

David N Seidman

List of Publications by Year in descending order

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145
papers

8,682
citations

76326

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46799

89
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149
all docs

149
docs citations

149
times ranked

5342
citing authors

#	ARTICLE	IF	CITATIONS
1	Mechanical behavior and strengthening mechanisms in ultrafine grain precipitation-strengthened aluminum alloy. <i>Acta Materialia</i> , 2014, 62, 141-155.	7.9	1,131
2	Analysis of Three-dimensional Atom-probe Data by the Proximity Histogram. <i>Microscopy and Microanalysis</i> , 2000, 6, 437-444.	0.4	701
3	Precipitation strengthening at ambient and elevated temperatures of heat-treatable Al(Sc) alloys. <i>Acta Materialia</i> , 2002, 50, 4021-4035.	7.9	645
4	Strengthening mechanisms in a high-strength bulk nanostructured Cu–Zn–Al alloy processed via cryomilling and spark plasma sintering. <i>Acta Materialia</i> , 2013, 61, 2769-2782.	7.9	492
5	Criteria for developing castable, creep-resistant aluminum-based alloys – A review. <i>International Journal of Materials Research</i> , 2006, 97, 246-265.	0.8	431
6	Mechanical properties of Al(Sc,Zr) alloys at ambient and elevated temperatures. <i>Acta Materialia</i> , 2003, 51, 4803-4814.	7.9	385
7	Precipitation evolution in Al–Zr and Al–Zr–Ti alloys during isothermal aging at 375–425°C. <i>Acta Materialia</i> , 2008, 56, 114-127.	7.9	239
8	Temporal evolution of the nanostructure of Al(Sc,Zr) alloys: Part II-coarsening of Al(ScZr) precipitates. <i>Acta Materialia</i> , 2005, 53, 5415-5428.	7.9	219
9	Solution processing of air-stable molecular semiconducting iodosalts, Cs ₂ SnI ₆ Br _x , for potential solar cell applications. <i>Sustainable Energy and Fuels</i> , 2017, 1, 710-724.	4.9	174
10	Nucleation and Precipitation Strengthening in Dilute Al-Ti and Al-Zr Alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2007, 38, 2552-2563.	2.2	156
11	Effect of Mg addition on the creep and yield behavior of an Al–Sc alloy. <i>Acta Materialia</i> , 2003, 51, 4751-4760.	7.9	155
12	Effect of Er additions on ambient and high-temperature strength of precipitation-strengthened Al–Zr–Sc–Si alloys. <i>Acta Materialia</i> , 2012, 60, 3643-3654.	7.9	138
13	Heterogeneous silicon mesostructures for lipid-supported bioelectric interfaces. <i>Nature Materials</i> , 2016, 15, 1023-1030.	27.5	132
14	Effects of substituting rare-earth elements for scandium in a precipitation-strengthened Al–0.08at.%Sc alloy. <i>Scripta Materialia</i> , 2006, 55, 437-440.	5.2	129
15	Effects of Ti additions on the nanostructure and creep properties of precipitation-strengthened Al–Sc alloys. <i>Acta Materialia</i> , 2005, 53, 4225-4235.	7.9	122
16	Comparison of Compositional and Morphological Atom-Probe Tomography Analyses for a Multicomponent Fe-Cu Steel. <i>Microscopy and Microanalysis</i> , 2007, 13, 272-284.	0.4	116
17	Microstructure and mechanical properties of a precipitation-strengthened Al-Zr-Sc-Er-Si alloy with a very small Sc content. <i>Acta Materialia</i> , 2018, 144, 80-91.	7.9	115
18	High-Strength Low-Carbon Ferritic Steel Containing Cu-Fe-Ni-Al-Mn Precipitates. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2008, 39, 363-373.	2.2	107

