

Paul M Voyles

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2125803/publications.pdf>

Version: 2024-02-01

219
papers

6,198
citations

66343

42
h-index

82547

72
g-index

227
all docs

227
docs citations

227
times ranked

7062
citing authors

#	ARTICLE	IF	CITATIONS
1	H ₂ V ₃ O ₈ Nanowire/Graphene Electrodes for Aqueous Rechargeable Zinc Ion Batteries with High Rate Capability and Large Capacity. <i>Advanced Energy Materials</i> , 2018, 8, 1800144.	19.5	427
2	Atomic-scale imaging of individual dopant atoms and clusters in highly n-type bulk Si. <i>Nature</i> , 2002, 416, 826-829.	27.8	413
3	Picometre-precision analysis of scanning transmission electron microscopy images of platinum nanocatalysts. <i>Nature Communications</i> , 2014, 5, 4155.	12.8	225
4	Imaging individual atoms inside crystals with ADF-STEM. <i>Ultramicroscopy</i> , 2003, 96, 251-273.	1.9	209
5	Nanoscale Structure and Structural Relaxation in $Zr_{50}Cu_{50}$ Metallic Glass. <i>Physical Review Letters</i> , 2012, 108, 195505.	7.8	167
6	Morphology and crystallization kinetics in HfO ₂ thin films grown by atomic layer deposition. <i>Journal of Applied Physics</i> , 2003, 93, 1477-1481.	2.5	157
7	Evaluation of connectivity, flux pinning, and upper critical field contributions to the critical current density of bulk pure and SiC-alloyed MgB ₂ . <i>Applied Physics Letters</i> , 2006, 89, 132508.	3.3	134
8	Fluctuation microscopy in the STEM. <i>Ultramicroscopy</i> , 2002, 93, 147-159.	1.9	130
9	Tm ₃ Fe ₅ O ₁₂ /Pt Heterostructures with Perpendicular Magnetic Anisotropy for Spintronic Applications. <i>Advanced Electronic Materials</i> , 2017, 3, 1600376.	5.1	112
10	Atom pair persistence in disordered materials from fluctuation microscopy. <i>Ultramicroscopy</i> , 2000, 83, 169-178.	1.9	110
11	Quantitative Measurement of Density in a Shear Band of Metallic Glass Monitored Along its Propagation Direction. <i>Physical Review Letters</i> , 2015, 115, 035501.	7.8	110
12	Fast flexible electronics with strained silicon nanomembranes. <i>Scientific Reports</i> , 2013, 3, 1291.	3.3	100
13	Aluminum nanoscale order in amorphous Al ₉₂ Sm ₈ measured by fluctuation electron microscopy. <i>Applied Physics Letters</i> , 2005, 86, 141910.	3.3	96
14	Fluctuation microscopy: a probe of atomic correlations in disordered materials. <i>Journal of Electron Microscopy</i> , 2000, 49, 259-266.	0.9	95
15	Absence of an Abrupt Phase Change from Polycrystalline to Amorphous in Silicon with Deposition Temperature. <i>Physical Review Letters</i> , 2001, 86, 5514-5517.	7.8	91
16	Influence of film composition in quaternary Heusler alloy Co ₂ (Mn,Fe)Si thin films on tunnelling magnetoresistance of Co ₂ (Mn,Fe)Si/MgO-based magnetic tunnel junctions. <i>Journal Physics D: Applied Physics</i> , 2015, 48, 164001.	2.8	88
17	Structure and physical properties of paracrystalline atomistic models of amorphous silicon. <i>Journal of Applied Physics</i> , 2001, 90, 4437-4451.	2.5	85
18	Medium-range order in amorphous silicon measured by fluctuation electron microscopy. <i>Solar Energy Materials and Solar Cells</i> , 2003, 78, 85-113.	6.2	81

