

Graeme Greaves

List of Publications by Year in descending order

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54
papers

1,216
citations

430442

18
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395343

33
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55
all docs

55
docs citations

55
times ranked

1189
citing authors

#	ARTICLE	IF	CITATIONS
1	Observations of He platelets during He ion irradiation in 3C SiC. Journal of Nuclear Materials, 2022, 559, 153426.	1.3	8
2	Helium implantation damage resistance in nanocrystalline W-Ta-V-Cr high entropy alloys. Materials Today Energy, 2021, 19, 100599.	2.5	14
3	In situ He+ irradiation of the double solid solution (Ti _{0.5} Zr _{0.5}) ₂ (Al _{0.5} Sn _{0.5})C MAX phase: Defect evolution in the 350–800 Å°C temperature range. Acta Materialia, 2021, 206, 116606.	3.8	9
4	Anomalous nucleation of crystals within amorphous germanium nanowires during thermal annealing. Nanotechnology, 2021, 32, 285707.	1.3	1
5	Comparative irradiation response of an austenitic stainless steel with its high-entropy alloy counterpart. Intermetallics, 2021, 132, 107130.	1.8	17
6	In situ TEM investigations of the microstructural changes and radiation tolerance in SiC nanowhiskers irradiated with He ions at high temperatures. Acta Materialia, 2021, 210, 116820.	3.8	9
7	In-situ TEM investigation of nano-scale helium bubble evolution in tantalum-doped tungsten at 800Å°C. Journal of Nuclear Materials, 2021, 550, 152910.	1.3	16
8	Nanostructuring Germanium Nanowires by In Situ TEM Ion Irradiation. Particle and Particle Systems Characterization, 2021, 38, 2100154.	1.2	0
9	Irradiation stability and induced ferromagnetism in a nanocrystalline CoCrCuFeNi highly-concentrated alloy. Nanoscale, 2021, 13, 20437-20450.	2.8	9
10	Low-temperature investigations of ion-induced amorphisation in silicon carbide nanowhiskers under helium irradiation. Applied Surface Science, 2020, 501, 143969.	3.1	8
11	Prototypic Lightweight Alloy Design for Stellar Radiation Environments. Advanced Science, 2020, 7, 2002397.	5.6	7
12	The effect of flux on ion irradiation-enhanced precipitation in AISI-316L: An in-situ TEM study. Journal of Nuclear Materials, 2020, 541, 152414.	1.3	5
13	Synthesis and <i>in situ</i> ion irradiation of A-site deficient zirconate perovskite ceramics. Journal of Materials Chemistry A, 2020, 8, 19454-19466.	5.2	7
14	Dual-Beam Irradiation Stability of Amorphous Silicon Oxycarbide at 300Å°C and 500Å°C. Jom, 2020, 72, 4002-4007.	0.9	4
15	In-Situ Helium Implantation and TEM Investigation of Radiation Tolerance to Helium Bubble Damage in Equiaxed Nanocrystalline Tungsten and Ultrafine Tungsten-TiC Alloy. Materials, 2020, 13, 794.	1.3	11
16	Radiation Damage Suppression in AISI-316 Steel Nanoparticles: Implications for the Design of Future Nuclear Materials. ACS Applied Nano Materials, 2020, 3, 9652-9662.	2.4	3
17	Direct Comparison of Tungsten Nanoparticles and Foils under Helium Irradiation at High Temperatures Studied via In-Situ Transmission Electron Microscopy. Microscopy and Microanalysis, 2019, 25, 1576-1577.	0.2	0
18	Understanding amorphization mechanisms using ion irradiation in situ a TEM and 3D damage reconstruction. Ultramicroscopy, 2019, 207, 112838.	0.8	7

