David T. Hoelzer

Selected Publications:

1. Stability of Ti-, Y-, and O-Enriched Particles in a MA/ODS Ferritic Alloy, M.K. Miller, D.T. Hoelzer, S.S. Babu, E.A. Kenik, and K. F. Russell, to be presented at the 49th International Field Emission Symposium, will be published in the J. de Physique, (2002).

2. Atom Probe Tomography of Nanoscale Particles in ODS Ferritic Alloys, M.K. Miller, E.A. Kenik, K.F. Russell, D.T. Hoelzer, and P.J. Maziasz, accepted in 2001 for publication in Mater. Sci. and Eng. A.

3. Investigating Solute Interactions in V-4Cr-4Ti Based on Tensile Deformation Behavior of Vanadium, D.T. Hoelzer and A.F. Rowcliffe, presented at ICFRM-10 in Baden-Baden in 2001, will be published in J. Nuclear Materials.

4. Effect of Periodic Temperature Variations on the Microstructure of Neutron Irradiated Metals, S.J. Zinkle, N. Hasimoto, D.T. Hoelzer, A.L. Qualls, T. Muroga, and B.N. Singh, presented at ICFRM-10 in Baden-Baden in 2001, will be published in J. Nuclear Materials.

5. Templated Growth of a Complex Nitride Island Dispersion Through an Internal Nitridation Reaction, M.P. Brady, D.T. Hoelzer, E.A. Payzant, P.F. Tortorelli, J.A. Horton, I.M. Anderson, L.R. Walker, and S.K. Wrobel, J. Mater. Res., 16:10, (2001), p. 2784.

6. A Microstructural Study of Oxide Scale Formation on ODS Fe-13Cr Steel, D.T. Hoelzer, B.A. Pint, and I.G. Wright, J. Nuclear Materials, 283-287, (2000), p. 1306.

7. Solute Interactions in Pure Vanadium and V-4Cr-4Ti Alloy, D.T. Hoelzer, M.K. West, S.J. Zinkle, and A.F. Rowcliffe, J. Nuclear Materials, 283-287, (2000), p. 616.

8. Effect of Strain Rate on the Tensile Properties of Unirradiated and Irradiated V-4Cr-4Ti, A.F. Rowcliffe, S.J. Zinkle, and D.T. Hoelzer, J. Nuclear Materials, 283-287, (2000), p. 508.

9. Development of an Oxide Dispersion Strengthened, Reduced-Activation Steel for Fusion Energy, G.R. Romanoski, L.L. Snead, R.L. Klueh, and D.T. Hoelzer, J. Nuclear Materials, 283-287, (2000), p. 642.

10. Impurity Effects on Gas Tungsten Arc Welds in V-Cr-Ti Alloys, M.L. Grossbeck, J.F. King, and D.T. Hoelzer, J. Nuclear Materials, 283-287, (2000), p. 1356.

11. Microstructures in Ti-Al Intermetallic Compounds Irradiated at 673K in HFIR, Y. Miwa, T. Sawai, K. Fukai, D.T. Hoelzer, and A. Hishinuma, J. Nuclear Materials, 283-287, (2000), p. 273.

12. An Electron Microscopy Study of the Formation of Hydroxyapatite Through Sol-Gel Processing, A. Jillavenkatesa, D.T. Hoelzer, and R.A. Condrate, J. Materials Science, 34, (1999), p. 4821.

13. Grain Boundaries and Growth Kinetics of Polycrystalline Ferrimagnetic Oxides with Chemical Additives, Y.S. Cho, D.T. Hoelzer, V.L. Burdick, and V.R.W. Amarakoon, J. Applied Physics, 85:8, (1999), p. 1.

14. Cordierite-Based Dielectric Thick Films on an Oxidized Copper Layer: Microstructural Evidence of Copper Diffusion, Y.S. Cho, D.T. Hoelzer, W. Schulze, and V.R.W. Amarakoon, J. American Ceramic Society, 82:7, (1999), p. 1949.

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16. Interfacial Characterization of Plasma-Sprayed Calcium Phosphate Coatings on Ti-6Al-4V, E. Park, R.A. Condrate, Sr., D.T. Hoelzer, and G.S. Fischman, J. Materials Science: Materials in Medicine, 9:11, (1998), p. 643.

17. The Effect of Aluminum on the Formation of Orthorhombic Plates in the Nb-Ti-Al Ternary System, D.T. Hoelzer and F. Ebrahimi, High-Temperature Ordered Intermetallic Alloys VII, MRS Symposium Proceeding, Materials Research Society, 460, (1997), p. 97.

18. Analysis of the Interface Between Plasma-Sprayed Hydroxyapatite Coating and Ti, E. Park, D.T. Hoelzer, and R.A. Condrate, Thin Films, MRS Symposium Proceeding, Materials Research Society, 458, (1997), p. 409.

19. Interactions at Metal/InP Interfaces Formed at 300K and 77K, J. Palmer, W. Anderson, D.T. Hoelzer, and H. Hardtdegen, Compound Semiconductor Electronics and Photonics, MRS Symposium Proceeding, Materials Research Society, 421, (1996), p. 257.

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22. Modification of Microstructure for Improved Oxidation Resistance in Gamma-Based Ti-Al-X Alloys, M.P. Brady, J.L. Smialek, E.D. Verink, Jr., D.T. Hoelzer, and R. Stone, Materials and Manufacturing Processes, 11:4, (1996), p. 635.

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34. Development of a Mechanistic Understanding of Radiation Embrittlement in Reactor Pressure Vessel Steels, F. Ebrahimi, D.T. Hoelzer, D. Venables, and V. Krishnamoorthy, Final Report NUREG/CR-5063 MEA-2268, (1988).

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