K Andre Mkhoyan

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8889273/publications.pdf

Version: 2024-02-01

204 papers	10,000 citations	57631 44 h-index	37111 96 g-index
209 all docs	209 docs citations	209 times ranked	16117 citing authors

#	Article	IF	Citations
1	Challenges to magnetic doping of thin films of the Dirac semimetal <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Cd</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math> Physical Review Materials, 2022, 6, .	3	4
2	Tunable metal contacts at layered black-arsenic/metal interface forming during metal deposition for device fabrication. Communications Materials, 2022, 3, .	2.9	1
3	Twin-free, directly synthesized MFI nanosheets with improved thickness uniformity and their use in membrane fabrication. Science Advances, 2022, 8, eabm8162.	4.7	30
4	Alumina Graphene Catalytic Condenser for Programmable Solid Acids. Jacs Au, 2022, 2, 1123-1133.	3.6	9
5	ZrTe2/CrTe2: an epitaxial van der Waals platform for spintronics. Nature Communications, 2022, 13, .	5.8	32
6	Sub-ns Switching and Cryogenic-Temperature Performance of Mo-Based Perpendicular Magnetic Tunnel Junctions. IEEE Electron Device Letters, 2022, 43, 1215-1218.	2.2	3
7	Control of NÃ©el Vector with Spin-Orbit Torques in an Antiferromagnetic Insulator with Tilted Easy Plane. Physical Review Letters, 2022, 129, .	2.9	20
8	Deep-UV Transparent Conducting Oxide La-Doped SrSnO₃ with a High Figure of Merit. ACS Applied Electronic Materials, 2022, 4, 3623-3631.	2.0	7
9	Self-Assembled Periodic Nanostructures Using Martensitic Phase Transformations. Nano Letters, 2021, 21, 1246-1252.	4.5	9
10	Metallic line defect in wide-bandgap transparent perovskite BaSnO ₃. Science Advances, 2021, 7, .	4.7	11
11	Structure-property relationships and mobility optimization in sputtered La-doped <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>BaSn</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math> films: Toward <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>100</mml:mn><mml:mspace width="0.16em"/><mml:mi mathvariant="normal">c</mml:mi><mml:msup><mml:mrow><mml:mi mathva	0.9	7
12	Dopant Segregation Inside and Outside Dislocation Cores in Perovskite BaSnO3 and Reconstruction of the Local Atomic and Electronic Structures. Nano Letters, 2021, 21, 4357-4364.	4.5	10
13	Two Distinct Stages of Structural Modification of ZIF-L MOF under Electron-Beam Irradiation. Chemistry of Materials, 2021, 33, 5681-5689.	3.2	16
14	Fewâ€Unitâ€Cell MFI Zeolite Synthesized using a Simple Diâ€quaternary Ammonium Structureâ€Directing Agent. Angewandte Chemie - International Edition, 2021, 60, 19214-19221.	7.2	19
15	Fewâ€Unitâ€Cell MFI Zeolite Synthesized using a Simple Diâ€quaternary Ammonium Structureâ€Directing Agent. Angewandte Chemie, 2021, 133, 19363-19370.	1.6	8
16	Magnetic proximity effect in magnetic-insulator/heavy-metal heterostructures across the compensation temperature. Physical Review B, 2021, 104, .	1.1	9
17	Solid-source metalâ€“organic molecular beam epitaxy of epitaxial RuO2. APL Materials, 2021, 9, .	2.2	6
18	Spin and Charge Interconversion in Dirac-Semimetal Thin Films. Physical Review Applied, 2021, 16, .	1.5	20

