Nuclear Electric Power for Space Systems: Technology Background and Flight Systems Program
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Proceedings of the 16th Intersociety Energy Conversion Engineering Conference, Atlanta, GA, August 9-14, 1981, Vol. 1, Technologies for the Transition, Paper No. 819181, 1981

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CORPORATE AFFILIATION: UKAEA Industrial Group, Risley, England
AUTHOR: Evans, J.W.; Thorley, A.
TITLE: Corrosion of Niobium and Vanadium in Liquid Sodium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: IGR-TN/C-1019

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CORPORATE AFFILIATION: Union Carbide Corporation, Kokomo, IN
AUTHOR: Bewley, J.C.
TITLE: Strengthening of Columbium Alloy Cb-752 by Duplex-Annealing Process
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Refractory Metals and Alloys IV, Research

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and Development, Vol. 1. R.I. Jaffee, G.M. Ault, J. Maltz, and M. Semchyshen, eds., Gordon and Breach Sci. Publ., pp. 369-386, 1968

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CORPORATE AFFILIATION: United Kingdom Atomic Authority, Warrington, England
AUTHOR: Thorley, A.; Tyzack, C.
TITLE: The Embrittlement of Niobium in Hydrogen-Contaminated NaK
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: Proceedings of a Symposium on Thermodynamics of Nuclear Materials, Vienna, Austria, May 21-25, 1962, p. 387. International Atomic Energy Agency, 1962

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CORPORATE AFFILIATION: University of Wisconsin, Milwaukee, WI
AUTHOR: Gilliland, R.G.; Slaughter, G.M.
TITLE: The Development of Brazing Filler Metals for High Temperature Service
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: Welding J. (N.Y.) 48(10), pp. 463-s-468-s, 1969

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
TITLE: Fabrication of Refractory Metal Alloy Rods
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: 1969, June

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
TITLE: The Varestraint Test for Refractor Metals
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-CR-72828, 1970, November

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
TITLE: The Effect of Contamination Level on the Weldability of Refractory Metal Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: WANL-PR-(P)-015; NASA-CR-1609, 1970, September

<442>
CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
TITLE: Investigation of High Temperature Fracture of T-111 and ASTAR 811C
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-CR 72859, 1971, April

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
TITLE: Influence of Restraint and Thermal Exposure on Welds in T-111 and ASTAR-811C
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-CR-72858, 1971, January

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Ammon, R.L.
TITLE: Influence of Metallurgical Condition on the Mechanical Properties of ASTAR-811C Alloys-Phase III-Effect of Metallurgical Condition on the Creep Properties of ASTAR-811C
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-CR-121096, 1972, December

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Ammon, R.L.
TITLE: Development of a Columbium Alloy Clad System
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-CR-134535; MDC-E0913, 1973, September

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Ammon, R.L.
TITLE: Development of High Strength Tantalum Base Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA CR-134606, 1974, October

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Ammon, R.L.; Buckman, R.W., Jr.
TITLE: Development of Advanced High Strength Tantalum Base Alloys - Part II - Scale-Up Investigation
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA CR-120931, 1972, April

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Ammon, R.L.; Buckman, R.W., Jr.; Harrod, D.L.
TITLE: Development of Advanced High Strength Tantalum Base Alloys - Phase III
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA CR-121096; WANL-M-FR-72-009, 1972, December

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Ammon, R.L.; Harrod, D.L.
TITLE: Strengthening Effects in Ta-W-Hf Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Refractory Metals and Alloys IV, Research and Development. Vol. 1, R.I. Jaffee, G.M. Ault, J. Maltz, and M. Semchyshen, eds., Gordon and Breach Sci. Publ., pp. 423-442, 1968

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Arcella, F.G.
TITLE: Interdiffusion Behavior of Tungsten or Rhenium and Group V and VI Elements and Alloys of the Periodic Table - Part I. Final Report
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA CR-134490, 1973

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Arcella, F.G.
TITLE: Interdiffusion Behavior of Tungsten or Rhenium and Group V and VI Elements and Alloys of the Periodic Table - Part II. Appendices
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA CR-134526, 1974

