Albina Y Borisevich

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/4288784/publications.pdf

Version: 2024-02-01

220 papers 9,770 citations

26567 56 h-index 95 g-index

226 all docs

226 docs citations

times ranked

226

11298 citing authors

#	Article	IF	CITATIONS
1	Oxygen Vacancy Injection as a Pathway to Enhancing Electromechanical Response in Ferroelectrics. Advanced Materials, 2022, 34, e2106426.	11.1	20
2	Effects of precipitate size and spacing on deformation-induced fcc to bcc phase transformation. Materials Research Letters, 2022, 10, 585-592.	4.1	3
3	Three-Dimensional Integration of Functional Oxides and Crystalline Silicon for Optical Neuromorphic Computing Using Nanometer-Scale Oxygen Scavenging Barriers. ACS Applied Nano Materials, 2021, 4, 2153-2159.	2.4	7
4	Bifunctional nanoprecipitates strengthen and ductilize a medium-entropy alloy. Nature, 2021, 595, 245-249.	13.7	141
5	Crystal Symmetry Engineering in Epitaxial Perovskite Superlattices. Advanced Functional Materials, 2021, 31, 2106466.	7.8	7
6	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
7	Metalâ€Nitrogen arbon Clusterâ€Decorated Titanium Carbide is a Durable and Inexpensive Oxygen Reduction Reaction Electrocatalyst. ChemSusChem, 2021, 14, 4680-4689.	3.6	2
8	Interface Engineered Roomâ€Temperature Ferromagnetic Insulating State in Ultrathin Manganite Films. Advanced Science, 2020, 7, 1901606.	5 . 6	24
9	Quantitative Aberration-Corrected STEM for Studies of Oxide Superlattices and Topological Defects in Layered Ferroelectrics. Microscopy and Microanalysis, 2020, 26, 1194-1195.	0.2	O
10	Synthesizing Highâ€Capacity Oxyfluoride Conversion Anodes by Direct Fluorination of Molybdenum Dioxide (MoO ₂). ChemSusChem, 2020, 13, 3825-3834.	3.6	12
11	Room-temperature skyrmions in strain-engineered FeGe thin films. Physical Review B, 2020, 101, .	1.1	15
12	Evidence for Interfacial Octahedral Coupling as a Route to Enhance Magnetoresistance in Perovskite Oxide Superlattices. Advanced Materials Interfaces, 2020, 7, 1901576.	1.9	8
13	Domains and Topological Defects in Layered Ferrielectric Materials: Implications for Nanoelectronics. ACS Applied Nano Materials, 2020, 3, 8161-8166.	2.4	4
14	Role of Solid-State Miscibility during Anion Exchange in Cesium Lead Halide Nanocrystals Probed by Single-Particle Fluorescence. Journal of Physical Chemistry Letters, 2020, 11, 952-959.	2.1	11
15	Amorphization and Plasticity of Olivine During Lowâ€√emperature Micropillar Deformation Experiments. Journal of Geophysical Research: Solid Earth, 2020, 125, e2019JB019242.	1.4	5
16	Detection of defects in atomic-resolution images of materials using cycle analysis. Advanced Structural and Chemical Imaging, 2020, 6, .	4.0	11
17	A STEM-based Path Towards Atomic-scale Silicon-based Devices. Microscopy and Microanalysis, 2019, 25, 2290-2291.	0.2	O
18	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