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19	Chromium and tantalum site substitution patterns in Ni ₃ Al(L1 ₂)-precipitates. Applied Physics Letters, 2008, 93, .	3.3	86
20	Atomic gold-enabled three-dimensional lithography for silicon mesostructures. Science, 2015, 348, 1451-1455.	12.6	82
21	Multicomponent High-Strength Low-Alloy Steel Precipitation-Strengthened by Sub-nanometric Cu Precipitates and M ₂ C Carbides. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 3860-3872.	2.2	82
22	Direct observations of nucleation in a nondilute multicomponent alloy. Physical Review B, 2006, 73, .	3.2	80
23	The partitioning and site preference of rhenium or ruthenium in model nickel-based superalloys: An atom-probe tomographic and first-principles study. Applied Physics Letters, 2008, 93, .	3.3	71
24	Mechanical properties and optimization of the aging of a dilute Al-Sc-Er-Zr-Si alloy with a high Zr/Sc ratio. Acta Materialia, 2016, 119, 35-42.	7.9	71
25	Precipitation strengthening in naturally aged Al-Zn-Mg-Cu alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 803, 140719.	5.6	65
26	On the interplay between tungsten and tantalum atoms in Ni-based superalloys: An atom-probe tomographic and first-principles study. Applied Physics Letters, 2009, 94, .	3.3	63
27	Role of silicon in the precipitation kinetics of dilute Al-Sc-Er-Zr alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 677, 485-495.	5.6	63
28	Atom-probe analyses of nanodiamonds from Allende. Meteoritics and Planetary Science, 2014, 49, 453-467.	1.6	62
29	Effect of vanadium micro-alloying on the microstructural evolution and creep behavior of Al-Er-Sc-Zr-Si alloys. Acta Materialia, 2017, 124, 501-512.	7.9	61
30	Effects of Mo and Mn microadditions on strengthening and over-aging resistance of nanoprecipitation-strengthened Al-Zr-Sc-Er-Si alloys. Acta Materialia, 2019, 165, 1-14.	7.9	58
31	Nanoscale precipitation and mechanical properties of Al-0.06 at.% Sc alloys microalloyed with Yb or Gd. Journal of Materials Science, 2006, 41, 7814-7823.	3.7	55
32	Subnanoscale Studies of Segregation at Grain Boundaries: Simulations and Experiments. Annual Review of Materials Research, 2002, 32, 235-269.	9.3	52
33	Microstructural and creep properties of boron- and zirconium-containing cobalt-based superalloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 682, 260-269.	5.6	52
34	Chemistry and structure of core/double-shell nanoscale precipitates in Al-6.5Li-0.07Sc-0.02Yb (at.%). Acta Materialia, 2011, 59, 3398-3409.	7.9	51
35	Creep of Al-Sc Microalloys with Rare-Earth Element Additions. Materials Science Forum, 2006, 519-521, 1035-1040.	0.3	49
36	Dependence of interfacial excess on the threshold value of the isoconcentration surface. Surface and Interface Analysis, 2004, 36, 594-597.	1.8	48

