Yutai Katoh

List of Publications by Year
in descending order

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401 papers	13,829 citations	30551 56 h-index	40945 97 g-index
491 all docs	491 docs citations	491 times ranked	5023 citing authors

#	Article	IF	Citations
1	Characterization and qualification of neutron radiation effects â€“ Summary of Japan-USA Joint Projects for 40 years â€“. Journal of Nuclear Materials, 2022, 560, 153494.	1.3	3
2	Neutron irradiation-enhanced grain growth in tungsten and tungsten alloys. Journal of Alloys and Compounds, 2022, 901, 163419.	2.8	21
3	Mechanisms of stored energy release in silicon carbide materials neutron-irradiated at elevated temperatures. Materials and Design, 2022, 214, 110413.	3.3	3
4	Additive manufacturing of ceramic materials for energy applications: Road map and opportunities. Journal of the European Ceramic Society, 2022, 42, 3049-3088.	2.8	62
5	Thermo-Mechanical Distortion of Tungsten-Coated Steel During High Heat Flux Testing Using Plasma Arc Lamps. Fusion Science and Technology, 2022, 78, 291-317.	0.6	1
6	Neutron irradiation of tungsten in hydrogen environment at HFIR. Fusion Engineering and Design, 2022, 178, 113089.	1.0	0
7	Qualitative and quantitative analysis of neutron irradiation effects in SiC/SiC composites using X-ray computed tomography. Composites Part B: Engineering, 2022, 238, 109896.	5.9	19
8	Anisotropic thermal diffusivity and conductivity in SiC/SiC tubes studied by infrared imaging and X-ray computed tomography. Ceramics International, 2022, 48, 21717-21727.	2.3	10
9	Failure evaluation of neutron-irradiated SiC/SiC composites by underwater acoustic emission. Journal of Nuclear Materials, 2022, 566, 153787.	1.3	5
10	A review on additive manufacturing of refractory tungsten and tungsten alloys. Additive Manufacturing, 2022, 58, 103009.	1.7	5
11	Electric currentâ€“assisted direct joining of silicon carbide. Journal of the European Ceramic Society, 2021, 41, 3072-3081.	2.8	15
12	Electron tomography of unirradiated and irradiated nuclear graphite. Journal of Nuclear Materials, 2021, 545, 152649.	1.3	9
13	Additive manufacturing of silicon carbide for nuclear applications. Journal of Nuclear Materials, 2021, 543, 152577.	1.3	54
14	Advanced synchrotron characterization techniques for fusion materials science. Journal of Nuclear Materials, 2021, 543, 152574.	1.3	9
15	Hydrothermal Corrosion of First-Generation Dual-Purpose Coatings on Silicon Carbide for Accident-Tolerant Fuel Cladding. Journal of Nuclear Materials, 2021, 544, 152695.	1.3	17
16	Effects of helium on irradiation response of reduced-activation ferritic-martensitic steels: Using nickel isotopes to simulate fusion neutron response. Journal of Nuclear Materials, 2021, 545, 152634.	1.3	3
17	Helium effects on the surface and subsurface evolutions in single-crystalline tungsten. Acta Materialia, 2021, 203, 116420.	3.8	17
18	Thermal diffusivity of irradiated tungsten and tungsten-rhenium alloys. Journal of Nuclear Materials, 2021, 543, 152594.	1.3	13