#	Article	IF	CITATIONS
19	Tracing Oxygen Transport Pathways with In-Situ STEM and Theory. Microscopy and Microanalysis, 2019, 25, 1428-1429.	0.2	0
20	Confined polaronic transport in (LaFeO3) <i>n</i> /(SrFeO3)1 superlattices. APL Materials, 2019, 7, .	2.2	5
21	KBaTeBiO ₆ : A Lead-Free, Inorganic Double-Perovskite Semiconductor for Photovoltaic Applications. Chemistry of Materials, 2019, 31, 4769-4778.	3.2	46
22	Epitaxial growth and dielectric characterization of atomically smooth 0.5Ba(Zr0.2Ti0.8)O3–0.5(Ba0.7Ca0.3)TiO3 thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2019, 37, .	0.9	5
23	Atomic Structure and Electrical Activity of Grain Boundaries and Ruddlesden–Popper Faults in Cesium Lead Bromide Perovskite. Advanced Materials, 2019, 31, e1805047.	11.1	72
24	Bis(trimethylsilyl) 2-fluoromalonate derivatives as electrolyte additives for high voltage lithium ion batteries. Journal of Power Sources, 2019, 412, 527-535.	4.0	47
25	Evaluation of microstructure and mechanical property variations in AlxCoCrFeNi high entropy alloys produced by a high-throughput laser deposition method. Intermetallics, 2018, 95, 110-118.	1.8	107
26	Direct atomic fabrication and dopant positioning in Si using electron beams with active real-time image-based feedback. Nanotechnology, 2018, 29, 255303.	1.3	46
27	Feature extraction via similarity search: application to atom finding and denoising in electron and scanning probe microscopy imaging. Advanced Structural and Chemical Imaging, 2018, 4, 3.	4.0	31
28	Oxygen-vacancy-mediated dielectric property in perovskite Eu0.5Ba0.5TiO3- \hat{l}' epitaxial thin films. Applied Physics Letters, 2018, 112, .	1.5	16
29	Correlation between Geometrically Induced Oxygen Octahedral Tilts and Multiferroic Behaviors in BiFeO ₃ Films. Advanced Functional Materials, 2018, 28, 1800839.	7.8	21
30	Towards Atomic-Scale Fabrication in Silicon. Microscopy and Microanalysis, 2018, 24, 158-159.	0.2	0
31	Piezoelectric modulation of nonlinear optical response in BaTiO3 thin film. Applied Physics Letters, 2018, 113, 132902.	1.5	13
32	Towards the Mechanism of Oxygen Vacancy Formation & Ordering via Tracking of Beam-Induced Dynamics and Density Functional Theory. Microscopy and Microanalysis, 2018, 24, 92-93.	0.2	0
33	Significantly Enhanced Emission Stability of CsPbBr ₃ Nanocrystals via Chemically Induced Fusion Growth for Optoelectronic Devices. ACS Applied Nano Materials, 2018, 1, 6091-6098.	2.4	42
34	Facile MoS2 Growth on Reduced Graphene-Oxide via Liquid Phase Method. Frontiers in Materials, 2018, 5, .	1.2	5
35	Quantum Confinement in Oxide Heterostructures: Room-Temperature Intersubband Absorption in SrTiO ₃ /LaAlO ₃ Multiple Quantum Wells. ACS Nano, 2018, 12, 7682-7689.	7.3	15
36	Deep Convolutional Neural Network Approach as a Universal Tool for Determination of Local 3D Structure from ABF STEM Images of Perovskitesy. Microscopy and Microanalysis, 2018, 24, 530-531.	0.2	3

3

#	Article	IF	Citations
37	Atomic Manipulation on a Scanning Transmission Electron Microscope Platform using Real-Time Image Processing and Feedback. Microscopy and Microanalysis, 2018, 24, 534-535.	0.2	0
38	Rapid Atomic-Resolution Image Analysis: Towards Near-Instant Feedback. Microscopy and Microanalysis, 2018, 24, 538-539.	0.2	0
39	Theory-assisted determination of nano-rippling and impurities in atomic resolution images of angle-mismatched bilayer graphene. 2D Materials, 2018, 5, 041008.	2.0	5
40	Atomic-Scale Identification of Planar Defects in Cesium Lead Bromide Perovskite Nanocrystals. Microscopy and Microanalysis, 2018, 24, 100-101.	0.2	2
41	Prospects for single atom location and identification with aberration-corrected STEM., 2018, , 523-532.		0
42	Quantitative comparison of bright field and annular bright field imaging modes for characterization of oxygen octahedral tilts. Ultramicroscopy, 2017, 181, 1-7.	0.8	43
43	<i>In Situ</i> Observation of Oxygen Vacancy Dynamics and Ordering in the Epitaxial LaCoO ₃ System. ACS Nano, 2017, 11, 6942-6949.	7.3	89
44	Interface Engineering of Domain Structures in BiFeO ₃ Thin Films. Nano Letters, 2017, 17, 486-493.	4. 5	69
45	Atom-by-atom fabrication by electron beam via induced phase transformations. MRS Bulletin, 2017, 42, 653-659.	1.7	18
46	Quantum Many-Body Effects in Defective Transition-Metal-Oxide Superlattices. Journal of Chemical Theory and Computation, 2017, 13, 5604-5609.	2.3	7
47	xmlns:mml="http://www.w3.org/1998/Math/MathML"> <mml:mrow><mml:mi mathvariant="normal">E</mml:mi><mml:msub><mml:mi mathvariant="normal">u</mml:mi><mml:mrow><mml:mn>0.5</mml:mn></mml:mrow></mml:msub><mml:mi mathvariant="normal">B</mml:mi><mml:msub><mml:mi< th=""><th>1.1</th><th>15</th></mml:mi<></mml:msub></mml:mrow>	1.1	15
48	Direct Observation of Inherent Atomicâ€Scale Defect Disorders responsible for Highâ€Performance Ti _{1â°'} <i>_x</i> Hsub> <i>_y</i> Halfâ€Heusler Thermoelectric Alloys. Advanced Materials, 2017, 29, 1702091.	ik/mml:m s ub.x y <th>i><mml:msu ub49(i></mml:msu </th>	i> <mml:msu ub49(i></mml:msu
49	Polar phase transitions in heteroepitaxial stabilized La _{0.5} Y _{0.5} AlO ₃ thin films. Journal of Physics Condensed Matter, 2017, 29, 405401.	0.7	0
50	Engineering an Insulating Ferroelectric Superlattice with a Tunable Band Gap from Metallic Components. Physical Review Letters, 2017, 119, 177603.	2.9	16
51	Structural " δDoping―to Control Local Magnetization in Isovalent Oxide Heterostructures. Physical Review Letters, 2017, 119, 197204.	2.9	28
52	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
53	Cation–Eutectic Transition <i>via</i> Sublattice Melting in CulnP ₂ S ₆ /ln _{4/3} P ₂ S ₆ van der Waals Layered Crystals. ACS Nano, 2017, 11, 7060-7073.	7.3	54
54	Acquisition and Fast Analysis of Multi-Dimensional STEM Data. Microscopy and Microanalysis, 2017, 23, 168-169.	0.2	0

