

Albina Y Borisevich

List of Publications by Year in descending order

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220
papers

9,770
citations

26567

56
h-index

38300

95
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226
all docs

226
docs citations

226
times ranked

11298
citing authors

#	ARTICLE	IF	CITATIONS
1	Palladium-tin catalysts for the direct synthesis of H ₂ O ₂ with high selectivity. <i>Science</i> , 2016, 351, 965-968.	6.0	465
2	Direct Sub-Angstrom Imaging of a Crystal Lattice. <i>Science</i> , 2004, 305, 1741-1741.	6.0	463
3	Observation of a periodic array of flux-closure quadrants in strained ferroelectric PbTiO ₃ films. <i>Science</i> , 2015, 348, 547-551.	6.0	430
4	CuInP ₂ S ₆ Room Temperature Layered Ferroelectric. <i>Nano Letters</i> , 2015, 15, 3808-3814.	4.5	328
5	Suppression of Octahedral Tilts and Associated Changes in Electronic Properties at Epitaxial Oxide Heterostructure Interfaces. <i>Physical Review Letters</i> , 2010, 105, 087204.	2.9	308
6	Spectroscopic Imaging of Single Atoms Within a Bulk Solid. <i>Physical Review Letters</i> , 2004, 92, 095502.	2.9	299
7	Enhanced tunnelling electroresistance effect due to a ferroelectrically induced phase transition at a magnetic complex oxide interface. <i>Nature Materials</i> , 2013, 12, 397-402.	13.3	283
8	Probing oxygen vacancy concentration and homogeneity in solid-oxide fuel-cell cathode materials on the subunit-cell level. <i>Nature Materials</i> , 2012, 11, 888-894.	13.3	282
9	Direct observation of ferroelectric field effect and vacancy-controlled screening at the BiFeO ₃ /La _x Sr _{1-x} MnO ₃ interface. <i>Nature Materials</i> , 2014, 13, 1019-1025.	13.3	218
10	A Sacrificial Coating Strategy Toward Enhancement of Metal-Support Interaction for Ultrastable Au Nanocatalysts. <i>Journal of the American Chemical Society</i> , 2016, 138, 16130-16139.	6.6	217
11	Depth sectioning with the aberration-corrected scanning transmission electron microscope. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 3044-3048.	3.3	216
12	Control of Octahedral Tilts and Magnetic Properties of Perovskite Oxide Heterostructures by Substrate Symmetry. <i>Physical Review Letters</i> , 2010, 105, 227203.	2.9	211
13	Dopants adsorbed as single atoms prevent degradation of catalysts. <i>Nature Materials</i> , 2004, 3, 143-146.	13.3	199
14	MATERIALS CHARACTERIZATION IN THE ABERRATION-CORRECTED SCANNING TRANSMISSION ELECTRON MICROSCOPE. <i>Annual Review of Materials Research</i> , 2005, 35, 539-569.	4.3	188
15	Crystal Chemistry of Complex Perovskites: New Cation-Ordered Dielectric Oxides. <i>Annual Review of Materials Research</i> , 2008, 38, 369-401.	4.3	177
16	Mapping Octahedral Tilts and Polarization Across a Domain Wall in BiFeO ₃ from Z-Contrast Scanning Transmission Electron Microscopy Image Atomic Column Shape Analysis. <i>ACS Nano</i> , 2010, 4, 6071-6079.	7.3	150
17	Atomic-scale evolution of modulated phases at the ferroelectric-antiferroelectric morphotropic phase boundary controlled by flexoelectric interaction. <i>Nature Communications</i> , 2012, 3, 775.	5.8	145
18	Bifunctional nanoprecipitates strengthen and ductilize a medium-entropy alloy. <i>Nature</i> , 2021, 595, 245-249.	13.7	141

