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List of Publications by Year in descending order

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171
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173
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173
docs citations

173
times ranked

3204
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Recent Developments in Irradiation-Resistant Steels. Annual Review of Materials Research, 2008, 38, 471-503. | 9.3 | 1,035 |
| 2 | On the role of alloy composition and processing parameters in nanocluster formation and dispersion strengthening in nanostructured ferritic alloys. Acta Materialia, 2009, 57, 392-406. | 7.9 | 354 |
| 3 | Ferritic/martensitic steels – overview of recent results. Journal of Nuclear Materials, 2002, 307-311, 455-465. | 2.7 | 271 |
| 4 | Primary damage formation in bcc iron. Journal of Nuclear Materials, 1997, 251, 49-60. | 2.7 | 261 |
| 5 | On the dominant mechanism of irradiation embrittlement of reactor pressure vessel steels. Scripta Metallurgica, 1983, 17, 1183-1188. | 1.2 | 214 |
| 6 | Influence of particle dispersions on the high-temperature strength of ferritic alloys. Journal of Nuclear Materials, 2007, 367-370, 166-172. | 2.7 | 211 |
| 7 | Dislocation loop structure, energy and mobility of self-interstitial atom clusters in bcc iron. Journal of Nuclear Materials, 2000, 276, 33-40. | 2.7 | 193 |
| 8 | Recent progress of R&D activities on reduced activation ferritic/martensitic steels. Journal of Nuclear Materials, 2013, 442, S2-S8. | 2.7 | 180 |
| 9 | Progress and critical issues of reduced activation ferritic/martensitic steel development. Journal of Nuclear Materials, 2000, 283-287, 52-59. | 2.7 | 179 |
| 10 | Development of next generation tempered and ODS reduced activation ferritic/martensitic steels for fusion energy applications. Nuclear Fusion, 2017, 57, 092005. | 3.5 | 177 |
| 11 | The development and stability of Yâ€“Tiâ€“O nanoclusters in mechanically alloyed Feâ€“Cr based ferritic alloys. Journal of Nuclear Materials, 2004, 329-333, 382-386. | 2.7 | 175 |
| 12 | Precipitation in neutron-irradiated Feâ€“Cu and Feâ€“Cuâ€“Mn model alloys: a comparison of APT and SANS data. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 353, 133-139. | 5.6 | 165 |
| 13 | Energetics of formation and migration of self-interstitials and self-interstitial clusters in δ -iron. Journal of Nuclear Materials, 1997, 244, 185-194. | 2.7 | 157 |
| 14 | Ductile reinforcement toughening of β -TiAl: Effects of debonding and ductility. Acta Metallurgica Et Materialia, 1990, 38, 1491-1502. | 1.8 | 149 |
| 15 | Status and key issues of reduced activation ferritic/martensitic steels as the structural material for a DEMO blanket. Journal of Nuclear Materials, 2011, 417, 9-15. | 2.7 | 144 |
| 16 | A computational microscopy study of nanostructural evolution in irradiated pressure vessel steels. Journal of Nuclear Materials, 1997, 251, 157-171. | 2.7 | 135 |
| 17 | Recent progress on development of vanadium alloys for fusion. Journal of Nuclear Materials, 2004, 329-333, 47-55. | 2.7 | 134 |
| 18 | Recent results of the reduced activation ferritic/martensitic steel development. Journal of Nuclear Materials, 2004, 329-333, 39-46. | 2.7 | 129 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | Status of R&D activities on materials for fusion power reactors. Nuclear Fusion, 2007, 47, S696-S717. | 3.5 | 128 |
