

Jian-Min Zuo

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

216
papers

7,940
citations

47
h-index

83
g-index

229
ext. papers

8,658
ext. citations

6.3
avg, IF

5.96
L-index

#	Paper	IF	Citations
216	Data-driven electron microscopy: electron diffraction imaging of materials structural properties.. <i>Microscopy (Oxford, England)</i> , 2022 , 71, i116-i131	1.3	0
215	Role of Atomic Structure on Exciton Dynamics and Photoluminescence in NIR Emissive InAs/InP/ZnSe Quantum Dots. <i>Journal of Physical Chemistry C</i> , 2022 , 126, 7576-7587	3.8	1
214	Cepstral scanning transmission electron microscopy imaging of severe lattice distortions. <i>Ultramicroscopy</i> , 2021 , 231, 113252	3.1	1
213	Ultralow Thermal Conductivity in Nanoporous Crystalline Fe ₃ O ₄ . <i>Journal of Physical Chemistry C</i> , 2021 , 125, 6897-6908	3.8	3
212	Training artificial neural networks for precision orientation and strain mapping using 4D electron diffraction datasets. <i>Ultramicroscopy</i> , 2021 , 231, 113256	3.1	8
211	Electrodeposition of atmosphere-sensitive ternary sodium transition metal oxide films for sodium-based electrochemical energy storage. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	3
210	Detecting minute amounts of nitrogen in GaNAs thin films using STEM and CBED. <i>Ultramicroscopy</i> , 2021 , 231, 113299	3.1	1
209	Two-dimensional superconductivity and anisotropic transport at KTaO (111) interfaces. <i>Science</i> , 2021 , 371, 716-721	33.3	33
208	Direct electron imaging of dislocation activities in nanocrystalline molybdenum nanopillars. <i>Microscopy and Microanalysis</i> , 2021 , 27, 3104-3105	0.5	
207	Sub-10-nm graphene nanoribbons with atomically smooth edges from squashed carbon nanotubes. <i>Nature Electronics</i> , 2021 , 4, 653-663	28.4	14
206	Antimony segregation in an InAs/InAs _{1-x} Sbx superlattice grown by metalorganic chemical vapor deposition. <i>Journal of Applied Physics</i> , 2021 , 130, 095302	2.5	1
205	The dislocation structure of slip bands in deformed high entropy alloy nanopillars. <i>Journal of Materials Science and Technology</i> , 2021 , 95, 136-144	9.1	1
204	Doped NiO: The mottness of a charge transfer insulator. <i>Physical Review B</i> , 2020 , 101,	3.3	10
203	Rare-region onset of superconductivity in niobium nanoislands. <i>Physical Review B</i> , 2020 , 101,	3.3	1
202	Temperature-independent giant dielectric response in transitional BaTiO ₃ thin films. <i>Applied Physics Reviews</i> , 2020 , 7, 011402	17.3	20
201	Electron image contrast analysis of mosaicity in rutile nanocrystals using direct electron detection. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2020 , 76, 687-697	1.7	
200	Liquid Exfoliation of Decagonal Quasicrystals and Its Light Out-Coupling Performance in Organic Light-Emitting Devices. <i>Advanced Photonics Research</i> , 2020 , 1, 2000042	1.9	1