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19	Oxygen Reduction Kinetics Enhancement on a Heterostructured Oxide Surface for Solid Oxide Fuel Cells. <i>Journal of Physical Chemistry Letters</i> , 2010, 1, 3149-3155.	2.1	136
20	Point Defect Configurations of Supersaturated Au Atoms Inside Si Nanowires. <i>Nano Letters</i> , 2008, 8, 1016-1019.	4.5	119
21	Evaluation of microstructure and mechanical property variations in Al _x CoCrFeNi high entropy alloys produced by a high-throughput laser deposition method. <i>Intermetallics</i> , 2018, 95, 110-118.	1.8	107
22	Interplay of Octahedral Tilts and Polar Order in BiFeO ₃ Films. <i>Advanced Materials</i> , 2013, 25, 2497-2504.	11.1	101
23	Nitrogen: unraveling the secret to stable carbon-supported Pt-alloy electrocatalysts. <i>Energy and Environmental Science</i> , 2013, 6, 2957.	15.6	99
24	Directing Matter: Toward Atomic-Scale 3D Nanofabrication. <i>ACS Nano</i> , 2016, 10, 5600-5618.	7.3	99
25	Crystalline Structure and Dielectric Properties of Li _{1+x} Y _{1-x} Nb _{1-x} Ti _x O ₃ (Mg) Phase Solid Solutions. <i>Journal of the American Ceramic Society</i> , 2002, 85, 573-578.		
26	The observation of square ice in graphene questioned. <i>Nature</i> , 2015, 528, E1-E2.	13.7	95
27	Microwave dielectric properties of Li _{1-x} M _{1-x} 3yTi _x +4yO ₃ (M=Nb ⁵⁺ , Ta ⁵⁺) solid solutions. <i>Journal of the European Ceramic Society</i> , 2001, 21, 1719-1722.	2.8	91
28	Aberration-corrected scanning transmission electron microscopy: from atomic imaging and analysis to solving energy problems. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2009, 367, 3709-3733.	1.6	89
29	<i>In Situ</i> Observation of Oxygen Vacancy Dynamics and Ordering in the Epitaxial LaCoO ₃ System. <i>ACS Nano</i> , 2017, 11, 6942-6949.	7.3	89
30	Beyond Condensed Matter Physics on the Nanoscale: The Role of Ionic and Electrochemical Phenomena in the Physical Functionalities of Oxide Materials. <i>ACS Nano</i> , 2012, 6, 10423-10437.	7.3	88
31	Atomically Resolved Mapping of Polarization and Electric Fields Across Ferroelectric/Oxide Interfaces by Contrast Imaging. <i>Advanced Materials</i> , 2011, 23, 2474-2479.	11.1	79
32	Fire up the atom forge. <i>Nature</i> , 2016, 539, 485-487.	13.7	79
33	Towards 3D Mapping of BO ₆ Octahedron Rotations at Perovskite Heterointerfaces, Unit Cell by Unit Cell. <i>ACS Nano</i> , 2015, 9, 8412-8419.	7.3	78
34	Distribution of histone H3.3 in hematopoietic cell lineages. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 574-579.	3.3	75
35	Conductivity of twin-domain-wall/surface junctions in ferroelastics: Interplay of deformation potential, octahedral rotations, improper ferroelectricity, and flexoelectric coupling. <i>Physical Review B</i> , 2012, 86, .	1.1	74
36	Big data and deep data in scanning and electron microscopies: deriving functionality from multidimensional data sets. <i>Advanced Structural and Chemical Imaging</i> , 2015, 1, 6.	4.0	74

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37	Depth sectioning of aligned crystals with the aberration-corrected scanning transmission electron microscope. <i>Journal of Electron Microscopy</i> , 2006, 55, 7-12.	0.9	73
38	Nanoscale Structural and Chemical Properties of Antipolar Clusters in Sm-Doped BiFeO ₃ Ferroelectric Epitaxial Thin Films. <i>Chemistry of Materials</i> , 2010, 22, 2588-2596.	3.2	73
39	Atomic-Level Sculpting of Crystalline Oxides: Toward Bulk Nanofabrication with Single Atomic Plane Precision. <i>Small</i> , 2015, 11, 5895-5900.	5.2	73
40	Atomic Structure and Electrical Activity of Grain Boundaries and Ruddlesden-Popper Faults in Cesium Lead Bromide Perovskite. <i>Advanced Materials</i> , 2019, 31, e1805047.	11.1	72
41	Spatial resolution, information limit, and contrast transfer in piezoresponse force microscopy. <i>Nanotechnology</i> , 2006, 17, 3400-3411.	1.3	71
42	Ultrathin limit and dead-layer effects in local polarization switching of BiFeO ₃ . <i>Physical Review B</i> , 2012, 85, .	1.1	71
43	Dimensionality Controlled Octahedral Symmetry-Mismatch and Functionalities in Epitaxial LaCoO ₃ /SrTiO ₃ Heterostructures. <i>Nano Letters</i> , 2015, 15, 4677-4684.	4.5	71
44	Effect of V ₂ O ₅ Doping on the Sintering and Dielectric Properties of LiM _{1-x} Nb _{1-x} Ti _{4-x} O ₃ Ceramics. <i>Journal of the American Ceramic Society</i> , 2004, 87, 1047-1052.	1.9	70
45	Evolution of gold structure during thermal treatment of Au/FeO _x catalysts revealed by aberration-corrected electron microscopy. <i>Journal of Electron Microscopy</i> , 2009, 58, 199-212.	0.9	70
46	Interface Engineering of Domain Structures in BiFeO ₃ Thin Films. <i>Nano Letters</i> , 2017, 17, 486-493.	4.5	69
47	Origin of Anomalous Pt-Pt Distances in the Pt/Alumina Catalytic System. <i>ChemPhysChem</i> , 2004, 5, 1893-1897.	1.0	68
48	Large-scale synthesis of arrays of high-aspect-ratio rigid vertically aligned carbon nanofibres. <i>Nanotechnology</i> , 2003, 14, 1029-1035.	1.3	67
49	High-T _c Layered Ferrielectric Crystals by Coherent Spinodal Decomposition. <i>ACS Nano</i> , 2015, 9, 12365-12373.	7.3	67
50	Identification of phases, symmetries and defects through local crystallography. <i>Nature Communications</i> , 2015, 6, 7801.	5.8	63
51	Defect-Mediated Polarization Switching in Ferroelectrics and Related Materials: From Mesoscopic Mechanisms to Atomistic Control. <i>Advanced Materials</i> , 2010, 22, 314-322.	11.1	62
52	Big Data Analytics for Scanning Transmission Electron Microscopy Ptychography. <i>Scientific Reports</i> , 2016, 6, 26348.	1.6	62
53	Population and hierarchy of active species in gold iron oxide catalysts for carbon monoxide oxidation. <i>Nature Communications</i> , 2016, 7, 12905.	5.8	62
54	Graphene-Analogues Boron Nitride Nanosheets Confining Ionic Liquids: A High-Performance Quasi-Liquid Solid Electrolyte. <i>Small</i> , 2016, 12, 3535-3542.	5.2	62