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19	Adhesion, structure, and mechanical properties of Cr HiPIMS and cathodic arc deposited coatings on SiC. Surface and Coatings Technology, 2021, 410, 126939.	2.2	13
20	Segregation behavior and phase instability of Eurofer97 after neutron irradiation to 72Âdpa. Journal of Nuclear Materials, 2021, 547, 152834.	1.3	9
21	Conceptual Design of HFIR Irradiation Experiment for Material Compatibility Study on Liquid Sn Divertor. Plasma and Fusion Research, 2021, 16, 2405040-2405040.	0.3	1
22	X-ray characterization of anisotropic defect formation in SiC under irradiation with applied stress. Scripta Materialia, 2021, 197, 113785.	2.6	6
23	Technological aspects in blanket design: Effects of micro-alloying and thermo-mechanical treatments of EUROFER97 type steels after neutron irradiation. Fusion Engineering and Design, 2021, 168, 112645.	1.0	10
24	The status of the Japanese material properties handbook and the challenge to facilitate structural designÂcriteria for DEMO in-vessel components. Nuclear Fusion, 2021, 61, 116054.	1.6	14
25	Fiber/matrix debonding evaluation of SiCf/SiC composites using micropillar compression technique. Composites Part B: Engineering, 2021, 224, 109189.	5.9	18
26	Processing of tungsten through electron beam melting. Journal of Nuclear Materials, 2021, 555, 153041.	1.3	27
27	Thermal diffusivity and thermal conductivity of SiC composite tubes: the effects of microstructure and irradiation. Journal of Nuclear Materials, 2021, 557, 153217.	1.3	13
28	Effects of sample bias on adhesion of magnetron sputtered Cr coatings on SiC. Journal of Nuclear Materials, 2021, 556, 153251.	1.3	5
29	Atomic and microstructural origins of stored energy release in neutron-irradiated silicon carbide. Physical Review Materials, 2021, 5, .	0.9	2
30	Irradiation hardening and ductility loss of Eurofer97 steel variants after neutron irradiation to ITER-TBM relevant conditions. Fusion Engineering and Design, 2021, 173, 112935.	1.0	5
31	A logical approach for zero-rupture Fully Ceramic Microencapsulated (FCM) fuels via pressure-assisted sintering route. Journal of Nuclear Materials, 2020, 531, 151987.	1.3	16
32	Neutron irradiation-induced microstructure damage in ultra-high temperature ceramic TiC. Acta Materialia, 2020, 186, 1-10.	3.8	30
33	Progress in development of SiC-based joints resistant to neutron irradiation. Journal of the European Ceramic Society, 2020, 40, 1023-1034.	2.8	19
34	Neutron irradiation effects on the mechanical properties of powder metallurgical processed tungsten alloys. Journal of Nuclear Materials, 2020, 529, 151910.	1.3	23
35	Determination of neutron irradiation temperatures of SiC using electrical resistivity method. Journal of Nuclear Materials, 2020, 540, 152370.	1.3	8
36	Design and strategy for next-generation silicon carbide composites for nuclear energy. Journal of Nuclear Materials, 2020, 540, 152375.	1.3	24

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37	Effects of carbonitrides and carbides on microstructure and properties of castable nanostructured alloys. Journal of Nuclear Materials, 2020, 540, 152376.	1.3	21
38	Effects of HFIR neutron irradiation on fracture toughness properties of standard and Ni-doped F82H. Journal of Nuclear Materials, 2020, 542, 152501.	1.3	5
39	Tensile properties of powder-metallurgical-processed tungsten alloys after neutron irradiation near recrystallization temperatures. Journal of Nuclear Materials, 2020, 542, 152505.	1.3	16
40	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
41	The effects of neutron and ionizing irradiation on the aqueous corrosion of SiC. Journal of Nuclear Materials, 2020, 536, 152190.	1.3	17
42	Non-contact strain evaluation for miniature tensile specimens of neutron-irradiated F82H by digital image correlation. Fusion Engineering and Design, 2020, 157, 111663.	1.0	13
43	Plasma-arc lamp high heat flux cycling exposure of neutron irradiated tungsten materials. Physica Scripta, 2020, T171, 014077.	1.2	0
44	Perspectives on the FESAC transformative enabling capabilities: Priorities, plans, and Status. Fusion Engineering and Design, 2020, 155, 111529.	1.0	1
45	Impact of control blade insertion on the deformation behavior of SiC-SiC channel boxes in BWRs. Nuclear Engineering and Design, 2020, 363, 110621.	0.8	7
46	Protection of graphite from salt and gas permeation in molten salt reactors. Journal of Nuclear Materials, 2020, 534, 152119.	1.3	24
47	Properties of Zirconium Carbide for Nuclear Fuel Applications. , 2020, , 419-456.		2
48	Radiation Effects in SiC and SiCâ€“SiC. , 2020, , 437-461.		3
49	Chemical compatibility of silicon carbide in molten fluoride salts for the fluoride salt-cooled high temperature reactor. Journal of Nuclear Materials, 2019, 524, 119-134.	1.3	15
50	Tungsten Microstructural Results from the Gadolinium-Shielded 19J Irradiation Experiment. Microscopy and Microanalysis, 2019, 25, 1600-1601.	0.2	0
51	Silicon carbide and its composites for nuclear applications â€“ Historical overview. Journal of Nuclear Materials, 2019, 526, 151849.	1.3	121
52	Characterization of PVD Cr, CrN, and TiN coatings on SiC. Journal of Nuclear Materials, 2019, 527, 151781.	1.3	26
53	Pair distribution function analysis of neutron-irradiated silicon carbide. Journal of Nuclear Materials, 2019, 527, 151798.	1.3	4
54	Deuterium retention in advanced steels for fusion reactor structural application. Journal of Nuclear Materials, 2019, 516, 144-151.	1.3	8

