

Yutai Katoh

List of Publications by Year in descending order

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401
papers

13,829
citations

26567

56
h-index

35952

97
g-index

491
all docs

491
docs citations

491
times ranked

4572
citing authors

#	ARTICLE	IF	CITATIONS
1	Handbook of SiC properties for fuel performance modeling. Journal of Nuclear Materials, 2007, 371, 329-377.	1.3	1,079
2	Continuous SiC fiber, CVI SiC matrix composites for nuclear applications: Properties and irradiation effects. Journal of Nuclear Materials, 2014, 448, 448-476.	1.3	368
3	Radiation effects in SiC for nuclear structural applications. Current Opinion in Solid State and Materials Science, 2012, 16, 143-152.	5.6	318
4	Current status and critical issues for development of SiC composites for fusion applications. Journal of Nuclear Materials, 2007, 367-370, 659-671.	1.3	310
5	Current status and recent research achievements in SiC/SiC composites. Journal of Nuclear Materials, 2014, 455, 387-397.	1.3	266
6	Properties of zirconium carbide for nuclear fuel applications. Journal of Nuclear Materials, 2013, 441, 718-742.	1.3	222
7	Silicon carbide composites as fusion power reactor structural materials. Journal of Nuclear Materials, 2011, 417, 330-339.	1.3	211
8	Silicon Carbide Oxidation in Steam up to 2ÂMPa. Journal of the American Ceramic Society, 2014, 97, 2331-2352.	1.9	197
9	Irradiation hardening of pure tungsten exposed to neutron irradiation. Journal of Nuclear Materials, 2016, 480, 235-243.	1.3	189
10	Promise and challenges of SiCf/SiC composites for fusion energy applications. Journal of Nuclear Materials, 2002, 307-311, 1057-1072.	1.3	187
11	Issues and advances in SiCf/SiC composites development for fusion reactors. Journal of Nuclear Materials, 2004, 329-333, 56-65.	1.3	178
12	Design and material issues for high performance SiCf/SiC-based fusion power cores. Fusion Engineering and Design, 2001, 55, 55-95.	1.0	172
13	Microstructural development in cubic silicon carbide during irradiation at elevated temperatures. Journal of Nuclear Materials, 2006, 351, 228-240.	1.3	155
14	Radiation-tolerant joining technologies for silicon carbide ceramics and composites. Journal of Nuclear Materials, 2014, 448, 497-511.	1.3	140
15	Preparation of SiC/SiC Composites by Hot Pressing, Using Tyrannoâ€SA Fiber as Reinforcement. Journal of the American Ceramic Society, 2003, 86, 26-32.	1.9	137
16	Evaluation of neutron irradiated silicon carbide and silicon carbide composites. Journal of Nuclear Materials, 2007, 371, 76-89.	1.3	130
17	SiC/SiC composites through transient eutectic-phase route for fusion applications. Journal of Nuclear Materials, 2004, 329-333, 587-591.	1.3	129
18	Thermo-mechanical properties and microstructure of silicon carbide composites fabricated by nano-infiltrated transient eutectoid process. Fusion Engineering and Design, 2002, 61-62, 723-731.	1.0	125