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55	Dynamic scan control in STEM: spiral scans. <i>Advanced Structural and Chemical Imaging</i> , 2016, 2, .	4.0	59
56	Communicating with wireless perovskites: cation order and zinc volatilization. <i>Journal of the European Ceramic Society</i> , 2003, 23, 2461-2466.	2.8	58
57	Finite size and intrinsic field effect on the polar-active properties of ferroelectric-semiconductor heterostructures. <i>Physical Review B</i> , 2010, 81, .	1.1	57
58	Watching domains grow: <i>in-situ</i> studies of polarization switching by combined scanning probe and scanning transmission electron microscopy. <i>Journal of Applied Physics</i> , 2011, 110, .	1.1	57
59	Interface dipole between two metallic oxides caused by localized oxygen vacancies. <i>Physical Review B</i> , 2012, 86, .	1.1	56
60	Cation- <i>Eutectic</i> Transition <i>via</i> Sublattice Melting in $\text{CuInP}_{2}\text{S}_{6}/\text{In}_{4/3}\text{P}_{2}\text{S}_{6}$ van der Waals Layered Crystals. <i>ACS Nano</i> , 2017, 11, 7060-7073.	7.3	54
61	Oxygen-Vacancy-Induced Polar Behavior in $(\text{LaFeO}_{3})_{2}/(\text{SrFeO}_{3})$ Superlattices. <i>Nano Letters</i> , 2014, 14, 2694-2701.	4.5	53
62	Structural Study of $\text{Li}_{1-x}\text{Nb}_{1-x}\text{Ti}_{x+4}\text{O}_{3}$ Solid Solutions. <i>Journal of Solid State Chemistry</i> , 2002, 166, 81-90.	1.4	51
63	Direct Observation of Inherent Atomic-Scale Defect Disorders responsible for High-Performance $\text{Ti}_{1-x}\text{Hf}_{x}\text{NiSn}_{1-x}\text{Sb}_{x}$ Half-Heusler Thermoelectric Alloys. <i>Advanced Materials</i> , 2017, 29, 1702091.		
64	Better Catalysts through Microscopy: Mesoscale M1/M2 Intergrowth in Molybdenum-Vanadium Based Complex Oxide Catalysts for Propane Ammoxidation. <i>ACS Nano</i> , 2015, 9, 3470-3478.	7.3	47
65	Bis(trimethylsilyl) 2-fluoromalonate derivatives as electrolyte additives for high voltage lithium ion batteries. <i>Journal of Power Sources</i> , 2019, 412, 527-535.	4.0	47
66	Direct atomic fabrication and dopant positioning in Si using electron beams with active real-time image-based feedback. <i>Nanotechnology</i> , 2018, 29, 255303.	1.3	46
67	KBaTeBiO_{6} : A Lead-Free, Inorganic Double-Perovskite Semiconductor for Photovoltaic Applications. <i>Chemistry of Materials</i> , 2019, 31, 4769-4778.	3.2	46
68	Oxygen-Induced Surface Reconstruction of SrRuO_{3} and Its Effect on the BaTiO_{3} Interface. <i>ACS Nano</i> , 2010, 4, 4190-4196.	7.3	44
69	Quantitative comparison of bright field and annular bright field imaging modes for characterization of oxygen octahedral tilts. <i>Ultramicroscopy</i> , 2017, 181, 1-7.	0.8	43
70	Misfit accommodation in oxide thin film heterostructures. <i>Acta Materialia</i> , 2013, 61, 2725-2733.	3.8	42
71	Impact of symmetry on the ferroelectric properties of CaTiO_{3} thin films. <i>Applied Physics Letters</i> , 2015, 106, .	1.5	42
72	Significantly Enhanced Emission Stability of CsPbBr_{3} Nanocrystals via Chemically Induced Fusion Growth for Optoelectronic Devices. <i>ACS Applied Nano Materials</i> , 2018, 1, 6091-6098.	2.4	42

