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Education

- Ph.D. in Nuclear Engineering: University of Michigan, Ann Arbor, MI. December 2000
- Masters of Science in Nuclear Engineering: University of Michigan, Ann Arbor, MI, December 1998
- Bachelor of Science in Nuclear Engineering: Kansas State University, Manhattan, KS Cum Laude, December 1995

Professional and Relevant Program Experience

- Associate Laboratory Director, Isotope Science and Engineering Directorate, Oak Ridge National Laboratory, Oak Ridge, TN
  April 2023 - present
- Associate Laboratory Director, Fusion and Fission Directorate, Oak Ridge National Laboratory, Oak Ridge, TN
  January 2023 – March 2023
- Division Director for Reactor and Nuclear Systems Division (now called Nuclear Energy and Fuel Cycle Division) Oak Ridge National Laboratory, Oak Ridge, TN
  January 2019 – December 2022
- Division Director for Materials Science and Technology Division, Oak Ridge National Laboratory, Oak Ridge, TN
  August 2015 – December 2018
- Group Leader for Nuclear Fuels and Materials Group, Oak Ridge National Laboratory, Oak Ridge, TN
  April 2013 – August 2015
- Group Leader for LWRS Group, Oak Ridge National Laboratory, Oak Ridge, TN
  April 2013 – August 2015
- Senior Research Scientist, Oak Ridge National Laboratory, Oak Ridge, TN

November 2004 – April 2013

- Technical Lead and Program Manager for Materials Aging and Degradation Pathway for Light Water Reactor Sustainability Program,
  April 2008 – August 2015
- Technical Lead for DOE-NE Reactor Materials Cross-Cut
  April 2008 – August 2015
- Adjunct Assistant Professor of Nuclear Engineering and Radiological Sciences, University of Michigan, Ann Arbor, MI
  November 2004 – Present
- Adjunct Assistant Professor of Materials Science, Virginia Tech University, Blacksburg, VA
  August 2018 – Present
- Assistant Research Scientist in Nuclear Engineering and Radiological Sciences, University of Michigan, Ann Arbor, MI
  January 2001 - November 2004

Awards and Honors

- *Fellow, American Nuclear Society, 2019*
- *University of Michigan Dept of Nuclear Engineering and Radiological Sciences Distinguished Alumni, 2019*
- *Presidential Early Career Award for Science and Engineering, 2010*
  - For "excellence in research leading to the development of high performance cast stainless steels, a critical part of the U.S. Contributions to ITER project, and for mentoring of students both as an Adjunct Assistant Professor at the University of Michigan and at ORNL."
- *Secretary of Energy Achievement Award, 2011*
  - "For contributions to DOE's response to the earthquake and subsequent tsunami in Japan on March 11."
- *ORNL Early Career Award for Engineering Accomplishment*, 2007
  - For "excellence in engineering materials research and development of high-performance cast stainless steels for critical application in ITER"
- *ORNL Significant Event Award*, 2007
  - For "achievement in development of improved cast stainless steels"
- *ANS Landis Young Member Achievement Award*, 2006
  - For "developing post-irradiation annealing as a recognized method for understanding IASCC and other irradiation-induced degradation processes"

- *Literary Award*, ANS Materials Science and Technology Division, 2002

Research Interests

Radiation-induced degradation in nuclear structural materials, radiation-induced segregation, embrittlement, radiation-induced phase transformations, stress corrosion cracking, development of advanced reactor materials, advanced characterization techniques, small specimen testing, and development of novel testing methods.