#	ARTICLE	IF	CITATIONS
19	Total reaction and 2n-removal cross sections of ^{20}Ne , $^{60}\text{MeV He}^{4,6,8}$, $^{9,11}\text{Li}$, and ^{10}Be on Si. Physical Review C, 1996, 54, 1700-1709.	2.9	79
20	Depth-Dependent Imaging of Individual Dopant Atoms in Silicon. Microscopy and Microanalysis, 2004, 10, 291-300.	0.4	76
21	Structural, optical, and magnetic characterization of monodisperse Fe-doped ZnO nanocrystals. Journal of Applied Physics, 2008, 103, .	2.5	76
22	Medium-range structure and glass forming ability in Zr-Cu-Al bulk metallic glasses. Acta Materialia, 2016, 109, 103-114.	7.9	76
23	Nanoscale grains, high irreversibility field and large critical current density as a function of high-energy ball milling time in C-doped magnesium diboride. Superconductor Science and Technology, 2008, 21, 035009.	3.5	73
24	Spatially heterogeneous dynamics in a metallic glass forming liquid imaged by electron correlation microscopy. Nature Communications, 2018, 9, 1129.	12.8	73
25	Structural disorder induced in hydrogenated amorphous silicon by light soaking. Applied Physics Letters, 1998, 73, 3093-3095.	3.3	67
26	Tuning of magnetic properties in cobalt ferrite nanocrystals. Journal of Applied Physics, 2008, 103, .	2.5	66
27	Supertwisted spirals of layered materials enabled by growth on non-Euclidean surfaces. Science, 2020, 370, 442-445.	12.6	65
28	Stable p-Type Conduction from Sb-Decorated Head-to-Head Basal Plane Inversion Domain Boundaries in ZnO Nanowires. Nano Letters, 2012, 12, 1311-1316.	9.1	61
29	Variable Resolution Fluctuation Electron Microscopy on Cu-Zr Metallic Glass Using a Wide Range of Coherent STEM Probe Size. Microscopy and Microanalysis, 2011, 17, 67-74.	0.4	60
30	Machine learning in scanning transmission electron microscopy. Nature Reviews Methods Primers, 2022, 2, .	21.2	59
31	Pore Structure and Bifunctional Catalyst Activity of Overlayers Applied by Atomic Layer Deposition on Copper Nanoparticles. ACS Catalysis, 2014, 4, 1554-1557.	11.2	58
32	Atomic Layer Epitaxy of h-BN(0001) Multilayers on Co(0001) and Molecular Beam Epitaxy Growth of Graphene on h-BN(0001)/Co(0001). Langmuir, 2016, 32, 2601-2607.	3.5	58
33	Dopant mapping for the nanotechnology age. Nature Materials, 2003, 2, 129-131.	27.5	56
34	Realistic models of paracrystalline silicon. Physical Review B, 2001, 63, .	3.2	49
35	Quantifying nanoscale order in amorphous materials: simulating fluctuation electron microscopy of amorphous silicon. Journal of Physics Condensed Matter, 2007, 19, 455204.	1.8	49
36	Spin injection and detection up to room temperature in Heusler alloy spin valves. Physical Review B, 2016, 94, .	1.2	49

#	ARTICLE	IF	CITATIONS
37	Radiation-induced segregation in a ceramic. <i>Nature Materials</i> , 2020, 19, 992-998.	27.5	47
38	Local chemical and topological order in Al ¹⁰⁰ Tb and its role in controlling nanocrystal formation. <i>Acta Materialia</i> , 2012, 60, 994-1003.	7.9	46
39	Behavior of Pt Atoms on Oxide Supports During Reduction Treatments at Elevated Temperatures, Characterized by Aberration Corrected Stem Imaging. <i>Catalysis Letters</i> , 2012, 142, 176-182.	2.6	46
40	Prospects for 3D, nanometer-resolution imaging by confocal STEM. <i>Ultramicroscopy</i> , 2006, 106, 1041-1052.	1.9	45
41	A phenomenological model of fluctuation electron microscopy for a nanocrystal/amorphous composite. <i>Ultramicroscopy</i> , 2008, 108, 727-736.	1.9	45
42	Reentrant glass transition leading to ultrastable metallic glass. <i>Materials Today</i> , 2020, 34, 66-77.	14.2	45
43	Computational thermodynamics to identify Zr ¹⁰⁰ Ti ¹⁰⁰ Ni ¹⁰⁰ Cu ¹⁰⁰ Al alloys with high glass-forming ability. <i>Acta Materialia</i> , 2006, 54, 2975-2982.	7.9	42
44	Effect of nonstoichiometry on the half-metallic character of Co ₂ MnSi investigated through saturation magnetization and tunneling magnetoresistance ratio. <i>Physical Review B</i> , 2014, 89, .	3.2	42
45	Surface Gradient Ti-Doped MnO ₂ Nanowires for High-Rate and Long-Life Lithium Battery. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 44376-44384.	8.0	41
46	Understanding the route to high critical current density in mechanically alloyed Mg(B _{1-x} C _x) ₂ . <i>Superconductor Science and Technology</i> , 2007, 20, 650-657.	3.5	39
47	Electron scattering mechanisms in GZO films grown on a-sapphire substrates by plasma-enhanced molecular beam epitaxy. <i>Journal of Applied Physics</i> , 2012, 111, .	2.5	38
48	Increasing medium-range order in amorphous silicon with low-energy ion bombardment. <i>Applied Physics Letters</i> , 2003, 82, 3665-3667.	3.3	37
49	Microstructures of SiC nanoparticle-doped MgB ₂ +Fe tapes. <i>Journal of Applied Physics</i> , 2007, 102, 013913.	2.5	37
50	Size analysis of nanoscale order in amorphous materials by variable-resolution fluctuation electron microscopy. <i>Ultramicroscopy</i> , 2010, 110, 1273-1278.	1.9	36
51	Metastable Intermediates in Amorphous Titanium Oxide: A Hidden Role Leading to Ultra-Stable Photoanode Protection. <i>Nano Letters</i> , 2018, 18, 5335-5342.	9.1	36
52	Epitaxial growth and magnetic properties of Fe ₃ O ₄ films on TiN buffered Si(001), Si(110), and Si(111) substrates. <i>Applied Physics Letters</i> , 2010, 97, 092508.	3.3	34
53	Informatics and data science in materials microscopy. <i>Current Opinion in Solid State and Materials Science</i> , 2017, 21, 141-158.	11.5	33
54	Microstructure and microchemistry study of irradiation-induced precipitates in proton irradiated ZrNb alloys. <i>Acta Materialia</i> , 2019, 178, 228-240.	7.9	33