| 20 | On the effect of dose rate on irradiation hardening of RPV steels. Philosophical Magazine, 2005, 85, 779-797. | 1.6 | 121 |
| 21 | Cleavage fracture and irradiation embrittlement of fusion reactor alloys: mechanisms, multiscale models, toughness measurements and implications to structural integrity assessment. Journal of Nuclear Materials, 2003, 323, 313-340. | 2.7 | 120 |
| 22 | Analytical solutions for helium bubble and critical radius parameters using a hard sphere equation of state. Journal of Nuclear Materials, 1985, 131, 118-125. | 2.7 | 115 |
| 23 | Critical issues and current status of vanadium alloys for fusion energy applications. Journal of Nuclear Materials, 2000, 283-287, 70-78. | 2.7 | 113 |
| 24 | Recent progress toward development of reduced activation ferritic/martensitic steels for fusion structural applications. Journal of Nuclear Materials, 2009, 386-388, 411-417. | 2.7 | 107 |
| 25 | The transport and fate of helium in nanostructured ferritic alloys at fusion relevant He/dpa ratios and dpa rates. Journal of Nuclear Materials, 2007, 367-370, 399-410. | 2.7 | 102 |
| 26 | On the contrasting role of ductile-phase reinforcements in the fracture toughness and fatigue-crack propagation behavior of TiNb/ \hat{I}^3 -TiAl intermetallic matrix composites. Acta Metallurgica Et Materialia, 1992, 40, 353-361. | 1.8 | 100 |
| 27 | Multiscale modeling of radiation damage in Fe-based alloys in the fusion environment. Journal of Nuclear Materials, 2004, 329-333, 103-111. | 2.7 | 97 |
| 28 | Transmission electron microscopy characterization of the nanofeatures in nanostructured ferritic alloy MA957. Acta Materialia, 2012, 60, 3456-3468. | 7.9 | 97 |
| 29 | A test procedure for characterizing the toughening of brittle intermetallics by ductile reinforcements. Acta Metallurgica, 1989, 37, 2969-2977. | 2.1 | 94 |
| 30 | Multiscale-Multiphysics Modeling of Radiation-Damaged Materials: Embrittlement of Pressure-Vessel Steels. MRS Bulletin, 2001, 26, 176-181. | 3.5 | 91 |
| 31 | A lattice Monte Carlo simulation of nanophase compositions and structures in irradiated pressure vessel Fe-Cu-Ni-Mn-Si steels. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1997, 238, 202-209. | 5.6 | 86 |
| 32 | Ductile-reinforcement toughening in \hat{I}^3 -TiAl intermetallic-matrix composites: Effects on fracture toughness and fatigue-crack propagation resistance. Acta Metallurgica Et Materialia, 1994, 42, 893-911. | 1.8 | 82 |
| 33 | Ductile phase toughening mechanisms in a TiAl \hat{I} -TiNb laminate composite. Acta Metallurgica Et Materialia, 1992, 40, 2381-2389. | 1.8 | 80 |
| 34 | Atomic scale investigation of radiation-induced segregation in austenitic stainless steels. Journal of Nuclear Materials, 2010, 406, 244-250. | 2.7 | 79 |
| 35 | A physically-based correlation of irradiation-induced transition temperature shifts for RPV steels. Journal of Nuclear Materials, 2013, 433, 240-254. | 2.7 | 78 |
| 36 | MD modeling of defects in Fe and their interactions. Journal of Nuclear Materials, 2003, 323, 181-191. | 2.7 | 72 |

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|----|---|-----|-----------|
| 37 | The Effects of Helium in Irradiated Structural Alloys. , 2012, , 141-193. | | 72 |
| 38 | Helium transport, fate and management in nanostructured ferritic alloys: In situ helium implanter studies. Journal of Nuclear Materials, 2011, 417, 1001-1004. | 2.7 | 70 |