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37	Nanoscale studies of segregation at coherent heterophase interfaces in $\text{Al}-\text{Fe}$ based systems. Surface and Interface Analysis, 2004, 36, 569-574.	1.8	47
38	Phase-partitioning and site-substitution patterns of molybdenum in a model Ni-Al-Mo superalloy: An atom-probe tomographic and first-principles study. Applied Physics Letters, 2012, 101, .	3.3	45
39	Creep properties and precipitate evolution in $\text{Al}-\text{Li}$ alloys microalloyed with Sc and Yb. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 550, 300-311.	5.6	44
40	Atomic resolution mapping of interfacial intermixing and segregation in InAs/GaSb superlattices: A correlative study. Journal of Applied Physics, 2013, 113, 103511.	2.5	41
41	Co-Precipitated and Collocated Carbides and Cu-Rich Precipitates in a Fe-Cu Steel Characterized by Atom-Probe Tomography. Microscopy and Microanalysis, 2014, 20, 1727-1739.	0.4	41
42	Nanoscale Studies of the Chemistry of a Renâ€™ N6 Superalloy. Journal of Materials Science, 2001, 9, 249-255.	1.2	40
43	Ambient- and elevated-temperature strengthening by Al_3Zr -Nanoprecipitates and Al_3Ni -Microfibers in a cast Al-2.9Ni-0.11Zr-0.02Si-0.005Er (at.%) alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 759, 78-89.	5.6	39
44	Ultraviolet-laser atom-probe tomographic three-dimensional atom-by-atom mapping of isotopically modulated Si nanoscopic layers. Applied Physics Letters, 2011, 98, 013111.	3.3	38
45	Dopant Diffusion and Activation in Silicon Nanowires Fabricated by ex Situ Doping: A Correlative Study via Atom-Probe Tomography and Scanning Tunneling Spectroscopy. Nano Letters, 2016, 16, 4490-4500.	9.1	36
46	On the nanometer scale phase separation of a low-supersaturation Ni-Al-Cr alloy. Philosophical Magazine, 2010, 90, 219-235.	1.6	35
47	Effects of Zn and Cr additions on precipitation and creep behavior of a dilute Al-Zr-Er-Si alloy. Acta Materialia, 2019, 181, 249-261.	7.9	35
48	Phase partitioning and site-preference of hafnium in the $\text{Al}^{2+}(\text{L12})-\text{Al}^{3+}(\text{fcc})$ system in Ni-based superalloys: An atom-probe tomographic and first-principles study. Applied Physics Letters, 2009, 95, .	3.3	34
49	Mn and Mo additions to a dilute Al-Zr-Sc-Er-Si-based alloy to improve creep resistance through solid-solution- and precipitation-strengthening. Acta Materialia, 2020, 194, 60-67.	7.9	34
50	Laser writing of nitrogen-doped silicon carbide for biological modulation. Science Advances, 2020, 6, .	10.3	33
51	Nanostructural evolution of Al_3Sc precipitates in an $\text{Al}_{0.9}\text{Sc}_{0.1}\text{Mg}$ alloy by three-dimensional atom probe microscopy. Surface and Interface Analysis, 2004, 36, 559-563.	1.8	32
52	Three-dimensional Investigation of Ceramic/Metal Heterophase Interfaces by Atom-probe Microscopy. Microscopy and Microanalysis, 2000, 6, 445-451.	0.4	31
53	Nanoscale Analyses of High-Nickel Concentration Martensitic High-Strength Steels. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 3046-3059.	2.2	31
54	Effects of annealing on local composition and electrical transport correlations in MgO -based magnetic tunnel junctions. Applied Physics Letters, 2008, 93, .	3.3	30