#	Article	IF	Citations
55	Investigating Ionic Transport Anisotropy in Oxygen Deficient Lanthanum Cobaltites via STEM and First Principles Theory. Microscopy and Microanalysis, 2017, 23, 1410-1411.	0.2	O
56	Identifying Novel Polar Distortion Modes in Engineered Magnetic Oxide Superlattices. Microscopy and Microanalysis, 2017, 23, 1590-1591.	0.2	1
57	Local Crystallography for Quantitative Analysis of Atomically Resolved Images. Microscopy and Microanalysis, 2016, 22, 948-949.	0.2	0
58	Distortion Correction in Scanning Transmission Electron Microcopy with Controllable Scanning Pathways. Microscopy and Microanalysis, 2016, 22, 900-901.	0.2	0
59	Tracking BO 6 Coupling in Perovskite Superlattices to Engineer Magnetic Interface Behavior. Microscopy and Microanalysis, 2016, 22, 904-905.	0.2	0
60	Investigation of the tunnel magnetoresistance in junctions with a strontium stannate barrier. Journal of Applied Physics, 2016, 120, 233903.	1.1	1
61	Big, deep, and smart data from atomically resolved images: exploring the origins of materials functionality. Microscopy and Microanalysis, 2016, 22, 1416-1417.	0.2	0
62	Depth resolved lattice-charge coupling in epitaxial BiFeO3 thin film. Scientific Reports, 2016, 6, 38724.	1.6	8
63	Fast Aberration Measurement in Multi-Dimensional STEM. Microscopy and Microanalysis, 2016, 22, 252-253.	0.2	1
64	Using Multivariate Analysis of Scanning-Rochigram Data to Reveal Material Functionality. Microscopy and Microanalysis, 2016, 22, 292-293.	0.2	2
65	Growth and In Situ Characterization of Oxide Epitaxial Heterostructures with Atomic Plane Precision. Microscopy and Microanalysis, 2016, 22, 1504-1505.	0.2	0
66	Big Data Analytics for Scanning Transmission Electron Microscopy Ptychography. Scientific Reports, 2016, 6, 26348.	1.6	62
67	Directing Matter: Toward Atomic-Scale 3D Nanofabrication. ACS Nano, 2016, 10, 5600-5618.	7.3	99
68	The Effect of Polar Fluctuation and Lattice Mismatch on Carrier Mobility at Oxide Interfaces. Nano Letters, 2016, 16, 2307-2313.	4.5	39
69	Direct-write liquid phase transformations with a scanning transmission electron microscope. Nanoscale, 2016, 8, 15581-15588.	2.8	29
70	Dynamic scan control in STEM: spiral scans. Advanced Structural and Chemical Imaging, 2016, 2, .	4.0	59
71	A Sacrificial Coating Strategy Toward Enhancement of Metal–Support Interaction for Ultrastable Au Nanocatalysts. Journal of the American Chemical Society, 2016, 138, 16130-16139.	6.6	217
72	Towards spin-polarized two-dimensional electron gas at a surface of an antiferromagnetic insulating oxide. Physical Review B, 2016, 94, .	1.1	6