| 39 | Tensile and fracture toughness properties of MA957: implications to the development of nanocomposited ferritic alloys. Journal of Nuclear Materials, 2002, 307-311, 484-489. | 2.7 | 69 |
| 40 | Development of mechanical property correlation methodology for fusion environments. Journal of Nuclear Materials, 1979, 85-86, 817-822. | 2.7 | 66 |
| 41 | Structural characterization of nanoscale intermetallic precipitates in highly neutron irradiated reactor pressure vessel steels. Scripta Materialia, 2016, 113, 18-22. | 5.2 | 66 |
| 42 | Comparison of radiation-induced segregation in ultrafine-grained and conventional 316 austenitic stainless steels. Ultramicroscopy, 2011, 111, 659-663. | 1.9 | 65 |
| 43 | On mechanisms controlling swelling in ferritic and martensitic alloys. Journal of Nuclear Materials, 1988, 155-157, 921-927. | 2.7 | 63 |
| 44 | TEM examination of microstructural evolution during processing of 14CrYWTi nanostructured ferritic alloys. Journal of Nuclear Materials, 2004, 329-333, 369-371. | 2.7 | 63 |
| 45 | Reactive gas atomization processing for Fe-based ODS alloys. Journal of Nuclear Materials, 2012, 428, 65-75. | 2.7 | 60 |
| 46 | Thermal stability of nano-structured ferritic alloy. Journal of Nuclear Materials, 2008, 377, 59-64. | 2.7 | 59 |
| 47 | On the history and status of reactor pressure vessel steel ductile to brittle transition temperature shift prediction models. Journal of Nuclear Materials, 2019, 526, 151863. | 2.7 | 58 |
| 48 | Fission-fusion correlations for swelling and microstructure in stainless steels: Effect of the helium to displacement per atom ratio. Journal of Nuclear Materials, 1981, 104, 1289-1303. | 2.7 | 57 |
| 49 | Shear punch tests for mechanical property measurements in TEM disc-sized specimens. Journal of Nuclear Materials, 1984, 122, 429-434. | 2.7 | 56 |
| 50 | Composition and magnetic character of nanometre-size Cu precipitates in reactor pressure vessel steels: Implications for nuclear power plant lifetime extension. Philosophical Magazine Letters, 2002, 82, 609-615. | 1.2 | 55 |
| 51 | Influence of statistical and constraint loss size effects on cleavage fracture toughness in the transitionâ€”A single variable experiment and database. Engineering Fracture Mechanics, 2006, 73, 134-158. | 4.3 | 55 |
| 52 | Recent progress in small specimen test technology. Journal of Nuclear Materials, 2002, 307-311, 1600-1608. | 2.7 | 52 |
| 53 | Neural network analysis of Charpy transition temperature of irradiated low-activation martensitic steels. Journal of Nuclear Materials, 2007, 367-370, 603-609. | 2.7 | 51 |
| 54 | Stability of nanosized oxides in ferrite under extremely high dose self ion irradiations. Journal of Nuclear Materials, 2017, 486, 86-95. | 2.7 | 51 |

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|----|--|-----|-----------|
| 55 | The microstructure and strength properties of MA957 nanostructured ferritic alloy joints produced by friction stir and electro-spark deposition welding. <i>Journal of Nuclear Materials</i> , 2007, 367-370, 1197-1202. | 2.7 | 50 |
| 56 | Precipitation and hardening in irradiated low alloy steels with a wide range of Ni and Mn compositions. <i>Acta Materialia</i> , 2019, 179, 119-128. | 7.9 | 50 |
| 57 | Cu diffusion in α -Fe: determination of solute diffusivities using atomic-scale simulations. <i>Computational Materials Science</i> , 2004, 31, 347-367. | 3.0 | 49 |
| 58 | On the remarkable fracture toughness of 90 to 97W-NiFe alloys revealing powerful new ductile phase toughening mechanisms. <i>Acta Materialia</i> , 2020, 186, 324-340. | 7.9 | 49 |