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55	Effects of temperature and ferromagnetism on the $\hat{3}$ -Ni/ $\hat{3}$ -Ni ₃ Al interfacial free energy from first principles calculations. Journal of Materials Science, 2012, 47, 7653-7659.	3.7	30
56	Dopant Distributions in PbTe-Based Thermoelectric Materials. Journal of Electronic Materials, 2012, 41, 1583-1588.	2.2	30
57	Thermally Stable Ni-rich Austenite Formed Utilizing Multistep Intercritical Heat Treatment in a Low-Carbon 10 Wt Pct Ni Martensitic Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 3642-3654.	2.2	30
58	A subnanoscale study of the nucleation, growth, and coarsening kinetics of Cu-rich precipitates in a multicomponent Fe- \hat{C} Cu based steel. International Journal of Materials Research, 2008, 99, 513-527.	0.3	29
59	Atom Probe Tomographic Studies of Precipitation in Al-0.1Zr-0.1Ti (at.%) Alloys. Microscopy and Microanalysis, 2007, 13, 503-516.	1.9	28
60	Carbon Redistribution and Carbide Precipitation in a High-Strength Low-Carbon HSLA-115 Steel Studied on a Nanoscale by Atom Probe Tomography. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 3205-3219.	0.4	27
61	Effects of Sb micro-alloying on precipitate evolution and mechanical properties of a dilute Al-Sc-Zr alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 680, 64-74.	2.2	27
62	Atomic-scale chemical analyses of niobium oxide/niobium interfaces via atom-probe tomography. Applied Physics Letters, 2008, 93, .	5.6	27
63	Precipitate Evolution and Creep Behavior of a W-Free Co-based Superalloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 6090-6096.	3.3	26
64	Effects of Si and Fe micro-additions on the aging response of a dilute Al-0.08Zr-0.08Hf-0.045Er at.% alloy. Materials Characterization, 2019, 147, 72-83.	2.2	26
65	Strength Recovery in a High-Strength Steel During Multiple Weld Thermal Simulations. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2011, 42, 3669-3679.	4.4	25
66	Effects of Heating and Cooling Rates on Phase Transformations in 10 Wt Pct Ni Steel and Their Application to Gas Tungsten Arc Welding. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 5890-5910.	2.2	25
67	Effects of Nb and Ta additions on the strength and coarsening resistance of precipitation-strengthened Al-Zr-Sc-Er-Si alloys. Materials Characterization, 2018, 141, 260-266.	4.4	25
68	Atomic-scale analyses of Nb ₃ Sn on Nb prepared by vapor diffusion for superconducting radiofrequency cavity applications: a correlative study. Superconductor Science and Technology, 2019, 32, 024001.	3.5	25
69	Grain-boundary structure and segregation in Nb ₃ Sn coatings on Nb for high-performance superconducting radiofrequency cavity applications. Acta Materialia, 2020, 188, 155-165.	7.9	24
70	NiSi crystal structure, site preference, and partitioning behavior of palladium in NiSi(Pd)/Si(100) thin films: Experiments and calculations. Applied Physics Letters, 2011, 99, .	3.3	23
71	Effect of Si micro-addition on creep resistance of a dilute Al-Sc-Zr-Er alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 734, 27-33.	5.6	23
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73	Effect of micro-additions of Ge, In or Sn on precipitation in dilute Al-Sc-Zr alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 739, 427-436.	5.6	23
74	Effect of microadditions of Mn and Mo on dual L12- and \hat{L} -precipitation in a dilute Al-Zr-Sc-Er-Si alloy. Materials Characterization, 2020, 169, 110585.	4.4	23
75	Perspective: From field-ion microscopy of single atoms to atom-probe tomography: A journey: "Atom-probe tomography" [Rev. Sci. Instrum. 78, 031101 (2007)]. Review of Scientific Instruments, 2007, 78, 030901.	1.3	22
76	Range profiles of low-energy (100 to 1500 eV) implanted ^3He and ^4He atoms in tungsten I. Experimental results. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1981, 44, 177-198.	0.6	21
77	Atomic Scale Chemistry of \hat{L} Interfaces in a Multi-Component TiAl Alloy. Journal of Materials Science, 2004, 12, 303-310.	1.2	21
78	Materials integrity in microsystems: a framework for a petascale predictive-science-based multiscale modeling and simulation system. Computational Mechanics, 2008, 42, 485-510.	4.0	21
79	Atom probe tomography of metallic nanostructures. MRS Bulletin, 2016, 41, 23-29.	3.5	21
80	Alloy-assisted deposition of three-dimensional arrays of atomic gold catalyst for crystal growth studies. Nature Communications, 2017, 8, 2014.	12.8	21
81	Atomic resolution study of displacement cascades in ion-irradiated platinum. Journal of Applied Physics, 1986, 60, 137-150.	2.5	20
82	Atomic-Scale Characterization of Aluminum-Based Multishell Nanoparticles Created by Solid-State Synthesis. Small, 2010, 6, 1728-1731.	10.0	19
83	Phase Segmentation in Atom-Probe Tomography Using Deep Learning-Based Edge Detection. Scientific Reports, 2019, 9, 20140.	3.3	19
84	Investigation of Strength Recovery in Welds of NUCu-140 Steel Through Multipass Welding and Isothermal Post-Weld Heat Treatments. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 5158-5170.	2.2	18
85	Systematic approaches for targeting an atom-probe tomography sample fabricated in a thin TEM specimen: Correlative structural, chemical and 3-D reconstruction analyses. Ultramicroscopy, 2018, 184, 284-292.	1.9	18
86	Range profiles of low-energy (100 to 1500 eV) implanted ^3He and ^4He atoms in tungsten II. Analysis and discussion. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1981, 44, 199-222.	0.6	17
87	Tomographic study of atomic-scale redistribution of platinum during the silicidation of Ni _{0.95} Pt _{0.05} /Si(100) thin films. Applied Physics Letters, 2009, 94, 113103.	3.3	17
88	Specimen preparation for correlating transmission electron microscopy and atom probe tomography of mesoscale features. Ultramicroscopy, 2014, 147, 25-32.	1.9	17
89	Laser-Assisted Field Evaporation and Three-Dimensional Atom-by-Atom Mapping of Diamond Isotopic Homojunctions. Nano Letters, 2016, 16, 1335-1344.	9.1	17
90	Effects of W and Si microadditions on microstructure and the strength of dilute precipitation-strengthened Al-Zr-Er alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 798, 140159.	5.6	17