Professional Activities and Service

- ORNL Chair/Co-Chair for ORNL Gives, 2019-2021
- Advisory Board for Virginia Tech, Materials Science Dept., 2017 - present
- Advisory Board for University of Michigan, Nuclear Engineering and Radiological Sciences Dept., 2019 - present
- Editor for Met Trans E, 2016-2017
- Dean of Modeling, Experiment and Validation (MeV) Summer School, 2009-2019
- Chair of 2012 MeV Summer School on Nuclear Materials, 2011- 2012
- American Nuclear Society
    - ANS Materials Science and Technology Division Executive Committee, 2004-present
    - ANS Materials Science and Technology Division Chair, 2010-2011
    - ANS Materials Science and Technology Division Vice Chair, 2009-2010
    - ANS Materials Science and Technology Division Secretary/Treasurer, 2008-2009
    - ANS Accelerator Applications Division Executive Committee, 2009-2015
- The Minerals, Metals & Materials Society
    - TMS Nuclear Materials Executive Committee, 2003-present
    - TMS Nuclear Materials Committee Chair, 2006-2007
    - TMS Nuclear Materials Committee Vice Chair, 2005-2006
    - Supported organization of TMS 1-day workshop on Principles of Corrosion, 2017-2018
- Assistant Technical Program Chair for 13th International Symposium on Environmental Degradation of Materials in Nuclear Power Systems-Water Reactors, 2005-2007
- Technical Program Chair for 14th International Symposium on Environmental Degradation of Materials in Nuclear Power Systems-Water Reactors, 2007-2009
- General Program Chair for 15th International Symposium on Environmental Degradation of Materials in Nuclear Power Systems-Water Reactors, 2009-2011

- ASTM Editorial Board Member for 23rd ASTM Radiation Effects on Materials Conference, 2007
- Co-Chair for 22nd ASTM Radiation Effects on Materials Conference, 2003-2004
- Co-Chair for 23rd ASTM Radiation Effects on Materials Conference, 2005-2006
- Chair for 24th ASTM Radiation Effects on Materials Conference, 2007-2008
- Co-organizer for TMS 2010 Annual Meeting Special Session: Nuclear Energy Policies and Processes
- Co-organizer for Microscopy and Microanalysis 2010 Symposium on "Structural and Chemical Analysis of Materials in the Nuclear Power Industry"
- International Scientific Program Committee for IAEA International Conference on Fast Reactors and Closed Fuel Cycle, 2007-2009
- International Scientific Program Committee for Joint IAEA-EC Topical meeting on Development of New Structural Materials for Advanced Fission and Fusion Reactor Systems
- Member of Organization for Economic Cooperation and Development, Nuclear Energy Agency (OECD-NEA) Expert Group on Innovative Structural Materials, 2008-present

Teaching and Mentoring

- Adjunct Assistant Professor of Nuclear Engineering and Radiological Sciences, University of Michigan
    - Developed and co-taught graduate level course (NERS 522: Radiation Materials Science II: Mechanical and Environmental Effects of Irradiation) in Winter 2009, Winter 2011, Winter 2013, Winter 2015, Winter 2017, and Winter 2021 Terms
    - Served on PhD committee for Kale Stephenson (2011 to 2016)
    - Provided financial support and advice for 4 graduate students
- Mentoring (last ~8 years)
    - ORNL: 8 senior staff/leadership, 7 early career staff, 5 mid-career staff, 2 post-docs
    - ORNL: developed and implemented "Mentoring Pods" program for Nuclear Energy and Fuel Cycle Division
    - University of Michigan: 1 undergraduate student, 5 graduate students and 1 post-doctoral researcher
    - University of Wisconsin: 2 graduate students and 1 post-doctoral researcher
    - University of Illinois: 1 graduate student
    - Ohio State University: 1 undergraduate student
    - Idaho State University: I graduate student
    - Penn State University: 1 graduate student and 1 post-doctoral researcher
    - University of Tennessee: 1 undergraduate student
    - University of California-Berkley: 2 graduate student and 1 post-doctoral researcher

- Assistant Scout Master: Boy Scouts, Troop 555, Knoxville TN (2011 to 2015)
- Technical Mentor: Hardin Valley Academy FIRST Robotics team (2014 to present)

Publication Statistics (as of August 1, 2022, Scopus)

- H-index = 34
- Career peer-reviewed publications: 122
- Citations: 4305
- Field-weighted citation impact = 1.35
- Over 100 invited talks, presentations, seminars, and lectures