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55	A 6 MW/m² High Heat Flux Testing Facility of Irradiated Materials Using Infrared Plasma-Arc Lamps. Fusion Science and Technology, 2019, 75, 690-701.	0.6	4
56	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
57	Elastic moduli reduction in SiC-SiC tubular specimen after high heat flux neutron irradiation measured by resonant ultrasound spectroscopy. Journal of Nuclear Materials, 2019, 523, 391-401.	1.3	9
58	Preliminary study of sintering zeroâ€rupture Fully Ceramic Microencapsulated (FCM) fuel. International Journal of Applied Ceramic Technology, 2019, 16, 1699-1707.	1.1	11
59	In-pile tensile creep of chemical vapor deposited silicon carbide at 300â€Â°C. Journal of Nuclear Materials, 2019, 521, 63-70.	1.3	4
60	PHENIX U.S.-Japan Collaboration Investigation of Thermal and Mechanical Properties of Thermal Neutronâ€“Shielded Irradiated Tungsten. Fusion Science and Technology, 2019, 75, 499-509.	0.6	28
61	Characterization of the Irradiation Effects in Nuclear Graphite. Minerals, Metals and Materials Series, 2019, , 901-906.	0.3	0
62	High-dose, intermediate-temperature neutron irradiation effects on silicon carbide composites with varied fiber/matrix interfaces. Journal of the European Ceramic Society, 2019, 39, 2634-2647.	2.8	13
63	Evaluation of the continuous dilatometer method of silicon carbide thermometry for passive irradiation temperature determination. Nuclear Instruments & Methods in Physics Research B, 2019, 445, 46-56.	0.6	20
64	Multiscale experimental characterization of coatings on ceramics: A case study of tungsten on SiC. Surface and Coatings Technology, 2019, 367, 1-10.	2.2	2
65	Fully Ceramic Microencapsulated fuel in prismatic high-temperature gas-cooled reactors: Sensitivity of reactor behavior during design basis accidents to fuel properties and the potential impact of the SiC defect annealing process. Nuclear Engineering and Design, 2019, 345, 125-147.	0.8	18
66	Mechanical properties and microstructure characterization of Eurofer97 steel variants in EUROfusion program. Fusion Engineering and Design, 2019, 146, 2227-2232.	1.0	20
67	Response of unalloyed tungsten to mixed spectrum neutrons. Journal of Nuclear Materials, 2019, 520, 193-207.	1.3	72
68	High throughput crystal structure and composition mapping of crystalline nanoprecipitates in alloys by transmission Kikuchi diffraction and analytical electron microscopy. Ultramicroscopy, 2019, 202, 33-43.	0.8	18
69	Mechanical properties of single-crystal tungsten irradiated in a mixed spectrum fission reactor. Journal of Nuclear Materials, 2019, 518, 208-225.	1.3	58
70	Preliminary Characterization and Projections of PVD Coatings On SiC Cladding for Light Water Reactors. Ceramic Engineering and Science Proceedings, 2019, , 117-134.	0.1	0
71	Response of isotopically tailored titanium diboride to neutron irradiation. Journal of the American Ceramic Society, 2019, 102, 85-89.	1.9	8
72	Deformation analysis of SiC-SiC channel box for BWR applications. Journal of Nuclear Materials, 2019, 513, 71-85.	1.3	17