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73	Characterizing the Two- and Three-Dimensional Resolution of an Improved Aberration-Corrected STEM. <i>Microscopy and Microanalysis</i> , 2009, 15, 441-453.	0.2	40
74	The Effect of Polar Fluctuation and Lattice Mismatch on Carrier Mobility at Oxide Interfaces. <i>Nano Letters</i> , 2016, 16, 2307-2313.	4.5	39
75	Room Temperature Ferrimagnetism and Ferroelectricity in Strained, Thin Films of $\text{BiFe}_{0.5}\text{Mn}_{0.5}\text{O}_3$. <i>Advanced Functional Materials</i> , 2014, 24, 7478-7487.	7.8	38
76	In situ SEM study of lithium intercalation in individual V_2O_5 nanowires. <i>Nanoscale</i> , 2015, 7, 3022-3027.	2.8	38
77	Universal emergence of spatially modulated structures induced by flexoantiferrodistortive coupling in multiferroics. <i>Physical Review B</i> , 2013, 88, .	1.1	37
78	Exploring Mesoscopic Physics of Vacancy-Ordered Systems through Atomic Scale Observations of Topological Defects. <i>Physical Review Letters</i> , 2012, 109, 065702.	2.9	36
79	Synthesis and Dielectric Properties of $\text{Li}_{1-x}\text{yTa}_{1-x-3y}\text{Ti}_x+4y\text{O}_3$ M-Phase Solid Solutions. <i>Journal of the American Ceramic Society</i> , 2002, 85, 2487-2491.	1.9	33
80	Feature extraction via similarity search: application to atom finding and denoising in electron and scanning probe microscopy imaging. <i>Advanced Structural and Chemical Imaging</i> , 2018, 4, 3.	4.0	31
81	Layer-by-layer and pseudo-two-dimensional growth modes for heteroepitaxial BaTiO_3 films by exploiting kinetic limitations. <i>Applied Physics Letters</i> , 2007, 91, 202901.	1.5	30
82	Polar distortion in ultrathin BaTiO_3 films studied by in situ LEED $\hat{\parallel}$ V. <i>Physical Review B</i> , 2008, 77, .	1.1	29
83	Direct-write liquid phase transformations with a scanning transmission electron microscope. <i>Nanoscale</i> , 2016, 8, 15581-15588.	2.8	29
84	Defect thermodynamics and kinetics in thin strained ferroelectric films: The interplay of possible mechanisms. <i>Physical Review B</i> , 2014, 89, .	1.1	28
85	Structural ϵ Doping to Control Local Magnetization in Isovalent Oxide Heterostructures. <i>Physical Review Letters</i> , 2017, 119, 197204.	2.9	28
86	Multiferroic tunnel junctions and ferroelectric control of magnetic state at interface (invited). <i>Journal of Applied Physics</i> , 2015, 117, .	1.1	26
87	Spatially Resolved Mapping of Oxygen Reduction/Evolution Reaction on Solid-Oxide Fuel Cell Cathodes with Sub-10 nm Resolution. <i>ACS Nano</i> , 2013, 7, 3808-3814.	7.3	25
88	Dual Nanoparticle/Substrate Control of Catalytic Dehydrogenation. <i>Advanced Materials</i> , 2007, 19, 2129-2133.	11.1	24
89	Interface Engineered Room-Temperature Ferromagnetic Insulating State in Ultrathin Manganite Films. <i>Advanced Science</i> , 2020, 7, 1901606.	5.6	24
90	Correlation between Geometrically Induced Oxygen Octahedral Tilts and Multiferroic Behaviors in BiFeO_3 Films. <i>Advanced Functional Materials</i> , 2018, 28, 1800839.	7.8	21

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91	Simultaneously Boosting the Ionic Conductivity and Mechanical Strength of Polymer Gel Electrolyte Membranes by Confining Ionic Liquids into Hollow Silica Nanocavities. Batteries and Supercaps, 2019, 2, 985-991.	2.4	21
92	Interrelation between Structure "Magnetic Properties in $\text{La}_{0.5}\text{Sr}_{0.5}\text{CoO}_3$. Advanced Materials Interfaces, 2014, 1, 1400203.	1.9	20
93	Oxygen Vacancy Injection as a Pathway to Enhancing Electromechanical Response in Ferroelectrics. Advanced Materials, 2022, 34, e2106426.	11.1	20
94	Chapter 9 Materials Applications of Aberration-Corrected Scanning Transmission Electron Microscopy. Advances in Imaging and Electron Physics, 2008, , 327-384.	0.1	19
95	A combined HAADF STEM and density functional theory study of tantalum and niobium locations in the MoVTeTa(Nb)O M1 phases. Catalysis Communications, 2012, 29, 68-72.	1.6	19
96	Nanoscale Probing of Voltage Activated Oxygen Reduction/Evolution Reactions in Nanopatterned $(\text{La}_{1-x}\text{Sr}_x)\text{CoO}_3$ Cathodes. Advanced Energy Materials, 2013, 3, 788-797.	10.2	19
97	Oxygen Disorder, a Way to Accommodate Large Epitaxial Strains in Oxides. Advanced Materials Interfaces, 2015, 2, 1500344.	1.9	19
98	Aberration-corrected STEM: current performance and future directions. Journal of Physics: Conference Series, 2006, 26, 7-12.	0.3	18
99	Rotoflexoelectric coupling impact on the phase diagrams and pyroelectricity of thin SrTiO_3 films. Journal of Applied Physics, 2012, 112, .	1.1	18
100	Local probing of electrochemically induced negative differential resistance in TiO_2 memristive materials. Nanotechnology, 2013, 24, 085702.	1.3	18
101	Atom-by-atom fabrication by electron beam via induced phase transformations. MRS Bulletin, 2017, 42, 653-659.	1.7	18
102	Design of magnetoelectric coupling in a self-assembled epitaxial nanocomposite via chemical interaction. Journal of Materials Chemistry C, 2014, 2, 811-815.	2.7	17
103	Quantum confinement in transition metal oxide quantum wells. Applied Physics Letters, 2015, 106, .	1.5	17
104	Toward Atomic-Scale Tomography: The ATOM Project. Microscopy and Microanalysis, 2011, 17, 708-709.	0.2	16
105	Engineering an Insulating Ferroelectric Superlattice with a Tunable Band Gap from Metallic Components. Physical Review Letters, 2017, 119, 177603.	2.9	16
106	Oxygen-vacancy-mediated dielectric property in perovskite $\text{Eu}_{0.5}\text{Ba}_{0.5}\text{TiO}_3$ epitaxial thin films. Applied Physics Letters, 2018, 112, .	1.5	16
107	Manipulating multiple order parameters via oxygen vacancies: The case of E_u	1.1	15
108	Quantum Confinement in Oxide Heterostructures: Room-Temperature Intersubband Absorption in $\text{SrTiO}_3/\text{LaAlO}_3$ Multiple Quantum Wells. ACS Nano, 2018, 12, 7682-7689.	7.3	15