Publications

Journal Articles:

- Tan, L, Sokolov, M., Pawel, S., Sham, T.-L., and Busby, J.T. "Varied enhancements in mechanical properties and sodium compatibility of Grade 92 by thermomechanical treatments." Materials Science & Engineering A 832 (2022) 142359, doi:10.1016/j.msea.2021.142359.
- Gussev, M. N., Was, G. S., Busby, J. T., & Leonard, K. J. (2018). Plastic deformation processes accompanying stress corrosion crack propagation in irradiated austenitic steels. Minerals, Metals and Materials Series, Part F11, 1073-1084. doi: https://doi.org/10.1007/978-3-319-68454-3_78
- Merezhko, D. A., Merezhko, M. S., Gussev, M. N., Busby, J. T., Maksimkin, O. P., Short, M. P., & Garner, F. A. (2018). Investigation of pitting corrosion in sensitized modified high-nitrogen 316LN steel after neutron irradiation. Minerals, Metals and Materials Series, Part F9, 1125-1140. doi: https://doi.org/10.1007/978-3-319-67244-1_71
- Kenik, E. A., Busby, J. T., Gussev, M. N., Maziasz, P. J., Hoelzer, D. T., Rowcliffe, A. F., & Vitek, J. M. (2017). Structure and mechanical properties of improved cast stainless steels for nuclear applications. Journal of Nuclear Materials, 483, 35-43. doi: https://doi.org/10.1016/j.jnucmat.2016.https://doi.org/10.045
- Mamivand, M., Yang, Y., Busby, J., & Morgan, D. (2017). Integrated modeling of second phase precipitation in cold-worked 316 stainless steels under irradiation. Acta Materialia, 130, 94-110. doi: https://doi.org/10.1016/j.actamat.2017.03.025
- Silva, C., Song, M., Leonard, K., Wang, M., Was, G., & Busby, J. (2017). Characterization of alloy 718 subjected to different thermomechanical treatments.

Materials Science and Engineering A, 691, 195-202. doi: https://doi.org/10.1016/j.msea.2017.03.045