#	Article	IF	Citations
73	Identifying local structural states in atomic imaging by computer vision. Advanced Structural and Chemical Imaging, 2016, 2, 14.	4.0	14
74	Population and hierarchy of active species in gold iron oxide catalysts for carbon monoxide oxidation. Nature Communications, 2016, 7, 12905.	5.8	62
75	Graphene-Analogues Boron Nitride Nanosheets Confining Ionic Liquids: A High-Performance Quasi-Liquid Solid Electrolyte. Small, 2016, 12, 3535-3542.	5.2	62
76	Palladium-tin catalysts for the direct synthesis of H ₂ O ₂ with high selectivity. Science, 2016, 351, 965-968.	6.0	465
77	Fire up the atom forge. Nature, 2016, 539, 485-487.	13.7	79
78	Patterning: Atomicâ€Level Sculpting of Crystalline Oxides: Toward Bulk Nanofabrication with Single Atomic Plane Precision (Small 44/2015). Small, 2015, 11, 5854-5854.	5.2	2
79	Moving atomic-resolution imaging into the age of deep data. Microscopy and Microanalysis, 2015, 21, 1607-1608.	0.2	0
80	Automated and Shaped-Controlled Liquid STEM Nanolithography. Microscopy and Microanalysis, 2015, 21, 1127-1128.	0.2	0
81	Quantitative Analysis of HAADF–STEM Images of MoVTeTaO M1 Phase Catalyst for Propane Ammoxidation to Acrylonitrile. ChemCatChem, 2015, 7, 3731-3737.	1.8	13
82	Atomicâ€Level Sculpting of Crystalline Oxides: Toward Bulk Nanofabrication with Single Atomic Plane Precision. Small, 2015, 11, 5895-5900.	5.2	73
83	Atomic-Level Fabrication of Crystalline Oxides in STEM. Microscopy and Microanalysis, 2015, 21, 939-940.	0.2	1
84	Ptychographic Imaging in an Aberration Corrected STEM. Microscopy and Microanalysis, 2015, 21, 1219-1220.	0.2	4
85	STEM in 4 Dimensions: Using Multivariate Analysis of Ptychographic Data to Reveal Material Functionality. Microscopy and Microanalysis, 2015, 21, 1863-1864.	0.2	0
86	Local Crystallography: Phases, Symmetries, and Defects from Bottom Up. Microscopy and Microanalysis, 2015, 21, 2203-2204.	0.2	1
87	Phase Transformations and Surface/Interface Properties in Functional Perovskites with Aberration-Corrected STEM/EELS. Microscopy and Microanalysis, 2015, 21, 2429-2430.	0.2	0
88	Multiferroic tunnel junctions and ferroelectric control of magnetic state at interface (invited). Journal of Applied Physics, 2015, 117, .	1.1	26
89	Quantum confinement in transition metal oxide quantum wells. Applied Physics Letters, 2015, 106, .	1.5	17
90	Big data and deep data in scanning and electron microscopies: deriving functionality from multidimensional data sets. Advanced Structural and Chemical Imaging, 2015, 1, 6.	4.0	74

#	Article	IF	Citations
91	The observation of square ice in graphene questioned. Nature, 2015, 528, E1-E2.	13.7	95
92	High- <i>T</i> _c Layered Ferrielectric Crystals by Coherent Spinodal Decomposition. ACS Nano, 2015, 9, 12365-12373.	7.3	67
93	In situ SEM study of lithium intercalation in individual V ₂ O ₅ nanowires. Nanoscale, 2015, 7, 3022-3027.	2.8	38
94	Identification of phases, symmetries and defects through local crystallography. Nature Communications, 2015, 6, 7801.	5.8	63
95	Towards 3D Mapping of BO ₆ Octahedron Rotations at Perovskite Heterointerfaces, Unit Cell by Unit Cell. ACS Nano, 2015, 9, 8412-8419.	7.3	78
96	Dimensionality Controlled Octahedral Symmetry-Mismatch and Functionalities in Epitaxial LaCoO ₃ /SrTiO ₃ Heterostructures. Nano Letters, 2015, 15, 4677-4684.	4.5	71
97	Observation of a periodic array of flux-closure quadrants in strained ferroelectric PbTiO ₃ films. Science, 2015, 348, 547-551.	6.0	430
98	CulnP ₂ S ₆ Room Temperature Layered Ferroelectric. Nano Letters, 2015, 15, 3808-3814.	4.5	328
99	Better Catalysts through Microscopy: Mesoscale M1/M2 Intergrowth in Molybdenum–Vanadium Based Complex Oxide Catalysts for Propane Ammoxidation. ACS Nano, 2015, 9, 3470-3478.	7.3	47
100	Impact of symmetry on the ferroelectric properties of CaTiO3 thin films. Applied Physics Letters, 2015, $106, .$	1.5	42
101	Oxygen Disorder, a Way to Accommodate Large Epitaxial Strains in Oxides. Advanced Materials Interfaces, 2015, 2, 1500344.	1.9	19
102	Antisite defects in layered multiferroic CuCr _{0.9} ln _{0.1} P ₂ S ₆ . Nanoscale, 2015, 7, 18579-18583.	2.8	8
103	Room Temperature Ferrimagnetism and Ferroelectricity in Strained, Thin Films of BiFe _{0.5} Mn _{0.5} O ₃ . Advanced Functional Materials, 2014, 24, 7478-7487.	7.8	38
104	Interrelation between Structure – Magnetic Properties in La _{0.5} Sr _{0.5} CoO ₃ . Advanced Materials Interfaces, 2014, 1, 1400203.	1.9	20
105	Water-mediated electrochemical nano-writing on thin ceria films. Nanotechnology, 2014, 25, 075701.	1.3	12
106	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
107	Direct observation of ferroelectric field effect andÂvacancy-controlled screening at the BiFeO3/LaxSr1â°'xMnO3 interface. Nature Materials, 2014, 13, 1019-1025.	13.3	218
108	Oxygen-Vacancy-Induced Polar Behavior in (LaFeO3)2/(SrFeO3) Superlattices. Nano Letters, 2014, 14, 2694-2701.	4.5	53

