Yinbin Miao

List of Publications by Year in descending order

58 papers	989 citations	393982 19 h-index	500791 28 g-index
66 all docs	66 docs citations	66 times ranked	858 citing authors

#	Article	IF	Citations
1	Neutron irradiation effects in Fe and Fe-Cr at 300ÂÂ°C. Acta Materialia, 2016, 111, 407-416.	3.8	54
2	On the microstructure and strengthening mechanism in oxide dispersion-strengthened 316 steel: A coordinated electron microscopy, atom probe tomography and in situ synchrotron tensile investigation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 639, 585-596.	2.6	48
3	Atom probe study of irradiation-enhanced Î±â€² precipitation in neutron-irradiated Feâ€“Cr model alloys. Journal of Nuclear Materials, 2015, 462, 242-249.	1.3	46
4	Synchrotron study on load partitioning between ferrite/martensite and nanoparticles of a 9Cr ODS steel. Journal of Nuclear Materials, 2014, 455, 376-381.	1.3	44
5	The microstructure and mechanical properties of Al-containing 9Cr ODS ferritic alloy. Journal of Alloys and Compounds, 2015, 648, 223-228.	2.8	44
6	The interfacial orientation relationship of oxide nanoparticles in a hafnium-containing oxide dispersion-strengthened austenitic stainless steel. Materials Characterization, 2015, 101, 136-143.	1.9	43
7	Gaseous swelling of U3Si2 during steady-state LWR operation: A rate theory investigation. Nuclear Engineering and Design, 2017, 322, 336-344.	0.8	42
8	In situ synchrotron tensile investigations on the phase responses within an oxide dispersion-strengthened (ODS) 304 steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 625, 146-152.	2.6	33
9	Bubble morphology in U3Si2 implanted by high-energy Xe ions at 300ÂÂ°C. Journal of Nuclear Materials, 2017, 495, 146-153.	1.3	33
10	Ion-irradiation-induced microstructural modifications in ferritic/martensitic steel T91. Journal of Nuclear Materials, 2017, 490, 305-316.	1.3	32
11	Short Communication on â€œIn-situ TEM ion irradiation investigations on U3Si2 at LWR temperaturesâ€• Journal of Nuclear Materials, 2017, 484, 168-173.	1.3	31
12	The comparison of microstructures and mechanical properties between 14Cr-Al and 14Cr-Ti ferritic ODS alloys. Materials and Design, 2016, 98, 61-67.	3.3	29
13	The evolution of internal stress and dislocation during tensile deformation in a 9Cr ferritic/martensitic (F/M) ODS steel investigated by high-energy X-rays. Journal of Nuclear Materials, 2015, 467, 50-57.	1.3	28
14	Nano-crystallization induced by high-energy heavy ion irradiation in UO2. Scripta Materialia, 2018, 155, 169-174.	2.6	25
15	Characterization of dislocation loops in CeO₂irradiated with high energy Krypton and Xenon. Philosophical Magazine, 2013, 93, 4569-4581.	0.7	24
16	Microstructure investigations of U3Si2 implanted by high-energy Xe ions at 600â€Â°C. Journal of Nuclear Materials, 2018, 503, 314-322.	1.3	23
17	The evolution mechanism of the dislocation loops in irradiated lanthanum doped cerium oxide. Journal of Nuclear Materials, 2014, 445, 209-217.	1.3	21
18	Defect structures induced by high-energy displacement cascades in Î³ uranium. Journal of Nuclear Materials, 2015, 456, 1-6.	1.3	21

#	Article	IF	Citations
19	Rate theory scenarios study on fission gas behavior of U3Si2 under LOCA conditions in LWRs. Nuclear Engineering and Design, 2018, 326, 371-382.	0.8	21
20	Load partitioning between ferrite/martensite and dispersed nanoparticles of a 9Cr ferritic/martensitic (F/M) ODS steel at high temperatures. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 637, 75-81.	2.6	20
21	In situ synchrotron tensile investigations on 14YWT, MA957, and 9-Cr ODS alloys. Journal of Nuclear Materials, 2016, 471, 289-298.	1.3	19
22	Mechanical properties of UO2 thin films under heavy ion irradiation using nanoindentation and finite element modeling. Journal of Nuclear Materials, 2016, 479, 548-558.	1.3	18
23	High-energy synchrotron study of in-pile-irradiated Uâ€“Mo fuels. Scripta Materialia, 2016, 114, 146-150.	2.6	18
24	Effect of orientation on plastic deformations of Alloy 617 for VHTR applications. Journal of Nuclear Materials, 2013, 443, 366-377.	1.3	17
25	Phase-field simulations of intergranular fission gas bubble behavior in U3Si2 nuclear fuel. Journal of Nuclear Materials, 2020, 541, 152415.	1.3	17
26	In situ synchrotron investigation of grain growth behavior of nano-grained UO2. Scripta Materialia, 2017, 131, 29-32.	2.6	16
27	Cross section TEM characterization of high-energy-Xe-irradiated U-Mo. Journal of Nuclear Materials, 2017, 488, 134-142.	1.3	16
28	Stability of nanoclusters in an oxide dispersion strengthened alloy under neutron irradiation. Scripta Materialia, 2017, 138, 57-61.	2.6	15
29	Load-partitioning in an oxide dispersion-strengthened 310 steel at elevated temperatures. Materials and Design, 2016, 111, 622-630.	3.3	14
30	Radiation resistance of oxide dispersion strengthened alloys: Perspectives from in situ observations and rate theory calculations. Scripta Materialia, 2018, 148, 33-36.	2.6	14
31	In-situ TEM study of the ion irradiation behavior of U3Si2 and U3Si5. Journal of Nuclear Materials, 2018, 511, 56-63.	1.3	12
32	Fuel performance evaluation of annular metallic fuels for an advanced fast reactor concept. Nuclear Engineering and Design, 2019, 352, 110157.	0.8	11
33	Phase decomposition and bubble evolution in Xe implanted U3Si2 at 450â˜C. Journal of Nuclear Materials, 2019, 518, 108-116.	1.3	11
34	Correlation between crystallographic orientation and surface faceting in UO2. Journal of Nuclear Materials, 2016, 478, 176-184.	1.3	10
35	The effect of thermal-aging on the microstructure and mechanical properties of 9Cr ferritic/martensitic ODS alloy. Journal of Nuclear Materials, 2019, 522, 212-219.	1.3	10
36	Investigation of High-Energy Ion-Irradiated MA957 Using Synchrotron Radiation under In-Situ Tension. Materials, 2016, 9, 15.	1.3	9