#	Article	IF	Citations
19	STEM beam channeling in BaSnO3/LaAlO3 perovskite bilayers and visualization of 2D misfit dislocation network. Ultramicroscopy, 2020, 208, 112863.	0.8	3
20	Simultaneous multi-region background subtraction for core-level EEL spectra. Ultramicroscopy, 2020, 210, 112919.	0.8	4
21	Dysprosium Iron Garnet Thin Films with Perpendicular Magnetic Anisotropy on Silicon. Advanced Electronic Materials, 2020, 6, 1900820.	2.6	41
22	Atomic-resolution analytical scanning transmission electron microscopy of topological insulators with a layered tetradymite structure. APL Materials, 2020, 8, 070902.	2.2	6
23	Low Gilbert damping and high thermal stability of Ru-seeded L1-phase FePd perpendicular magnetic thin films at elevated temperatures. Applied Physics Letters, 2020, 117, .	1.5	13
24	Nonthermal Plasma-Enhanced Chemical Vapor Deposition of Two-Dimensional Molybdenum Disulfide. ACS Omega, 2020, 5, 21853-21861.	1.6	11
25	Magnetic structure of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Fe</mml:mi><mml:mn>16</mml:mn></mml:mathvariant="normal">N</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> determined by polarized neutron diffraction on thin-film samples. Physical Review B, 2020, 102, .	1.1	10
26	Atomic and Electronic Structure Evolution of ZIF-L Metal Organic Framework During Amorphization. Microscopy and Microanalysis, 2020, 26, 2968-2969.	0.2	3
27	Layer Dependence of Dielectric Response and Water-Enhanced Ambient Degradation of Highly Anisotropic Black As. ACS Nano, 2020, 14, 5988-5997.	7.3	10
28	Spin pumping and large field-like torque at room temperature in sputtered amorphous WTe2â^'x films. APL Materials, 2020, 8, .	2.2	21
29	Ambipolar transport in van der Waals black arsenic field effect transistors. Nanotechnology, 2020, 31, 405203.	1.3	7
30	Plasmonic nanocomposites of zinc oxide and titanium nitride. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, 042404.	0.9	4
31	One-dimensional intergrowths in two-dimensional zeolite nanosheets and their effect on ultra-selective transport. Nature Materials, 2020, 19, 443-449.	13.3	91
32	Large-scale interlayer rotations and Te grain boundaries in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mrow><mml:mo>(</mml:mo><mml:mrow><mml:mn> thin films. Physical Review Materials, 2020, 4, .	0.9	10
33	Strain-induced majority carrier inversion in ferromagnetic epitaxial <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>LaCo</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mrow><mml:mn>3</mml:mn><mml:mo>â^'</mml:mo><mml:mi>Î´</mml:mi></mml:mrow> thin films. Physical Review Materials, 2020, 4, .	0.9	14
34	Thermal transport in ZnO nanocrystal networks synthesized by nonthermal plasma. Physical Review Materials, 2020, 4, .	0.9	4
35	Diffusive Formation of Hollow Mesoporous Silica Shells from Coreâ€“Shell Composites: Insights from the Hydrogen Sulfide Capture Cycle of CuO@mSiO₂ Nanoparticles. Langmuir, 2020, 36, 6540-6549.	1.6	6
36	Visualization of Misfit Dislocation Network at the BaSnO3-LaAlO3 Interface. Microscopy and Microanalysis, 2019, 25, 980-981.	0.2	0

#	Article	IF	Citations
37	Study of Sub-atomic Channeling in SrTiO3 Crystal Along <100> Direction Using Multislice Simulations. Microscopy and Microanalysis, 2019, 25, 970-971.	0.2	0
38	Decomposition of Core-Loss EEL Edges into a Linear Combination of Refined â€˜Pureâ€™ Spectra. Microscopy and Microanalysis, 2019, 25, 656-657.	0.2	0
39	Separating Electrons and Donors in BaSnO₃ via Band Engineering. Nano Letters, 2019, 19, 8920-8927.	4.5	17
40	Simultaneous Multi-Region Background Subtraction for EELS Spectra. Microscopy and Microanalysis, 2019, 25, 650-651.	0.2	0
41	Electron-Beam-Damage in Metal Organic Frameworks in the TEM. Microscopy and Microanalysis, 2019, 25, 1704-1705.	0.2	10
42	Quantification of La Dopant Level in La:SrSnO₃/SrSnO₃/BaSnO₃ Heterostructures with STEM-EELS. Microscopy and Microanalysis, 2019, 25, 2110-2111.	0.2	1
43	Metal-insulator transition in a semiconductor nanocrystal network. Science Advances, 2019, 5, eaaw1462.	4.7	16
44	Insights into the Formation of Bicontinuous, Porous CuZn nano/micro Particles by in-situ (S)TEM. Microscopy and Microanalysis, 2019, 25, 1544-1545.	0.2	0
45	Synthesis of multiwall Î±-Fe2O3 hollow fibers via a centrifugal spinning technique. Materials Science and Engineering C, 2019, 102, 552-557.	3.8	29
46	Rational synthesis of ternary PtIrNi nanocrystals with enhanced poisoning tolerance for electrochemical ethanol oxidation. Electrochemistry Communications, 2019, 101, 61-67.	2.3	17
47	Van der Waals contacts between three-dimensional metals and two-dimensional semiconductors. Nature, 2019, 568, 70-74.	13.7	551
48	Subatomic Channeling and Helicon-Type Beams in SrTiO3. Physical Review Letters, 2019, 122, 075501.	2.9	2
49	Structure and basal twinning of topological insulator <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">B</mml:mi><mml:msub><mml:mi mathvariant="normal">i</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi mathvariant="normal">S</mml:mi><mml:msub><mml:mi mathvariant="normal">i</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>	0.9	12
50	Visualizing the metal-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Mo</mml:mi><mml:msub><mml:mi mathvariant="normal">S</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> contacts in two-dimensional field-effect transistors with atomic resolution. Physical Review Materials, 2019, 3, .	0.9	25
51	Magnetic impurities as the origin of the variability in spin relaxation rates in Cu-based spin transport devices. Physical Review Materials, 2019, 3, .	0.9	10
52	A Chromium Hydroxide/MILâ€101(Cr) MOF Composite Catalyst and Its Use for the Selective Isomerization of Glucose to Fructose. Angewandte Chemie - International Edition, 2018, 57, 4926-4930.	7.2	73
53	A Chromium Hydroxide/MILâ€101(Cr) MOF Composite Catalyst and Its Use for the Selective Isomerization of Glucose to Fructose. Angewandte Chemie, 2018, 130, 5020-5024.	1.6	30
54	Enhancement of tunneling magnetoresistance by inserting a diffusion barrier in L1-FePd perpendicular magnetic tunnel junctions. Applied Physics Letters, 2018, 112, .	1.5	15