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73	Hydrothermal Corrosion of Coatings on Silicon Carbide in Boiling Water Reactor Conditions. Corrosion, 2019, 75, 217-223.	0.5	22
74	Nano-scale microstructure damage by neutron irradiations in a novel Boron-11 enriched TiB2 ultra-high temperature ceramic. Acta Materialia, 2019, 165, 26-39.	3.8	28
75	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
76	Transmutation-induced precipitation in tungsten irradiated with a mixed energy neutron spectrum. Acta Materialia, 2019, 165, 51-61.	3.8	55
77	Development of mesopores in superfine grain graphite neutron-irradiated at high fluence. Carbon, 2019, 141, 663-675.	5.4	31
78	Stored energy release in neutron irradiated silicon carbide. Journal of Nuclear Materials, 2019, 514, 181-188.	1.3	16
79	Master Curve Fracture Toughness Characterization of Eurofer97 Steel Variants Using Miniature Multi-Notch Bend Bar Specimens for Fusion Applications. , 2019, , .		3
80	CaO-Al2O3 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
81	Electroplating chromium on CVD SiC and SiCf-SiC advanced cladding via PyC compatibility coating. Journal of Nuclear Materials, 2018, 503, 245-249.	1.3	15
82	Interlaboratory round robin study on axial tensile properties of SiCâ€SiC <scp>CMC</scp> tubular test specimens. International Journal of Applied Ceramic Technology, 2018, 15, 1334-1349.	1.1	21
83	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
84	Mechanical property degradation of high crystalline SiC fiberâ€“reinforced SiC matrix composite neutron irradiated to â¼100 displacements per atom. Journal of the European Ceramic Society, 2018, 38, 1087-1094.	2.8	38
85	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
86	Overview of the fusion nuclear science facility, a credible break-in step on the path to fusion energy. Fusion Engineering and Design, 2018, 135, 236-270.	1.0	67
87	Materials challenges for the fusion nuclear science facility. Fusion Engineering and Design, 2018, 135, 290-301.	1.0	46
88	Reprint of: Microstructural evolution of neutron irradiated 3C-SiC. Scripta Materialia, 2018, 143, 176-180.	2.6	10
89	Parametric Evaluation of SiC/SiC Composite Cladding with UO2 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
90	Irradiation stability and thermo-mechanical properties of NITE-SiC irradiated to 10 dpa. Journal of Nuclear Materials, 2018, 499, 242-247.	1.3	24

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91	Evaluating the irradiation effects on the elastic properties of miniature monolithic SiC tubular specimens. Journal of Nuclear Materials, 2018, 499, 107-110.	1.3	11
92	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
93	Applications of Combined Transmission Kikuchi Diffraction and STEM-SDD X-Ray Analysis in Irradiated Materials. Microscopy and Microanalysis, 2018, 24, 736-737.	0.2	1
94	Nitrogen adsorption data, FIB-SEM tomography and TEM micrographs of neutron-irradiated superfine grain graphite. Data in Brief, 2018, 21, 2643-2650.	0.5	6
95	Multiscale characterization of irradiation behaviour of ion-irradiated SiC/SiC composites. Acta Materialia, 2018, 161, 207-220.	3.8	36
96	Site specific, high-resolution characterisation of porosity in graphite using FIB-SEM tomography. Journal of Nuclear Materials, 2018, 511, 164-173.	1.3	34
97	Validation of miniature test specimens for post-irradiation thermal diffusivity measurement. Fusion Engineering and Design, 2018, 136, 513-517.	1.0	3
98	Ceramic matrix composites in fission and fusion energy applications. , 2018, , 595-622.		2
99	Advanced manufacturingâ€"A transformative enabling capability for fusion. Fusion Engineering and Design, 2018, 136, 1007-1011.	1.0	5
100	An F82H steel pressurized tube creep capsule for irradiation in HFIR. Nuclear Materials and Energy, 2018, 15, 254-260.	0.6	3
101	Materials-engineering challenges for the fusion core and lifetime components of the fusion nuclear science facility. Nuclear Materials and Energy, 2018, 16, 82-87.	0.6	12
102	Surface morphology of Tungsten-F82H after high-heat flux testing using plasma-arc lamps. Nuclear Materials and Energy, 2018, 16, 128-132.	0.6	3
103	Raman spectroscopy of neutron irradiated silicon carbide: <scp>C</scp>orrelation among <scp>R</scp>aman spectra, swelling, and irradiation temperature. Journal of Raman Spectroscopy, 2018, 49, 1686-1692.	1.2	18
104	Microstructural evolution of 3C-SiC exposed to simultaneous neutron irradiation and helium implantation. Journal of Nuclear Materials, 2018, 509, 366-376.	1.3	11
105	Mechanical properties of neutron irradiated F82H using micro-tensile testing. Nuclear Materials and Energy, 2018, 16, 258-262.	0.6	9
106	Recent progress in the development of SiC composites for nuclear fusion applications. Journal of Nuclear Materials, 2018, 511, 544-555.	1.3	114
107	Development of castable nanostructured alloys as a new generation RAFM steels. Journal of Nuclear Materials, 2018, 511, 598-604.	1.3	35
108	Master Curve Fracture Toughness Characterization of Eurofer97 Using Miniature Multi-Notch Bend Bar Specimens for Fusion Applications. , 2018, , .		3

