G D W Smith

List of Publications by Year
in descending order

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55 papers	2,700 citations	201674 27 h-index	197818 49 g-index
55 all docs	55 docs citations	55 times ranked	1338 citing authors

#	Article	IF	Citations
1	High-resolution electron microscopy studies of the structure of Cu precipitates in Î±-Fe. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1994, 70, 1-24.	0.6	378
2	Application of a positionâ€sensitive detector to atom probe microanalysis. Review of Scientific Instruments, 1988, 59, 862-866.	1.3	331
3	Transmission electron microscope investigations of the structure of copper precipitates in thermally-aged Feâ€”Cu and Feâ€”Cuâ€”Ni. Philosophical Magazine Letters, 1991, 64, 383-391.	1.2	312
4	Performance of an energy-compensated three-dimensional atom probe. Review of Scientific Instruments, 1998, 69, 49-58.	1.3	164
5	Measurement of temperature rises in the femtosecond laser pulsed three-dimensional atom probe. Applied Physics Letters, 2006, 88, 154103.	3.3	106
6	A study of the early stages of tempering of iron-carbon martensites by atom probe field ion microscopy. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1981, 12, 1197-1204.	1.4	98
7	Evidence for Reconstructed {001} Tungsten Obtained by Field-Ion Microscopy. Physical Review Letters, 1979, 43, 1521-1524.	7.8	97
8	Influence of surface migration on the spatial resolution of pulsed laser atom probe tomography. Journal of Applied Physics, 2010, 108, .	2.5	81
9	Aspects of the performance of a femtosecond laser-pulsed 3-dimensional atom probe. Ultramicroscopy, 2007, 107, 720-725.	1.9	77
10	Some aspects of the field evaporation behaviour of GaSb. Ultramicroscopy, 2011, 111, 487-492.	1.9	77
11	An atom probe study of the anomalous field evaporation of alloys containing silicon. Journal of Vacuum Science and Technology, 1981, 19, 57-62.	1.9	66
12	Phase composition and phase stability of a high-chromium nickel-based superalloy, IN939. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1983, 14, 1771-1783.	1.4	59
13	Field evaporation behavior during irradiation with picosecond laser pulses. Applied Physics Letters, 2008, 92, .	3.3	58
14	Materials analysis with a positionâ€sensitive atom probe. Journal of Microscopy, 1989, 154, 215-225.	1.8	53
15	Pulsed laser atom probe analysis of semiconductor materials. Journal of Microscopy, 1986, 141, 155-170.	1.8	52
16	The distribution of substitutional alloying elements during the bainite transformation. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1990, 21, 837-844.	1.4	49
17	Focused ion-beam specimen preparation for atom probe field-ion microscopy characterization of multilayer film structures. Nanotechnology, 1999, 10, 45-50.	2.6	46
18	Optimisation of mass ranging for atom probe microanalysis and application to the corrosion processes in Zr alloys. Ultramicroscopy, 2011, 111, 480-486.	1.9	44