| 59 | On the ductile to brittle transition in martensitic stainless steels " Mechanisms, models and structural implications. <i>Journal of Nuclear Materials</i> , 1994, 212-215, 45-51. | 2.7 | 48 |
| 60 | Helium effects on microstructural evolution in tempered martensitic steels: In situ helium implantation studies in HFIR. <i>Journal of Nuclear Materials</i> , 2009, 386-388, 338-341. | 2.7 | 47 |
| 61 | The role of small specimen test technology in fusion materials development. <i>Journal of Nuclear Materials</i> , 2007, 367-370, 1549-1556. | 2.7 | 46 |
| 62 | An ab initio study of Ti-O nanocluster energetics in nanostructured ferritic alloys. <i>Acta Materialia</i> , 2012, 60, 935-947. | 7.9 | 46 |
| 63 | On the remarkable thermal stability of nanostructured ferritic alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 613, 296-305. | 5.6 | 46 |
| 64 | A master curve analysis of F82H using statistical and constraint loss size adjustments of small specimen data. <i>Journal of Nuclear Materials</i> , 2004, 329-333, 1243-1247. | 2.7 | 44 |
| 65 | Embrittlement recovery due to annealing of reactor pressure vessel steels. <i>Nuclear Engineering and Design</i> , 1998, 179, 257-265. | 1.7 | 43 |
| 66 | Influence of statistical and constraint loss size effects on cleavage fracture toughness in the transition " A model based analysis. <i>Engineering Fracture Mechanics</i> , 2006, 73, 2723-2747. | 4.3 | 43 |
| 67 | Neural-network analysis of irradiation hardening in low-activation steels. <i>Journal of Nuclear Materials</i> , 2006, 348, 311-328. | 2.7 | 43 |
| 68 | Modeling of microstructural evolution under irradiation. <i>Journal of Nuclear Materials</i> , 1979, 85-86, 533-545. | 2.7 | 41 |
| 69 | The effects of helium implantation on microstructural evolution in an austenitic alloy. <i>Journal of Nuclear Materials</i> , 1988, 154, 286-304. | 2.7 | 41 |
| 70 | A cleavage toughness master curve model. <i>Journal of Nuclear Materials</i> , 2000, 283-287, 120-127. | 2.7 | 41 |
| 71 | Fracture toughness and Charpy impact properties of several RAFMS before and after irradiation in HFIR. <i>Journal of Nuclear Materials</i> , 2007, 367-370, 68-73. | 2.7 | 41 |
| 72 | On the structure and chemistry of complex oxide nanofeatures in nanostructured ferritic alloy U14YWT. <i>Philosophical Magazine</i> , 2012, 92, 2089-2107. | 1.6 | 40 |

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| 73 | Thermodynamic and kinetic modeling of oxide precipitation in nanostructured ferritic alloys. <i>Acta Materialia</i> , 2015, 91, 340-354. | 7.9 | 40 |
| 74 | Direct comparison of nanoindentation and tensile test results on reactor-irradiated materials. <i>Journal of Nuclear Materials</i> , 2018, 504, 135-143. | 2.7 | 39 |
| 75 | Tensile deformation and fracture properties of a 14YWT nanostructured ferritic alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 675, 437-448. | 5.6 | 37 |
| 76 | Effects of consolidation temperature, strength and microstructure on fracture toughness of nanostructured ferritic alloys. <i>Journal of Nuclear Materials</i> , 2007, 367-370, 208-212. | 2.7 | 36 |
| 77 | On the micromechanics of low temperature strength and toughness of intermetallic/metallic microlaminate composites. <i>Acta Materialia</i> , 1996, 44, 4289-4299. | 7.9 | 35 |
| 78 | Positron annihilation characterization of nanostructured ferritic alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009, 518, 150-157. | 5.6 | 35 |