#	ARTICLE	IF	CITATIONS
55	Poisson noise removal from high-resolution STEM images based on periodic block matching. <i>Advanced Structural and Chemical Imaging</i> , 2015, 1, .	4.0	32
56	Evidence for a New Class of Defects in Highly-Doped Si: Donor-Pair-Vacancy-Interstitial Complexes. <i>Physical Review Letters</i> , 2003, 91, 125505.	7.8	31
57	Non-rigid registration and non-local principle component analysis to improve electron microscopy spectrum images. <i>Nanotechnology</i> , 2016, 27, 364001.	2.6	30
58	Bifunctional Materials for the Catalytic Conversion of Cellulose into Soluble Renewable Biorefinery Feedstocks. <i>Topics in Catalysis</i> , 2012, 55, 148-161.	2.8	29
59	Ionic Layer Epitaxy of Nanometer-Thick Palladium Nanosheets with Enhanced Electrocatalytic Properties. <i>Chemistry of Materials</i> , 2018, 30, 3308-3314.	6.7	29
60	Demonstration of Ru as the 4th ferromagnetic element at room temperature. <i>Nature Communications</i> , 2018, 9, 2058.	12.8	29
61	Short-range order structure motifs learned from an atomistic model of a Zr ₅₀ Cu ₄₅ Al ₅ metallic glass. <i>Acta Materialia</i> , 2019, 175, 35-45.	7.9	29
62	A quantitative measure of medium-range order in amorphous materials from transmission electron micrographs. <i>Journal of Physics Condensed Matter</i> , 2003, 15, S2425-S2435.	1.8	28
63	M _x Zn _{1-x} Fe ₂ R _y O ₄ (R=Gd, Eu) ferrite nanocrystals for magnetocaloric applications. <i>Microelectronics Journal</i> , 2009, 40, 677-680.	2.0	28
64	Thermal Resistance of Transferred-Silicon-Nanomembrane Interfaces. <i>Physical Review Letters</i> , 2015, 115, 256101.	7.8	28
65	Evidence from atomistic simulations of fluctuation electron microscopy for preferred local orientations in amorphous silicon. <i>Applied Physics Letters</i> , 2004, 85, 745-747.	3.3	27
66	High-Jc MgB ₂ Josephson junctions with operating temperature up to 40 K. <i>Applied Physics Letters</i> , 2010, 96, .	3.3	27
67	Flexible formation of coherent probes on an aberration-corrected STEM with three condensers. <i>Journal of Electron Microscopy</i> , 2010, 59, S15-S21.	0.9	27
68	Effect of sample thickness, energy filtering, and probe coherence on fluctuation electron microscopy experiments. <i>Ultramicroscopy</i> , 2011, 111, 1375-1380.	1.9	27
69	Atomic resolution convergent beam electron diffraction analysis using convolutional neural networks. <i>Ultramicroscopy</i> , 2020, 210, 112921.	1.9	26
70	Memristive Behavior Enabled by Amorphous-Crystalline 2D Oxide Heterostructure. <i>Advanced Materials</i> , 2020, 32, e2000801.	21.0	26
71	Integrated Computational and Experimental Structure Refinement for Nanoparticles. <i>ACS Nano</i> , 2016, 10, 4031-4038.	14.6	25
72	Epitaxy, exfoliation, and strain-induced magnetism in rippled Heusler membranes. <i>Nature Communications</i> , 2021, 12, 2494.	12.8	25