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91	True Atomic-Scale Imaging in Three Dimensions: A Review of the Rebirth of Field-Ion Microscopy. <i>Microscopy and Microanalysis</i> , 2017, 23, 210-220.	0.4	16
92	Nanowire Kinking Modulates Doping Profiles by Reshaping the Liquid-Solid Growth Interface. <i>Nano Letters</i> , 2017, 17, 4518-4525.	9.1	16
93	Tungsten solubility in L12-ordered Al ₃ Er and Al ₃ Zr nanoprecipitates formed by aging in an aluminum matrix. <i>Journal of Alloys and Compounds</i> , 2020, 820, 153383.	5.5	16
94	An electrochemical etching procedure for fabricating scanning tunneling microscopy and atom-probe field-ion microscopy tips. <i>Metals and Materials International</i> , 2003, 9, 399-404.	3.4	15
95	Effects of elemental distributions on the behavior of MgO-based magnetic tunnel junctions. <i>Journal of Applied Physics</i> , 2011, 109, 103909.	2.5	15
96	Atomic-Scale Structural and Chemical Study of Columnar and Multilayer Re-Ni Electrodeposited Thermal Barrier Coating. <i>Advanced Engineering Materials</i> , 2016, 18, 1133-1144.	3.5	15
97	Isothermal omega formation and evolution in the Beta-Ti alloy Ti-5Al-5Mo-5V-3Cr. <i>Philosophical Magazine Letters</i> , 2016, 96, 416-424.	1.2	15
98	Solute-induced strengthening during creep of an aged-hardened Al-Mn-Zr alloy. <i>Acta Materialia</i> , 2021, 219, 117268.	7.9	15
99	Atom probe tomography of space-weathered lunar ilmenite grain surfaces. <i>Meteoritics and Planetary Science</i> , 2020, 55, 426-440.	1.6	14
100	Individual and synergistic effects of Mn and Mo micro-additions on precipitation and strengthening of a dilute Al-Zr-Sc-Er-Si alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 800, 140288.	5.6	14
101	New method for the calibration of three-dimensional atom-probe mass spectra. <i>Review of Scientific Instruments</i> , 2001, 72, 2984-2988.	1.3	13
102	Effects of ruthenium on phase separation in a model Ni-Al-Cr-Ru superalloy. <i>Philosophical Magazine</i> , 2013, 93, 1326-1350.	1.6	13
103	MC Carbide Characterization in High Refractory Content Powder-Processed Ni-Based Superalloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018, 49, 2340-2351.	2.2	13
104	Criteria and considerations for preparing atom-probe tomography specimens of nanomaterials utilizing an encapsulation methodology. <i>Ultramicroscopy</i> , 2018, 184, 225-233.	1.9	13
105	Evolution of Microstructure and Carbon Distribution During Heat Treatments of a Dual-Phase Steel: Modeling and Atom-Probe Tomography Experiments. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 436-450.	2.2	13
106	Enhanced magnetoresistance in naturally oxidized MgO-based magnetic tunnel junctions with ferromagnetic CoFe/CoFeB bilayers. <i>Applied Physics Letters</i> , 2011, 98, 232506.	3.3	12
107	Atom-Probe Tomographic Analyses of Hydrogen Interstitial Atoms in Ultrahigh Purity Niobium. <i>Microscopy and Microanalysis</i> , 2015, 21, 535-543.	0.4	12
108	An Atomistic Tomographic Study of Oxygen and Hydrogen Atoms and their Molecules in CVD Grown Graphene. <i>Small</i> , 2015, 11, 5968-5974.	10.0	12