#	Article	IF	Citations
109	Defect thermodynamics and kinetics in thin strained ferroelectric films: The interplay of possible mechanisms. Physical Review B, 2014, 89, .	1.1	28
110	Functional Electron Microscopy for Electrochemistry Research: From the Atomic to the Micro Scale. Electrochemical Society Interface, 2014, 23, 61-66.	0.3	3
111	Novel M1/M2 Heterostructure in Mo-V-M-Ta (M = Te or Sb) Complex Oxide Catalyst Revealed by Aberration Corrected HAADF STEM. Microscopy and Microanalysis, 2014, 20, 110-111.	0.2	0
112	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
113	Uncovering Structure-Properties Relations in Fuel Cells and Catalysts with Quantitative Aberration-Corrected STEM and EELS. Microscopy and Microanalysis, 2014, 20, 484-485.	0.2	13
114	Toward 3D Mapping of Octahedral Rotations at Perovskite Thin Film Heterointerfaces Unit Cell by Unit Cell. Microscopy and Microanalysis, 2014, 20, 1038-1039.	0.2	0
115	Nanoscale Probing of Voltage Activated Oxygen Reduction/Evolution Reactions in Nanopatterned (La _{<i>x</i>} Sr _{1â€<i>x</i>})CoO _{3â€} _{<i>í´</i>} Cathodes. Advanced Energy Materials, 2013, 3, 788-797.	10.2	19
116	Universal emergence of spatially modulated structures induced by flexoantiferrodistortive coupling in multiferroics. Physical Review B, 2013, 88, .	1.1	37
117	Probing Biasâ€Dependent Electrochemical Gas–Solid Reactions in (La _{<i>x</i>} Sr _{1–<i>x</i>})CoO _{3–} _{<i>δ</i>} Cathode Materials. Advanced Functional Materials, 2013, 23, 5027-5036.	7.8	9
118	Spatially Resolved Mapping of Oxygen Reduction/Evolution Reaction on Solid-Oxide Fuel Cell Cathodes with Sub-10 nm Resolution. ACS Nano, 2013, 7, 3808-3814.	7.3	25
119	Enhanced tunnelling electroresistance effect due to a ferroelectrically induced phase transition at a magnetic complex oxide interface. Nature Materials, 2013, 12, 397-402.	13.3	283
120	Misfit accommodation in oxide thin film heterostructures. Acta Materialia, 2013, 61, 2725-2733.	3.8	42
121	Local probing of electrochemically induced negative differential resistance in TiO2memristive materials. Nanotechnology, 2013, 24, 085702.	1.3	18
122	Nitrogen: unraveling the secret to stable carbon-supported Pt-alloy electrocatalysts. Energy and Environmental Science, 2013, 6, 2957.	15.6	99
123	Interplay of Octahedral Tilts and Polar Order in BiFeO ₃ Films. Advanced Materials, 2013, 25, 2497-2504.	11.1	101
124	Atomic Structure of Surface Dielectric Dead Layer in BiFeO3 Thin Film. Microscopy and Microanalysis, 2013, 19, 1928-1929.	0.2	6
125	Interplay of Octahedral Rotations, Magnetic and Electronic Properties in Epitaxial LaCoO3 Thin Films. Microscopy and Microanalysis, 2013, 19, 1924-1925.	0.2	0
126	Unconventional Antiferroelectric Phase Stabilization in Thin Film BiFeO3 by Interface-Induced Rotoelectric Coupling Effect. Microscopy and Microanalysis, 2012, 18, 412-413.	0.2	0

#	Article	IF	CITATIONS
127	Untangling Coupled Order Parameters at Complex Oxide Interfaces with Aberration-Corrected STEM and EELS. Microscopy and Microanalysis, 2012, 18, 318-319.	0.2	1
128	Electrochemical Strain Microscopy: Probing Electrochemical Transformations in Nanoscale Volumes. Microscopy Today, 2012, 20, 10-15.	0.2	11
129	Beyond Condensed Matter Physics on the Nanoscale: The Role of Ionic and Electrochemical Phenomena in the Physical Functionalities of Oxide Materials. ACS Nano, 2012, 6, 10423-10437.	7.3	88
130	A combined HAADF STEM and density functional theory study of tantalum and niobium locations in the Mo–V–Te–Ta(Nb)–O M1 phases. Catalysis Communications, 2012, 29, 68-72.	1.6	19
131	Conductivity of twin-domain-wall/surface junctions in ferroelastics: Interplay of deformation potential, octahedral rotations, improper ferroelectricity, and flexoelectric coupling. Physical Review B, 2012, 86, .	1.1	74
132	Roto-flexoelectric coupling impact on the phase diagrams and pyroelectricity of thin SrTiO3 films. Journal of Applied Physics, 2012, 112, .	1.1	18
133	Nanoscale modulations in (KLa)(CaW)O6 and (NaLa)(CaW)O6. Journal of Solid State Chemistry, 2012, 191, 220-224.	1.4	5
134	Interface dipole between two metallic oxides caused by localized oxygen vacancies. Physical Review B, 2012, 86, .	1.1	56
135	Direct Mapping of Octahedral Tilts in Perovskite Oxide Materials Using Bright Field Scanning Transmission Electron Microscopy. Microscopy and Microanalysis, 2012, 18, 420-421.	0.2	1
136	Probing oxygen vacancy concentration and homogeneity in solid-oxide fuel-cell cathode materials on the subunit-cell level. Nature Materials, 2012, 11, 888-894.	13.3	282
137	Exploring Mesoscopic Physics of Vacancy-Ordered Systems through Atomic Scale Observations of Topological Defects. Physical Review Letters, 2012, 109, 065702.	2.9	36
138	Ultrathin limit and dead-layer effects in local polarization switching of BiFeO <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow></mml:mrow><mml:mn>3</mml:mn></mml:msub></mml:math> . Physical Review B, 2012, 85, .	1.1	71
139	Atomic-scale evolution of modulated phases at the ferroelectric–antiferroelectric morphotropic phase boundary controlled by flexoelectric interaction. Nature Communications, 2012, 3, 775.	5.8	145
140	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
141	MEMS-Based Electrical Testing of IBID Carbon and Tungsten Wires. Microscopy and Microanalysis, 2011, 17, 436-437.	0.2	0
142	Toward Atomic-Scale Tomography: The ATOM Project. Microscopy and Microanalysis, 2011, 17, 708-709.	0.2	16
143	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
144	Interplay Between Polarization and Oxygen Stoichiometry at Ferroelectric Domain Boundaries in BiFeO3. Microscopy and Microanalysis, 2011, 17, 1412-1413.	0.2	0

