Jonathan Hyde

List of Publications by Year
in descending order

64 papers	2,125 citations	236925 25 h-index	233421 45 g-index
65 all docs	65 docs citations	65 times ranked	1237 citing authors

#	Article	IF	Citations
1	APT and TEM study of behaviour of alloying elements in neutron-irradiated zirconium-based alloys. Scripta Materialia, 2022, 208, 114323.	5.2	9
2	Observation of Mn-Ni-Si-rich features in thermally-aged model reactor pressure vessel steels. Scripta Materialia, 2021, 191, 126-130.	5.2	7
3	Using alpha hulls to automatically and reproducibly detect edge clusters in atom probe tomography datasets. Materials Characterization, 2020, 160, 110078.	4.4	7
4	The effect of composition variations on the response of steels subjected to high fluence neutron irradiation. Materialia, 2020, 11, 100717.	2.7	14
5	A more holistic characterisation of internal interfaces in a variety of materials via complementary use of transmission Kikuchi diffraction and Atom probe tomography. Applied Surface Science, 2020, 528, 147011.	6.1	7
6	The dominant mechanisms for the formation of solute-rich clusters in low-Cu steels under irradiation. Materials Today Energy, 2020, 17, 100472.	4.7	19
7	Research Tools: Microstructure, Mechanical Properties, and Computational Thermodynamics. , 2019, , 103-161.		1
8	The association of hydrogen with nanometre bubbles of helium implanted into zirconium. Scripta Materialia, 2018, 152, 102-106.	5.2	22
9	A sensitivity study using maximum entropy to interpret SANS data from the Ringhals Unit 3 NPP. Journal of Nuclear Materials, 2018, 509, 417-424.	2.7	0
10	The effect of Ni on the microstructural evolution of high Cu reactor pressure vessel steel welds after thermal ageing for up to 100,000â€¯h. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 736, 111-119.	5.6	16
11	Analysis of Radiation Damage in Light Water Reactors: Comparison of Cluster Analysis Methods for the Analysis of Atom Probe Data. Microscopy and Microanalysis, 2017, 23, 366-375.	0.4	40
12	Detecting Clusters in Atom Probe Data with Gaussian Mixture Models. Microscopy and Microanalysis, 2017, 23, 269-278.	0.4	23
13	The measurement of stress and phase fraction distributions in pre and post-transition Zircaloy oxides using nano-beam synchrotron X-ray diffraction. Journal of Nuclear Materials, 2016, 479, 559-575.	2.7	28
14	Secondary precipitation within the cementite phase of reactor pressure vessel steels. Scripta Materialia, 2016, 115, 118-122.	5.2	14
15	Post-irradiation annealing of Niâ€“Mnâ€“Si-enriched clusters in a neutron-irradiated RPV steel weld using Atom Probe Tomography. Journal of Nuclear Materials, 2015, 459, 127-134.	2.7	65
16	SANS examination of irradiated RPV steel welds during in-situ annealing. Journal of Nuclear Materials, 2015, 461, 45-50.	2.7	3
17	Characterisation of interfacial segregation to Cu-enriched precipitates in two thermally aged reactor pressure vessel steel welds. Ultramicroscopy, 2015, 159, 292-298.	1.9	28
18	Microstructural characterisation techniques for the study of reactor pressure vessel (RPV) embrittlement. , 2015, , 211-294.		1

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19	Uncertainties and assumptions associated with APT and SANS characterisation of irradiation damage in RPV steels. Journal of Nuclear Materials, 2014, 449, 308-314.	2.7	19
20	Quantitative methods for the APT analysis of thermally aged RPV steels. Ultramicroscopy, 2013, 132, 258-264.	1.9	36
21	Precipitation in long term thermally aged high copper, high nickel model RPV steel welds. Progress in Nuclear Energy, 2012, 57, 86-92.	2.9	68
22	A comparison of the structure of solute clusters formed during thermal ageing and irradiation. Ultramicroscopy, 2011, 111, 664-671.	1.9	48
23	Effects of heavy-ion irradiation on solute segregation to dislocations in oxide-dispersion-strengthened Eurofer 97 steel. Journal of Nuclear Materials, 2011, 412, 100-105.	2.7	35
24	A sensitivity analysis of the maximum separation method for the characterisation of solute clusters. Ultramicroscopy, 2011, 111, 440-447.	1.9	153
25	Atom probe tomography of reactor pressure vessel steels: An analysis of data integrity. Ultramicroscopy, 2011, 111, 676-682.	1.9	38
26	Applications of atom-probe tomography to the characterisation of solute behaviours. Materials Science and Engineering Reports, 2010, 69, 37-62.	31.8	227
27	Statistical analysis of atom probe data: Detecting the early stages of solute clustering and/or co-segregation. Ultramicroscopy, 2009, 109, 502-509.	1.9	37
28	Nuclear reactor materials at the atomic scale. Materials Today, 2009, 12, 30-37.	14.2	98
29	Characterisation of the early stages of solute clustering in 1Niâ€“1.3Mn welds containing Cu. Ultramicroscopy, 2009, 109, 510-517.	1.9	11
30	Early Stages of Solute Clustering in Irradiated 1 Ni â€“ 1.3 Mn Welds. Microscopy and Microanalysis, 2009, 15, 1352-1353.	0.4	0
31	Studies of radiation embrittlement of model alloys by positron annihilation, thermo-electric and magnetic measurements. NDT and E International, 2004, 37, 19-22.	3.7	11
32	Microstructural Aspects of Irradiation Damage in A508 Gr 4N Forging Steel: Composition and Flux Effects. , 2004, , 194-207.		4
33	Microstructural evolution in medium copper low alloy steels irradiated in a pressurized water reactor and a material test reactor. Journal of Nuclear Materials, 2003, 312, 163-173.	2.7	62
34	Radiation Embrittlement of Reactor Pressure Vessel Steels. , 2003, , 351-398.		4
35	A model of irradiation damage in high nickel submerged arc welds. International Journal of Pressure Vessels and Piping, 2002, 79, 649-660.	2.6	29
36	Microstructural characterization of irradiation-induced Cu-enriched clusters in reactor pressure vessel steels. Journal of Nuclear Materials, 2001, 298, 211-224.	2.7	110