- Byun, T. S., Yang, Y., Overman, N. R., & Busby, J. T. (2016). Thermal Aging Phenomena in Cast Duplex Stainless Steels. JOM, 68(2), 507-516. doi: https://doi.org/10.1007/s11837-015-1709-9
- Tan, L., Stoller, R. E., Field, K. G., Yang, Y., Nam, H., Morgan, D., Wirth, B. D., Gussev, M. N., & Busby, J. T. (2016). Microstructural Evolution of Type 304 and 316 Stainless Steels Under Neutron Irradiation at LWR Relevant Conditions. JOM, 68(2), 517-529. doi: https://doi.org/10.1007/s11837-015-1753-5
- Yang, Y., Field, K. G., Allen, T. R., & Busby, J. T. (2016). Roles of vacancy/interstitial diffusion and segregation in the microchemistry at grain boundaries of irradiated Fe-Cr-Ni alloys. Journal of Nuclear Materials, 473, 35-53. doi: https://doi.org/10.1016/j.jnucmat.2016.02.007
- Field, K. G., Yang, Y., Allen, T. R., & Busby, J. T. (2015). Defect sink characteristics of specific grain boundary types in 304 stainless steels under high dose neutron environments. Acta Materialia, 89, 438-449. doi: https://doi.org/10.1016/j.actamat.2015.01.064
- Gussev, M. N., Field, K. G., & Busby, J. T. (2015). Deformation localization and dislocation channel dynamics in neutron-irradiated austenitic stainless steels. Journal of Nuclear Materials, 460, 139-152. doi: https://doi.org/10.1016/j.jnucmat.2015.02.008
- Leonard, K. J., Gussev, M. N., Stevens, J. N., & Busby, J. T. (2015). Analysis of stress corrosion cracking in alloy 718 following commercial reactor exposure. Journal of Nuclear Materials, 466, 443-459. doi: https://doi.org/10.1016/j.jnucmat.2015.08.039
- Rosseel, TM, Field, KG, Le Pape, Y, Naus, DJ, Remec, I, Busby, JT, Wall, JJ, & Bruck, P. (2015). Dommages d'irradiation dans les cavites en beton des reacteurs aux Etats-Unis. (1), 21-27.
- Tan, L., & Busby, J. T. (2015). Formulating the strength factor α for improved predictability of radiation hardening. Journal of Nuclear Materials, 465, 724-730. doi: https://doi.org/10.1016/j.jnucmat.2015.07.009
- Yang, Y., Tan, L., & Busby, J. T. (2015). Thermal Stability of Intermetallic Phases in Fe-rich Fe-Cr-Ni-Mo Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 46(9), 3900-3908. doi: https://doi.org/10.1007/s11661-015-2997-y
- Field, K. G., Gussev, M. N., & Busby, J. T. (2014). Microstructural characterization of deformation localization at small strains in a neutron-irradiated 304 stainless steel. Journal of Nuclear Materials, 452(1-3), 500-508. doi: https://doi.org/10.1016/j.jnucmat.2014.05.053
- Gussev, M. N., Busby, J. T., Tan, L., & Garner, F. A. (2014). Magnetic phase formation in irradiated austenitic alloys. Journal of Nuclear Materials, 448(1-3), 294-300. doi: https://doi.org/10.1016/j.jnucmat.2014.02.005
- Gussev, M. N., Field, K. G., & Busby, J. T. (2014). Strain-induced phase transformation at the surface of an AISI-304 stainless steel irradiated to 4.4 dpa and deformed to 0.8% strain. Journal of Nuclear Materials, 446(1-3), 187-192. doi: https://doi.org/10.1016/j.jnucmat.2013.11.041

- Tan, L., Yang, Y., Nanstad, R. K., & Busby, J. T. (2014). Effect of Thermal Aging on Coarsening Kinetics of γ′ in Alloy 617. Journal of Phase Equilibria and Diffusion, 35(5), 524-529. doi: https://doi.org/10.1007/s11669-014-0312-z
- Yang, Y., & Busby, J. T. (2014). Thermodynamic modeling and kinetics simulation of precipitate phases in AISI 316 stainless steels. Journal of Nuclear Materials, 448(1-3), 282-293. doi: https://doi.org/10.1016/j.jnucmat.2014.02.008