#	Article	IF	Citations
55	Obtaining Structural Parameters from STEMâ€“EDX Maps of Core/Shell Nanocrystals for Optoelectronics. ACS Applied Nano Materials, 2018, 1, 989-996.	2.4	15
56	Quasi continuous wave laser sintering of Si-Ge nanoparticles for thermoelectrics. Journal of Applied Physics, 2018, 123, 094301.	1.1	10
57	Direct Synthesis of 7 nm-Thick Zinc(II)â€“Benzimidazoleâ€“Acetate Metalâ€“Organic Framework Nanosheets. Chemistry of Materials, 2018, 30, 69-73.	3.2	40
58	Sulfidation-Oxidation Cycling of a H2S Adsorbing Hollow Sphere Array. Microscopy and Microanalysis, 2018, 24, 1800-1801.	0.2	0
59	Uncovering the Microstructure of BaSnCb Thin Films Deposited on Different Substrates Using TEM. Microscopy and Microanalysis, 2018, 24, 2198-2199.	0.2	1
60	Understanding High Contact Resistance in M0S2 FETs using STEM-EELS. Microscopy and Microanalysis, 2018, 24, 1558-1559.	0.2	0
61	Unique Line Defect Discovered in BaSnO3 Thin Film. Microscopy and Microanalysis, 2018, 24, 68-69.	0.2	0
62	Controlling Dissolution and Transformation of Zeolitic Imidazolate Frameworks by using Electronâ€Beamâ€Induced Amorphization. Angewandte Chemie, 2018, 130, 13780-13785.	1.6	6
63	Direct Synthesis and Pseudomorphic Transformation of Mixed Metal Oxide Nanostructures with Nonâ€Closeâ€Packed Hollow Sphere Arrays. Angewandte Chemie, 2018, 130, 15933-15937.	1.6	3
64	Direct Synthesis and Pseudomorphic Transformation of Mixed Metal Oxide Nanostructures with Nonâ€Closeâ€Packed Hollow Sphere Arrays. Angewandte Chemie - International Edition, 2018, 57, 15707-15711.	7.2	7
65	Zeolitic imidazolate framework membranes made by ligand-induced permselectivation. Science, 2018, 361, 1008-1011.	6.0	324
66	Controlling Dissolution and Transformation of Zeolitic Imidazolate Frameworks by using Electronâ€Beamâ€Induced Amorphization. Angewandte Chemie - International Edition, 2018, 57, 13592-13597.	7.2	57
67	Mobility Anisotropy in Black Phosphorus MOSFETs With HfO₂ Gate Dielectrics. IEEE Transactions on Electron Devices, 2018, 65, 4093-4101.	1.6	18
68	On the direct synthesis of Cu(BDC) MOF nanosheets and their performance in mixed matrix membranes. Journal of Membrane Science, 2018, 549, 312-320.	4.1	116
69	Room-temperature high spinâ€“orbit torque due to quantum confinement in sputtered BixSe(1â€“x) films. Nature Materials, 2018, 17, 800-807.	13.3	344
70	Microstructure characterization of BaSnO3 thin films on LaAlO3 and PrScO3 substrates from transmission electron microscopy. Scientific Reports, 2018, 8, 10245.	1.6	13
71	Electronic structure of BaSnO3 investigated by high-energy-resolution electron energy-loss spectroscopy and ab initio calculations. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2018, 36, .	0.9	11
72	Nonthermal Plasma Synthesis of Titanium Nitride Nanocrystals with Plasmon Resonances at Near-Infrared Wavelengths Relevant to Photothermal Therapy. ACS Applied Nano Materials, 2018, 1, 2869-2876.	2.4	43