199	Molecular beam epitaxy of the magnetic Kagome metal FeSn on LaAlO ₃ (111). <i>AIP Advances</i> , 2020 , 10, 105017	1.5	4
198	Environment-Dependent Electron Beam Reduction of Rutile Nanocrystals at High Temperatures. <i>Microscopy and Microanalysis</i> , 2019 , 25, 1680-1681	0.5	
197	Determination of Crystallinity in Li _{1-x} Mg _x Mn ₂ O ₄ Nanocrystals Based on Diffraction Patterns Correlation Analysis and Strain Mapping. <i>Microscopy and Microanalysis</i> , 2019 , 25, 1972-1973	0.5	0
196	Lattice strain mapping using circular Hough transform for electron diffraction disk detection. <i>Ultramicroscopy</i> , 2019 , 207, 112837	3.1	13
195	High Aspect Ratio GaO Fin Arrays with Low-Interface Charge Density by Inverse Metal-Assisted Chemical Etching. <i>ACS Nano</i> , 2019 , 13, 8784-8792	16.7	31
194	Effects of Particle Size on Mg Ion Intercalation into MnO Cathode Materials. <i>Nano Letters</i> , 2019 , 19, 4712-4720	11.5	26
193	Thermal transport in layer-by-layer assembled polycrystalline graphene films. <i>Npj 2D Materials and Applications</i> , 2019 , 3,	8.8	21
192	Determination of Mn Valences in Li _{1-x} Mg _x Mn ₂ O ₄ Using Monochromated EELS in an Aberration-Corrected STEM. <i>Microscopy and Microanalysis</i> , 2019 , 25, 658-659	0.5	0
191	Shear banding mechanism in compressed nanocrystalline ceramic nanopillars. <i>Physical Review Materials</i> , 2019 , 3,	3.2	3
190	Point group symmetry of cadmium arsenide thin films determined by convergent beam electron diffraction. <i>Physical Review Materials</i> , 2019 , 3,	3.2	4
189	Local structure of potassium doped nickel oxide: A combined experimental-theoretical study. <i>Physical Review Materials</i> , 2019 , 3,	3.2	3
188	Electron Nanodiffraction. <i>Springer Handbooks</i> , 2019 , 905-969	1.3	12
187	Direct Synthesis of H ₂ O ₂ on AgPt Octahedra: The Importance of AgPt Coordination for High H ₂ O ₂ Selectivity. <i>ACS Catalysis</i> , 2018 , 8, 2880-2889	13.1	38
186	Performance-defining properties of Nb ₃ Sn coating in SRF cavities. <i>Superconductor Science and Technology</i> , 2018 , 31, 015004	3.1	11
185	Determination of atomic vacancies in InAs/GaSb strained-layer superlattices by atomic strain. <i>IUCrJ</i> , 2018 , 5, 67-72	4.7	6
184	Sb-induced strain fluctuations in a strained layer superlattice of InAs/InAsSb. <i>Journal of Applied Physics</i> , 2018 , 123, 161521	2.5	8
183	Structural determination of single-walled carbon nanotube with an intramolecular junction and its electrical transport property. <i>Carbon</i> , 2018 , 139, 472-476	10.4	
182	Extended electronic structure inhomogeneity created by double chain layer defects surrounding columnar tracks in heavy-ion irradiated YBa ₂ Cu ₃ O ₇ . <i>Superconductor Science and Technology</i> , 2018 , 31, 105006	3.1	4

181	Developing High Resolution and High Precision Strain Mapping Methodologies for Materials Research and Semiconductor Technology. <i>Microscopy and Microanalysis</i> , 2018 , 24, 966-967	0.5	
180	Scanning Convergent Beam Electron Diffraction (CBED), the Essential Questions of Why, What and How?. <i>Microscopy and Microanalysis</i> , 2018 , 24, 172-173	0.5	0
179	Ab initio study of growth mechanism of omega precipitates in Al-Cu-Mg-Ag alloy and similar systems. <i>Journal of Alloys and Compounds</i> , 2018 , 737, 207-212	5.7	7
178	Studies of x-ray localization and thickness dependence in atomic-scale elemental mapping by STEM energy-dispersive x-ray spectroscopy using single-frame scanning method. <i>Ultramicroscopy</i> , 2018 , 186, 23-29	3.1	8
177	Strain Characterization of Advanced CMOS Transistors: An Industry Perspective. <i>Microscopy and Microanalysis</i> , 2018 , 24, 974-975	0.5	0
176	Dislocation avalanche mechanism in slowly compressed high entropy alloy nanopillars. <i>Communications Physics</i> , 2018 , 1,	5.4	18
175	Fast Atomic-Scale Elemental Mapping of Crystalline Materials by STEM Energy-Dispersive X-Ray Spectroscopy Achieved with Thin Specimens. <i>Microscopy and Microanalysis</i> , 2017 , 23, 145-154	0.5	3
174	Elemental and lattice-parameter mapping of binary oxide superlattices of (LaNiO ₃) ₄ /(LaMnO ₃) ₂ at atomic resolution. <i>Semiconductor Science and Technology</i> , 2017 , 32, 014002	1.8	2
173	Dissolution Kinetics of Oxidative Etching of Cubic and Icosahedral Platinum Nanoparticles Revealed by in Situ Liquid Transmission Electron Microscopy. <i>ACS Nano</i> , 2017 , 11, 1696-1703	16.7	65
172	Electroplating lithium transition metal oxides. <i>Science Advances</i> , 2017 , 3, e1602427	14.3	45
171	Nanoscale physico-chemical investigation of complementary ZnO-Si nanocomposites and their photoconductive behavior. <i>Current Applied Physics</i> , 2017 , 17, 152-156	2.6	2
170	Nanoscale symmetry fluctuations in ferroelectric barium titanate, BaTiO ₃ . <i>Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials</i> , 2017 , 73, 708-714	1.8	12
169	Symmetry-Breaking Nanoregions in Single-Phase High Entropy Alloys Determined using Scanning Convergent Beam Electron Diffraction. <i>Microscopy and Microanalysis</i> , 2017 , 23, 348-349	0.5	
168	In-situ Observation of Shape Transformation and Surface Oxidation of Pd Nanocrystals. <i>Microscopy and Microanalysis</i> , 2017 , 23, 912-913	0.5	
167	Dynamics of Transformation from Platinum Icosahedral Nanoparticles to Larger FCC Crystal at Millisecond Time Resolution. <i>Scientific Reports</i> , 2017 , 7, 17243	4.9	6
166	Strategy for reliable strain measurement in InAs/GaAs materials from high-resolution Z-contrast STEM images. <i>Journal of Physics: Conference Series</i> , 2017 , 902, 012021	0.3	1
165	Dynamic-template-directed multiscale assembly for large-area coating of highly-aligned conjugated polymer thin films. <i>Nature Communications</i> , 2017 , 8, 16070	17.4	66
164	Lattice-Rotation Vortex at the Charged Monoclinic Domain Boundary in a Relaxor Ferroelectric Crystal. <i>Physical Review Letters</i> , 2017 , 118, 157601	7.4	15