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19	Recent advances and issues in development of silicon carbide composites for fusion applications. Journal of Nuclear Materials, 2009, 386-388, 622-627.	1.3	124
20	Development of new generation reduced activation ferritic-martensitic steels for advanced fusion reactors. Journal of Nuclear Materials, 2016, 478, 42-49.	1.3	122
21	Stability of SiC and its composites at high neutron fluence. Journal of Nuclear Materials, 2011, 417, 400-405.	1.3	121
22	Silicon carbide and its composites for nuclear applications – Historical overview. Journal of Nuclear Materials, 2019, 526, 151849.	1.3	121
23	Recent progress in the development of SiC composites for nuclear fusion applications. Journal of Nuclear Materials, 2018, 511, 544-555.	1.3	114
24	Defect evolution in single crystalline tungsten following low temperature and low dose neutron irradiation. Journal of Nuclear Materials, 2016, 470, 278-289.	1.3	107
25	Fabrication and characterization of fully ceramic microencapsulated fuels. Journal of Nuclear Materials, 2012, 426, 268-276.	1.3	102
26	Thermo-mechanical analysis of LWR SiC/SiC composite cladding. Journal of Nuclear Materials, 2014, 447, 125-142.	1.3	102
27	Thermophysical and mechanical properties of near-stoichiometric fiber CVI SiC/SiC composites after neutron irradiation at elevated temperatures. Journal of Nuclear Materials, 2010, 403, 48-61.	1.3	100
28	Deuterium trapping at defects created with neutron and ion irradiations in tungsten. Nuclear Fusion, 2013, 53, 073006.	1.6	99
29	Nanoscale engineering of radiation tolerant silicon carbide. Physical Chemistry Chemical Physics, 2012, 14, 13429.	1.3	98
30	Radiation and helium effects on microstructures, nano-indentation properties and deformation behavior in ferrous alloys. Journal of Nuclear Materials, 2003, 323, 251-262.	1.3	92
31	Joining of β -SiC by spark plasma sintering. Journal of the European Ceramic Society, 2014, 34, 1681-1686.	2.8	90
32	Microstructural evolution of pure tungsten neutron irradiated with a mixed energy spectrum. Journal of Nuclear Materials, 2017, 490, 66-74.	1.3	89
33	Swelling of SiC at intermediate and high irradiation temperatures. Journal of Nuclear Materials, 2007, 367-370, 677-684.	1.3	88
34	A new Multiple Beams – Material Interaction Research Facility for radiation damage studies in fusion materials. Fusion Engineering and Design, 2000, 51-52, 789-795.	1.0	87
35	Recent status and improvement of reduced-activation ferritic-martensitic steels for high-temperature service. Journal of Nuclear Materials, 2016, 479, 515-523.	1.3	87
36	High-performance SiC/SiC composites by improved PIP processing with new precursor polymers. Journal of Nuclear Materials, 2000, 283-287, 565-569.	1.3	85

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37	The influences of irradiation temperature and helium production on the dimensional stability of silicon carbide. <i>Journal of Nuclear Materials</i> , 2002, 307-311, 1221-1226.	1.3	84
38	Effect of heat treatment on the tensile strength and creep resistance of advanced SiC fibers. <i>Journal of Nuclear Materials</i> , 2004, 329-333, 592-596.	1.3	84
39	Stability of MX-type strengthening nanoprecipitates in ferritic steels under thermal aging, stress and ion irradiation. <i>Acta Materialia</i> , 2014, 71, 11-19.	3.8	83
40	Stability of SiC-matrix microencapsulated fuel constituents at relevant LWR conditions. <i>Journal of Nuclear Materials</i> , 2014, 448, 389-398.	1.3	83
41	Swelling of nuclear graphite and high quality carbon fiber composite under very high irradiation temperature. <i>Journal of Nuclear Materials</i> , 2008, 381, 55-61.	1.3	81
42	Joining of SiC-based materials for nuclear energy applications. <i>Journal of Nuclear Materials</i> , 2011, 417, 379-382.	1.3	80
43	Microstructural evolution and mechanical performances of SiC/SiC composites by polymer impregnation/microwave pyrolysis (PIMP) process. <i>Ceramics International</i> , 2002, 28, 899-905.	2.3	77
44	Evaluation of neutron irradiated near-stoichiometric silicon carbide fiber composites. <i>Journal of Nuclear Materials</i> , 2000, 283-287, 551-555.	1.3	72
45	Recent research and development for the dual-coolant blanket concept in the US. <i>Fusion Engineering and Design</i> , 2008, 83, 920-927.	1.0	72
46	Method for analyzing passive silicon carbide thermometry with a continuous dilatometer to determine irradiation temperature. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2016, 370, 49-58.	0.6	72
47	Response of unalloyed tungsten to mixed spectrum neutrons. <i>Journal of Nuclear Materials</i> , 2019, 520, 193-207.	1.3	72
48	Processing optimization and mechanical evaluation of hot pressed 2D Tyranno-SA/SiC composites. <i>Journal of the European Ceramic Society</i> , 2003, 23, 1223-1231.	2.8	71
49	Microstructural defects in SiC neutron irradiated at very high temperatures. <i>Journal of Nuclear Materials</i> , 2008, 382, 160-169.	1.3	69
50	Effects of fast neutron irradiation on zirconium carbide. <i>Journal of Nuclear Materials</i> , 2010, 399, 200-207.	1.3	69
51	Overview of the fusion nuclear science facility, a credible break-in step on the path to fusion energy. <i>Fusion Engineering and Design</i> , 2018, 135, 236-270.	1.0	67
52	The effect of high dose/high temperature irradiation on high purity fibers and their silicon carbide composites. <i>Journal of Nuclear Materials</i> , 2002, 307-311, 1157-1162.	1.3	65
53	Neutron energy spectrum influence on irradiation hardening and microstructural development of tungsten. <i>Journal of Nuclear Materials</i> , 2016, 479, 249-254.	1.3	64
54	Properties and radiation effects in high-temperature pyrolyzed PIP-SiC/SiC. <i>Journal of Nuclear Materials</i> , 2001, 289, 42-47.	1.3	63