#	Article	IF	Citations
145	In Situ and Post Mortem Observation of Bias Cycling Effects in Thin Film La0.8Sr0.2CoO3 Solid Oxide Fuel Cell Cathodes. Microscopy and Microanalysis, 2011, 17, 1596-1597.	0.2	O
146	Atomically Resolved Mapping of Polarization and Electric Fields Across Ferroelectric/Oxide Interfaces by Zâ€contrast Imaging. Advanced Materials, 2011, 23, 2474-2479.	11.1	79
147	Watching domains grow: <i>In-situ</i> studies of polarization switching by combined scanning probe and scanning transmission electron microscopy. Journal of Applied Physics, 2011, 110, .	1.1	57
148	Interface Structure-Property Relations Through Aberration-Corrected STEM. Microscopy and Microanalysis, 2010, 16, 1420-1421.	0.2	2
149	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
150	Uncovering Interface Structure by Column Shape Analysis in ADF STEM Images. Microscopy and Microanalysis, 2010, 16, 108-109.	0.2	0
151	Towards the Thinking Microscope. Microscopy and Microanalysis, 2010, 16, 160-161.	0.2	1
152	Nanoscale Structural and Chemical Properties of Antipolar Clusters in Sm-Doped BiFeO ₃ Ferroelectric Epitaxial Thin Films. Chemistry of Materials, 2010, 22, 2588-2596.	3.2	73
153	Defectâ€Mediated Polarization Switching in Ferroelectrics and Related Materials: From Mesoscopic Mechanisms to Atomistic Control. Advanced Materials, 2010, 22, 314-322.	11.1	62
154	Finite size and intrinsic field effect on the polar-active properties of ferroelectric-semiconductor heterostructures. Physical Review B, 2010, 81, .	1.1	57
155	Imaging of Light Atoms in the Presence of Heavy Atomic Columns. Microscopy and Microanalysis, 2010, 16, 92-93.	0.2	6
156	Oxygen Reduction Kinetics Enhancement on a Heterostructured Oxide Surface for Solid Oxide Fuel Cells. Journal of Physical Chemistry Letters, 2010, 1, 3149-3155.	2.1	136
157	Control of Octahedral Tilts and Magnetic Properties of Perovskite Oxide Heterostructures by Substrate Symmetry. Physical Review Letters, 2010, 105, 227203.	2.9	211
158	Suppression of Octahedral Tilts and Associated Changes in Electronic Properties at Epitaxial Oxide Heterostructure Interfaces. Physical Review Letters, 2010, 105, 087204.	2.9	308
159	Oxygen-Induced Surface Reconstruction of SrRuO ₃ and Its Effect on the BaTiO ₃ Interface. ACS Nano, 2010, 4, 4190-4196.	7.3	44
160	Mapping Octahedral Tilts and Polarization Across a Domain Wall in BiFeO ₃ from Z-Contrast Scanning Transmission Electron Microscopy Image Atomic Column Shape Analysis. ACS Nano, 2010, 4, 6071-6079.	7.3	150
161	Aberration-corrected scanning transmission electron microscopy: from atomic imaging and analysis to solving energy problems. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2009, 367, 3709-3733.	1.6	89
162	Evolution of gold structure during thermal treatment of Au/FeOx catalysts revealed by aberration-corrected electron microscopy. Journal of Electron Microscopy, 2009, 58, 199-212.	0.9	70