- Chen, X., Sokolov, M. A., Sham, S., Erdman Iii, D. L., Busby, J. T., Mo, K., & Stubbins, J. F. (2013). Experimental and modeling results of creep-fatigue life of Inconel 617 and Haynes 230 at 850 °c. Journal of Nuclear Materials, 432(1-3), 94-101. doi: https://doi.org/10.1016/j.jnucmat.2012.08.040
- Field, K. G., Barnard, L. M., Parish, C. M., Busby, J. T., Morgan, D., & Allen, T. R. (2013). Dependence on grain boundary structure of radiation induced segregation in a 9 wt.% Cr model ferritic/martensitic steel. Journal of Nuclear Materials, 435(1-3), 172-180. doi: https://doi.org/10.1016/j.jnucmat.2012.12.026
- Gulsoy, G., Was, G. S., Pawel, S. J., & Busby, J. T. (2013). Degradation modes of austenitic and ferritic-martensitic stainless steels in He-CO-CO2 and liquid sodium environments of equivalent oxygen and carbon chemical potentials. Journal of Nuclear Materials, 441(1-3), 633-643. doi: https://doi.org/10.1016/j.jnucmat.2013.03.063
- Gussev, M. N., Busby, J. T., Byun, T. S., & Parish, C. M. (2013). Twinning and martensitic transformations in nickel-enriched 304 austenitic steel during tensile and indentation deformations. Materials Science and Engineering A, 588, 299-307. doi: https://doi.org/10.1016/j.msea.2013.08.072
- Tan, L., Allen, T. R., & Busby, J. T. (2013). Grain boundary engineering for structure materials of nuclear reactors. Journal of Nuclear Materials, 441(1-3), 661-666. doi: https://doi.org/10.1016/j.jnucmat.2013.03.050
- Tan, L., & Busby, J. T. (2013). Alloying effect of Ni and Cr on irradiated microstructural evolution of type 304 stainless steels. Journal of Nuclear Materials, 443(1-3), 351-358. doi: https://doi.org/10.1016/j.jnucmat.2013.07.054
- Tan, L., Busby, J. T., Chichester, H. J. M., Sridharan, K., & Allen, T. R. (2013). Thermomechanical treatment for improved neutron irradiation resistance of austenitic alloy (Fe-21Cr-32Ni). Journal of Nuclear Materials, 437(1-3), 70-74. doi: https://doi.org/10.1016/j.jnucmat.2013.01.333
- Tan, L., Busby, J. T., Maziasz, P. J., & Yamamoto, Y. (2013). Effect of thermomechanical treatment on 9Cr ferritic-martensitic steels. Journal of Nuclear Materials, 441(1-3), 713-717. doi: https://doi.org/10.1016/j.jnucmat.2013.01.323
- Tan, L., Yang, Y., & Busby, J. T. (2013). Effects of alloying elements and thermomechanical treatment on 9Cr Reduced Activation Ferritic-Martensitic (RAFM) steels. Journal of Nuclear Materials, 442(1-3 SUPPL.1), S13-S17. doi: https://doi.org/10.1016/j.jnucmat.2012.https://doi.org/10.015
- Yang, Y., Tan, L., Bei, H., & Busby, J. T. (2013). Thermodynamic modeling and experimental study of the Fe-Cr-Zr system. Journal of Nuclear Materials, 441(1-3), 190-202. doi: https://doi.org/10.1016/j.jnucmat.2013.05.061

- Gussev, M. N., Byun, T. S., & Busby, J. T. (2012). Description of strain hardening behavior in neutron-irradiated fcc metals. Journal of Nuclear Materials, 427(1-3), 62-68. doi: https://doi.org/10.1016/j.jnucmat.2012.04.017
- Kenik, E. A., & Busby, J. T. (2012). Radiation-induced degradation of stainless steel light water reactor internals. Materials Science and Engineering R: Reports, 73(7-8), 67-83. doi: https://doi.org/10.1016/j.mser.2012.05.002

- Tan, L., Hoelzer, D. T., Busby, J. T., Sokolov, M. A., & Klueh, R. L. (2012). Microstructure control for high strength 9Cr ferritic-martensitic steels. Journal of Nuclear Materials, 422(1-3), 45-50. doi: https://doi.org/10.1016/j.jnucmat.2011.12.011
- Busby, J. T., Maziasz, P. J., Rowcliffe, A. F., Santella, M., & Sokolov, M. (2011). Development of high performance cast stainless steels for ITER shield module applications. Journal of Nuclear Materials, 417(1-3), 866-869. doi: https://doi.org/10.1016/j.jnucmat.2010.12.152
- Leonard, K. J., Busby, J. T., & Zinkle, S. J. (2011). Influence of thermal and radiation effects on microstructural and mechanical properties of Nb-1Zr. Journal of Nuclear Materials, 414(2), 286-302. doi: https://doi.org/10.1016/j.jnucmat.2011.04.018
- Tan, L., Rakotojaona, L., Allen, T. R., Nanstad, R. K., & Busby, J. T. (2011). Microstructure optimization of austenitic Alloy 800H (Fe-21Cr-32Ni). Materials Science and Engineering A, 528(6), 2755-2761. doi: https://doi.org/10.1016/j.msea.2010.12.052
- Wharry, J. P., Jiao, Z., Shankar, V., Busby, J. T., & Was, G. S. (2011). Radiation-induced segregation and phase stability in ferritic-martensitic alloy T 91. Journal of Nuclear Materials, 417(1-3), 140-144. doi: https://doi.org/10.1016/j.jnucmat.2010.12.052
- Allen, T., Busby, J., Meyer, M., & Petti, D. (2010). Materials challenges for nuclear systems. Materials Today, 13(12), 14-23. doi: https://doi.org/10.1016/S1369-7021(10)70220-0
- Certain, A. G., Field, K. G., Allen, T. R., Miller, M. K., Bentley, J., & Busby, J. T. (2010). Response of nanoclusters in a 9Cr ODS steel to 1 dpa, 525 °c proton irradiation. Journal of Nuclear Materials, 407(1), 2-9. doi: https://doi.org/10.1016/j.jnucmat.2010.07.002
- Katoh, Y., Snead, L. L., Nozawa, T., Kondo, S., & Busby, J. T. (2010). Thermophysical and mechanical properties of near-stoichiometric fiber CVI SiC/SiC composites after neutron irradiation at elevated temperatures. Journal of Nuclear Materials, 403(1-3), 48-61. doi: https://doi.org/10.1016/j.jnucmat.2010.06.002
- Allen, T., Busby, J., & Ilevbare, G. (2009). 14th International Conference on Environmental Degradation of Materials in Nuclear Power Systems Water Reactors 2009: Foreword. 14th International Conference on Environmental Degradation of Materials in Nuclear Power Systems Water Reactors 2009, 1.