#	Article	IF	Citations
73	Decomposition of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">L</mml:mi><mml:msub><mml:mi mathvariant="normal">a</mml:mi><mml:mrow><mml:mn>2</mml:mn><mml:mo>â^'</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub><mml:mi mathvariant="normal">S</mml:mi><mml:msub><mml:mi mathvariant="normal">r</mml:mi><mml:mi>x</mml:mi></mml:msub><mml:msub><mml:mi>Cu</mml:mi><mml:msub><mml:mi	0.9	2
74	Nonthermal Plasma Synthesis of Core/Shell Quantum Dots: Strained Ge/Si Nanocrystals. ACS Applied Materials & Interfaces, 2017, 9, 8263-8270.	4.0	42
75	Voltage-controlled interlayer coupling in perpendicularly magnetized magnetic tunnel junctions. Nature Communications, 2017, 8, 15232.	5.8	43
76	Room temperature spin Kondo effect and intermixing in Co/Cu non-local spin valves. Applied Physics Letters, 2017, 110, .	1.5	10
77	Effects of small-angle mistilts on dopant visibility in ADF-STEM imaging of nanocrystals. Ultramicroscopy, 2017, 177, 53-57.	0.8	2
78	Ultra-selective high-flux membranes from directly synthesized zeolite nanosheets. Nature, 2017, 543, 690-694.	13.7	446
79	Elemental Distribution Analysis of Core/Shell Nanocrystals with STEM/EDX. Microscopy and Microanalysis, 2017, 23, 1904-1905.	0.2	0
80	In Situ Observation of Phase Separation in High-Temperature Superconductor La2-xSrxCuO4. Microscopy and Microanalysis, 2017, 23, 1680-1681.	0.2	0
81	Probing the Electronic Structure of BaSnO3 by EELS Analysis and ab initio Calculations. Microscopy and Microanalysis, 2017, 23, 1602-1603.	0.2	0
82	Chelant Enhanced Solution Processing for Wafer Scale Synthesis of Transition Metal Dichalcogenide Thin Films. Scientific Reports, 2017, 7, 6419.	1.6	20
83	Epitaxial growth: rapid synthesis of highly permeable and selective zeolite-T membranes. Journal of Materials Chemistry A, 2017, 5, 17828-17832.	5.2	17
84	Characterization of MEL defects in 2 - Dimensional MFI nanosheets. Microscopy and Microanalysis, 2017, 23, 1802-1803.	0.2	1
85	Sputtering growth of Y₃Fe₅O₁₂/Pt bilayers and spin transfer at Y₃Fe₅O₁₂/Pt interfaces. APL Materials, 2017, 5, 126104.	2.2	16
86	Early Growth Stages of Directly Synthesized Large-Area Zeolite Nanosheets. Microscopy and Microanalysis, 2017, 23, 1986-1987.	0.2	0
87	Strontium Oxide Tunnel Barriers for High Quality Spin Transport and Large Spin Accumulation in Graphene. Nano Letters, 2017, 17, 7578-7585.	4.5	20
88	Chemical vapor deposition of partially oxidized graphene. RSC Advances, 2017, 7, 32209-32215.	1.7	4
89	Simplifying Electron Beam Channeling in Scanning Transmission Electron Microscopy (STEM). Microscopy and Microanalysis, 2017, 23, 794-808.	0.2	13
90	Simplifying Electron Beam Channeling in STEM. Microscopy and Microanalysis, 2017, 23, 410-411.	0.2	0