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109	Room-temperature skyrmions in strain-engineered FeGe thin films. <i>Physical Review B</i> , 2020, 101, .	1.1	15
110	Identifying local structural states in atomic imaging by computer vision. <i>Advanced Structural and Chemical Imaging</i> , 2016, 2, 14.	4.0	14
111	Uncovering Structure-Properties Relations in Fuel Cells and Catalysts with Quantitative Aberration-Corrected STEM and EELS. <i>Microscopy and Microanalysis</i> , 2014, 20, 484-485.	0.2	13
112	Quantitative Analysis of HAADF-STEM Images of MoVTaO M1 Phase Catalyst for Propane Ammoxidation to Acrylonitrile. <i>ChemCatChem</i> , 2015, 7, 3731-3737.	1.8	13
113	Piezoelectric modulation of nonlinear optical response in BaTiO ₃ thin film. <i>Applied Physics Letters</i> , 2018, 113, 132902.	1.5	13
114	Water-mediated electrochemical nano-writing on thin ceria films. <i>Nanotechnology</i> , 2014, 25, 075701.	1.3	12
115	Synthesizing High-Capacity Oxyfluoride Conversion Anodes by Direct Fluorination of Molybdenum Dioxide (MoO ₂). <i>ChemSusChem</i> , 2020, 13, 3825-3834.	3.6	12
116	La(Li _{1/3} Ti _{2/3})O ₃ : a new 1:2 ordered perovskite. <i>Journal of Solid State Chemistry</i> , 2003, 170, 198-201.	1.4	11
117	Electrochemical Strain Microscopy: Probing Electrochemical Transformations in Nanoscale Volumes. <i>Microscopy Today</i> , 2012, 20, 10-15.	0.2	11
118	Role of Solid-State Miscibility during Anion Exchange in Cesium Lead Halide Nanocrystals Probed by Single-Particle Fluorescence. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 952-959.	2.1	11
119	Detection of defects in atomic-resolution images of materials using cycle analysis. <i>Advanced Structural and Chemical Imaging</i> , 2020, 6, .	4.0	11
120	3D Atomic Resolution Imaging through Aberration-Corrected STEM. <i>Microscopy and Microanalysis</i> , 2004, 10, 1172-1173.	0.2	10
121	Atomic resolution study of the interfacial bonding at Si ₃ N ₄ /CeO ₂ grain boundaries. <i>Applied Physics Letters</i> , 2008, 93, 053104.	1.5	9
122	Probing Bias-Dependent Electrochemical Gas-Solid Reactions in (La _x Sr _{1-x})CoO ₃ Cathode Materials. <i>Advanced Functional Materials</i> , 2013, 23, 5027-5036.	7.8	9
123	Evolution of fractal particles in systems with conserved order parameter. <i>Physical Review E</i> , 2000, 61, 1189-1194.	0.8	8
124	Analysis of phase distributions in the Li ₂ O-Nb ₂ O ₅ -TiO ₂ system by piezoresponse imaging. <i>Journal of Materials Research</i> , 2001, 16, 329-332.	1.2	8
125	Sub-Ångstrom Resolution through Aberration-Corrected STEM. <i>Microscopy and Microanalysis</i> , 2003, 9, 926-927.	0.2	8
126	1:2 Cation order in A(Li _{1/3} (Nb,Ta) _{2/3})O ₃ microwave perovskites. <i>Applied Physics Letters</i> , 2004, 84, 1347-1349.	1.5	8

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127	Antisite defects in layered multiferroic $\text{CuCr}_{0.9}\text{In}_{0.1}\text{P}_2\text{S}_6$. <i>Nanoscale</i> , 2015, 7, 18579-18583.	2.8	8
128	Depth resolved lattice-charge coupling in epitaxial BiFeO_3 thin film. <i>Scientific Reports</i> , 2016, 6, 38724.	1.6	8
129	Evidence for Interfacial Octahedral Coupling as a Route to Enhance Magnetoresistance in Perovskite Oxide Superlattices. <i>Advanced Materials Interfaces</i> , 2020, 7, 1901576.	1.9	8
130	Quantum Many-Body Effects in Defective Transition-Metal-Oxide Superlattices. <i>Journal of Chemical Theory and Computation</i> , 2017, 13, 5604-5609.	2.3	7
131	Three-Dimensional Integration of Functional Oxides and Crystalline Silicon for Optical Neuromorphic Computing Using Nanometer-Scale Oxygen Scavenging Barriers. <i>ACS Applied Nano Materials</i> , 2021, 4, 2153-2159.	2.4	7
132	Crystal Symmetry Engineering in Epitaxial Perovskite Superlattices. <i>Advanced Functional Materials</i> , 2021, 31, 2106466.	7.8	7
133	Imaging of Light Atoms in the Presence of Heavy Atomic Columns. <i>Microscopy and Microanalysis</i> , 2010, 16, 92-93.	0.2	6
134	Atomic Structure of Surface Dielectric Dead Layer in BiFeO_3 Thin Film. <i>Microscopy and Microanalysis</i> , 2013, 19, 1928-1929.	0.2	6
135	Towards spin-polarized two-dimensional electron gas at a surface of an antiferromagnetic insulating oxide. <i>Physical Review B</i> , 2016, 94, .	1.1	6
136	Materials Applications of Aberration-Corrected STEM. <i>Microscopy and Microanalysis</i> , 2004, 10, 12-13.	0.2	5
137	Nanoscale modulations in $(\text{KLa})(\text{CaW})\text{O}_6$ and $(\text{NaLa})(\text{CaW})\text{O}_6$. <i>Journal of Solid State Chemistry</i> , 2012, 191, 220-224.	1.4	5
138	Facile MoS_2 Growth on Reduced Graphene-Oxide via Liquid Phase Method. <i>Frontiers in Materials</i> , 2018, 5, .	1.2	5
139	Theory-assisted determination of nano-rippling and impurities in atomic resolution images of angle-mismatched bilayer graphene. <i>2D Materials</i> , 2018, 5, 041008.	2.0	5
140	Confined polaronic transport in $(\text{LaFeO}_3)_n/(\text{SrFeO}_3)_1$ superlattices. <i>APL Materials</i> , 2019, 7, .	2.2	5
141	Epitaxial growth and dielectric characterization of atomically smooth $0.5\text{Ba}(\text{Zr}_{0.2}\text{Ti}_{0.8})\text{O}_3 \approx 0.5(\text{Ba}_{0.7}\text{Ca}_{0.3})\text{TiO}_3$ thin films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2019, 37, .	0.9	5
142	Amorphization and Plasticity of Olivine During Low-Temperature Micropillar Deformation Experiments. <i>Journal of Geophysical Research: Solid Earth</i> , 2020, 125, e2019JB019242.	1.4	5
143	Behavior of Au Species in Au/FeO_x Catalysts as a Result of In-Situ Thermal Treatments, Characterized via Aberration-Corrected STEM Imaging. <i>Microscopy and Microanalysis</i> , 2009, 15, 1482-1483.	0.2	4
144	Ptychographic Imaging in an Aberration Corrected STEM. <i>Microscopy and Microanalysis</i> , 2015, 21, 1219-1220.	0.2	4