#	ARTICLE	IF	CITATIONS
91	Flux Pinning Optimization of MgB_2 Bulk Samples Prepared Using High-Energy Ball Milling and Addition of TaB_2 . IEEE Transactions on Applied Superconductivity, 2009, 19, 2797-2801.	1.7	16
92	Epitaxial growth and thermal stability of Fe ₄ N film on TiN buffered Si(001) substrate. Journal of Applied Physics, 2011, 109, 07E126.	2.5	15
93	Analytical and computational modeling of fluctuation electron microscopy from a nanocrystal/amorphous composite. Ultramicroscopy, 2012, 122, 37-47.	1.9	15
94	High electrical conductivity in the epitaxial polar metals LaAuGe and LaPtSb. APL Materials, 2019, 7, .	5.1	15
95	Fast Surface Dynamics on a Metallic Glass Nanowire. ACS Nano, 2021, 15, 11309-11316.	14.6	15
96	Hexagonal-based pyramid void defects in GaN and InGaN. Journal of Applied Physics, 2012, 111, .	2.5	14
97	Homogeneous Silica Formed by the Oxidation of Si(100) in Hyperthermal Atomic Oxygen. Journal of Spacecraft and Rockets, 2006, 43, 431-435.	1.9	13
98	Nanoscale disorder in pure and doped MgB_2 thin films. Superconductor Science and Technology, 2010, 23, 095008.	3.5	13
99	Impurity distribution and microstructure of Ga-doped ZnO films grown by molecular beam epitaxy. Journal of Applied Physics, 2012, 112, 123527.	2.5	13
100	Inelastic and elastic mean free paths from FIB samples of metallic glasses. Ultramicroscopy, 2013, 124, 6-12.	1.9	13
101	Effect of tungsten alloying on short-to-medium-range-order evolution and crystallization behavior of near-eutectic amorphous Ni ₆₀ P. Acta Materialia, 2017, 122, 400-411.	7.9	13
102	Vitrification, crystallization, and atomic structure of deformed and quenched Ni ₆₀ Nb ₄₀ metallic glass. Journal of Non-Crystalline Solids, 2018, 491, 133-140.	3.1	13
103	Surface Diffusion Is Controlled by Bulk Fragility across All Glass Types. Physical Review Letters, 2022, 128, 075501.	7.8	13
104	Imaging Single Atoms with Z-Contrast Scanning Transmission Electron Microscopy in Two and Three Dimensions. Mikrochimica Acta, 2006, 155, 5-10.	5.0	12
105	InGaN based light emitting diodes utilizing Ga doped ZnO as a highly transparent contact to p-GaN. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 1548-1551.	0.8	12
106	Local Dielectric Breakdown Path along c -Axis Planar Boundaries in Cr_2O_3 Thin Films. Advanced Materials Interfaces, 2017, 4, 1700172.	3.7	12
107	Heavy-Metal-Free, Low-Damping, and Non-Interface Perpendicular Fe ₁₆ N ₂ Thin Film and Magnetoresistance Device. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1900089.	2.4	12
108	Graph network based deep learning of bandgaps. Journal of Chemical Physics, 2021, 155, 154702.	3.0	12

#	ARTICLE	IF	CITATIONS
109	Method for detecting subtle spatial structures by fluctuation microscopy. Physical Review B, 1999, 60, 191-200.	3.2	11
110	MgO platelets and high critical field in MgB ₂ thin films doped with carbon from methane. Superconductor Science and Technology, 2009, 22, 125001.	3.5	11
111	Applications and limitations of electron correlation microscopy to study relaxation dynamics in supercooled liquids. Ultramicroscopy, 2017, 178, 125-130.	1.9	11
112	An Ultrafast Direct Electron Camera for 4D STEM. Microscopy and Microanalysis, 2021, 27, 1004-1006.	0.4	11
113	$\frac{MgO}{MgB_2}$ Josephson Junctions for High-Speed Circuits. IEEE Transactions on Applied Superconductivity, 2011, 21, 115-118.	1.7	10
114	Thickness Variations and Absence of Lateral Compositional Fluctuations in Aberration-Corrected STEM Images of InGaN LED Active Regions at Low Dose. Microscopy and Microanalysis, 2014, 20, 864-868.	0.4	10
115	Radiation-induced mobility of small defect clusters in covalent materials. Physical Review B, 2016, 94, .	3.2	10
116	Reduced interface spin polarization by antiferromagnetically coupled Mn segregated to the C ₂ MnSi ₂ /GaAs (001) interface. Physical Review B, 2018, 97, .	3.2	10
117	Domain configurations in Co/Pd and L1 ₀ -FePt nanowire arrays with perpendicular magnetic anisotropy. Nanoscale, 2016, 8, 5358-5367.	5.6	9
118	Control of polymorphism during epitaxial growth of hyperferroelectric candidate LiZnSb on GaSb (111)B. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2020, 38, .	1.2	9
119	Machine Learning Prediction of the Critical Cooling Rate for Metallic Glasses from Expanded Datasets and Elemental Features. Chemistry of Materials, 2022, 34, 2945-2954.	6.7	9
120	Experimental Methods and Data Analysis for Fluctuation Microscopy. Materials Research Society Symposia Proceedings, 1999, 589, 155.	0.1	8
121	Comparative Fluctuation Microscopy Study of Medium-Range Order in Hydrogenated Amorphous Silicon Deposited by Various Methods. Materials Research Society Symposia Proceedings, 2000, 609, 241.	0.1	8
122	Elastic and inelastic mean free paths of 200 keV electrons in metallic glasses. Ultramicroscopy, 2016, 171, 89-95.	1.9	8
123	FEMSIM + ÅHRMC: Simulation of and structural refinement using fluctuation electron microscopy for amorphous materials. Computer Physics Communications, 2017, 213, 217-222.	7.5	8
124	Enhanced Ferromagnetism from Organic-Cerium Oxide Hybrid Ultrathin Nanosheets. ACS Applied Materials & Interfaces, 2019, 11, 44601-44608.	8.0	8
125	MODELS OF PARACRYSTALLINE SILICON WITH A DEFECT-FREE BANDGAP. International Journal of Modern Physics B, 2001, 15, 3253-3257.	2.0	7
126	Medium-Range Order in High Al-content Amorphous Alloys Measured by Fluctuation Electron Microscopy. Microscopy and Microanalysis, 2004, 10, 788-789.	0.4	7