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37	An Analysis of the Structure of Irradiation induced Cu-enriched Clusters in Low and High Nickel Welds. Materials Research Society Symposia Proceedings, 2000, 650, 661.	0.1	56
38	Temper Embrittlement, Irradiation Induced Phosphorus Segregation and Implications for Post-Irradiation Annealing of Reactor Pressure Vessels. , 1999, , 296-316.		10
39	Modelling spinodal decomposition at the atomic scale: beyond the Cahn - Hilliard model. Modelling and Simulation in Materials Science and Engineering, 1996, 4, 33-54.	2.0	18
40	Data analysis in the optical PoSAP. Applied Surface Science, 1996, 94-95, 457-463.	6.1	7
41	A study of the effect of ageing temperature on phase separation in Feî—¸45%Cr alloys. Applied Surface Science, 1995, 87-88, 311-317.	6.1	24
42	Comparison of low temperature decomposition in Feî—¸Cr and duplex stainless steels. Applied Surface Science, 1995, 87-88, 323-328.	6.1	37
43	Spinodal decomposition in Fe-Cr alloys: Experimental study at the atomic level and comparison with computer modelsâ€"I. Introduction and methodology. Acta Metallurgica Et Materialia, 1995, 43, 3385-3401.	1.8	198
44	Spinodal decomposition in Fe-Cr alloys: Experimental study at the atomic level and comparison with computer modelsâ€"II. Development of domain size and composition amplitude. Acta Metallurgica Et Materialia, 1995, 43, 3403-3413.	1.8	85
45	Spinodal decomposition in Fe-Cr alloys: Experimental study at the atomic level and comparison with computer modelsâ€"III. Development of morphology. Acta Metallurgica Et Materialia, 1995, 43, 3415-3426.	1.8	70
46	Simulation of the early stages of ordering in Ti-15at.% Al alloy. Philosophical Magazine Letters, 1995, 71, 247-255.	1.2	2
47	Atomic-scale characterisation of precipitation in copper-cobalt alloys. Applied Surface Science, 1994, 76-77, 203-212.	6.1	14
48	A critical comparison between experimental results and numerical simulations of phase separation in the Fe-Cr system. Applied Surface Science, 1994, 76-77, 233-241.	6.1	22
49	Improvements in three-dimensional atom probe design. Applied Surface Science, 1994, 76-77, 374-381.	6.1	53
50	Lateral and depth scale calibration of the position sensitive atom probe. Applied Surface Science, 1994, 76-77, 382-391.	6.1	42
51	Analysis of data from an optical atom probe. Applied Surface Science, 1994, 76-77, 409-415.	6.1	3
52	Position sensitive atom probe study of the decomposition of a Cu-2.6at%Co alloy. Applied Surface Science, 1993, 67, 368-379.	6.1	16
53	Comparison of models for deconvoluting the compositions of coexisting phases. Applied Surface Science, 1993, 67, 429-435.	6.1	6
54	Dynamical Ising Model Simulations of Nucleation and Growth in Copper-Cobalt Alloys. Materials Research Society Symposia Proceedings, 1992, 291, 623.	0.1	1

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55	Three-dimensional characterization and modelling of spinodally decomposed iron-chromium alloys. Surface Science, 1992, 266, 370-377.	1.9	26
56	Estimation of composition amplitude: Pa and LBM versus V. Surface Science, 1992, 266, 446-452.	1.9	8
57	Structural analysis with the position sensitive atom probe. Surface Science, 1992, 266, 463-470.	1.9	5
58	Visualisation of three-dimensional microstructures. Surface Science, 1992, 266, 471-480.	1.9	23
59	New dimensions in atom-probe analysis. Surface Science, 1992, 266, 481-493.	1.9	18
60	Atom probe analysis and modelling of interfaces in magnetic multilayers. Ultramicroscopy, 1992, 47, 367-374.	1.9	20
61	Ultra-high-resolution chemical analysis by field-ion microscopy, atom probe and position-sensitive atom-probe techniques. Ultramicroscopy, 1992, 47, 199-211.	1.9	2
62	Measurement of the amplitude of a spinodal. Surface Science, 1991, 246, 304-314.	1.9	39
63	A topological approach to materials characterisation. Scripta Metallurgica Et Materialia, 1991, 25, 1435-1440.	1.0	23
64	PosgenPy: An Automated and Reproducible Approach to Assessing the Validity of Cluster Search Parameters in Atom Probe Tomography Datasets. Microscopy and Microanalysis, 0, , 1-10.	0.4	0