- Allen, T. R., & Busby, J. T. (2009). Radiation damage concerns for extended light water reactor service. JOM, 61(7), 29-34. doi: https://doi.org/10.1007/s11837-009-0099-2
- Bentley, J., Hoelzer, D. T., Busby, J. T., Certain, A. G., Allen, T. R., Kaoumi, D., Motta, A. T., & Kirk, M. A. (2009). TEM characterization of crept and irradiated nano-structured ferritic alloys. Microscopy and Microanalysis, 15(SUPPL. 2), 1350-1351. doi: https://doi.org/10.1017/S1431927609095828
- Busby, J. T. (2009). Economic benefits of advanced materials in nuclear power systems. Journal of Nuclear Materials, 392(2), 301-306. doi: https://doi.org/10.1016/j.jnucmat.2009.03.018
- Hackett, M. J., Busby, J. T., Miller, M. K., & Was, G. S. (2009). Effects of oversized solutes on radiation-induced segregation in austenitic stainless steels. Journal of Nuclear Materials, 389(2), 265-278. doi: https://doi.org/10.1016/j.jnucmat.2009.02.010
- Leonard, K. J., Busby, J. T., Hoelzer, D. T., & Zinkle, S. J. (2009). Nb-base fs-85 alloy as a candidate structural material for space reactor applications: Effects of thermal aging. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 40(4), 838-855. doi: https://doi.org/10.1007/s11661-008-9771-3
- Szilard, R., Planchon, P., & Busby, J. (2009). The case for extended nuclear reactor operation. JOM, 61(7), 24-27. doi: https://doi.org/10.1007/s11837-009-0098-3
- Zinkle, S. J., & Busby, J. T. (2009). Structural materials for fission & fusion energy. Materials Today, 12(11), 12-19. doi: https://doi.org/10.1016/S1369-7021(09)70294-9
- Allen, T. R., Busby, J. T., Klueh, R. L., Maloy, S. A., & Toloczko, M. B. (2008). Cladding and duct materials for advanced nuclear recycle reactors. JOM, 60(1), 15-23. doi: https://doi.org/10.1007/s11837-008-0002-6
- Allen, T. R., Gan, J., Cole, J. I., Miller, M. K., Busby, J. T., Shutthanandan, S., & Thevuthasan, S. (2008). Radiation response of a 9 chromium oxide dispersion strengthened steel to heavy ion irradiation. Journal of Nuclear Materials, 375(1), 26-37. doi: https://doi.org/10.1016/j.jnucmat.2007.11.001
- Busby, J. (2008). Scientists develop high-performance cast stainless steel. Materials Performance, 47(12), 16-18.
- Hackett, M. J., Busby, J. T., & Was, G. S. (2008). The mechanism of Zr and Hf in reducing radiation-induced segregation in 316 stainless steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 39(2), 218-224. doi: https://doi.org/10.1007/s11661-007-9296-1
- Bloom, E. E., Busby, J. T., Duty, C. E., Maziasz, P. J., McGreevy, T. E., Nelson, B. E., Pint, B. A., Tortorelli, P. F., & Zinkle, S. J. (2007). Critical questions in materials science and engineering for successful development of fusion power. Journal of Nuclear Materials, 367-370 A(SPEC. ISS.), 1-10. doi: https://doi.org/10.1016/j.jnucmat.2007.02.007
- Busby, J. T., & Leonard, K. J. (2007). Space fission reactor structural materials: Choices past, present, and future. JOM, 59(4), 20-24+26. doi: https://doi.org/10.1007/s11837-007-0049-9