#	ARTICLE	IF	CITATIONS
127	Multiple Morphologies of Gold-Magnetite Heterostructure Nanoparticles are Effectively Functionalized with Protein for Cell Targeting. <i>Microscopy and Microanalysis</i> , 2013, 19, 821-834.	0.4	7
128	Patterning of sub-50 nm perpendicular CoFeB/MgO-based magnetic tunnel junctions. <i>Nanotechnology</i> , 2016, 27, 185302.	2.6	7
129	Paths to Stabilizing Electronically Aberrant Compounds: A Defect-Stabilized Polymorph and Constrained Atomic Motion in PtGa ₂ . <i>Inorganic Chemistry</i> , 2018, 57, 13880-13894.	4.0	7
130	StructOpt: A modular materials structure optimization suite incorporating experimental data and simulated energies. <i>Computational Materials Science</i> , 2019, 160, 1-8.	3.0	7
131	Semi-adsorption-controlled growth window for half-Heusler FeVSb epitaxial films. <i>Physical Review Materials</i> , 2020, 4, .	2.4	7
132	Correlation symmetry analysis of electron nanodiffraction from amorphous materials. <i>Ultramicroscopy</i> , 2022, 232, 113405.	1.9	7
133	Thermodynamics of Paracrystalline Silicon. <i>Materials Research Society Symposia Proceedings</i> , 2000, 616, 47.	0.1	6
134	Factors correlating to enhanced surface diffusion in metallic glasses. <i>Journal of Chemical Physics</i> , 2021, 154, 104502.	3.0	6
135	Exploration of characteristic temperature contributions to metallic glass forming ability. <i>Computational Materials Science</i> , 2021, 196, 110494.	3.0	6
136	Reactive sputtering of (Co,Fe) nitride thin films on TiN-buffered Si. <i>Applied Physics A: Materials Science and Processing</i> , 2013, 110, 487-492.	2.3	5
137	Molecular simulation-derived features for machine learning predictions of metal glass forming ability. <i>Computational Materials Science</i> , 2021, 199, 110728.	3.0	5
138	Electronically enhanced layer buckling and Au-Au dimerization in epitaxial LaAuSb films. <i>Physical Review Materials</i> , 2019, 3, .	2.4	5
139	When is Z-Contrast D-Contrast?. <i>Microscopy Today</i> , 2014, 22, 65-65.	0.3	4
140	Atomic structure of a glass imaged at last. <i>Nature</i> , 2021, 592, 31-32.	27.8	4
141	Ion-Implanted Amorphous Silicon Studied by Variable Coherence TEM. <i>Materials Research Society Symposia Proceedings</i> , 1999, 589, 247.	0.1	3
142	Topological Signatures of Medium Range Order in Amorphous Semiconductor Models. <i>Materials Research Society Symposia Proceedings</i> , 2000, 609, 251.	0.1	3
143	Control of Medium Range Order in Amorphous Silicon via Ion and Neutral Bombardment. <i>Materials Research Society Symposia Proceedings</i> , 2001, 664, 2731.	0.1	3
144	Medium-Range Order in High Al-content Amorphous Alloys Measured by Fluctuation Electron Microscopy. <i>Materials Research Society Symposia Proceedings</i> , 2003, 806, 380.	0.1	3