| 79 | A theoretical assessment of the effect of microchemical, microstructural and environmental mechanisms on swelling incubation in austenitic stainless steels. <i>Journal of Nuclear Materials</i> , 1984, 122, 514-519. | 2.7 | 34 |
| 80 | Modeling the multiscale mechanics of flow localization-ductility loss in irradiation damaged bcc alloys. <i>Journal of Nuclear Materials</i> , 2002, 307-311, 171-178. | 2.7 | 33 |
| 81 | Low temperature yield properties of two γ -Fe-Cr ferritic/martensitic steels. <i>Journal of Nuclear Materials</i> , 1999, 275, 324-331. | 2.7 | 32 |
| 82 | Plastic flow properties and fracture toughness characterization of unirradiated and irradiated tempered martensitic steels. <i>Journal of Nuclear Materials</i> , 2007, 367-370, 527-538. | 2.7 | 32 |
| 83 | Effect of tube processing methods on the texture and grain boundary characteristics of 14YWT nanostructured ferritic alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 661, 222-232. | 5.6 | 32 |
| 84 | Helical dislocations: Observation of vacancy defect bias of screw dislocations in neutron irradiated Fe-Cr. <i>Acta Materialia</i> , 2019, 181, 173-184. | 7.9 | 32 |
| 85 | New approaches to simulating fusion damage in fission reactors. <i>Journal of Nuclear Materials</i> , 1986, 141-143, 1011-1017. | 2.7 | 30 |
| 86 | Magnetic evaluation of irradiation hardening in A533B reactor pressure vessel steels: Magnetic hysteresis measurements and the model analysis. <i>Journal of Nuclear Materials</i> , 2012, 422, 158-162. | 2.7 | 30 |
| 87 | Effect of bulk oxygen on 14YWT nanostructured ferritic alloys. <i>Journal of Nuclear Materials</i> , 2014, 444, 35-38. | 2.7 | 30 |
| 88 | Kinetic Monte Carlo modeling of cascade aging and damage accumulation in Fe-Cu alloys. <i>Journal of Nuclear Materials</i> , 2007, 361, 127-140. | 2.7 | 29 |
| 89 | Characterization and comparative analysis of the tensile properties of five tempered martensitic steels and an oxide dispersion strengthened ferritic alloy irradiated at 295°C to 6.5 dpa . <i>Journal of Nuclear Materials</i> , 2016, 468, 232-239. | 2.7 | 28 |
| 90 | Precipitation in reactor pressure vessel steels under ion and neutron irradiation: On the role of segregated network dislocations. <i>Acta Materialia</i> , 2021, 212, 116922. | 7.9 | 27 |

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| 91 | Simulation of Irradiation Effects in Reactor Pressure Vessel Steels: the Reactor for Virtual Experiments (REVE) Project. <i>Journal of Testing and Evaluation</i> , 2002, 30, 37-46. | 0.7 | 27 |
| 92 | Microlaminated high temperature intermetallic composites. <i>Scripta Metallurgica Et Materialia</i> , 1994, 31, 1487-1492. | 1.0 | 26 |
| 93 | Fracture toughness master-curve analysis of the tempered martensitic steel Eurofer97. <i>Journal of Nuclear Materials</i> , 2009, 386-388, 323-327. | 2.7 | 26 |
| 94 | Texture evolution and microcracking mechanisms in as-extruded and cross-rolled conditions of a 14YWT nanostructured ferritic alloy. <i>Acta Materialia</i> , 2018, 152, 338-357. | 7.9 | 26 |
| 95 | Recommendations on damage exposure units for ferritic steel embrittlement correlations. <i>Journal of Nuclear Materials</i> , 1992, 186, 203-205. | 2.7 | 25 |
| 96 | A universal relationship between indentation hardness and flow stress. <i>Journal of Nuclear Materials</i> , 2007, 367-370, 556-560. | 2.7 | 25 |