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19	Investigating Helium Bubble Nucleation and Growth through Simultaneous In-Situ Cryogenic, Ion Implantation, and Environmental Transmission Electron Microscopy. <i>Materials</i> , 2019, 12, 2618.	1.3	8
20	Thermodynamics of an austenitic stainless steel (AISI-348) under in situ TEM heavy ion irradiation. <i>Acta Materialia</i> , 2019, 179, 360-371.	3.8	14
21	Chemical effects on He bubble superlattice formation in high entropy alloys. <i>Current Opinion in Solid State and Materials Science</i> , 2019, 23, 100762.	5.6	24
22	Investigating sluggish diffusion in a concentrated solid solution alloy using ion irradiation with in situ TEM. <i>Intermetallics</i> , 2019, 110, 106461.	1.8	22
23	A candidate accident tolerant fuel system based on a highly concentrated alloy thin film. <i>Materials Today Energy</i> , 2019, 12, 356-362.	2.5	12
24	New Microscope and Ion Accelerators for Materials Investigations (MIAMI-2) system at the University of Huddersfield. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2019, 931, 37-43.	0.7	42
25	Thermal stability and irradiation response of nanocrystalline CoCrCuFeNi high-entropy alloy. <i>Nanotechnology</i> , 2019, 30, 294004.	1.3	38
26	Intermetallic Re phases formed in ion irradiated WRe alloy. <i>Journal of Nuclear Materials</i> , 2019, 514, 123-127.	1.3	8
27	Rapid and damage-free outgassing of implanted helium from amorphous silicon oxycarbide. <i>Scientific Reports</i> , 2018, 8, 5009.	1.6	13
28	Effects of crystallographic and geometric orientation on ion beam sputtering of gold nanorods. <i>Scientific Reports</i> , 2018, 8, 512.	1.6	9
29	Ion implantation in nanodiamonds: size effect and energy dependence. <i>Scientific Reports</i> , 2018, 8, 5099.	1.6	25
30	Enhanced Radiation Tolerance of Tungsten Nanoparticles to He Ion Irradiation. <i>Nanomaterials</i> , 2018, 8, 1052.	1.9	14
31	Energetic particle irradiation study of TiN coatings: are these films appropriate for accident tolerant fuels?. <i>Journal of Nuclear Materials</i> , 2018, 512, 239-245.	1.3	31
32	Ion-beam-induced bending of semiconductor nanowires. <i>Nanotechnology</i> , 2018, 29, 335701.	1.3	12
33	Shape Modification of Germanium Nanowires during Ion Irradiation and Subsequent Solid-Phase Epitaxial Growth. <i>Advanced Materials Interfaces</i> , 2018, 5, 1800276.	1.9	8
34	A candidate fusion engineering material, WC-FeCr. <i>Scripta Materialia</i> , 2018, 155, 129-133.	2.6	21
35	The effect of temperature on bubble lattice formation in copper under in situ He ion irradiation. <i>Scripta Materialia</i> , 2017, 131, 108-111.	2.6	16
36	Grain size threshold for enhanced irradiation resistance in nanocrystalline and ultrafine tungsten. <i>Materials Research Letters</i> , 2017, 5, 343-349.	4.1	81

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37	Engineering self-organising helium bubble lattices in tungsten. <i>Scientific Reports</i> , 2017, 7, 7724.	1.6	33
38	Effects of temperature on the ion-induced bending of germanium and silicon nanowires. <i>Materials Research Express</i> , 2017, 4, 075056.	0.8	5
39	Effect of He implantation on the microstructure of zircaloy-4 studied using in situ TEM. <i>Journal of Nuclear Materials</i> , 2017, 493, 230-238.	1.3	23
40	A study of the effect of helium concentration and displacement damage on the microstructure of helium ion irradiated tungsten. <i>Journal of Nuclear Materials</i> , 2017, 495, 492-503.	1.3	47
41	Effect of He-appm/DPA ratio on the damage microstructure of tungsten. <i>MRS Advances</i> , 2016, 1, 2893-2899.	0.5	19
42	TEM with in situ Ion Irradiation of Nuclear Materials under In-Service Conditions. <i>Microscopy and Microanalysis</i> , 2016, 22, 1460-1461.	0.2	1
43	An in situ transmission electron microscopy study of the ion irradiation induced amorphisation of silicon by He and Xe. <i>Scripta Materialia</i> , 2016, 113, 190-193.	2.6	17
44	Helium bubble formation in ultrafine and nanocrystalline tungsten under different extreme conditions. <i>Journal of Nuclear Materials</i> , 2015, 458, 216-223.	1.3	137
45	Helium bubble formation in nuclear glass by in-situ TEM ion implantation. <i>Journal of Nuclear Materials</i> , 2014, 452, 565-568.	1.3	26
46	In-situ TEM studies of ion-irradiation induced bubble development and mechanical deformation in model nuclear materials. <i>Materials Research Society Symposia Proceedings</i> , 2014, 1645, 1.	0.1	3
47	Sputtering yields exceeding 1000 by 80keV Xe irradiation of Au nanorods. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2014, 341, 17-21.	0.6	17
48	Dynamic microstructural evolution of graphite under displacing irradiation. <i>Carbon</i> , 2014, 68, 273-284.	5.4	33
49	Kink Band Formation in Graphite under Ion Irradiation at 100 and 298 K. <i>Materials Transactions</i> , 2014, 55, 447-450.	0.4	8
50	In-situ observation and atomic resolution imaging of the ion irradiation induced amorphisation of graphene. <i>Scientific Reports</i> , 2014, 4, 6334.	1.6	62
51	In-situ TEM observation of the response of ultrafine- and nanocrystalline-grained tungsten to extreme irradiation environments. <i>Scientific Reports</i> , 2014, 4, 4716.	1.6	161
52	Enhanced Sputtering Yields from Single-Ion Impacts on Gold Nanorods. <i>Physical Review Letters</i> , 2013, 111, 065504.	2.9	71
53	Helium irradiation effects in polycrystalline Si, silica, and single crystal Si. <i>Journal of Applied Physics</i> , 2012, 111, .	1.1	18
54	A cross-sectional transmission electron microscopy study of iron recovered from a laser-heated diamond anvil cell. <i>Journal of Physics: Conference Series</i> , 2008, 126, 012047.	0.3	2