#	ARTICLE	IF	CITATIONS
145	Increased in-field critical current density in neutron-irradiated MgB ₂ films. Superconductor Science and Technology, 2009, 22, 015023.	3.5	3
146	Medium-range Order of Zr ₅₄ Cu ₃₈ Al ₈ Bulk Metallic Glass. Materials Research Society Symposia Proceedings, 2014, 1649, 1.	0.1	3
147	High-Resolution Scanning Transmission Electron Microscopy Study of Black Spot Defects in Ion Irradiated Silicon Carbide. Microscopy and Microanalysis, 2014, 20, 1824-1825.	0.4	3
148	Joint Denoising and Distortion Correction for Atomic Column Detection in Scanning Transmission Electron Microscopy Images. Microscopy and Microanalysis, 2017, 23, 164-165.	0.4	3
149	Superconductivity and fluctuation effects in a fractal dimensional bulk metallic glass: Correlation with medium range order. Materials Today Communications, 2020, 25, 101427.	1.9	3
150	Varying kinetic stability, icosahedral ordering, and mechanical properties of a model Zr-Cu-Al metallic glass by sputtering. Physical Review Materials, 2021, 5, .	2.4	3
151	Optimizing Nonrigid Registration for Scanning Transmission Electron Microscopy Image Series. Microscopy and Microanalysis, 2021, 27, 90-98.	0.4	3
152	Changes in the Medium Range Order of $\hat{I}\pm$ -Si:H Thin Films Observed by Variable Coherence Tem. Materials Research Society Symposia Proceedings, 1998, 507, 837.	0.1	2
153	Fluctuation Microscopy Studies of Medium-range Order Structures in Amorphous Tetrahedral Semiconductors. Materials Research Society Symposia Proceedings, 2000, 638, 1.	0.1	2
154	Increased Ordering in the Amorphous SiO _x due to Hyperthermal Atomic Oxygen.. Materials Research Society Symposia Proceedings, 2004, 851, 517.	0.1	2
155	Effect of Doping on the Structural and Optical Properties of Microwave-Assisted Synthesis of ZnSe@ZnS Core-Shell Quantum Dots. Materials Research Society Symposia Proceedings, 2009, 1207, 1.	0.1	2
156	Fluctuation Microscopy in the STEM. , 2011, , 725-756.		2
157	Vertical composition variation in nominally uniform InGaN layers revealed by aberration-corrected STEM imaging. Proceedings of SPIE, 2011, , .	0.8	2
158	Optimization of ZnO:Ga properties for application as a transparent conducting oxide in InGaN-based light-emitting diodes. Proceedings of SPIE, 2011, , .	0.8	2
159	Absence of Lateral Composition Fluctuations in Aberration-corrected STEM Images of an InGaN Quantum Well at Low Dose. Materials Research Society Symposia Proceedings, 2012, 1432, 73.	0.1	2
160	Electrical properties of ZnO:Ga as a transparent conducting oxide in InGaN based light emitting diodes. Proceedings of SPIE, 2012, , .	0.8	2
161	Inverse TMR in a nominally symmetric CoFe/AlO _x /CoFe junction induced by interfacial Fe ₃ O ₄ investigated by STEM-EELS. Journal of Magnetism and Magnetic Materials, 2012, 324, 1837-1844.	2.3	2
162	Three-Dimensional Imaging of Single La Vacancies in LaMnO ₃ . Microscopy and Microanalysis, 2016, 22, 902-903.	0.4	2