| 97 | The transport and fate of helium in martensitic steels at fusion relevant He/dpa ratios and dpa rates. <i>Journal of Nuclear Materials</i> , 2007, 367-370, 417-422. | 2.7 | 25 |
| 98 | Microstructural evolution in an austenitic stainless steel fusion reactor first wall. <i>Journal of Nuclear Materials</i> , 1986, 141-143, 647-653. | 2.7 | 24 |
| 99 | Microstructural examination of neutron, proton and self-ion irradiation damage in a model Fe9Cr alloy. <i>Journal of Nuclear Materials</i> , 2020, 533, 152130. | 2.7 | 24 |
| 100 | A model based fission-fusion correlation of cavity swelling in stainless steel. <i>Journal of Nuclear Materials</i> , 1981, 104, 1361-1365. | 2.7 | 23 |
| 101 | Analysis of cleavage fracture potential of martensitic stainless steel fusion structures. <i>Journal of Nuclear Materials</i> , 1983, 117, 264-275. | 2.7 | 23 |
| 102 | The effect of copper and manganese on magnetic minor hysteresis loops in neutron irradiated Fe model alloys. <i>Journal of Nuclear Materials</i> , 2009, 384, 109-114. | 2.7 | 23 |
| 103 | On nano-oxide coarsening kinetics in the nanostructured ferritic alloy MA957: A mechanism based predictive model. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 655, 355-362. | 5.6 | 23 |
| 104 | On delamination toughening of a 14YWT nanostructured ferritic alloy. <i>Acta Materialia</i> , 2017, 136, 61-73. | 7.9 | 23 |
| 105 | Constitutive behavior and fracture toughness properties of the F82H ferritic/martensitic steel. <i>Journal of Nuclear Materials</i> , 2000, 283-287, 721-726. | 2.7 | 22 |
| 106 | Recent Progress in Subsize Charpy Impact Specimen Testing for Fusion Reactor Materials Development. <i>Fusion Science and Technology</i> , 1986, 10, 728-733. | 0.6 | 21 |
| 107 | Micromechanical modeling of master curve temperature shifts due to constraint loss. <i>Journal of Nuclear Materials</i> , 2002, 307-311, 1624-1628. | 2.7 | 21 |
| 108 | A Composite Model of Microstructural Evolution in Austenitic Stainless Steel Under Fast Neutron Irradiation. , 1987, , 371-392. | | 21 |

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| 109 | Shear Punch and Microhardness Tests for Strength and Ductility Measurements. , 1986, , 112-140. | | 20 |
| 110 | The mumechanical mechanisms of cleavage fracture in martensitic stainless steels. Journal of Nuclear Materials, 1984, 122, 442-447. | 2.7 | 19 |
| 111 | On the relation between irradiation induced changes in the master curve reference temperature shift and changes in strain hardened flow stress. Journal of Nuclear Materials, 2007, 367-370, 561-567. | 2.7 | 19 |
| 112 | The mechanistic implications of the high temperature, long time thermal stability of nanoscale Mn-Ni-Si precipitates in irradiated reactor pressure vessel steels. Scripta Materialia, 2020, 181, 134-139. | 5.2 | 19 |
| 113 | Application of ball punch tests to evaluating fracture mode transition in ferritic steels. Journal of Nuclear Materials, 1991, 179-181, 429-433. | 2.7 | 18 |
| 114 | The effect of hot rolling on the strength and fracture toughness of 90Wâ€“7Ni3Fe tungsten heavy metal alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 824, 141738. | 5.6 | 18 |
| 115 | Some recent innovations in small specimen testing. Journal of Nuclear Materials, 2002, 307-311, 1643-1648. | 2.7 | 17 |
| 116 | Mechanical properties and plasticity size effect of Fe-6%Cr irradiated by Fe ions and by neutrons. Journal of Nuclear Materials, 2016, 482, 236-247. | 2.7 | 17 |