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109	Composition, Structure, Manufacture, and Properties of SiC-Sic CMCS for Nuclear Applications: Informational Chapters in the Asme BPV Code Section III. Ceramic Engineering and Science Proceedings, 2017, , 17-22.	0.1	1
110	Microstructural evolution of pure tungsten neutron irradiated with a mixed energy spectrum. Journal of Nuclear Materials, 2017, 490, 66-74.	1.3	89
111	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
112	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
113	Equilibrium shapes and surface selection of nanostructures in 6H-SiC. Applied Physics Letters, 2017, 110, 142106.	1.5	9
114	Microstructure and mechanical properties of titanium aluminum carbides neutron irradiated at 400â€“700 Â°C. Journal of the European Ceramic Society, 2017, 37, 2353-2363.	2.8	12
115	Irradiation resistance of silicon carbide joint at light water reactorâ€“relevant temperature. Journal of Nuclear Materials, 2017, 488, 150-159.	1.3	21
116	Positron annihilation spectroscopy investigation of vacancy defects in neutron-irradiated<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mn>3</mml:mn><mml:mi>C</mml:mi></mml:math>-SiC. Physical Review B, 2017, 95, .	3.8	23
117	Microstructural evolution of neutron irradiated 3C-SiC. Scripta Materialia, 2017, 137, 132-136.	2.6	18
118	Irradiation-induced Î² to Î± SiC transformation at low temperature. Scientific Reports, 2017, 7, 1198.	1.6	26
119	Micro-mechanical evaluation of SiC-SiC composite interphase properties and debond mechanisms. Composites Part B: Engineering, 2017, 131, 173-183.	5.9	46
120	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
121	Developing the science and technology for the Material Plasma Exposure eXperiment. Nuclear Fusion, 2017, 57, 116001.	1.6	44
122	Corrigendum to â€œMicrostructure and mechanical properties of titanium aluminum carbides neutron irradiated at 400â€“700 Â°Câ€•[J. Eur. Ceram. Soc., 37(6) (2017) 2353â€“2363]. Journal of the European Ceramic Society, 2017, 37, 3225.	2.8	0
123	Helium sequestration at nanoparticle-matrix interfaces in heliumÂ+Âheavy ion irradiated nanostructured ferritic alloys. Journal of Nuclear Materials, 2017, 483, 21-34.	1.3	42
124	Phase stability, swelling, microstructure and strength of Ti3SiC2-TiC ceramics after low dose neutron irradiation. Journal of Nuclear Materials, 2017, 483, 44-53.	1.3	31
125	Oxidation Behavior of Matrix Graphite and Its Effect on Compressive Strength. Science and Technology of Nuclear Installations, 2017, 2017, 1-6.	0.3	10
126	Combining Transmission Kikuchi Diffraction and Scanning Transmission Electron Microscopy for Irradiated Materials Studies. Microscopy and Microanalysis, 2017, 23, 2218-2219.	0.2	1