#	Article	IF	Citations
163	Using Neural Network Algorithms for Compositional Mapping in STEM EELS. Microscopy and Microanalysis, 2009, 15, 450-451.	0.2	1
164	Characterizing the Two- and Three-Dimensional Resolution of an Improved Aberration-Corrected STEM. Microscopy and Microanalysis, 2009, 15, 441-453.	0.2	40
165	Interfacial Structure in Multiferroic BiFeO3 Thin Films. Microscopy and Microanalysis, 2009, 15, 1028-1029.	0.2	0
166	Study of the Atomic Structures of Si3N4/CeO2-x and Si3N4/SiO2 Interfaces Using STEM and First-Principles Methods. Microscopy and Microanalysis, 2009, 15, 1014-1015.	0.2	0
167	Behavior of Au Species in Au/FeOx Catalysts as a Result of In-Situ Thermal Treatments, Characterized via Aberration-Corrected STEM Imaging. Microscopy and Microanalysis, 2009, 15, 1482-1483.	0.2	4
168	Chapter 9 Materials Applications of Aberration-Corrected Scanning Transmission Electron Microscopy. Advances in Imaging and Electron Physics, 2008, , 327-384.	0.1	19
169	Crystal Chemistry of Complex Perovskites: New Cation-Ordered Dielectric Oxides. Annual Review of Materials Research, 2008, 38, 369-401.	4.3	177
170	Point Defect Configurations of Supersaturated Au Atoms Inside Si Nanowires. Nano Letters, 2008, 8, 1016-1019.	4.5	119
171	Polar distortion in ultrathinBaTiO3films studied byin situLEEDIâ^'V. Physical Review B, 2008, 77, .	1.1	29
172	Atomic resolution study of the interfacial bonding at Si3N4/CeO2â^Î grain boundaries. Applied Physics Letters, 2008, 93, 053104.	1.5	9
173	Investigation of the Atomic Structures of Si3N4/CeO2-δInterfaces using Atomic Resolution Z-contrast Imaging and EELS combined with First-Principles Methods. Microscopy and Microanalysis, 2008, 14, 1364-1365.	0.2	0
174	Direct Imaging of Point Defect Configurations for Au inside Si Nanowires. Microscopy and Microanalysis, 2008, 14, 204-205.	0.2	1
175	3D Scanning Transmission Electron Microscopy for Catalysts: Imaging and Data Analysis. Microscopy and Microanalysis, 2008, 14, 168-169.	0.2	2
176	Layer-by-layer and pseudo-two-dimensional growth modes for heteroepitaxial BaTiO3 films by exploiting kinetic limitations. Applied Physics Letters, 2007, 91, 202901.	1.5	30
177	Improving 3D Reconstruction from STEM Data. Microscopy and Microanalysis, 2007, 13, .	0.2	0
178	New Views of Materials through Aberration-Corrected STEM. Microscopy and Microanalysis, 2007, 13, .	0.2	0
179	Structure-Properties Relationships in SnO2/Al2O3 and Pt/SnO2/Al2O3 Catalysts. Microscopy and Microanalysis, 2007, 13, .	0.2	1
180	Spatial Resolution, Information Limit, and Contrast Transfer in Piezoresponce Force Microscopy. Microscopy and Microanalysis, 2007, 13, .	0.2	1

#	Article	IF	Citations
181	Dual Nanoparticle/Substrate Control of Catalytic Dehydrogenation. Advanced Materials, 2007, 19, 2129-2133.	11.1	24
182	Aberration-Corrected STEM - More than just Higher Resolution. Microscopy and Microanalysis, 2006, 12, 132-133.	0.2	0
183	Depth-related Contrast in Aberration-Corrected Confocal STEM. Microscopy and Microanalysis, 2006, 12, 1574-1575.	0.2	3
184	3D Imaging with Single Atom Sensitivity using Confocal STEM. Microscopy and Microanalysis, 2006, 12, 1562-1563.	0.2	1
185	Vertical Resolution in the Confocal STEM – Present and Future. Microscopy and Microanalysis, 2006, 12, 184-185.	0.2	0
186	Studies of Bimetallic (Pt, Ru) Catalysts with Aberration-Corrected STEM and Theory. Microscopy and Microanalysis, 2006, 12, 774-775.	0.2	0
187	Aberration-corrected STEM: current performance and future directions. Journal of Physics: Conference Series, 2006, 26, 7-12.	0.3	18
188	Distribution of histone H3.3 in hematopoietic cell lineages. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 574-579.	3.3	75
189	Depth sectioning of aligned crystals with the aberration-corrected scanning transmission electron microscope. Journal of Electron Microscopy, 2006, 55, 7-12.	0.9	7 3
190	Depth sectioning with the aberration-corrected scanning transmission electron microscope. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 3044-3048.	3.3	216
191	Spatial resolution, information limit, and contrast transfer in piezoresponse force microscopy. Nanotechnology, 2006, 17, 3400-3411.	1.3	71
192	Imaging of Materials through Aberration Corrected STEM. Microscopy and Microanalysis, 2005, 11 , .	0.2	0
193	Resolution Limit Measured by Fourier Transform: 0.61 Angstrom Information Transfer through HAADF-STEM. Microscopy and Microanalysis, 2005, 11, .	0.2	0
194	Nanostructure Functionality through Aberration-Corrected STEM. Microscopy and Microanalysis, 2005, 11 , .	0.2	0
195	Aberration-Corrected STEM for Understanding of the Catalytic Mechanisms and Development of New Catalysts. Microscopy and Microanalysis, 2005, 11 , .	0.2	0
196	Three Dimensional Characterization of Interfaces using Aberration-corrected STEM. Microscopy and Microanalysis, 2005, 11 , .	0.2	0
197	MATERIALS CHARACTERIZATION IN THE ABERRATION-CORRECTED SCANNING TRANSMISSION ELECTRON MICROSCOPE. Annual Review of Materials Research, 2005, 35, 539-569.	4.3	188
198	1:2 Cation order in A(Li1/3(Nb,Ta)2/3)O3 microwave perovskites. Applied Physics Letters, 2004, 84, 1347-1349.	1.5	8