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55	Additive manufacturing of ceramic materials for energy applications: Road map and opportunities. <i>Journal of the European Ceramic Society</i> , 2022, 42, 3049-3088.	2.8	62
56	PSI issues at plasma facing surfaces of blankets in fusion reactors. <i>Journal of Nuclear Materials</i> , 2003, 313-316, 32-41.	1.3	61
57	Effect of SiC particle dispersion on microstructure and mechanical properties of polymer-derived SiC/SiC composite. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003, 357, 376-385.	2.6	60
58	Property tailorability for advanced CVI silicon carbide composites for fusion. <i>Fusion Engineering and Design</i> , 2006, 81, 937-944.	1.0	60
59	Observation and possible mechanism of irradiation induced creep in ceramics. <i>Journal of Nuclear Materials</i> , 2013, 434, 141-151.	1.3	60
60	Mechanical properties of single-crystal tungsten irradiated in a mixed spectrum fission reactor. <i>Journal of Nuclear Materials</i> , 2019, 518, 208-225.	1.3	58
61	Swelling and dislocation evolution in simple ferritic alloys irradiated to high fluence in FFTF/MOTA. <i>Journal of Nuclear Materials</i> , 1995, 225, 154-162.	1.3	57
62	Effects of neutron irradiation on mechanical properties of silicon carbide composites fabricated by nano-infiltration and transient eutectic-phase process. <i>Journal of Nuclear Materials</i> , 2014, 448, 478-486.	1.3	55
63	Transmutation-induced precipitation in tungsten irradiated with a mixed energy neutron spectrum. <i>Acta Materialia</i> , 2019, 165, 51-61.	3.8	55
64	High-dose neutron irradiation of Hi-Nicalon Type S silicon carbide composites. Part 2: Mechanical and physical properties. <i>Journal of Nuclear Materials</i> , 2015, 462, 450-457.	1.3	54
65	Progress on matrix SiC processing and properties for fully ceramic microencapsulated fuel form. <i>Journal of Nuclear Materials</i> , 2015, 457, 9-17.	1.3	54
66	Additive manufacturing of silicon carbide for nuclear applications. <i>Journal of Nuclear Materials</i> , 2021, 543, 152577.	1.3	54
67	Progress in SiC-Based Ceramic Composites for Fusion Applications. <i>Fusion Science and Technology</i> , 2003, 44, 155-162.	0.6	51
68	ITER-Test blanket module functional materials. <i>Journal of Nuclear Materials</i> , 2007, 367-370, 1287-1292.	1.3	51
69	Consolidation of polymer-derived SiC matrix composites. <i>Composites Science and Technology</i> , 2002, 62, 2179-2188.	3.8	50
70	The effect of neutron irradiation on the fiber/matrix interphase of silicon carbide composites. <i>Journal of Nuclear Materials</i> , 2009, 384, 195-211.	1.3	49
71	Specimen size effects on the tensile properties of JPCA and JFMS. <i>Journal of Nuclear Materials</i> , 2000, 283-287, 1014-1017.	1.3	48
72	Physical properties of F82H for fusion blanket design. <i>Fusion Engineering and Design</i> , 2014, 89, 1595-1599.	1.0	48