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127	Impact of neutron irradiation on thermal helium desorption from iron. Journal of Nuclear Materials, 2017, 489, 109-117.	1.3	8
128	Neutron-irradiation creep of silicon carbide materials beyond the initial transient. Journal of Nuclear Materials, 2016, 478, 97-111.	1.3	20
129	Microscopy of Plasma-Materials Interactions in Tungsten for Fusion Power. Microscopy and Microanalysis, 2016, 22, 1462-1463.	0.2	0
130	Irradiation hardening of pure tungsten exposed to neutron irradiation. Journal of Nuclear Materials, 2016, 480, 235-243.	1.3	189
131	Quantification of irradiation defects in beta-silicon carbide using Raman spectroscopy. Scripta Materialia, 2016, 125, 58-62.	2.6	30
132	Hydrothermal corrosion of silicon carbide joints without radiation. Journal of Nuclear Materials, 2016, 481, 226-233.	1.3	11
133	Neutron energy spectrum influence on irradiation hardening and microstructural development of tungsten. Journal of Nuclear Materials, 2016, 479, 249-254.	1.3	64
134	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
135	Irradiation effects in tungsten-copper laminate composite. Journal of Nuclear Materials, 2016, 481, 134-146.	1.3	27
136	Property changes of G347A graphite due to neutron irradiation. Carbon, 2016, 109, 860-873.	5.4	45
137	Anisotropic swelling and microcracking of neutron irradiated Ti3AlC2â€“Ti5Al2C3 materials. Scripta Materialia, 2016, 114, 74-78.	2.6	43
138	Development of new generation reduced activation ferritic-martensitic steels for advanced fusion reactors. Journal of Nuclear Materials, 2016, 478, 42-49.	1.3	122
139	Method for analyzing passive silicon carbide thermometry with a continuous dilatometer to determine irradiation temperature. Nuclear Instruments & Methods in Physics Research B, 2016, 370, 49-58.	0.6	72
140	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
141	Dimensional isotropy of 6H and 3C SiC under neutron irradiation. Journal of Nuclear Materials, 2016, 471, 92-96.	1.3	34
142	Flexural Strength of Composite Tubes for SMR Applications using Pure Bending: Draft Astm Test Method. Ceramic Engineering and Science Proceedings, 2015, , 111-118.	0.1	1
143	Defect Microstructure in Irradiated Silicon Carbide. Microscopy and Microanalysis, 2015, 21, 1331-1332.	0.2	0
144	Application of Xâ€ray microcomputed tomography in the characterization of irradiated nuclear fuel and material specimens. Journal of Microscopy, 2015, 260, 163-174.	0.8	9

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145	Torsional Shear Strength Tests for Glassâ€“Ceramic Joined Silicon Carbide. International Journal of Applied Ceramic Technology, 2015, 12, 693-699.	1.1	16
146	Chemical reactivity of CVC and CVD SiC with UO2 at high temperatures. Journal of Nuclear Materials, 2015, 460, 52-59.	1.3	10
147	Through Thickness Mechanical Properties of Chemical Vapor Infiltration and Nanoâ€Infiltration and Transient Eutecticâ€Phase Processed SiC/SiC Composites. International Journal of Applied Ceramic Technology, 2015, 12, 481-490.	1.1	4
148	Microstructure and mechanical properties of heat-treated and neutron irradiated TRISO-ZrC coatings. Journal of Nuclear Materials, 2015, 464, 245-255.	1.3	17
149	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
150	High-dose neutron irradiation of Hi-Nicalon Type S silicon carbide composites. Part 2: Mechanical and physical properties. Journal of Nuclear Materials, 2015, 462, 450-457.	1.3	54
151	Modeling and testing miniature torsion specimens for SiC joining development studies for fusion. Journal of Nuclear Materials, 2015, 466, 253-268.	1.3	14
152	Progress on matrix SiC processing and properties for fully ceramic microencapsulated fuel form. Journal of Nuclear Materials, 2015, 457, 9-17.	1.3	54
153	Applicability and Limitations of Miniature Specimens for Properties Determination of Fine-Grained Graphite. , 2014, , 65-83.		3
154	Radiation-tolerant joining technologies for silicon carbide ceramics and composites. Journal of Nuclear Materials, 2014, 448, 497-511.	1.3	140
155	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
156	Stability of MX-type strengthening nanoprecipitates in ferritic steels under thermal aging, stress and ion irradiation. Acta Materialia, 2014, 71, 11-19.	3.8	83
157	Joining of Î²-SiC by spark plasma sintering. Journal of the European Ceramic Society, 2014, 34, 1681-1686.	2.8	90
158	Stability of SiC-matrix microencapsulated fuel constituents at relevant LWR conditions. Journal of Nuclear Materials, 2014, 448, 389-398.	1.3	83
159	Thermo-mechanical analysis of LWR SiC/SiC composite cladding. Journal of Nuclear Materials, 2014, 447, 125-142.	1.3	102
160	Current status and recent research achievements in SiC/SiC composites. Journal of Nuclear Materials, 2014, 455, 387-397.	1.3	266
161	Ceramic matrix composites in fission and fusion energy applications. , 2014, , 496-523.		6
162	Silicon Carbide Oxidation in Steam up to 2ÂMPa. Journal of the American Ceramic Society, 2014, 97, 2331-2352.	1.9	197