#	Article	IF	Citations
91	Probing Two-dimensional (Bi,Sb)2Te3/h-BN Heterostructures Using Complementary S/TEM and Simulation Techniques. Microscopy and Microanalysis, 2017, 23, 1760-1761.	0.2	0
92	Dissecting Electronic Structure of a New Line Defect in NdTiO3 by EELS. Microscopy and Microanalysis, 2017, 23, 1576-1577.	0.2	0
93	Cross-sectional STEM Imaging and Spectroscopy of Devices with Embedded 2D Materials. Microscopy and Microanalysis, 2017, 23, 1440-1441.	0.2	0
94	Correlation Averaging of Single-Atomic-Column STEM-EDX Images for Sub-Atomic Information. Microscopy and Microanalysis, 2016, 22, 882-883.	0.2	1
95	S/TEM Investigation of the Structure of (Bi,Sb) 2 Te 3 /h-BN Heterostructures Grown by Molecular Beam Epitaxy. Microscopy and Microanalysis, 2016, 22, 1602-1603.	0.2	0
96	Challenges of Oversimplifying Z-contrast in Atomic Resolution ADF-STEM. Microscopy and Microanalysis, 2016, 22, 946-947.	0.2	0
97	Quantification of the Effects of Small Mistilts on Dopant Visibility in Nanocrystals. Microscopy and Microanalysis, 2016, 22, 874-875.	0.2	0
98	Titelbild: Openâ€Pore Twoâ€Dimensional MFI Zeolite Nanosheets for the Fabrication of Hydrocarbonâ€Isomerâ€Selective Membranes on Porous Polymer Supports (Angew. Chem. 25/2016). Angewandte Chemie, 2016, 128, 7123-7123.	1.6	0
99	Phase Engineering of 2D Tin Sulfides. Small, 2016, 12, 2998-3004.	5.2	51
100	Pillared Snâ€MWW Prepared by a Solidâ€Stateâ€Exchange Method and its Use as a Lewis Acid Catalyst. ChemCatChem, 2016, 8, 1274-1278.	1.8	40
101	Quasi 2D Ultrahigh Carrier Density in a Complex Oxide Brokenâ€Gap Heterojunction. Advanced Materials Interfaces, 2016, 3, 1500432.	1.9	32
102	Improving Signal-to-Noise Ratio in Scanning Transmission Electron Microscopy Energy-Dispersive X-Ray (STEM-EDX) Spectrum Images Using Single-Atomic-Column Cross-Correlation Averaging. Microscopy and Microanalysis, 2016, 22, 536-543.	0.2	8
103	Atomic Structure of Self-Pillared, Single-Unit-Cell Sn-MFI Zeolite Nanosheets. Microscopy and Microanalysis, 2016, 22, 1616-1617.	0.2	0
104	Observation of MEL stacking faults in two-dimensional MFI zeolite nanosheets. Microscopy and Microanalysis, 2016, 22, 1634-1635.	0.2	0
105	Defects, stoichiometry, and electronic transport in SrTiO3-Î´ epilayers: A high pressure oxygen sputter deposition study. Journal of Applied Physics, 2016, 120, .	1.1	17
106	Investigation of Layer Composition and Morphology in Perpendicular Magnetic Tunnel Junctions. Microscopy and Microanalysis, 2016, 22, 1684-1685.	0.2	0
107	Observation of MoirÃ©-like Fringes in HAADF-STEM Images of Heterostructures of Two-dimensional Materials. Microscopy and Microanalysis, 2016, 22, 382-383.	0.2	0
108	Atomic bonding effects in annular dark field scanning transmission electron microscopy. I. Computational predictions. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2016, 34, .	0.9	3

#	Article	IF	Citations
109	Surface-State-Dominated Spin-Charge Current Conversion in Topological-Insulatorâ€"Ferromagnetic-Insulator Heterostructures. Physical Review Letters, 2016, 117, 076601.	2.9	162
110	Interdiffusion-controlled Kondo suppression of injection efficiency in metallic nonlocal spin valves. Physical Review B, 2016, 93, .	1.1	18
111	Probing core-electron orbitals by scanning transmission electron microscopy and measuring the delocalization of core-level excitations. Physical Review B, 2016, 93, .	1.1	21
112	A New Line Defect in NdTiO₃ Perovskite. Nano Letters, 2016, 16, 6816-6822.	4.5	18
113	Determination of Core/Double-Shell Architecture of a Single Tetragonal Bipyramidal Nanophosphor for Intense Dual-Mode Luminescence. Microscopy and Microanalysis, 2016, 22, 1428-1429.	0.2	0
114	Atomic bonding effects in annular dark field scanning transmission electron microscopy. II. Experiments. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2016, 34, 041603.	0.9	6
115	Study of Strain and Intermixing at the BaSnO 3 /SrTiO 3 and BaSnO 3 /LaAlO 3 Interfaces Using STEM and EELS. Microscopy and Microanalysis, 2016, 22, 320-321.	0.2	0
116	Quantification of Elemental Distribution in Spherical Core-Shell Nanoparticles Measured by STEM-EDX. Microscopy and Microanalysis, 2016, 22, 128-129.	0.2	1
117	Openâ€Pore Twoâ€Dimensional MFI Zeolite Nanosheets for the Fabrication of Hydrocarbonâ€Isomerâ€Selective Membranes on Porous Polymer Supports. Angewandte Chemie - International Edition, 2016, 55, 7184-7187.	7.2	100
118	Openâ€Pore Twoâ€Dimensional MFI Zeolite Nanosheets for the Fabrication of Hydrocarbonâ€Isomerâ€Selective Membranes on Porous Polymer Supports. Angewandte Chemie, 2016, 128, 7300-7303.	1.6	9
119	Direct observation of the core/double-shell architecture of intense dual-mode luminescent tetragonal bipyramidal nanophosphors. Nanoscale, 2016, 8, 10049-10058.	2.8	29
120	Electronic Structure of New Line Defect in Strained NdTiCb on SrTiO3. Microscopy and Microanalysis, 2015, 21, 2073-2074.	0.2	0
121	Mapping the chemical potential dependence of current-induced spin polarization in a topological insulator. Physical Review B, 2015, 92, .	1.1	78
122	Hybrid molecular beam epitaxy for the growth of stoichiometric BaSnO3. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, .	0.9	66
123	Structure and transport in high pressure oxygen sputter-deposited BaSnO_{3â^'Î´}. APL Materials, 2015, 3, 062509.	2.2	74
124	Analytical Method for Thickness and Wrinkling Measurements of 2-D Zeolites. Microscopy and Microanalysis, 2015, 21, 2367-2368.	0.2	0
125	Selfâ€Pillared, Singleâ€Unitâ€Cell Snâ€MFI Zeolite Nanosheets and Their Use for Glucose and Lactose Isomerization. Angewandte Chemie - International Edition, 2015, 54, 10848-10851.	7.2	138
126	Structure evolution of M02C catalysts upon exposure to oxygen. Microscopy and Microanalysis, 2015, 21, 1059-1060.	0.2	0