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73	Development of SiC/SiC composites by PIP in combination with RS. Journal of Nuclear Materials, 2001, 289, 37-41.	1.3	47
74	Microstructure and mechanical properties of low-activation glass-ceramic joining and coating for SiC/SiC composites. Journal of Nuclear Materials, 2000, 283-287, 1262-1266.	1.3	46
75	Interfacial characterization of CVI-SiC/SiC composites. Journal of Nuclear Materials, 2002, 307-311, 1088-1092.	1.3	46
76	Remote Handling and Plasma Conditions to Enable Fusion Nuclear Science R&D Using a Component Testing Facility. Fusion Science and Technology, 2009, 56, 957-964.	0.6	46
77	Micro-mechanical evaluation of SiC-SiC composite interphase properties and debond mechanisms. Composites Part B: Engineering, 2017, 131, 173-183.	5.9	46
78	Materials challenges for the fusion nuclear science facility. Fusion Engineering and Design, 2018, 135, 290-301.	1.0	46
79	Property changes of G347A graphite due to neutron irradiation. Carbon, 2016, 109, 860-873.	5.4	45
80	Thermo-mechanical assessment of full SiC/SiC composite cladding for LWR applications with sensitivity analysis. Journal of Nuclear Materials, 2018, 499, 126-143.	1.3	45
81	Fabrication of advanced SiC fiber/F-CVI SiC matrix composites with SiC/C multi-layer interphase. Journal of Nuclear Materials, 2004, 329-333, 572-576.	1.3	44
82	Fabrication of SiC fiber reinforced SiC composite by chemical vapor infiltration for excellent mechanical properties. Journal of Physics and Chemistry of Solids, 2005, 66, 551-554.	1.9	44
83	Developing the science and technology for the Material Plasma Exposure eXperiment. Nuclear Fusion, 2017, 57, 116001.	1.6	44
84	Mechanical properties of advanced SiC/SiC composites after neutron irradiation. Journal of Nuclear Materials, 2007, 367-370, 713-718.	1.3	43
85	An overview of the US DCLL ITER-TBM program. Fusion Engineering and Design, 2010, 85, 1129-1132.	1.0	43
86	Mechanical properties of advanced SiC fiber composites irradiated at very high temperatures. Journal of Nuclear Materials, 2011, 417, 416-420.	1.3	43
87	Anisotropic swelling and microcracking of neutron irradiated Ti ₃ AlC ₂ -Ti ₅ Al ₂ C ₃ materials. Scripta Materialia, 2016, 114, 74-78.	2.6	43
88	Interfacial reactions and mechanical properties of W-SiC in-situ joints for plasma facing components. Journal of Nuclear Materials, 2004, 329-333, 1549-1552.	1.3	42
89	Helium sequestration at nanoparticle-matrix interfaces in helium+heavy ion irradiated nanostructured ferritic alloys. Journal of Nuclear Materials, 2017, 483, 21-34.	1.3	42
90	Dimensional stability and anisotropy of SiC and SiC-based composites in transition swelling regime. Journal of Nuclear Materials, 2018, 499, 471-479.	1.3	42