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19	Combined atomicâ€“scale modelling and experimental studies of nucleation in the solid state. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2003, 361, 463-477.	3.4	42
20	Pearlite phase transformation in Si and V steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1995, 26, 1617-1631.	2.2	41
21	Three-dimensional atom probe field-ion microscopy observation of Cu/Co multilayer film structures. Applied Physics Letters, 1998, 73, 1125-1127.	3.3	40
22	A versatile time-of-flight atom probe for metallurgical applications. Surface and Interface Analysis, 1979, 1, 149-160.	1.8	36
23	Compositional nonuniformities in pulsed laser atom probe tomography analysis of compound semiconductors. Journal of Applied Physics, 2012, 111, 064908.	2.5	35
24	Pulsed laser atom probe analysis of GaAs and InAs. Applied Physics Letters, 1985, 46, 567-569.	3.3	30
25	Quantitative atom probe analysis of spinodal reaction in ferrite phase of duplex stainless steel. Materials Science and Technology, 1990, 6, 293-300.	1.6	30
26	Effects of vanadium addition on nucleation and growth of pearlite in high carbon steel. Materials Science and Technology, 1994, 10, 955-963.	1.6	29
27	Quantifying the composition of yttrium and oxygen rich nanoparticles in oxide dispersion strengthened steels. Ultramicroscopy, 2013, 125, 10-17.	1.9	29
28	THERMAL STABILITY OF ELECTRODEPOSITED NANOCRYSTALLINE NICKEL. Surface Engineering, 2002, 18, 151-156.	2.2	26
29	Accuracy of pulsed laser atom probe tomography for compound semiconductor analysis. Journal of Physics: Conference Series, 2011, 326, 012031.	0.4	24
30	Interfacial chemistry in an InAs/GaSb superlattice studied by pulsed laser atom probe tomography. Applied Physics Letters, 2012, 100, .	3.3	23
31	Atom probe microanalysis of a pearlitic steel. Metal Science, 1977, 11, 249-253.	0.7	22
32	Comparison of the number densities of nanosized Cu-rich precipitates in ferritic alloys measured using EELS and EDX mapping, HREM and 3DAP. Journal of Materials Science, 2006, 41, 2559-2565.	3.7	18
33	Design of a scanning atom probe with improved mass resolution. Review of Scientific Instruments, 2000, 71, 3016-3023.	1.3	17
34	Progress in the Atomic-Scale Analysis of Materials with the Three-Dimensional Atom Probe. MRS Bulletin, 2001, 26, 102-107.	3.5	17
35	Atom probe analysis of a ceramic oxide superconductor. Applied Physics Letters, 1988, 52, 1020-1022.	3.3	16
36	Partitioning and segregation of trace element Sn in a low-alloy steel. Philosophical Magazine Letters, 2007, 87, 327-339.	1.2	10

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37	A helium gas flow cryostat and specimen airlock assembly for ultrahigh vacuum use (in field ion) Tj ETQq1 1 0.784314 rgBT /Overlock	0.7	8
38	A high-voltage mercury-wetted reed pulse generator with secondary pulse suppression. Journal of Physics E: Scientific Instruments, 1977, 10, 329-330.	0.7	8
39	An atom probe study of the aging of iron-nickel-carbon martensite. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1983, 14, 1021-1024.	1.4	8
40	Field-ion microscope atom probe studies of metallic glasses. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1985, 52, L63-L69.	0.6	7
41	Applications of Atom Probe Microanalysis in Materials Science. MRS Bulletin, 1994, 19, 27-34.	3.5	7
42	Nanoscale characterization of compound semiconductors using laser-pulsed atom probe tomography. Journal of Physics: Conference Series, 2010, 209, 012026.	0.4	5
43	The effect of laser pulse shape on mass resolution in the pulsed-laser atom probe. Journal of Physics E: Scientific Instruments, 1987, 20, 1392-1394.	0.7	4
44	Optimisation of a scanning atom probe with improved mass resolution using post deceleration. Ultramicroscopy, 2007, 107, 705-712.	1.9	4
45	A simple method for extending the voltage and frequency range of a mercury relay high-voltage pulse generator. Journal of Physics E: Scientific Instruments, 1980, 13, 1287-1288.	0.7	3
46	An atom probe study of the aging of iron- nickel- carbon martensite. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1983, 14, 1021-1024.	1.4	3
47	Discussion of â€œmiscibility gap in Fe-Ni-Al and Fe-Ni-Al-Co Systemsâ€•and â€œRole of Alloying elements in phase decomposition in alnico magnet alloysâ€• Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1986, 17, 1629-1631.	1.4	3
48	Surface analysis with a position-sensitive atom probe. Journal of Physics Condensed Matter, 1989, 1, SB99-SB103.	1.8	3
49	Phase Composition and Phase Stability of Alloy IN939. , 1982, , 705-719.		2
50	Atomic Scale Study Of Precipitate / Matrix Interfaces in a Metallic Alloy. Materials Research Society Symposia Proceedings, 1997, 481, 521.	0.1	1
51	Supercomputers in Materials Science. , 1991, , 465-479.		1
52	Pulsed laser atom probe analysis of semiconductor materials. , 2021, , 665-674.		0
53	Three Dimensional materials characterisation at ultrahigh resolution using a position-sensitive atom probe. Proceedings Annual Meeting Electron Microscopy Society of America, 1990, 48, 408-409.	0.0	0
54	Recent developments in position-sensitive atom-probe microanalysis. Proceedings Annual Meeting Electron Microscopy Society of America, 1994, 52, 828-829.	0.0	0

#	Article	IF	Citations
55	3D atomic-scale chemical analysis of engineering alloys. , 2008, , 729-730.		0