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Begley, R.T.
TITLE: Development of Niobium Base Alloys - Part I
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: WADC-TR-344, Part I, 1957, November

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Begley, R.T.
TITLE: Development of Niobium Base Alloys - Part II
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: WADC-TR-57-344, Part II, 1958, December

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Begley, R.T.
TITLE: Development of Niobium Base Alloys - Part III
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: WADC-TR-57-344, Part III (CRD), 1959

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Begley, R.T.
TITLE: Mechanisms of Alloy Strengthening in Refractory Metals
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: AIME Metallurgical Society Conference, Refractory Metals and Alloys II, Vol. 17, M. Semchyshen and I. Perlmutter (eds.), Interscience, New York, p. 159, 1963

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Begley, R.T.
TITLE: Precipitation Hardening Columbium-Hafnium-Nitrogen Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Proceedings 5th Plansee Seminar, F. Benesovsky (ed.), Metallwerk Plansee A.G., Reutte, Austria, p. 401, 1965

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Begley, R.T.; Ammon, R.L.
TITLE: High Energy Rate Extrusion of Columbium Base Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: AIME Metallurgical Society Conference, High Temperature Materials II, Vol. 18, G.M. Sult, W.F. Barclay and H.P. Manger (eds.), Interscience, New York, 1963

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Begley, R.T.; Ammon, R.L.; Stickler, R.
TITLE: Development of Niobium Base Alloys - Part VI
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: WADC-TR-57-344, Part VI, 1963, February

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Begley, R.T.; Bechtold, J.H.
TITLE: Effect of Alloying on the Mechanical Properties of Niobium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Journal of Less Common Metals, Vol. 3, p. 1, 1961

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Begley, R.T.; Buckman, R.W., Jr.; Godshall, J.L.; Stickler, R.
TITLE: Development of Columbium Base Alloys - Part VII
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: WADC-TR-57-344, Part VII, 1963, April

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Begley, R.T.; France, L.L.
TITLE: Effect of Oxygen and Nitrogen on the Workability and Mechanical Properties of Columbium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: ASTM-STP-272; Newer Metals pp. 56-67, 1959

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Begley, R.T.; Godshall, J.L.
TITLE: Some Observations on the Role of Grain Boundaries in High Temperature Deformation and Fracture of Refractory Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Presented at the AIME Symposium on the Physical Metallurgy of Refractory Metals, French Lick, Ind., 1965, October

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Begley, R.T.; Godshall, J.L.; Harrod, D.L.
TITLE: Development of Columbium Base Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: AFML-TR-65-385, 1966, January

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Begley, R.T.; Godshall, J.L.; Harrod, D.L.
TITLE: Post-Weld Annealing Studies of T-111
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: WANL-PR-(P)-016, NASA-CR-1610, 1970, December

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Begley, R.T.; Harrod, D.L.; Gold, R.E.
TITLE: High Temperature Creep and Rupture Behavior of the Refractory Metals
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Refractory Metal Alloys: Metallurgy and Technology. I. Machlin, R.T. Begley, and E.D. Weisert, eds., Plenum Press, pp. 41-83, 1968

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Begley, R.T.; Lewis, A.I.
TITLE: Influence of Carbon Additions on the Workable and Mechanical Properties of Columbium
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: AIME Metallurgical Society Conferences, Columbium Metallurgy, Vol. 10, D.L. Douglass and F. Kuntz (eds.), Interscience, New York, °

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Begley, R.T.; Platte, W.N.
TITLE: Development of Niobium Base Alloys - Part IV
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: WADC-TR-57-344, Part IV, 1960, April

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CORPORATE AFFILIATION: Westinghouse

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Electric Corporation,
Astronuclear Laboratory,
Pittsburgh, PA
AUTHOR: Begley, R.T.; Platte, W.N.; Lewis, A.I.; Ammon, R.L.
TITLE: Development of Niobium Base Alloys - Part V
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: WADC-TR-57-344, Part V, 1961, January

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Bryant, W.A.
TITLE: Weldability, Strength and High Temperature Stability of Chemically Vapor Deposited Tungsten
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA CR-120876, 1972, December