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- Jiao, Z., Busby, J. T., & Was, G. S. (2007). Deformation microstructure of proton-irradiated stainless steels. Journal of Nuclear Materials, 361(2-3 SPEC. ISS.), 218-227. doi: https://doi.org/10.1016/j.jnucmat.2006.12.012
- Leonard, K. J., Busby, J. T., & Zinkle, S. J. (2007). Microstructural and mechanical property changes with aging of Mo-41Re and Mo-47.5Re alloys. Journal of Nuclear Materials, 366(3), 369-387. doi: https://doi.org/10.1016/j.jnucmat.2007.03.027
- Leonard, K. J., Busby, J. T., & Zinkle, S. J. (2007). Aging effects on microstructural and mechanical properties of select refractory metal alloys for space-reactor applications. Journal of Nuclear Materials, 366(3), 336-352. doi: https://doi.org/10.1016/j.jnucmat.2007.03.025
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- Peng, Q., Gartner, E., Busby, J. T., Motta, A. T., & Was, G. S. (2007). Corrosion behavior of model zirconium alloys in deaerated supercritical water at 500°C. Corrosion, 63(6), 577-590. doi: https://doi.org/10.5006/1.3278408
- Gupta, G., Jiao, Z., Ham, A. N., Busby, J. T., & Was, G. S. (2006). Microstructural evolution of proton irradiated T91. Journal of Nuclear Materials, 351(1-3), 162-173. doi: https://doi.org/10.1016/j.jnucmat.2006.02.028
- Busby, J. T., Hash, M. C., & Was, G. S. (2005). The relationship between hardness and yield stress in irradiated austenitic and ferritic steels. Journal of Nuclear Materials, 336(2-3), 267-278. doi: https://doi.org/10.1016/j.jnucmat.2004.09.024
- Busby, J. T., Sowa, M. M., Was, G. S., & Simonen, E. P. (2005). Post-irradiation annealing of small defect clusters. Philosophical Magazine, 85(4-7 SPEC. ISS.), 609-617. doi: https://doi.org/10.1080/02678370412331320071
- Was, G. S., & Busby, J. T. (2005). Role of irradiated microstructure and microchemistry in irradiation-assisted stress corrosion cracking. Philosophical Magazine, 85(4-7 SPEC. ISS.), 443-465. doi: https://doi.org/10.1080/02678370412331320224
- Zu, X. T., Sun, K., Atzmon, M., Wang, L. M., You, L. P., Wan, F. R., Busby, J. T., Was, G. S., & Adamson, R. B. (2005). Effect of proton and Ne irradiation on the microstructure of Zircaloy 4. Philosophical Magazine, 85(4-7 SPEC. ISS.), 649-659. doi: https://doi.org/10.1080/14786430412331320017
- Busby, J. T., Sowa, M. M., Was, G. S., & Kenik, E. A. (2004). The role of fine defect clusters in irradiation-assisted stress corrosion cracking of proton-irradiated

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