| 117 | Hardening and microstructural evolution of A533b steels irradiated with Fe ions and electrons. Journal of Nuclear Materials, 2016, 471, 243-250. | 2.7 | 17 |
| 118 | Analysis of cleavage fracture potential of martensitic stainless steel fusion structures. Journal of Nuclear Materials, 1983, 117, 276-286. | 2.7 | 16 |
| 119 | Irradiation hardening in F82H irradiated at 573K in the HFIR. Journal of Nuclear Materials, 2011, 417, 108-111. | 2.7 | 16 |
| 120 | A Comparison of the Relative Importance of Helium and Vacancy Accumulation in Void Nucleation. , 1987, , 358-370. | | 16 |
| 121 | Modeling microstructural evolution in fusion reactor environments. Journal of Nuclear Materials, 1985, 133-134, 127-133. | 2.7 | 15 |
| 122 | The effect of size, crack depth and strain rate on fracture toughnessâ€”temperature curves of a low activation martensitic stainless steel. Journal of Nuclear Materials, 1996, 233-237, 342-346. | 2.7 | 15 |
| 123 | A model for in-reactor stress rupture of austenitic stainless steels. Journal of Nuclear Materials, 1984, 122, 435-441. | 2.7 | 14 |
| 124 | Microstructures of HT-9 as a function of heat treatment. Journal of Nuclear Materials, 1986, 141-143, 439-443. | 2.7 | 14 |
| 125 | Heat treatment effect on fracture toughness of F82H irradiated in HFIR. Journal of Nuclear Materials, 2011, 417, 112-114. | 2.7 | 14 |
| 126 | Effects of neutron flux on irradiation-induced hardening and defects in RPV steels studied by positron annihilation spectroscopy. Journal of Nuclear Materials, 2020, 532, 152041. | 2.7 | 14 |

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| 127 | On the use of charged particles to characterize precipitation in irradiated reactor pressure vessel steels with a wide range of compositions. <i>Journal of Nuclear Materials</i> , 2020, 536, 152173. | 2.7 | 14 |
| 128 | The impact of swelling on fusion reactor first wall lifetime. <i>Journal of Nuclear Materials</i> , 1984, 122, 230-235. | 2.7 | 13 |
| 129 | On the mechanisms and mechanics of fracture toughness of a $\text{V}\text{-}4\text{Cr}\text{-}4\text{Ti}$ alloy. <i>Journal of Nuclear Materials</i> , 2000, 283-287, 518-522. | 2.7 | 13 |
| 130 | A physically based constitutive model for a $\text{V}\text{-}4\text{Cr}\text{-}4\text{Ti}$ alloy. <i>Journal of Nuclear Materials</i> , 2000, 283-287, 637-641. | 2.7 | 13 |
| 131 | Tensile and fracture toughness properties of the nanostructured oxide dispersion strengthened ferritic alloy $13\text{Cr}\text{-}1\text{W}\text{-}0.3\text{Ti}\text{-}0.3\text{Y}_2\text{O}_3$. <i>Journal of Nuclear Materials</i> , 2011, 417, 193-196. | 2.7 | 13 |
| 132 | Evidence for core-shell nanoclusters in oxygen dispersion strengthened steels measured using X-ray absorption spectroscopy. <i>Journal of Nuclear Materials</i> , 2014, 445, 50-56. | 2.7 | 13 |
| 133 | First-principles calculation of formation energies and electronic structures of hydrogen defects at tetrahedral and octahedral interstitial sites in pyrochlore-type $\text{Y}_2\text{Ti}_2\text{O}_7$ oxide. <i>Journal of Alloys and Compounds</i> , 2016, 678, 153-159. | 5.5 | 13 |
| 134 | Infrastructure development for radioactive materials at the NSLS-II. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2018, 880, 40-45. | 1.6 | 13 |
| 135 | A creep fracture model for irradiated and helium injected austenitic stainless steels. <i>Journal of Nuclear Materials</i> , 1981, 104, 1239-1243. | 2.7 | 12 |
| 136 | Deformation and fracture in irradiated austenitic stainless steels. <i>Journal of Nuclear Materials</i> , 1992, 191-194, 50-57. | 2.7 | 12 |