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145	Domains and Topological Defects in Layered Ferrielectric Materials: Implications for Nanoelectronics. ACS Applied Nano Materials, 2020, 3, 8161-8166.	2.4	4
146	Probing Nanostructures Site by Site with the Aberration-Corrected STEM. Microscopy and Microanalysis, 2003, 9, 2-3.	0.2	3
147	Single-Atom Sensitivity for Solving Catalysis Problems. Microscopy and Microanalysis, 2004, 10, 460-461.	0.2	3
148	Depth-related Contrast in Aberration-Corrected Confocal STEM. Microscopy and Microanalysis, 2006, 12, 1574-1575.	0.2	3
149	Functional Electron Microscopy for Electrochemistry Research: From the Atomic to the Micro Scale. Electrochemical Society Interface, 2014, 23, 61-66.	0.3	3
150	Studying Dynamics of Oxygen Vacancy Ordering in Epitaxial LaCoO ₃ / SrTiO ₃ Superlattice with Real-Time Observation. Microscopy and Microanalysis, 2014, 20, 422-423.	0.2	3
151	Deep Convolutional Neural Network Approach as a Universal Tool for Determination of Local 3D Structure from ABF STEM Images of Perovskites. Microscopy and Microanalysis, 2018, 24, 530-531.	0.2	3
152	Sub-10 nm Probing of Ferroelectricity in Heterogeneous Materials by Machine Learning Enabled Contact Kelvin Probe Force Microscopy. ACS Applied Electronic Materials, 2021, 3, 4409-4417.	2.0	3
153	Effects of precipitate size and spacing on deformation-induced fcc to bcc phase transformation. Materials Research Letters, 2022, 10, 585-592.	4.1	3
154	Studies of Single Dopant Atoms on Nanocrystalline $\hat{1}^3$ -Alumina Supports by Aberration-Corrected Z-contrast STEM and First Principles Calculations. Microscopy and Microanalysis, 2003, 9, 398-399.	0.2	2
155	Tomographic Imaging of Nanostructures with Next Generation HAADF-STEM. Microscopy and Microanalysis, 2004, 10, 1200-1201.	0.2	2
156	3D Scanning Transmission Electron Microscopy for Catalysts: Imaging and Data Analysis. Microscopy and Microanalysis, 2008, 14, 168-169.	0.2	2
157	Interface Structure-Property Relations Through Aberration-Corrected STEM. Microscopy and Microanalysis, 2010, 16, 1420-1421.	0.2	2
158	Patterning: Atomic-Level Sculpting of Crystalline Oxides: Toward Bulk Nanofabrication with Single Atomic Plane Precision (Small 44/2015). Small, 2015, 11, 5854-5854.	5.2	2
159	Using Multivariate Analysis of Scanning-Rochigram Data to Reveal Material Functionality. Microscopy and Microanalysis, 2016, 22, 292-293.	0.2	2
160	High-resolution structural characterization and magnetic properties of epitaxial Ce-doped yttrium iron garnet thin films. Materials Research Express, 2017, 4, 076101.	0.8	2
161	Atomic-Scale Identification of Planar Defects in Cesium Lead Bromide Perovskite Nanocrystals. Microscopy and Microanalysis, 2018, 24, 100-101.	0.2	2
162	Metal-Nitrogen-Carbon Cluster-Decorated Titanium Carbide is a Durable and Inexpensive Oxygen Reduction Reaction Electrocatalyst. ChemSusChem, 2021, 14, 4680-4689.	3.6	2