163	Peak separation method for sub-lattice strain analysis at atomic resolution: Application to InAs/GaSb superlattice. <i>Micron</i> , 2017 , 92, 6-12	2.3	9
162	Strain Measurements and Mapping 2017 , 553-580		1
161	Imaging and Characterization of Crystal Defects 2017 , 501-552		
160	Advanced Transmission Electron Microscopy 2017 ,		56
159	Structure of Nanocrystals, Nanoparticles, and Nanotubes 2017 , 581-652		1
158	Instrumentation and Experimental Techniques 2017 , 231-295		1
157	Accurate Diffraction Peak Identification for Scanning Electron Nanodiffraction Based on Automated Image Processing and Feature Detection. <i>Microscopy and Microanalysis</i> , 2017 , 23, 180-181	0.5	2
156	Improving Atomic-Scale Elemental Mapping Resolution of STEM-EDS through Optimizing Experimental Conditions. <i>Microscopy and Microanalysis</i> , 2017 , 23, 394-395	0.5	
155	Recent Progress of Correlative Transmission Electron Microscopy and Atom Probe Tomography for Materials Characterization. <i>Microscopy and Microanalysis</i> , 2017 , 23, 692-693	0.5	
154	Improvements in electron diffraction pattern automatic indexing algorithms. <i>EPJ Applied Physics</i> , 2017 , 80, 10701	1.1	6
153	Crystal Symmetry 2017 , 297-346		
152	Atomic Resolution Electron Imaging 2017 , 441-499		
151	Three-dimensional nanostructure determination from large diffraction dataset 2016 , 615-616		
150	Three-dimensional nanostructure determination from a large diffraction data set recorded using scanning electron nanodiffraction. <i>IUCrJ</i> , 2016 , 3, 300-308	4.7	21
149	Approaching the size limit of organometallic layers: synthesis and characterization of highly ordered silver-thiolate lamellae with ultra-short chain lengths. <i>Dalton Transactions</i> , 2016 , 45, 18954-18966	4.3	12
148	Picometre-precision atomic structure of inversion domain boundaries in GaN 2016 , 564-565		
147	Fundamental Symmetry of Barium Titanate Single Crystal Determined Using Energy-Filtered Scanning Convergent Beam Electron Diffraction. <i>Microscopy and Microanalysis</i> , 2016 , 22, 516-517	0.5	4
146	In-situ dislocation imaging during deformation in high entropy alloys. <i>Microscopy and Microanalysis</i> , 2016 , 22, 1558-1559	0.5	1