#	Article	IF	Citations
127	Structural Rearrangement of 2-D Zeolite Nanosheets under Electron Beam. Microscopy and Microanalysis, 2015, 21, 1323-1324.	0.2	1
128	Scanning Transmission Electron Microscopy Investigation of the Structure of Multilayered Perpendicular Magnetic Tunnel Junctions. Microscopy and Microanalysis, 2015, 21, 817-818.	0.2	0
129	Chemical Bonding Effects in HAADF-STEM Imaging of Light-Element Ceramics. Microscopy and Microanalysis, 2015, 21, 121-122.	0.2	0
130	Quantification of thickness and wrinkling of exfoliated two-dimensional zeolite nanosheets. Nature Communications, 2015, 6, 7128.	5.8	39
131	Enhanced tunneling magnetoresistance and perpendicular magnetic anisotropy in Mo/CoFeB/MgO magnetic tunnel junctions. Applied Physics Letters, 2015, 106, .	1.5	82
132	Nonequilibrium-Plasma-Synthesized ZnO Nanocrystals with Plasmon Resonance Tunable via Al Doping and Quantum Confinement. Nano Letters, 2015, 15, 8162-8169.	4.5	62
133	Nucleation, Growth, and Robust Synthesis of SPP Zeolite: Effect of Ethanol, Sodium, and Potassium. Topics in Catalysis, 2015, 58, 545-558.	1.3	15
134	2D Zeolite Coatings: Langmuirâ€“Schaefer Deposition of 3â€…nm Thick MFI Zeolite Nanosheets. Angewandte Chemie - International Edition, 2015, 54, 6571-6575.	7.2	67
135	Giant Spin Pumping and Inverse Spin Hall Effect in the Presence of Surface and Bulk Spinâˆ'Orbit Coupling of Topological Insulator Bi₂Se₃. Nano Letters, 2015, 15, 7126-7132.	4.5	257
136	Atomic and electronic structure of exfoliated black phosphorus. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, .	0.9	73
137	Mechanisms of plasticity in near-theoretical strength sub-100 nm Si nanocubes. Acta Materialia, 2015, 100, 256-265.	3.8	38
138	Stoichiometry-driven metal-to-insulator transition in NdTiO₃/SrTiO₃ heterostructures. Applied Physics Letters, 2014, 104, 082109.	1.5	40
139	High electron mobility in thin films formed via supersonic impact deposition of nanocrystals synthesized in nonthermal plasmas. Nature Communications, 2014, 5, 5822.	5.8	77
140	Disproportionation of (Mg,Fe)SiO ₃ perovskite in Earthâ€™s deep lower mantle. Science, 2014, 344, 877-882.	6.0	72
141	A high-performance adsorbent for hydrogen sulfide removal. Microporous and Mesoporous Materials, 2014, 190, 152-155.	2.2	63
142	Plasmonic Interactions through Chemical Bonds of Surface Ligands on PbSe Nanocrystals. Chemistry of Materials, 2014, 26, 3328-3333.	3.2	11
143	Facile synthesis of intense green light emitting LiGdF₄:Yb,Er-based upconversion bipyramidal nanocrystals and their polymer composites. Nanoscale, 2014, 6, 7461-7468.	2.8	53
144	Rapid facile synthesis of Cu₂ZnSnS₄ nanocrystals. Journal of Materials Chemistry A, 2014, 2, 10389-10395.	5.2	53

