Alistair Jw Garner

List of Publications by Year
in descending order

25	597	566801 15	713013 21
papers	citations	h-index	g-index

25	25	25	803
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Large-scale serial sectioning of environmentally assisted cracks in 7xxx Al alloys using femtosecond laser-PFIB. Materials Characterization, 2022, 188, 111890.	1.9	6
2	Multiscale analysis of grain boundary microstructure in high strength 7xxx Al alloys. Acta Materialia, 2021, 202, 190-210.	3.8	47
3	Co-deformation and dynamic annealing effects on the texture development during alphaâ€“beta processing of a model Zr-Nb alloy. Acta Materialia, 2021, 205, 116538.	3.8	14
4	Toward a Mechanistic Understanding of Pellet Cladding Interaction Using Advanced 3D Characterization and Atomistic Simulation. , 2021, , 904-926.		0
5	The Importance of Substrate Grain Orientation on Local Oxide Texture and Corrosion Performance in Î±-Zr Alloys. , 2021, , 878-903.		1
6	CALPHAD-informed phase-field modeling of grain boundary microchemistry and precipitation in Al-Zn-Mg-Cu alloys. Acta Materialia, 2021, 214, 116966.	3.8	30
7	Characterisation of deuterium distributions in corroded zirconium alloys using high-resolution SIMS imaging. Acta Materialia, 2020, 200, 581-596.	3.8	21
8	Investigating iodine-induced stress corrosion cracking of zirconium alloys using quantitative fractography. Journal of Nuclear Materials, 2020, 539, 152272.	1.3	6
9	Environmental cracking performance of new generation thick plate 7000-T7x series alloys in humid air. Corrosion Science, 2020, 171, 108701.	3.0	40
10	Ultra-thin van der Waals crystals as semiconductor quantum wells. Nature Communications, 2020, 11, 125.	5.8	33
11	A multi-technique study of â€œbarrier layerâ€•nano-porosity in Zr oxides during corrosion and hydrogen pickup using (S)TEM, TKD, APT and NanoSIMS. Corrosion Science, 2019, 158, 108109.	3.0	15
12	Indirect to Direct Gap Crossover in Two-Dimensional InSe Revealed by Angle-Resolved Photoemission Spectroscopy. ACS Nano, 2019, 13, 2136-2142.	7.3	63
13	Initiation and short crack growth behaviour of environmentally induced cracks in AA5083 H131 investigated across time and length scales. Corrosion Reviews, 2019, 37, 469-481.	1.0	12
14	Effect of neutron and ion irradiation on the metal matrix and oxide corrosion layer on Zr-1.0Nb cladding alloys. Acta Materialia, 2019, 173, 313-326.	3.8	28
15	High resolution crystallographic and chemical characterisation of iodine induced stress corrosion crack tips formed in irradiated and non-irradiated zirconium alloys. Journal of Nuclear Materials, 2019, 519, 166-172.	1.3	9
16	3D-characterization of deuterium distributions in zirconium oxide scale using high-resolution SIMS. Applied Surface Science, 2019, 464, 311-320.	3.1	18
17	Crystallographic evolution of MAX phases in proton irradiating environments. Journal of Nuclear Materials, 2018, 502, 220-227.	1.3	30
18	Phase stability of zirconium oxide films during focused ion beam milling. Journal of Nuclear Materials, 2018, 504, 176-180.	1.3	19

#	Article	IF	Citations
19	Advanced 3D characterisation of iodine induced stress corrosion cracks in zirconium alloys. Materials Characterization, 2018, 141, 348-361.	1.9	16
20	Scalable Patterning of Encapsulated Black Phosphorus. Nano Letters, 2018, 18, 5373-5381.	4.5	43
21	Understanding Corrosion and Hydrogen Pickup of Zirconium Fuel Cladding Alloys: The Role of Oxide Microstructure, Porosity, Suboxides, and Second-Phase Particles. , 2018, , 93-126.		13
22	Investigating the Effect of Zirconium Oxide Microstructure on Corrosion Performance: A Comparison between Neutron, Proton, and Nonirradiated Oxides. , 2018, , 491-523.		5
23	The effect of Sn concentration on oxide texture and microstructure formation in zirconium alloys. Acta Materialia, 2015, 99, 259-272.	3.8	47
24	Identifying suboxide grains at the metalâ€“oxide interface of a corroded Zrâ€“1.0%Nb alloy using (S)TEM, transmission-EBSD and EELS. Micron, 2015, 69, 35-42.	1.1	62
25	A method for accurate texture determination of thin oxide films by glancing-angle laboratory X-ray diffraction. Journal of Applied Crystallography, 2014, 47, 575-583.	1.9	19