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91	Development of SiC/SiC Composites by Nano-Infiltration and Transient Eutectoid (NITE) Process. Ceramic Engineering and Science Proceedings, 0, , 311-318.	0.1	42
92	CaO-Al ₂ O ₃ glass-ceramic as a joining material for SiC based components: A microstructural study of the effect of Si-ion irradiation. Journal of Nuclear Materials, 2018, 501, 172-180.	1.3	41
93	Joining of silicon carbide composites for fusion energy applications. Journal of Nuclear Materials, 2000, 283-287, 1258-1261.	1.3	40
94	Improvement of mechanical properties of SiC/SiC composites by various surface treatments of fibers. Journal of Nuclear Materials, 2001, 289, 23-29.	1.3	39
95	Evaluation of hardening behaviour of ion irradiated reduced activation ferritic/martensitic steels by an ultra-micro-indentation technique. Journal of Nuclear Materials, 2002, 307-311, 260-265.	1.3	39
96	DC electrical conductivity of silicon carbide ceramics and composites for flow channel insert applications. Journal of Nuclear Materials, 2009, 386-388, 639-642.	1.3	39
97	Microstructural stability of SiC and SiC/SiC composites under high temperature irradiation environment. Journal of Nuclear Materials, 2002, 307-311, 1130-1134.	1.3	38
98	Miniaturized fracture stress tests for thin-walled tubular SiC specimens. Journal of Nuclear Materials, 2007, 367-370, 653-658.	1.3	38
99	Microstructure and hydrothermal corrosion behavior of NITE-SiC with various sintering additives in LWR coolant environments. Journal of the European Ceramic Society, 2017, 37, 1261-1279.	2.8	38
100	Mechanical property degradation of high crystalline SiC fiber-reinforced SiC matrix composite neutron irradiated to ~ 100 displacements per atom. Journal of the European Ceramic Society, 2018, 38, 1087-1094.	2.8	38
101	The influence of He/dpa ratio and displacement rate on microstructural evolution: a comparison of theory and experiment. Journal of Nuclear Materials, 1994, 210, 290-302.	1.3	37
102	Irradiation creep of high purity CVD silicon carbide as estimated by the bend stress relaxation method. Journal of Nuclear Materials, 2007, 367-370, 758-763.	1.3	37
103	High dose neutron irradiation of Hi-Nicalon Type S silicon carbide composites, Part 1: Microstructural evaluations. Journal of Nuclear Materials, 2015, 462, 443-449.	1.3	37
104	Response of reduced activation ferritic steels to high-fluence ion-irradiation. Journal of Nuclear Materials, 2001, 297, 279-284.	1.3	36
105	Neutron irradiation effects on high-crystallinity and near-stoichiometry SiC fibers and their composites. Journal of Nuclear Materials, 2004, 329-333, 544-548.	1.3	36
106	Mechanical Properties of Thin Pyrolytic Carbon Interphase SiC-Matrix Composites Reinforced with Near-Stoichiometric SiC Fibers. Journal of the American Ceramic Society, 2005, 88, 3088-3095.	1.9	36
107	Transmutation of silicon carbide in fusion nuclear environment. Journal of Nuclear Materials, 2013, 442, S370-S375.	1.3	36
108	Multiscale characterization of irradiation behaviour of ion-irradiated SiC/SiC composites. Acta Materialia, 2018, 161, 207-220.	3.8	36