#	ARTICLE	IF	CITATIONS
163	3D Imaging with Single Atom Sensitivity using Confocal STEM. <i>Microscopy and Microanalysis</i> , 2006, 12, 1562-1563.	0.2	1
164	Structure-Properties Relationships in SnO ₂ /Al ₂ O ₃ and Pt/SnO ₂ /Al ₂ O ₃ Catalysts. <i>Microscopy and Microanalysis</i> , 2007, 13, .	0.2	1
165	Spatial Resolution, Information Limit, and Contrast Transfer in Piezoresponce Force Microscopy. <i>Microscopy and Microanalysis</i> , 2007, 13, .	0.2	1
166	Direct Imaging of Point Defect Configurations for Au inside Si Nanowires. <i>Microscopy and Microanalysis</i> , 2008, 14, 204-205.	0.2	1
167	Using Neural Network Algorithms for Compositional Mapping in STEM EELS. <i>Microscopy and Microanalysis</i> , 2009, 15, 450-451.	0.2	1
168	Towards the Thinking Microscope. <i>Microscopy and Microanalysis</i> , 2010, 16, 160-161.	0.2	1
169	Untangling Coupled Order Parameters at Complex Oxide Interfaces with Aberration-Corrected STEM and EELS. <i>Microscopy and Microanalysis</i> , 2012, 18, 318-319.	0.2	1
170	Direct Mapping of Octahedral Tilts in Perovskite Oxide Materials Using Bright Field Scanning Transmission Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2012, 18, 420-421.	0.2	1
171	Atomic-Level Fabrication of Crystalline Oxides in STEM. <i>Microscopy and Microanalysis</i> , 2015, 21, 939-940.	0.2	1
172	Local Crystallography: Phases, Symmetries, and Defects from Bottom Up. <i>Microscopy and Microanalysis</i> , 2015, 21, 2203-2204.	0.2	1
173	Investigation of the tunnel magnetoresistance in junctions with a strontium stannate barrier. <i>Journal of Applied Physics</i> , 2016, 120, 233903.	1.1	1
174	Fast Aberration Measurement in Multi-Dimensional STEM. <i>Microscopy and Microanalysis</i> , 2016, 22, 252-253.	0.2	1
175	Identifying Novel Polar Distortion Modes in Engineered Magnetic Oxide Superlattices. <i>Microscopy and Microanalysis</i> , 2017, 23, 1590-1591.	0.2	1
176	Information Localization in the Electron Microscope. <i>Microscopy and Microanalysis</i> , 2003, 9, 960-961.	0.2	0
177	Imaging of Materials through Aberration Corrected STEM. <i>Microscopy and Microanalysis</i> , 2005, 11, .	0.2	0
178	Resolution Limit Measured by Fourier Transform: 0.61 Angstrom Information Transfer through HAADF-STEM. <i>Microscopy and Microanalysis</i> , 2005, 11, .	0.2	0
179	Nanostructure Functionality through Aberration-Corrected STEM. <i>Microscopy and Microanalysis</i> , 2005, 11, .	0.2	0
180	Aberration-Corrected STEM for Understanding of the Catalytic Mechanisms and Development of New Catalysts. <i>Microscopy and Microanalysis</i> , 2005, 11, .	0.2	0

#	ARTICLE	IF	CITATIONS
181	Three Dimensional Characterization of Interfaces using Aberration-corrected STEM. Microscopy and Microanalysis, 2005, 11, .	0.2	0
182	Aberration-Corrected STEM - More than just Higher Resolution. Microscopy and Microanalysis, 2006, 12, 132-133.	0.2	0
183	Vertical Resolution in the Confocal STEM – Present and Future. Microscopy and Microanalysis, 2006, 12, 184-185.	0.2	0
184	Studies of Bimetallic (Pt, Ru) Catalysts with Aberration-Corrected STEM and Theory. Microscopy and Microanalysis, 2006, 12, 774-775.	0.2	0
185	Improving 3D Reconstruction from STEM Data. Microscopy and Microanalysis, 2007, 13, .	0.2	0
186	New Views of Materials through Aberration-Corrected STEM. Microscopy and Microanalysis, 2007, 13, .	0.2	0
187	Investigation of the Atomic Structures of Si ₃ N ₄ /CeO ₂ - $\hat{\Gamma}$ Interfaces using Atomic Resolution Z-contrast Imaging and EELS combined with First-Principles Methods. Microscopy and Microanalysis, 2008, 14, 1364-1365.	0.2	0
188	Interfacial Structure in Multiferroic BiFeO ₃ Thin Films. Microscopy and Microanalysis, 2009, 15, 1028-1029.	0.2	0
189	Study of the Atomic Structures of Si ₃ N ₄ /CeO _{2-x} and Si ₃ N ₄ /SiO ₂ Interfaces Using STEM and First-Principles Methods. Microscopy and Microanalysis, 2009, 15, 1014-1015.	0.2	0
190	Revealing Local Dynamics of Domain Growth in a Ferroelectric Material by In-Situ STEM-SPM. Microscopy and Microanalysis, 2010, 16, 1424-1425.	0.2	0
191	Uncovering Interface Structure by Column Shape Analysis in ADF STEM Images. Microscopy and Microanalysis, 2010, 16, 108-109.	0.2	0
192	Interface Structures and Associated Magnetic Properties of Perovskite Oxide Thin Films Controlled by Substrate Symmetry. Microscopy and Microanalysis, 2011, 17, 1406-1407.	0.2	0
193	MEMS-Based Electrical Testing of IBID Carbon and Tungsten Wires. Microscopy and Microanalysis, 2011, 17, 436-437.	0.2	0
194	Atomic Level View at the Ferroelectric-Antiferroelectric Transition and Phase Coexistence at Morphotropic Phase Boundary by Quantitative Aberration-Corrected STEM. Microscopy and Microanalysis, 2011, 17, 1358-1359.	0.2	0
195	Interplay Between Polarization and Oxygen Stoichiometry at Ferroelectric Domain Boundaries in BiFeO ₃ . Microscopy and Microanalysis, 2011, 17, 1412-1413.	0.2	0
196	In Situ and Post Mortem Observation of Bias Cycling Effects in Thin Film La _{0.8} Sr _{0.2} CoO ₃ Solid Oxide Fuel Cell Cathodes. Microscopy and Microanalysis, 2011, 17, 1596-1597.	0.2	0
197	Unconventional Antiferroelectric Phase Stabilization in Thin Film BiFeO ₃ by Interface-Induced Rotoelectric Coupling Effect. Microscopy and Microanalysis, 2012, 18, 412-413.	0.2	0
198	Interplay of Octahedral Rotations, Magnetic and Electronic Properties in Epitaxial LaCoO ₃ Thin Films. Microscopy and Microanalysis, 2013, 19, 1924-1925.	0.2	0