#	Article	IF	Citations
199	Effect of V ₂ O ₅ Doping on the Sintering and Dielectric Properties of <i>M</i> à€Phase Li _{1+<i>x</i>â°'<i>y</i>} Nb _{1â°'<i>x</i>â°'<ii>y</ii>} Nb _{1â°'<i>x</i>2004, 87, 1047-1052.}	1.9 sub>3 <td>ıb⁷⁰</td>	ıb ⁷⁰
200	Dopants adsorbed as single atoms prevent degradation of catalysts. Nature Materials, 2004, 3, 143-146.	13.3	199
201	Origin of Anomalous Pt-Pt Distances in the Pt/Alumina Catalytic System. ChemPhysChem, 2004, 5, 1893-1897.	1.0	68
202	Direct Sub-Angstrom Imaging of a Crystal Lattice. Science, 2004, 305, 1741-1741.	6.0	463
203	Spectroscopic Imaging of Single Atoms Within a Bulk Solid. Physical Review Letters, 2004, 92, 095502.	2.9	299
204	Tomographic Imaging of Nanostructures with Next Generation HAADF-STEM. Microscopy and Microanalysis, 2004, 10, 1200-1201.	0.2	2
205	Materials Applications of Aberration-Corrected STEM. Microscopy and Microanalysis, 2004, 10, 12-13.	0.2	5
206	3D Atomic Resolution Imaging through Aberration-Corrected STEM. Microscopy and Microanalysis, 2004, 10, 1172-1173.	0.2	10
207	Single-Atom Sensitivity for Solving Catalysis Problems. Microscopy and Microanalysis, 2004, 10, 460-461.	0.2	3
208	La(Li1/3Ti2/3)O3: a new 1:2 ordered perovskite. Journal of Solid State Chemistry, 2003, 170, 198-201.	1.4	11
209	Communicating with wireless perovskites: cation order and zinc volatilization. Journal of the European Ceramic Society, 2003, 23, 2461-2466.	2.8	58
210	Large-scale synthesis of arrays of high-aspect-ratio rigid vertically aligned carbon nanofibres. Nanotechnology, 2003, 14, 1029-1035.	1.3	67
211	Information Localization in the Electron Microscope. Microscopy and Microanalysis, 2003, 9, 960-961.	0.2	0
212	Studies of Single Dopant Atoms on Nanocrystalline \hat{I}^3 -Alumina Supports by Aberration-Corrected Z-contrast STEM and First Principles Calculations. Microscopy and Microanalysis, 2003, 9, 398-399.	0.2	2
213	Probing Nanostructures Site by Site with the Aberration-Corrected STEM. Microscopy and Microanalysis, 2003, 9, 2-3.	0.2	3
214	Sub-Ãngstrom Resolution through Aberration-Corrected STEM. Microscopy and Microanalysis, 2003, 9, 926-927.	0.2	8
215	Structural Study of Li1+xâ^'yNb1â^'xâ^'3yTix+4yO3 Solid Solutions. Journal of Solid State Chemistry, 2002, 166, 81-90.	1.4	51
216	Synthesis and Dielectric Properties of Li1-x+yTa1-x-3yTix+4yO3 M-Phase Solid Solutions. Journal of the American Ceramic Society, 2002, 85, 2487-2491.	1.9	33

#	Article	IF	CITATIONS
217	Crystalline Structure and Dielectric Properties of Li _{1+<i>xâ~'y</i>} Nb _{1â~'<i>x</i>} Ti _{Ti_{<i>x</i>+4<i>y</i>}O_{3<solid 2002,="" 573-578.<="" 85,="" american="" ceramic="" journal="" of="" society,="" solutions.="" td="" the=""><td>/sub><i>N</i></td><td>1∮&â€Phase</td></solid>}}	/sub> <i>N</i>	1∮&â€Phase
218	Microwave dielectric properties of Li1+xâ€"yM1â€"xâ€"3yTix+4yO3 (M=Nb5+, Ta5+) solid solutions. Journal of the European Ceramic Society, 2001, 21, 1719-1722.	2.8	91
219	Analysis of phase distributions in the Li2O–Nb2O5–TiO2 system by piezoresponse imaging. Journal of Materials Research, 2001, 16, 329-332.	1.2	8
220	Evolution of fractal particles in systems with conserved order parameter. Physical Review E, 2000, 61, 1189-1194.	0.8	8