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109	Effect of neutron irradiation on tensile properties of unidirectional silicon carbide composites. Journal of Nuclear Materials, 2007, 367-370, 774-779.	1.3	35
110	Evaluation of the Fracture Strength for Silicon Carbide Layers in the Tri-Isotropic-Coated Fuel Particle. Journal of the American Ceramic Society, 2007, 90, 184-191.	1.9	35
111	Development Status of a SiC-Foam Based Flow Channel Insert for a U.S.-ITER DCLL TBM. Fusion Science and Technology, 2009, 56, 883-891.	0.6	35
112	Mechanical properties of SiC composites neutron irradiated under light water reactor relevant temperature and dose conditions. Journal of Nuclear Materials, 2017, 494, 46-54.	1.3	35
113	Ceramic composites: A review of toughening mechanisms and demonstration of micropillar compression for interface property extraction. Journal of Materials Research, 2018, 33, 424-439.	1.2	35
114	Development of castable nanostructured alloys as a new generation RAFM steels. Journal of Nuclear Materials, 2018, 511, 598-604.	1.3	35
115	Microstructural and mechanical characteristics of SiC/SiC composites with modified-RS process. Journal of Nuclear Materials, 2001, 289, 30-36.	1.3	34
116	Hi-Nicalon TM Fiber-Reinforced CVI-SiC Matrix Composites: I Effects of PyC and PyC-SiC Multilayers on the Fracture Behaviors and Flexural Properties. Materials Transactions, 2002, 43, 2568-2573.	0.4	34
117	Silicon Carbide and Silicon Carbide Composites for Fusion Reactor Application. Materials Transactions, 2013, 54, 472-476.	0.4	34
118	Dimensional isotropy of 6H and 3C SiC under neutron irradiation. Journal of Nuclear Materials, 2016, 471, 92-96.	1.3	34
119	Parametric Evaluation of SiC/SiC Composite Cladding with UO ₂ Fuel for LWR Applications: Fuel Rod Interactions and Impact of Nonuniform Power Profile in Fuel Rod. Journal of Nuclear Materials, 2018, 499, 155-167.	1.3	34
120	Site specific, high-resolution characterisation of porosity in graphite using FIB-SEM tomography. Journal of Nuclear Materials, 2018, 511, 164-173.	1.3	34
121	Gas permeability of SiC/SiC composites as fusion reactor material. Fusion Engineering and Design, 2002, 61-62, 699-704.	1.0	33
122	Low Temperature Swelling in Beta-SiC Associated with Point Defect Accumulation. Materials Transactions, 2002, 43, 612-616.	0.4	32
123	Fabrication and Oxidation-Resistance Property of Allylhydridopolycarbosilane-Derived SiC/SiC Composites. Journal of the Ceramic Society of Japan, 2003, 111, 300-307.	1.3	32
124	The effects of neutron irradiation on shear properties of monolayered PyC and multilayered PyC/SiC interfaces of SiC/SiC composites. Journal of Nuclear Materials, 2007, 367-370, 685-691.	1.3	31
125	Phase stability, swelling, microstructure and strength of Ti ₃ SiC ₂ -TiC ceramics after low dose neutron irradiation. Journal of Nuclear Materials, 2017, 483, 44-53.	1.3	31
126	Development of mesopores in superfine grain graphite neutron-irradiated at high fluence. Carbon, 2019, 141, 663-675.	5.4	31