| 137 | Evaluation of fracture toughness master curve shifts for JMTR irradiated F82H using small specimens. <i>Journal of Nuclear Materials</i> , 2007, 367-370, 593-598. | 2.7 | 12 |
| 138 | Methods for forecasting performance limits of fusion reactor structural materials. <i>Nuclear Engineering and Design/fusion: an International Journal Devoted To the Thermal, Mechanical, Materials, Structural, and Design Problems of Fusion Energy</i> , 1985, 2, 145-173. | 0.6 | 11 |
| 139 | Neutron irradiation effects on magnetic minor hysteresis loops in nuclear reactor pressure vessel steels. <i>Philosophical Magazine</i> , 2008, 88, 1791-1800. | 1.6 | 11 |
| 140 | On the fracture toughness of irradiated F82H: Effects of loss of constraint and strain hardening capacity. <i>Journal of Nuclear Materials</i> , 2011, 417, 115-119. | 2.7 | 11 |
| 141 | An electric potential drop technique for characterizing part-through surface cracks. <i>Journal of Nuclear Materials</i> , 1992, 191-194, 1038-1041. | 2.7 | 10 |
| 142 | Shear punch and ball microhardness measurements of 14 MeV neutron irradiation hardening in five metals. <i>Journal of Nuclear Materials</i> , 1985, 133-134, 326-331. | 2.7 | 9 |
| 143 | Examination of indentation geometry-constitutive behaviour relations with confocal microscopy and finite element modeling. <i>Journal of Nuclear Materials</i> , 1998, 258-263, 452-456. | 2.7 | 9 |
| 144 | Irradiation response in weldment and HIP joint of reduced activation ferritic/martensitic steel, F82H. <i>Journal of Nuclear Materials</i> , 2013, 442, S557-S561. | 2.7 | 9 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 145 | Development of disc compact tension specimens and test techniques for HFIR irradiations. Journal of Nuclear Materials, 1991, 179-181, 434-437. | 2.7 | 8 |
| 146 | Tensile properties of a tempered martensitic iron-chromium-carbon model alloy. Journal of Nuclear Materials, 2004, 329-333, 278-282. | 2.7 | 8 |
| 147 | A critical stress-critical area statistical model of the curve for MA957 in the cleavage transition. Journal of Nuclear Materials, 2007, 367-370, 616-620. | 2.7 | 8 |
| 148 | Assessment of irradiation embrittlement of the Eurofer97 steel after 590MeV proton irradiation. Journal of Nuclear Materials, 2009, 386-388, 245-248. | 2.7 | 7 |
| 149 | Fracture toughness characterization in the lower transition of neutron irradiated Eurofer97 steel. Journal of Nuclear Materials, 2013, 442, S58-S61. | 2.7 | 7 |
| 150 | The Effects of Helium in Irradiated Structural Alloys. , 2020, , 186-234. | | 7 |
| 151 | Mechanical properties of HT-9 as a function of heat treatment. Journal of Nuclear Materials, 1986, 141-143, 527-531. | 2.7 | 6 |
| 152 | Analysis of cleavage fracture behavior in HT-9 with a statistical model. Journal of Nuclear Materials, 1988, 155-157, 673-678. | 2.7 | 6 |
| 153 | Opportunities for materials characterization using high-energy positron beams. Applied Surface Science, 2002, 194, 160-167. | 6.1 | 6 |
| 154 | Effect of long-term thermal aging on magnetic property in reactor pressure vessel steels. Journal of Nuclear Materials, 2013, 439, 131-136. | 2.7 | 6 |
| 155 | No ball milling needed: Alternative ODS steel manufacturing with gas atomization reaction synthesis (GARS) and friction-based processing. Journal of Nuclear Materials, 2022, 566, 153768. | 2.7 | 6 |
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