#	ARTICLE	IF	CITATIONS
163	Identification and Quantification of Boron Dopant Sites in Antiferromagnetic Cr ₂ O ₃ Films by Electron Energy Loss Spectroscopy. <i>Microscopy and Microanalysis</i> , 2017, 23, 1584-1585.	0.4	2
164	Bayesian Statistical Model for Imaging of Single La Vacancies in LaMnO ₃ . <i>Microscopy and Microanalysis</i> , 2017, 23, 1572-1573.	0.4	2
165	Benchmark tests of atom-locating CNN models with a consistent dataset. <i>Microscopy and Microanalysis</i> , 2021, 27, 2518-2520.	0.4	2
166	Optimizing mechanical properties in single-layered and multi-layered amorphous carbon coatings. <i>Diamond and Related Materials</i> , 2022, 123, 108843.	3.9	2
167	Structure and magnetism in epitaxial $\text{Fe}_{1-x}\text{Co}_x\text{ZrO}_3$ nanocomposite films. <i>Physical Review Materials</i> , 2021, 5, .	0.4	2
168	Fluctuation Microscopy in the STEM. <i>Microscopy and Microanalysis</i> , 2001, 7, 226-227.	0.4	1
169	Evidence from Simulations for Orientational Medium Range Order in Fluctuation-Electron-Microscopy Observations of a-Si. <i>Microscopy and Microanalysis</i> , 2004, 10, 820-821.	0.4	1
170	Nanometer-scale Structural Relaxation in Zr-based Bulk Metallic Glass. <i>Materials Research Society Symposia Proceedings</i> , 2007, 1048, 4.	0.1	1
171	Stabilization of Copper Catalysts for Liquid-Phase Reactions by Atomic Layer Deposition (<i>Angew. Chem.</i> 51/2013). <i>Angewandte Chemie</i> , 2013, 125, 14068-14068.	2.0	1
172	Precision Limits to STEM Imaging from Dynamical Scattering and Channeling of Sub-Angstrom Electron Probes. <i>Microscopy and Microanalysis</i> , 2014, 20, 120-121.	0.4	1
173	Atomic Resolution Imaging of Black Spot Defects in Ion Irradiated Silicon Carbide. <i>Microscopy and Microanalysis</i> , 2015, 21, 1337-1338.	0.4	1
174	Fluctuation Electron Microscopy and Computational Structure Refinement for the Structure of Amorphous Materials. <i>Microscopy and Microanalysis</i> , 2016, 22, 486-487.	0.4	1
175	Applications of High Precision STEM Imaging to Structurally Complex Materials. <i>Microscopy and Microanalysis</i> , 2017, 23, 418-419.	0.4	1
176	Materials Design of Glasses. <i>Current Opinion in Solid State and Materials Science</i> , 2018, 22, 39-40.	11.5	1
177	Atomic Resolution Convergent Beam Electron Diffraction Analysis Using Convolutional Neural Networks. <i>Microscopy and Microanalysis</i> , 2019, 25, 128-129.	0.4	1
178	Effect of Mo capping in sub-100 nm CoFeB-MgO tunnel junctions with perpendicular magnetic anisotropy. <i>Journal of Magnetism and Magnetic Materials</i> , 2019, 483, 34-41.	2.3	1
179	Structural Determination in Metallic Glasses from Correlations in 4D STEM Datasets. <i>Microscopy and Microanalysis</i> , 2020, 26, 940-942.	0.4	1
180	Structural tunability and origin of two-level systems in amorphous silicon. <i>Physical Review Materials</i> , 2022, 6, .	2.4	1

#	ARTICLE	IF	CITATIONS
181	Fluctuation Microscopy: A New Class of Microscopy Techniques for Probing Medium Range Order in Amorphous Materials. <i>Microscopy and Microanalysis</i> , 1998, 4, 702-703.	0.4	0
182	Imaging Single Dopant Atoms and Nanoclusters in Highly n-type Bulk Si. <i>Microscopy and Microanalysis</i> , 2002, 8, 1614-1615.	0.4	0
183	Z-Contrast Imaging of Nanostructures in the STEM. <i>Microscopy and Microanalysis</i> , 2003, 9, 264-265.	0.4	0
184	Exploring the physical limits of transistor scaling using STEM. <i>Microscopy and Microanalysis</i> , 2003, 9, 1012-1013.	0.4	0
185	ADF-STEM Imaging of Dopants and Defect Nanoclusters in Si. <i>Microscopy and Microanalysis</i> , 2003, 9, 22-23.	0.4	0
186	Turning Cutting-Edge Research into Secondary Curriculum. <i>Materials Research Society Symposia Proceedings</i> , 2004, 861, 36.	0.1	0
187	Change in Activation Volume for Plastic Deformation of Zr-based Bulk Metallic Glass following Annealing. <i>Materials Research Society Symposia Proceedings</i> , 2007, 1048, 8.	0.1	0
188	Model of Fluctuation Electron Microscopy for a Nanocrystal /Amorphous Composite. <i>Microscopy and Microanalysis</i> , 2008, 14, 914-915.	0.4	0
189	Nanoscale Disorder in MgB ₂ Thin Films Grown by Hybrid Physical-Chemical Vapor Deposition. <i>Microscopy and Microanalysis</i> , 2008, 14, 212-213.	0.4	0
190	The Electron Microscopy Database: an Online Resource for Teaching and Learning Quantitative Transmission Electron Microscopy. <i>Microscopy Today</i> , 2009, 17, 26-27.	0.3	0
191	Effect of Growth Conditions on Structural and Electrical Properties of Ga-doped ZnO Films Grown by Plasma-assisted MBE. <i>Materials Research Society Symposia Proceedings</i> , 2009, 1201, 124.	0.1	0
192	Nanometer Scale Atomic Order in a Bulk Metallic Glass from Fluctuation Microscopy. <i>Microscopy and Microanalysis</i> , 2009, 15, 770-771.	0.4	0
193	MgO platelets and high critical field in MgB ₂ thin films doped with carbon from methane. <i>Superconductor Science and Technology</i> , 2010, 23, 049801-049801.	3.5	0
194	Pre-Meeting Congress on Opportunities, Artifacts and Interpretation of Aberration-Corrected Electron Microscopy Data. <i>Microscopy and Microanalysis</i> , 2011, 17, 20-20.	0.4	0
195	Indium Composition Variation in Nominally Uniform InGaN Layers Discovered by Aberration-Corrected Z-contrast STEM. <i>Microscopy and Microanalysis</i> , 2011, 17, 1386-1387.	0.4	0
196	<title>Pyramid nano-voids in GaN and InGaN</title>. , 2012, , .		0
197	Morphology of Amorphous Pockets in SiC Irradiated with 1 MeV Kr Ions. <i>Microscopy and Microanalysis</i> , 2014, 20, 1830-1831.	0.4	0
198	Revealing New Atomic-scale Information about Materials by Improving the Quality and Quantifiability of Aberration-corrected STEM Data. <i>Microscopy and Microanalysis</i> , 2015, 21, 2409-2410.	0.4	0