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163	Stability of the strengthening nanoprecipitates in reduced activation ferritic steels under Fe2+ ion irradiation. Journal of Nuclear Materials, 2014, 445, 104-110.	1.3	24
164	Irradiation creep of nano-powder sintered silicon carbide at low neutron fluences. Journal of Nuclear Materials, 2014, 455, 73-80.	1.3	10
165	Physical properties of F82H for fusion blanket design. Fusion Engineering and Design, 2014, 89, 1595-1599.	1.0	48
166	Effects of neutron irradiation on mechanical properties of silicon carbide composites fabricated by nano-infiltration and transient eutectic-phase process. Journal of Nuclear Materials, 2014, 448, 478-486.	1.3	55
167	High-Heat-Flux Testing of Irradiated Tungsten-Based Materials for Fusion Applications Using Infrared Plasma Arc Lamps. Fusion Science and Technology, 2014, 66, 394-404.	0.6	9
168	Atomic-Resolution Investigation of Irradiation-Induced Defects in Silicon Carbide. Microscopy and Microanalysis, 2014, 20, 1042-1043.	0.2	1
169	The effect of neutron irradiation on the mechanical properties of C/SiC composites. Journal of Nuclear Materials, 2013, 439, 192-201.	1.3	7
170	Determination of interfacial mechanical properties of ceramic composites by the compression of micro-pillar test specimens. Journal of Materials Science, 2013, 48, 5219-5224.	1.7	15
171	Properties of zirconium carbide for nuclear fuel applications. Journal of Nuclear Materials, 2013, 441, 718-742.	1.3	222
172	Principles and practice of a bellows-loaded compact irradiation vehicle. Journal of Nuclear Materials, 2013, 439, 108-116.	1.3	8
173	Transmutation of silicon carbide in fusion nuclear environment. Journal of Nuclear Materials, 2013, 442, S370-S375.	1.3	36
174	Tritium trapping in silicon carbide in contact with solid breeder under high flux isotope reactor irradiation. Journal of Nuclear Materials, 2013, 442, S497-S500.	1.3	4
175	Observation and possible mechanism of irradiation induced creep in ceramics. Journal of Nuclear Materials, 2013, 434, 141-151.	1.3	60
176	Deuterium trapping at defects created with neutron and ion irradiations in tungsten. Nuclear Fusion, 2013, 53, 073006.	1.6	99
177	Selected Emerging Opportunities for Ceramics in Energy, Environment, and Transportation. International Journal of Applied Ceramic Technology, 2013, 10, 731-739.	1.1	19
178	Progress on DCLL Blanket Concept. Fusion Science and Technology, 2013, 64, 623-630.	0.6	11
179	Test Methods for Flexural Strength of Ceramic Composite Tubes for Small Modular Reactor Applications. Ceramic Engineering and Science Proceedings, 2013, , 131-140.	0.1	0
180	Retention of Hydrogen Isotopes in Neutron Irradiated Tungsten. Materials Transactions, 2013, 54, 437-441.	0.4	25

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