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Buckman, R.W.; Goodspeed, R.C.
TITLE: Development of Dispersion Strengthened Tantalum Base Alloy
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: WANL-PR(Q)-010, 1966

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Buckman, R.W., Jr.
TITLE: Operation of Ultra-High Vacuum Creep Testing Laboratory
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Transactions Vacuum Metallurgy Conference, American Vacuum Society, pp. 25-37, 1966

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Buckman, R.W., Jr.
TITLE: Development of Advanced High Strength Tantalum Base Alloys - Part I - Screening Investigation
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA CR-120818, 1971

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Buckman, R.W., Jr.; Begley, R.R.
TITLE: Development of High Strength Tantalum Base Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA SP-245; pp. 19-38, 1969, June

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Buckman, R.W., Jr.; Goodspeed, R.C.
TITLE: Development of Precipitation Strengthened Tantalum Base Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA CR-1642; WANL-PR-Q-017

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Buckman, R.W., Jr.; Goodspeed, R.C.
TITLE: Development of Dispersion Strengthened Tantalum Base Alloy
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: WANL-PR-(Q)-013; NASA CR-72316, 1966, November

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Buckman, R.W., Jr.; Goodspeed, R.C.
TITLE: Development of Precipitation Strengthened Tantalum Base Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Contract NAS3-2542, Final Technical Report, 1967, August

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Buckman, R.W., Jr.; Goodspeed, R.C.
TITLE: Development of Precipitation Strengthened Tantalum Base Alloy Astar 811C
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA CR-1641, 1967, August

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Buckman, R.W., Jr.; Goodspeed, R.C.
TITLE: Considerations in the Development of Tantalum Base Alloys
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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Buckman, R.W., Jr.; Goodspeed, R.C.
TITLE: Evaluation of Refractory/Austenitic Bimetal Combinations
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: WANL-PR-(EE)-004, 1969, August

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Buckman, R.W., Jr.; Goodspeed, R.C.
TITLE: Development of Precipitation Strengthened Tantalum Base Alloys ASTAR-811C
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: WANL-PR-(Q)-016, 1969, December

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Buckman, R.W., Jr.; Goodspeed, R.C.
TITLE: Development of Precipitation Strengthened Tantalum Base Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: WANL-PR-(W)-107, 1969, December

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Buckman, R.W., Jr.; Goodspeed, R.C.
TITLE: Precipitation Strengthened Tantalum Base Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA CR-1642, 1971, May

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Buckman, R.W., Jr.; Hetherington, J.J.
TITLE: Apparatus for Determining Creep Behavior Under Conditions of Ultra-High Vacuum
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Review of Scientific Instruments, Vol. 37, No. 8; pp 999-1003, 1966, August

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Cornie, J.A.
TITLE: Development of Precipitation Strengthened Columbium Base Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: AFML-TR1-51, 1971, December

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Cornie, J.A.; Begley, R.T.
TITLE: Investigation of the Effects of Thermal Mechanical Variables on the Creep Properties of High Strength Columbium Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: AFML-TR-69-224, 1969, August

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Cornie, J.A.; Goodspeed, R.C.
TITLE: Development of a Ductile-Oxidation-Resistant Columbium Alloy
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: AFML-TR-69-64, 1969, December

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Filippi, A.M.
TITLE: Production and Quality Evaluation of T-222 Tantalum Alloy Sheet
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: WANL-PR-(KK)-003, 1968, January

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Filippi, A.M.

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TITLE: Evaluation of Mechanical Properties, Oxidation Resistance and Structure of Slurry Silicide Coated T-222
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA CR-72713, 1969, December

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Filippi, A.M.
TITLE: Evaluation of Mechanical Properties, Oxidation Behavior, and Structure of Slurry Silicide Coated T-222
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: WANL-PR-(RRR)-001, 1969, December

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Gold, R.E.
TITLE: Metallurgical Evaluation of Factors Influencing the Ductility of Aged T-111
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA CR-120865, 1972, December