145	Fast Atomic-Scale Chemical Imaging of Crystalline Materials and Dynamic Phase Transformations. <i>Nano Letters</i> , 2016 , 16, 2728-33	11.5	18
144	Three-Dimensional Nanostructure Determination Based On Scanning Electron Nanodiffraction. <i>Microscopy and Microanalysis</i> , 2016 , 22, 498-499	0.5	2
143	In Situ Observation of Pt Icosahedral Nanoparticles Transformation into FCC Single Crystal. <i>Microscopy and Microanalysis</i> , 2016 , 22, 766-767	0.5	
142	Environment Induced Shape Change of Palladium Nanocrystals. <i>Microscopy and Microanalysis</i> , 2016 , 22, 778-779	0.5	
141	Fast Atomic-Scale Chemical Imaging by STEM EDS for Study of Crystalline Materials and Dynamic Phase Transformations. <i>Microscopy and Microanalysis</i> , 2016 , 22, 720-721	0.5	
140	Toward Superconducting Critical Current by Design. <i>Advanced Materials</i> , 2016 , 28, 4593-600	24	45
139	Regioselective Atomic Rearrangement of Ag-Pt Octahedral Catalysts by Chemical Vapor-Assisted Treatment. <i>Nano Letters</i> , 2016 , 16, 7988-7992	11.5	19
138	Oscillatory Noncollinear Magnetism Induced by Interfacial Charge Transfer in Superlattices Composed of Metallic Oxides. <i>Physical Review X</i> , 2016 , 6,	9.1	24
137	In situ characterization of fracture toughness and dynamics of nanocrystalline titanium nitride films. <i>Journal of Materials Research</i> , 2016 , 31, 370-379	2.5	13
136	Strain Field in Ultrasmall Gold Nanoparticles Supported on Cerium-Based Mixed Oxides. Key Influence of the Support Redox State. <i>Langmuir</i> , 2016 , 32, 4313-22	4	6
135	Ag-Pt Compositional Intermetallics Made from Alloy Nanoparticles. <i>Nano Letters</i> , 2016 , 16, 6599-6603	11.5	28
134	Growth of Au on Pt icosahedral nanoparticles revealed by low-dose in situ TEM. <i>Nano Letters</i> , 2015 , 15, 2711-5	11.5	90
133	Synthesis, Internal Structure, and Formation Mechanism of Monodisperse Tin Sulfide Nanoplatelets. <i>Journal of the American Chemical Society</i> , 2015 , 137, 9943-52	16.4	59
132	Direct observation of interfacial Au atoms on TiO ₂ in three dimensions. <i>Nano Letters</i> , 2015 , 15, 2548-54	11.5	23
131	A novel, layered phase in Ti-rich SrTiO ₃ epitaxial thin films. <i>Advanced Materials</i> , 2015 , 27, 861-8	24	6
130	Atomic resolution tomography reconstruction of tilt series based on a GPU accelerated hybrid input-output algorithm using polar Fourier transform. <i>Ultramicroscopy</i> , 2015 , 149, 64-73	3.1	6
129	Solving protein nanocrystals by cryo-EM diffraction: multiple scattering artifacts. <i>Ultramicroscopy</i> , 2015 , 148, 87-93	3.1	38
128	Quantitative symmetry determination and symmetry mapping using convergent beam electron diffraction technique. <i>Microscopy and Microanalysis</i> , 2015 , 21, 821-822	0.5	