#	Article	IF	Citations
37	Size-dependent characteristics of ultra-fine oxygen-enriched nanoparticles in austenitic steels. Journal of Nuclear Materials, 2016, 480, 195-201.	1.3	9
38	Investigation of thermal aging effects on the tensile properties of Alloy 617 by in-situ synchrotron wide-angle X-ray scattering. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 651, 55-62.	2.6	9
39	First-principles study of surface properties of uranium silicides. Journal of Nuclear Materials, 2019, 513, 192-197.	1.3	9
40	Characterization of high energy Xe ion irradiation effects in single crystal molybdenum with depth-resolved synchrotron microbeam diffraction. Journal of Nuclear Materials, 2016, 471, 272-279.	1.3	8
41	Temperature effect of elastic anisotropy and internal strain development in advanced nanostructured alloys: An in-situ synchrotron X-ray investigation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 692, 53-61.	2.6	7
42	Interaction between Al and atomic layer deposited (ALD) ZrN under high-energy heavy ion irradiation. Acta Materialia, 2019, 164, 788-798.	3.8	6
43	FIPD: The SFR metallic fuels irradiation & physics database. Nuclear Engineering and Design, 2021, 380, 111225.	0.8	6
44	Biaxial Thermal Creep of Alloy 617 and Alloy 230 for VHTR Applications. Journal of Engineering Materials and Technology, Transactions of the ASME, 2016, 138, .	0.8	5
45	Microstructure evolution in U-10Zr alloy irradiated by swift Xe ions at 700Âå˜C. Journal of Nuclear Materials, 2021, 543, 152470.	1.3	5
46	Metallic fuel cladding degradation model development and evaluation for BISON. Nuclear Engineering and Design, 2021, 385, 111531.	0.8	5
47	Lattice strain mapping of cracks and indentations in UO2 using synchrotron microdiffraction. Journal of Nuclear Materials, 2020, 529, 151943.	1.3	4
48	Thermal conductivity measurement of the interaction layer between UMo and Al produced by high-energy heavy ion irradiation. Journal of Nuclear Materials, 2020, 539, 152262.	1.3	4
49	Grain subdivision and structural modifications by high-energy heavy ions in UO2 with different initial grain size. Nuclear Instruments & Methods in Physics Research B, 2022, 515, 48-60.	0.6	4
50	In situ synchrotron tensile investigations on ultrasonic additive manufactured (UAM) zirconium. Journal of Nuclear Materials, 2022, 568, 153843.	1.3	4
51	The incorporation and migration of a single xenon atom in ceria. Journal of Nuclear Materials, 2014, 449, 242-247.	1.3	3
52	Effect of reactor radiation on the thermal conductivity of TREAT fuel. Journal of Nuclear Materials, 2017, 487, 453-460.	1.3	3
53	An exploration of measuring lower-length-scale structures in nuclear materials: Thermal conductivity of U-Mo fuel particle. Journal of Nuclear Materials, 2019, 527, 151797.	1.3	3
54	Quantitative accuracy assessment and optimization of SPECT geometrical calibration. Tsinghua Science and Technology, 2010, 15, 96-101.	4.1	1

#	Article	IF	Citations
55	Effectiveness of the metal coating on Uâ€“7Mo dispersion fuel in Al during irradiation. Journal of Nuclear Materials, 2020, 529, 151945.	1.3	1
56	Temperature Effects on Interdiffusion of Al and U-Mo under Irradiation. Journal of Nuclear Materials, 2021, 544, 152684.	1.3	1
57	Microstructure investigations of temperature effect on Al-UMo diffusion couples irradiated by swift Xe ions. Journal of Nuclear Materials, 2021, 547, 152757.	1.3	0
58	In-Situ Synchrotron X-Ray Study of the Elevated Temperature Deformation Response of SS 316L Pressurized Creep Tubes. , 2015, , 244-255.		0