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Gold, R.E.; Kesterson, R.L.
TITLE: Development of Improved Gas Tungsten Arc Welding Procedures for Tantalum, T-111 Plate
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-CR-121198; WANL-M-PR-72-11, 1973, May

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Gold, R.E.; Lessmann, G.G.
TITLE: Influence of Restraint and Thermal Exposure on Welds in T-111 and ASTAR-811C
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA CR-72858; WANL-PR(VVV)-001, °

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Goodspeed, R.C.; King, G.W.
TITLE: Development of High Strength Tungsten-Thoria Alloy Sheet
RELEVANCE NUMBER: 1
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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Grisaffe, S.J.
TITLE: Technical Applications of High Temperature Coatings
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA TM X-52666, 1969

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Harrod, D.L.; Buckman, R.W., Jr.
TITLE: Effect of Heat Treatment on Creep Properties of the Tantalum Base Alloy ASTAR-811C
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA SP-245; pp. 127-143, °

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Kass, J.N.; Stoner, D.R.
TITLE: Evaluation of Tantalum/316 Stainless Steel Bimetal Tubing
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Final Report WANL-PR-PPP-001, °

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Kass, J.N.; Stoner, D.R.
TITLE: Joining Refractory/Austenitic Bimetal Tubing
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-CR-72275, °

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Kass, J.N.; Stoner, D.R.
TITLE: Joining Refractory/Austenitic Bimetal Tubing
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-CR-72353, °

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Keeton, A.R.; Stemann, L.G.
TITLE: Irradiation Capsule Assembly Fabrication Final Report
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA-CR-120788, 1971, August

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Keeton, A.R.; Stemann, L.G.
TITLE: Fabrication of Fuel Pin Assemblies - Phase III
RELEVANCE NUMBER: 2
PUBLICATION DESCRIPTION: NASA CR-120956, 1972

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Keeton, A.R.; Stemann, L.G.
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RELEVANCE NUMBER: 1
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AUTHOR: Lessman, G.G.
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AUTHOR: Lessmann, G.G.
TITLE: Determination of Weldability and Elevated Temperature Stability of Refractory Metal Alloys. I. Weldability of Refractory Metal Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: WANL-PR-(P)-013, NASA-CR-1607, 1970, August

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Lessmann, G.G.; Gold, R.E.
TITLE: Weldability of Tungsten Base Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: Welding Research 48(12):528s-542s, 1969, December

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Lessmann, G.G.; Gold, R.E.
TITLE: Thermal Stability of Refractory Metal Alloys
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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Lessmann, G.G.; Gold, R.E.
TITLE: Weldability of Tungsten Base Alloys
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-SP-245; pp. 261-296, 1970

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Lessmann, G.G.; Gold, R.E.
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RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: WANL-PR-(P)-014; NASA-CR-1608, 1970, September

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Lessmann, G.G.; Gold, R.E.
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RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: WANL-PR-(P)-017; NASA-CR-1611, 1970, September

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Lessmann, G.G.; Gold, R.E.; Arcella, F.G.; Reed, F.A.
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RELEVANCE NUMBER: 1
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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Lessmann, G.G.; Stoner, D.R.
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RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: presented at the 9th National SAMPE Symposium on Joining of Materials for Aerospace Systems, 1965, November

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AUTHOR: Stoner, D.R.
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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Stoner, D.R.
TITLE: Determination of Weldability and Elevated Temperature Stability of Refractory Metal Alloys III
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA CR-1609, 1970, September

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Stoner, D.R.
TITLE: Evaluation of Tantalum/316 Stainless Steel Transition Joints
RELEVANCE NUMBER: 1
PUBLICATION DESCRIPTION: NASA-CR-121111, 1972, December

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Stoner, D.R.; Buckman, R.W., Jr.
TITLE: Development of Large Diameter T-111 (Ta-8W-2Hf) Tubing
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PUBLICATION DESCRIPTION: NASA-CR-72869, 1970, December

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CORPORATE AFFILIATION: Westinghouse Electric Corporation, Astronuclear Laboratory, Pittsburgh, PA
AUTHOR: Stoner, D.R.; Lessmann, G.G.
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RELEVANCE NUMBER: 1
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