#	ARTICLE	IF	CITATIONS
199	Prospects for Detecting Single Vacancies by Quantitative Scanning Transmission Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2015, 21, 1887-1888.	0.4	0
200	Increased Fluctuation of Interatomic Distances in Distorted Structure of Stoichiometric LaMnO ₃ . <i>Microscopy and Microanalysis</i> , 2015, 21, 2413-2414.	0.4	0
201	Networked Data Storage and Analysis for the Wisconsin Regional Materials Network. <i>Microscopy and Microanalysis</i> , 2015, 21, 371-372.	0.4	0
202	Integrated Computational and Experimental Structure Determination for Nanoparticles. <i>Microscopy and Microanalysis</i> , 2015, 21, 2201-2202.	0.4	0
203	Medium-Range Structure of Zr-Cu-Al Bulk Metallic Glasses from Structural Refinement Based on Fluctuation Microscopy. <i>Microscopy and Microanalysis</i> , 2015, 21, 1659-1660.	0.4	0
204	Fluctuation Electron Microscopy Study of Medium-Range Packing Order in Ultrastable Indomethacin Glass Thin Films. <i>Materials Research Society Symposia Proceedings</i> , 2015, 1757, 32.	0.1	0
205	Combining Non-Rigid Registration with Non-Local Principle Component Analysis for Atomic Resolution EDS Mapping. <i>Microscopy and Microanalysis</i> , 2016, 22, 1406-1407.	0.4	0
206	High-precision stress mapping and defect characterization of thin films of LaMnO ₃ grown on DyScO ₃ substrate.. <i>Microscopy and Microanalysis</i> , 2016, 22, 1526-1527.	0.4	0
207	Measurement of Irradiation-induced Swelling in Stainless Steels with a New Transmission Electron Microscopy Method. <i>Microscopy and Microanalysis</i> , 2017, 23, 2234-2235.	0.4	0
208	Atomic-scale Relaxation Dynamics in the Supercooled Liquid State of a Metallic Glass Nanowire by Electron Correlation Microscopy. <i>Microscopy and Microanalysis</i> , 2017, 23, 960-961.	0.4	0
209	Dielectric breakdown along c-axis boundaries in magnetoelectric O ₂ O ₃ for spintronic devices. <i>Microscopy and Microanalysis</i> , 2017, 23, 1442-1443.	0.4	0
210	In situ Transmission Electron Microscopy of Room-temperature Plastic Deformation and Recovery in Thin 3C-SiC. <i>Microscopy and Microanalysis</i> , 2018, 24, 1834-1835.	0.4	0
211	Electron Correlation Microscopy for Studying Fluctuating Systems In Situ. <i>Microscopy and Microanalysis</i> , 2019, 25, 1520-1521.	0.4	0
212	Effectively Synchronizing 4D-STEM Detectors with Probe Movement. <i>Microscopy and Microanalysis</i> , 2019, 25, 68-69.	0.4	0
213	“Crystallography” of an Amorphous Material Using Electron Nanodiffraction. <i>Microscopy and Microanalysis</i> , 2020, 26, 38-40.	0.4	0
214	Electron Correlation Microscopy Measurements of Metallic Glass Surface Dynamics. <i>Microscopy and Microanalysis</i> , 2020, 26, 1142-1143.	0.4	0
215	Denosing Atomic Resolution Hyperspectral Data with Tensor Singular Value Decomposition. <i>Microscopy and Microanalysis</i> , 2020, 26, 1722-1723.	0.4	0
216	Oxidation of metallic glass thin films: a combined EPMA and XPS investigation into the composition and thickness of oxidized surfaces. <i>Microscopy and Microanalysis</i> , 2021, 27, 3328-3330.	0.4	0

#	ARTICLE	IF	CITATIONS
217	Symmetry Analysis in Metallic Glasses by Electron Nanodiffraction. <i>Microscopy and Microanalysis</i> , 2021, 27, 748-752.	0.4	0
218	Shear Transformation Zone Activation During Deformation in Bulk Metallic Glasses Characterized Using a New Indentation Creep Technique. , 2008, , .		0
219	4D Scanning Transmission Electron Microscopy of a Twisted WS ₂ Multilayer Structure. <i>Microscopy and Microanalysis</i> , 2020, 26, 628-630.	0.4	0