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127	Quantification of irradiation defects in beta-silicon carbide using Raman spectroscopy. Scripta Materialia, 2016, 125, 58-62.	2.6	30
128	Neutron irradiation-induced microstructure damage in ultra-high temperature ceramic TiC. Acta Materialia, 2020, 186, 1-10.	3.8	30
129	Effect of specimen size on fatigue properties of reduced activation ferritic/martensitic steels. Journal of Nuclear Materials, 2000, 283-287, 1018-1022.	1.3	29
130	High-temperature tensile strength of near-stoichiometric SiC/SiC composites. Journal of Nuclear Materials, 2002, 307-311, 1093-1097.	1.3	29
131	Unidirectional formation of tetrahedral voids in irradiated silicon carbide. Applied Physics Letters, 2008, 93, .	1.5	29
132	Analysis of grain boundary sinks and interstitial diffusion in neutron-irradiated SiC. Physical Review B, 2011, 83, .	1.1	29
133	Evaluation of the effects of neutron irradiation on first-generation corrosion mitigation coatings on SiC for accident-tolerant fuel cladding. Journal of Nuclear Materials, 2020, 536, 152203.	1.3	29
134	Fusion Nuclear Science Facility (FNSF) before Upgrade to Component Test Facility (CTF). Fusion Science and Technology, 2011, 60, 441-448.	0.6	28
135	Torsional Shear Strength of Silicon Carbide Components Pressurelessly Joined by a Glass-Ceramic. International Journal of Applied Ceramic Technology, 2012, 9, 786-794.	1.1	28
136	PHENIX U.S.-Japan Collaboration Investigation of Thermal and Mechanical Properties of Thermal Neutron-Shielded Irradiated Tungsten. Fusion Science and Technology, 2019, 75, 499-509.	0.6	28
137	Nano-scale microstructure damage by neutron irradiations in a novel Boron-11 enriched TiB ₂ ultra-high temperature ceramic. Acta Materialia, 2019, 165, 26-39.	3.8	28
138	Irradiation effects in tungsten-copper laminate composite. Journal of Nuclear Materials, 2016, 481, 134-146.	1.3	27
139	Critical Exploration of Liquid Metal Plasma-Facing Components in a Fusion Nuclear Science Facility. Fusion Science and Technology, 2019, 75, 886-917.	0.6	27
140	Processing of tungsten through electron beam melting. Journal of Nuclear Materials, 2021, 555, 153041.	1.3	27
141	Void swelling in reduced activation ferritic/martensitic steels under ion-beam irradiation to high fluences. Journal of Nuclear Materials, 2002, 307-311, 299-303.	1.3	26
142	Experimental design and analysis for irradiation of SiC/SiC composite tubes under a prototypic high heat flux. Journal of Nuclear Materials, 2017, 491, 94-104.	1.3	26
143	Irradiation-induced β to α SiC transformation at low temperature. Scientific Reports, 2017, 7, 1198.	1.6	26
144	Characterization of PVD Cr, CrN, and TiN coatings on SiC. Journal of Nuclear Materials, 2019, 527, 151781.	1.3	26

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145	Dual-ion irradiation effects on microstructure of austenitic alloys. Journal of Nuclear Materials, 1993, 205, 354-360.	1.3	25
146	Effects of precipitation morphology on toughness of reduced activation ferritic/martensitic steels. Journal of Nuclear Materials, 2002, 307-311, 490-494.	1.3	25
147	Effect of Carbon and Silicon Carbide/Carbon Interlayers on the Mechanical Behavior of Tyrannoâ€SAâ€Fiberâ€Reinforced Silicon Carbideâ€Matrix Composites. Journal of the American Ceramic Society, 2003, 86, 851-856.	1.9	25
148	High Temperature Ion-Irradiation Effects on Microstructural Evolution in $\hat{2}$ -SiC. Fusion Science and Technology, 2003, 44, 181-185.	0.6	25
149	Advanced Radiation-Resistant Ceramic Composites. Advances in Science and Technology, 2006, 45, 1915.	0.2	25
150	Retention of Hydrogen Isotopes in Neutron Irradiated Tungsten. Materials Transactions, 2013, 54, 437-441.	0.4	25
151	Stability of the strengthening nanoprecipitates in reduced activation ferritic steels under Fe ²⁺ ion irradiation. Journal of Nuclear Materials, 2014, 445, 104-110.	1.3	24
152	Irradiation stability and thermo-mechanical properties of NITE-SiC irradiated to 10 dpa. Journal of Nuclear Materials, 2018, 499, 242-247.	1.3	24
153	Design and strategy for next-generation silicon carbide composites for nuclear energy. Journal of Nuclear Materials, 2020, 540, 152375.	1.3	24
154	Protection of graphite from salt and gas permeation in molten salt reactors. Journal of Nuclear Materials, 2020, 534, 152119.	1.3	24
155	Effect of Fiber Properties on Neutron Irradiated SiC/SiC Composites. Materials Transactions, 2002, 43, 617-621.	0.4	23
156	Mechanical Properties of Chemically Vapor-Infiltrated Silicon Carbide Structural Composites with Thin Carbon Interphases for Fusion and Advanced Fission Applications. Materials Transactions, 2005, 46, 527-535.	0.4	23
157	Cavity swelling and dislocation evolution in SiC at very high temperatures. Journal of Nuclear Materials, 2009, 386-388, 222-226.	1.3	23
158	Positron annihilation spectroscopy investigation of vacancy defects in neutron-irradiated ^{3}C . Physical Review B, 2017, 95, .		23
159	Neutron irradiation effects on the mechanical properties of powder metallurgical processed tungsten alloys. Journal of Nuclear Materials, 2020, 529, 151910.	1.3	23
160	Mechanical Properties of Cubic Silicon Carbide after Neutron Irradiation at Elevated Temperatures. Journal of ASTM International, 2005, 2, 12377.	0.2	23
161	Microstructural stability of reduced activation ferritic/martensitic steels under high temperature and stress cycling. Fusion Engineering and Design, 2002, 61-62, 671-675.	1.0	22
162	Radiation effects on low cycle fatigue properties of reduced activation ferritic/martensitic steels. Journal of Nuclear Materials, 2002, 307-311, 304-307.	1.3	22