#	Article	IF	Citations
145	On the Rotational Intergrowth of Hierarchical FAU/EMT Zeolites. Angewandte Chemie - International Edition, 2014, 53, 9456-9461.	7.2	90
146	Wafer Scale Synthesis and High Resolution Structural Characterization of Atomically Thin MoS₂ Layers. Advanced Functional Materials, 2014, 24, 7461-7466.	7.8	102
147	Oxygen etching of thick MoS₂ films. Chemical Communications, 2014, 50, 11226-11229.	2.2	54
148	Investigation of secondary hardening in Coâ€“35Niâ€“20Crâ€“10Mo alloy using analytical scanning transmission electron microscopy. Acta Materialia, 2014, 63, 63-72.	3.8	34
149	Determining the thickness of atomically thin MoS2 and WS2 in the TEM. Ultramicroscopy, 2014, 147, 8-20.	0.8	46
150	Interfaces and Defects in Hybrid Molecular Beam Epitaxy Grown NdTiO3/SrTiO3 Heterostructures. Microscopy and Microanalysis, 2014, 20, 98-99.	0.2	0
151	Dynamics of Electron Beam Channeling in Single Atomic Column and in Crystals. Microscopy and Microanalysis, 2014, 20, 122-123.	0.2	0
152	Channeling of Aberration-corrected STEM Probes at the â€œSub-atomicâ€•Scale. Microscopy and Microanalysis, 2014, 20, 146-147.	0.2	0
153	Crystallographic Structure Determination of MFI-Zeolite Nanosheets. Microscopy and Microanalysis, 2014, 20, 390-391.	0.2	0
154	Strength and Plasticity of H- and Oxide- Terminated Cubic Si Nanocrystals. Microscopy and Microanalysis, 2014, 20, 1460-1461.	0.2	0
155	Determining the Thickness of Atomically Thin MoS2 and WS2 in the TEM. Microscopy and Microanalysis, 2014, 20, 1796-1797.	0.2	1
156	Fracture transitions in iron: Strain rate and environmental effects. Journal of Materials Research, 2014, 29, 1513-1521.	1.2	7
157	Optoelectronic properties of graphene thin films deposited by a Langmuirâ€“Blodgett assembly. Nanoscale, 2013, 5, 12365.	2.8	44
158	Phosphorus-Doped Silicon Nanocrystals Exhibiting Mid-Infrared Localized Surface Plasmon Resonance. Nano Letters, 2013, 13, 1317-1322.	4.5	165
159	Imaging Impurities in Semiconductor Nanostructures. Chemistry of Materials, 2013, 25, 1332-1350.	3.2	24
160	Cu2ZnSnS4 nanocrystal dispersions in polar liquids. Chemical Communications, 2013, 49, 3549.	2.2	28
161	Observation of Electrically-Inactive Interstitials in Nb-Doped SrTiO₃. ACS Nano, 2013, 7, 4487-4494.	7.3	14
162	Propagating Nanocavity-Enhanced Rapid Crystallization of Silicon Thin Films. Nano Letters, 2013, 13, 5735-5739.	4.5	4

#	Article	IF	Citations
163	Identifying Hexagonal Boron Nitride Monolayers by Transmission Electron Microscopy. Microscopy and Microanalysis, 2012, 18, 558-567.	0.2	11
164	Strain-hardening in submicron silicon pillars and spheres. Acta Materialia, 2012, 60, 2471-2478.	3.8	24
165	Improving the damp-heat stability of copper indium gallium diselenide solar cells with a semicrystalline tin dioxide overlayer. Solar Energy Materials and Solar Cells, 2012, 101, 270-276.	3.0	27
166	Sputter deposition of semicrystalline tin dioxide films. Thin Solid Films, 2012, 520, 2554-2561.	0.8	35
167	Efficient Organic Photovoltaic Cells Based on Nanocrystalline Mixtures of Boron Subphthalocyanine Chloride and C₆₀. Advanced Functional Materials, 2012, 22, 617-624.	7.8	123
168	Aqueous Only Route toward Graphene from Graphite Oxide. ACS Nano, 2011, 5, 1253-1258.	7.3	262
169	Graphene Oxide: Synthesis, Characterization, Electronic Structure, and Applications. Nanoscience and Technology, 2011, , 435-464.	1.5	2
170	Imaging â€œInvisibleâ€•Dopant Atoms in Semiconductor Nanocrystals. Nano Letters, 2011, 11, 5553-5557.	4.5	33
171	Dispersible Exfoliated Zeolite Nanosheets and Their Application as a Selective Membrane. Science, 2011, 334, 72-75.	6.0	601
172	Carbon Diffusion from Methane into Walls of Carbon Nanotube through Structurally and Compositionally Modified Iron Catalyst. Microscopy and Microanalysis, 2011, 17, 582-586.	0.2	3
173	Limits in detecting an individual dopant atom embedded in a crystal. Ultramicroscopy, 2011, 111, 1101-1110.	0.8	29
174	Routes to identification of intrinsic twist in helical MoS<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>nanotubes by electron diffraction and annular dark-field scanning transmission electron microscopy imaging. Physical Review B, 2011, 84, .	1.1	10
175	Radiolysis to knock-on damage transition in zeolites under electron beam irradiation. Physical Review B, 2011, 83, .	1.1	80
176	Catalyst rotation, twisting, and bending during multiwall carbon nanotube growth. Carbon, 2010, 48, 3840-3845.	5.4	23
177	Hydrogen etching and cutting of multiwall carbon nanotubes. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2010, 28, 1187-1194.	0.6	23
178	Effect of hydrogen on catalyst nanoparticles in carbon nanotube growth. Journal of Applied Physics, 2010, 108, .	1.1	65
179	Orientation and Morphological Evolution of Catalyst Nanoparticles During Carbon Nanotube Growth. ACS Nano, 2010, 4, 5087-5094.	7.3	47
180	Evolution of Electrical, Chemical, and Structural Properties of Transparent and Conducting Chemically Derived Graphene Thin Films. Advanced Functional Materials, 2009, 19, 2577-2583.	7.8	1,603