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109	Structure and growth of core-shell nanoprecipitates in Al-Er-Sc-Zr-V-Si high-temperature alloys. Journal of Materials Science, 2019, 54, 1857-1871.	3.7	12
110	Analysis of magnetic vortex dissipation in Sn-segregated boundaries in $\text{Nb}_{1-x}\text{Sn}_x$ superconducting RF cavities. Physical Review B, 2021, 103, .	2.2	12
111	The effect of vibrational entropy on the solubility and stability of ordered Al ₃ Li phases in Al-Li alloys. APL Materials, 2013, 1, .	5.1	11
112	Microstructural Evolution and Mechanical Properties of Fusion Welds in an Iron-Copper-Based Multicomponent Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 4155-4170.	2.2	10
113	Three-Dimensional Atom-Probe Tomographic Analyses of Lead-Telluride Based Thermoelectric Materials. Jom, 2014, 66, 2288-2297.	1.9	10
114	Analysis of a New High-Toughness Ultra-high-Strength Martensitic Steel by Transmission Electron Microscopy and Atom Probe Tomography. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 1517-1528.	2.2	10
115	Silicide-phase evolution and platinum redistribution during silicidation of Ni _{0.95} Pt _{0.05} /Si(100) specimens. Journal of Applied Physics, 2012, 112, .	2.5	9
116	Atomic-Scale Chemical-Analyses of Niobium for Superconducting Radio-Frequency Cavities. IEEE Transactions on Applied Superconductivity, 2007, 17, 1314-1317.	1.7	8
117	Coarsening kinetics of Cu-rich precipitates in a concentrated multicomponent Fe-Cu based steel. International Journal of Materials Research, 2011, 102, 1115-1124.	0.3	8
118	An Efficient and Cost-Effective Method for Preparing Transmission Electron Microscopy Samples from Powders. Microscopy and Microanalysis, 2015, 21, 1184-1194.	0.4	8
119	Atomic-Scale Structure and Chemistry of Segregation at Matrix/Precipitate Heterophase Interfaces. Journal of Materials Science, 2001, 9, 257-264.	1.2	7
120	A Subnanoscale Investigation of Sb Segregation at MnO/Ag Ceramic/Metal Interfaces. Journal of Materials Science, 2001, 9, 199-211.	1.2	7
121	Subnanometer-scale chemistry and structure of δ -iron/molybdenum nitride heterophase interfaces. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2002, 33, 2317-2326.	2.2	7
122	Atom-Probe Tomographic Investigation of Austenite Stability and Carbide Precipitation in a TRIP-Assisted 10 Wt Pct Ni Steel and Its Weld Heat-Affected Zones. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 1031-1043.	2.2	7
123	Strain-Energy Release in Bent Semiconductor Nanowires Occurring by Polygonization or Nanocrack Formation. ACS Nano, 2019, 13, 3730-3738.	14.6	7
124	Effect of U and Th trace additions on the precipitation strengthening of Al-0.09Sc (at.%) alloy. Journal of Materials Science, 2019, 54, 3485-3495.	3.7	7
125	Multi-component Cu-Strengthened Steel Welding Simulations: Atom Probe Tomography and Synchrotron X-ray Diffraction Analyses. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 3117-3131.	2.2	6
126	Comparison of Thermodynamic Predictions and Experimental Observations on B Additions in Powder-Processed Ni-Based Superalloys Containing Elevated Concentrations of Nb. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 729-739.	2.2	6