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163	Evaluation of Tensile Properties of SiC/SiC Composites with Miniaturized Specimens. Materials Transactions, 2005, 46, 543-551.	0.4	22
164	Development of a shear strength test method for NITE [®] SiC joining material. Journal of Nuclear Materials, 2011, 417, 383-386.	1.3	22
165	Hydrothermal Corrosion of Coatings on Silicon Carbide in Boiling Water Reactor Conditions. Corrosion, 2019, 75, 217-223.	0.5	22
166	Effects of helium implantation on hardness of pure iron and a reduced activation ferritic [®] martensitic steel. Journal of Nuclear Materials, 2000, 283-287, 470-473.	1.3	21
167	Microstructure analysis and strength evaluation of reaction sintered SiC/SiC composites. Scripta Materialia, 2001, 44, 153-157.	2.6	21
168	Irradiation resistance of silicon carbide joint at light water reactor [®] relevant temperature. Journal of Nuclear Materials, 2017, 488, 150-159.	1.3	21
169	Interlaboratory round robin study on axial tensile properties of SiC [®] SiC <sc>CMC</sc> tubular test specimens. International Journal of Applied Ceramic Technology, 2018, 15, 1334-1349.	1.1	21
170	Failure behavior of SiC/SiC composite tubes under strain rates similar to the pellet-cladding mechanical interaction phase of reactivity-initiated accidents. Journal of Nuclear Materials, 2019, 514, 66-73.	1.3	21
171	Effects of carbonitrides and carbides on microstructure and properties of castable nanostructured alloys. Journal of Nuclear Materials, 2020, 540, 152376.	1.3	21
172	Neutron irradiation-enhanced grain growth in tungsten and tungsten alloys. Journal of Alloys and Compounds, 2022, 901, 163419.	2.8	21
173	Evaluation of dual-ion irradiated \hat{I}^2 -SiC by means of indentation methods. Journal of Nuclear Materials, 2002, 307-311, 1187-1190.	1.3	20
174	Effects of fibers and fabrication processes on mechanical properties of neutron irradiated SiC/SiC composites. Journal of Nuclear Materials, 2002, 307-311, 1173-1177.	1.3	20
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176	Microstructures of beta-silicon carbide after irradiation creep deformation at elevated temperatures. Journal of Nuclear Materials, 2008, 382, 170-175.	1.3	20
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