#	ARTICLE	IF	CITATIONS
199	Novel M1/M2 Heterostructure in Mo-V-M-Ta (M = Te or Sb) Complex Oxide Catalyst Revealed by Aberration Corrected HAADF STEM. <i>Microscopy and Microanalysis</i> , 2014, 20, 110-111.	0.2	0
200	Toward 3D Mapping of Octahedral Rotations at Perovskite Thin Film Heterointerfaces Unit Cell by Unit Cell. <i>Microscopy and Microanalysis</i> , 2014, 20, 1038-1039.	0.2	0
201	Moving atomic-resolution imaging into the age of deep data. <i>Microscopy and Microanalysis</i> , 2015, 21, 1607-1608.	0.2	0
202	Automated and Shaped-Controlled Liquid STEM Nanolithography. <i>Microscopy and Microanalysis</i> , 2015, 21, 1127-1128.	0.2	0
203	STEM in 4 Dimensions: Using Multivariate Analysis of Ptychographic Data to Reveal Material Functionality. <i>Microscopy and Microanalysis</i> , 2015, 21, 1863-1864.	0.2	0
204	Phase Transformations and Surface/Interface Properties in Functional Perovskites with Aberration-Corrected STEM/EELS. <i>Microscopy and Microanalysis</i> , 2015, 21, 2429-2430.	0.2	0
205	Local Crystallography for Quantitative Analysis of Atomically Resolved Images. <i>Microscopy and Microanalysis</i> , 2016, 22, 948-949.	0.2	0
206	Distortion Correction in Scanning Transmission Electron Microscopy with Controllable Scanning Pathways. <i>Microscopy and Microanalysis</i> , 2016, 22, 900-901.	0.2	0
207	Tracking BO 6 Coupling in Perovskite Superlattices to Engineer Magnetic Interface Behavior. <i>Microscopy and Microanalysis</i> , 2016, 22, 904-905.	0.2	0
208	Big, deep, and smart data from atomically resolved images: exploring the origins of materials functionality. <i>Microscopy and Microanalysis</i> , 2016, 22, 1416-1417.	0.2	0
209	Growth and In Situ Characterization of Oxide Epitaxial Heterostructures with Atomic Plane Precision. <i>Microscopy and Microanalysis</i> , 2016, 22, 1504-1505.	0.2	0
210	Polar phase transitions in heteroepitaxial stabilized $\text{La}_{0.5}\text{Y}_{0.5}\text{AlO}_3$ thin films. <i>Journal of Physics Condensed Matter</i> , 2017, 29, 405401.	0.7	0
211	Acquisition and Fast Analysis of Multi-Dimensional STEM Data. <i>Microscopy and Microanalysis</i> , 2017, 23, 168-169.	0.2	0
212	Investigating Ionic Transport Anisotropy in Oxygen Deficient Lanthanum Cobaltites via STEM and First Principles Theory. <i>Microscopy and Microanalysis</i> , 2017, 23, 1410-1411.	0.2	0
213	Towards Atomic-Scale Fabrication in Silicon. <i>Microscopy and Microanalysis</i> , 2018, 24, 158-159.	0.2	0
214	Towards the Mechanism of Oxygen Vacancy Formation & Ordering via Tracking of Beam-Induced Dynamics and Density Functional Theory. <i>Microscopy and Microanalysis</i> , 2018, 24, 92-93.	0.2	0
215	Atomic Manipulation on a Scanning Transmission Electron Microscope Platform using Real-Time Image Processing and Feedback. <i>Microscopy and Microanalysis</i> , 2018, 24, 534-535.	0.2	0
216	Rapid Atomic-Resolution Image Analysis: Towards Near-Instant Feedback. <i>Microscopy and Microanalysis</i> , 2018, 24, 538-539.	0.2	0

#	ARTICLE	IF	CITATIONS
217	A STEM-based Path Towards Atomic-scale Silicon-based Devices. <i>Microscopy and Microanalysis</i> , 2019, 25, 2290-2291.	0.2	0
218	Tracing Oxygen Transport Pathways with In-Situ STEM and Theory. <i>Microscopy and Microanalysis</i> , 2019, 25, 1428-1429.	0.2	0
219	Quantitative Aberration-Corrected STEM for Studies of Oxide Superlattices and Topological Defects in Layered Ferroelectrics. <i>Microscopy and Microanalysis</i> , 2020, 26, 1194-1195.	0.2	0
220	Prospects for single atom location and identification with aberration-corrected STEM. , 2018, , 523-532.		0