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127	Effects of W micro-additions on precipitation kinetics and mechanical properties of an Al-Mn-Mo-Si-Zr-Sc-Er alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 803, 140550.	5.6	5
128	Study of the Structure and Chemistry of Point, line and Planar Imperfections Via Field-Ion and Atom-Probe Field-Ion Microscopy. Materials Research Society Symposia Proceedings, 1988, 138, 315.	0.1	4
129	Study of the Structure and Chemistry of Point, Line and Planar Imperfections Via Field-Ion and Atom-Probe Field-Ion Microscopy. Materials Research Society Symposia Proceedings, 1989, 139, 25.	0.1	4
130	A Subnanoscale Study of Mg Segregation at Al/Al ₃ Sc Interfaces. Microscopy and Microanalysis, 2002, 8, 1100-1101.	0.4	4
131	1-D Metal Nanobead Arrays within Encapsulated Nanowires via a Red-Ox-Induced Dewetting: Mechanism Study by Atom-Probe Tomography. Nano Letters, 2017, 17, 7478-7486.	9.1	4
132	The effects of alloying elements on the peritectic range of Fe-C-Mn-Si steels. Journal of Materials Science, 2021, 56, 6448-6464.	3.7	4
133	Atomic-scale Study of a Transition Phase Precipitate and Its Interfacial Chemistry in an Fe-15 at.% Mo-5 at.% V Alloy. Microscopy and Microanalysis, 2001, 7, 424-434.	0.4	4
134	A scanning tunneling microscopy tip with a stable atomic structure. Metals and Materials International, 2004, 10, 97-101.	3.4	3
135	A Model Ni-Al-Mo Superalloy Studied by Ultraviolet Pulsed-Laser-Assisted Local-Electrode Atom-Probe Tomography. Microscopy and Microanalysis, 2015, 21, 480-490.	0.4	3
136	Correlative Transmission Electron Microscopy and Atom-Probe Tomography of an Iron Meteorite. Microscopy and Microanalysis, 2015, 21, 1313-1314.	0.4	3
137	Formation mechanism and stability of austenitic islands in carbides in a Ni-Cr-Fe based high-temperature austenitic alloy undergoing carburization. Scripta Materialia, 2021, 197, 113792.	5.2	2
138	Microstructural stability of an Ni-Mo based Hastelloy after 10 MeV electron irradiation at high temperature. International Journal of Materials Research, 2010, 101, 631-636.	0.3	1
139	Solute-Atom Segregation and Two-Dimensional Phases at Internal Interfaces: Atomic Resolution Observations. Materials Research Society Symposia Proceedings, 1986, 82, 415.	0.1	0
140	Monte Carlo Simulation of Solute-Atom Segregation at Grain Boundaries In Single-Phase Binary Face-Centered Cubic Alloys. Microscopy and Microanalysis, 1998, 4, 764-765.	0.4	0
141	Nanometer Scale Study of Segregation at Heterophase Interfaces of Molybdenum Nitride Precipitates in an Fe-Fe ₃ C-Fe ₃ N-Fe ₃ Si-Fe ₃ Al-Fe ₃ Si ₂ N ₂ Matrix. Materials Research Society Symposia Proceedings, 2000, 652, 1.	0.1	0
142	A Subnanoscale Study of Segregation at CdO/Ag(Au) Heterophase Interfaces. Materials Research Society Symposia Proceedings, 2000, 654, 491.	0.1	0
143	An Experimental and Simulation Studies of a High Strain-Rate Deformation Shear Band in a High-Nickel Steel. Microscopy and Microanalysis, 2015, 21, 363-364.	0.4	0
144	Mapping Isotopes in Nanoscale and Quantum Materials Using Atom Probe Tomography. Microscopy and Microanalysis, 2016, 22, 652-653.	0.4	0

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145	The Supersaturation and Transient Volume Measurement for Nucleation, Growth, Coarsening in a Concentrated Ni-Based Superalloy. Microscopy and Microanalysis, 2017, 23, 724-725.	0.4	0