#	Article	IF	Citations
181	Atomic and Electronic Structure of Graphene-Oxide. Nano Letters, 2009, 9, 1058-1063.	4.5	1,043
182	Effects of tilt on high-resolution ADF-STEM imaging. Ultramicroscopy, 2008, 108, 718-726.	0.8	59
183	Effects of amorphous layers on ADF-STEM imaging. Ultramicroscopy, 2008, 108, 791-803.	0.8	52
184	Sidewall oxide effects on spin-torque- and magnetic-field-induced reversal characteristics of thin-film nanomagnets. Nature Materials, 2008, 7, 567-573.	13.3	58
185	Critical Role of Inelastic Interactions in Quantitative Electron Microscopy. Physical Review Letters, 2008, 100, 025503.	2.9	16
186	Reduction of Contrast in ADF-STEM Images Due To Amorphous Layer. Materials Research Society Symposia Proceedings, 2007, 1026, 1.	0.1	0
187	Separation of bulk and surface-losses in low-loss EELS measurements in STEM. Ultramicroscopy, 2007, 107, 345-355.	0.8	45
188	Radiolytic purification of CaO by electron beams. Philosophical Magazine, 2006, 86, 2907-2917.	0.7	13
189	Full Recovery of Electron Damage in Glass at Ambient Temperatures. Physical Review Letters, 2006, 96, 205506.	2.9	28
190	Direct Determination of Local Lattice Polarity in Crystals. Science, 2006, 312, 1354-1354.	6.0	53
191	Analytical electron microscopy study of growth mechanism for smoothing of metallic multilayer thin films. Applied Physics Letters, 2006, 89, 162509.	1.5	2
192	Atomic level scanning transmission electron microscopy characterization of GaN/AlN quantum wells. Journal of Applied Physics, 2004, 96, 738-746.	1.1	10
193	Formation of a quasi-two-dimensional electron gas in GaN/AlxGa1â^'xN heterostructures with diffuse interfaces. Journal of Applied Physics, 2004, 95, 1843-1848.	1.1	10
194	Measuring electronic structure of wurtzite InN using electron energy loss spectroscopy. Applied Physics Letters, 2003, 82, 1407-1409.	1.5	27
195	Nonuniformities in GaN/AlN quantum wells. Applied Physics Letters, 2003, 83, 2668-2670.	1.5	7
196	Electron-beam-induced damage in wurtzite InN. Applied Physics Letters, 2003, 82, 859-861.	1.5	34
197	Measuring Non-uniformities in GaN/AlN Quantum Wells. Microscopy and Microanalysis, 2003, 9, 816-817.	0.2	0
198	Electron Beam Induced Damage in Wurtzite InN. Microscopy and Microanalysis, 2002, 8, 628-629.	0.2	1

#	Article	IF	Citations
199	EELS Measurements on Wurtzite InN. Microscopy and Microanalysis, 2002, 8, 570-571.	0.2	0
200	Indirect transitions in thin films due to the coulomb interactions between electrons. Thin Solid Films, 1999, 338, 185-187.	0.8	6
201	SCALPEL mask-membrane charging. Microelectronic Engineering, 1999, 46, 223-226.	1.1	7
202	Indirect electronic transitions in semiconductors occurring as a result of scattering of charge carriers by dislocations in a quantizing magnetic field. Semiconductors, 1998, 32, 404-405.	0.2	0
203	Indirect transitions caused by electronâ€"dislocation interaction in size-quantized semiconductor film. Thin Solid Films, 1997, 302, 54-57.	0.8	3
204	High-Capacity Regenerable H2S Sorbent for Reducing Sulfur Emissions. Industrial & Engineering Chemistry Research, 0, , .	1.8	6