127	TEM Based High Resolution Electron Diffraction Techniques for Three-dimensional Nanostructure Determination. <i>Microscopy and Microanalysis</i> , 2015 , 21, 1095-1096	0.5	
126	Principles and Applications of Energy-Filtered Scanning CBED for Ferroelectric Domain Imaging and Symmetry Determination. <i>Microscopy and Microanalysis</i> , 2015 , 21, 1245-1246	0.5	2
125	Passivation Dynamics in the Anisotropic Deposition and Stripping of Bulk Magnesium Electrodes During Electrochemical Cycling. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 18406-14	9.5	29
124	Epitaxial growth of three dimensionally structured III-V photonic crystal via hydride vapor phase epitaxy. <i>Journal of Applied Physics</i> , 2015 , 118, 224303	2.5	7
123	Determination of 60° polarization nanodomains in a relaxor-based ferroelectric single crystal. <i>Applied Physics Letters</i> , 2015 , 107, 162902	3.4	12
122	Materials Processes Observed using Dynamical Environmental TEM at University of Illinois. <i>Microscopy and Microanalysis</i> , 2015 , 21, 2323-2324	0.5	
121	Direct Observation of Interfacial Au atoms Using STEM Depth Sectioning. <i>Microscopy and Microanalysis</i> , 2015 , 21, 2417-2418	0.5	
120	Colossal positive magnetoresistance in surface-passivated oxygen-deficient strontium titanite. <i>Scientific Reports</i> , 2015 , 5, 10255	4.9	22
119	TEM based high resolution and low-dose scanning electron nanodiffraction technique for nanostructure imaging and analysis. <i>Micron</i> , 2015 , 71, 39-45	2.3	32
118	An Ion-Exchange Promoted Phase Transition in a Li-Excess Layered Cathode Material for High-Performance Lithium Ion Batteries. <i>Advanced Energy Materials</i> , 2015 , 5, 1401937	21.8	63
117	Convergent-beam electron-diffraction-pattern symmetry of nanodomains in complex lead-based perovskite crystals. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2014 , 70, 583-590	1.7	4
116	Digital model for X-ray diffraction with application to composition and strain determination in strained InAs/GaSb superlattices. <i>Journal of Applied Physics</i> , 2014 , 116, 013513	2.5	10
115	Determination of interfacial atomic structure, misfits and energetics of β phase in AlCuMgAg alloy. <i>Acta Materialia</i> , 2014 , 81, 501-511	8.4	67
114	A kinetic Monte Carlo study of coarsening resistance of novel core/shell precipitates. <i>Acta Materialia</i> , 2014 , 79, 37-46	8.4	3
113	Nanoscale Spin-State Ordering in LaCoO ₃ Epitaxial Thin Films. <i>Chemistry of Materials</i> , 2014 , 26, 2496-2506	16	60
112	Interaction of nanometer-sized gold nanocrystals with rutile (110) surface steps revealed at atomic resolution. <i>Surface Science</i> , 2014 , 625, 16-22	1.8	14
111	Electrochemically tunable thermal conductivity of lithium cobalt oxide. <i>Nature Communications</i> , 2014 , 5, 4035	17.4	92
110	Imaging Shape-Dependent Corrosion Behavior of Pt Nanoparticles over Extended Time Using a Liquid Flow Cell and TEM. <i>Microscopy and Microanalysis</i> , 2014 , 20, 1508-1509	0.5	6

109	Surface Atomic Diffusion Processes Observed at Milliseconds Time Resolution using Environmental TEM. <i>Microscopy and Microanalysis</i> , 2014 , 20, 1590-1591	0.5	
108	Large area and depth-profiling dislocation imaging and strain analysis in Si/SiGe/Si heterostructures. <i>Microscopy and Microanalysis</i> , 2014 , 20, 1521-7	0.5	3
107	Electrical and microstructural properties of thermally annealed Ni/Au and Ni/Pt/Au Schottky contacts on AlGa _N /Ga _N heterostructures. <i>Semiconductor Science and Technology</i> , 2014 , 29, 095005	1.8	32
106	Impact of interstitial oxygen on the electronic and magnetic structure in superconducting Fe _{1+y} TeO _x thin films. <i>Physical Review B</i> , 2014 , 90,	3.3	6
105	Direct Evidence for the Modulation Caused by Ti Substitution of Ta in a (Ta ₂ O ₅) _{0.92} (TiO ₂) _{0.08} Ceramic by Analytical Electron Microscopy. <i>Journal of the American Ceramic Society</i> , 2014 , 97, 350-353	3.8	
104	Oxidation of Fe Whiskers and Surface Diffusion Observed by Environmental TEM. <i>Microscopy and Microanalysis</i> , 2014 , 20, 1864-1865	0.5	1
103	Lattice and strain analysis of atomic resolution Z-contrast images based on template matching. <i>Ultramicroscopy</i> , 2014 , 136, 50-60	3.1	71
102	Enhanced and tunable fluorescent quantum dots within a single crystal of protein. <i>Nano Research</i> , 2013 , 6, 627-634	10	19
101	Magnetic properties of the (LaMnO ₃) _N /(SrTiO ₃) _N atomic layer superlattices. <i>Journal of Applied Physics</i> , 2013 , 113, 173913	2.5	11
100	Symmetry quantification and mapping using convergent beam electron diffraction. <i>Ultramicroscopy</i> , 2013 , 124, 71-6	3.1	30
99	Metastability and structural polymorphism in noble metals: the role of composition and metal atom coordination in mono- and bimetallic nanoclusters. <i>ACS Nano</i> , 2013 , 7, 1542-57	16.7	32
98	In situ RHEED study of epitaxial gold nanocrystals on TiO ₂ (1 1 0) surfaces. <i>Applied Surface Science</i> , 2013 , 270, 661-666	6.7	7
97	High-index facets in gold nanocrystals elucidated by coherent electron diffraction. <i>Nano Letters</i> , 2013 , 13, 1840-6	11.5	20
96	Atomic resolution mapping of interfacial intermixing and segregation in InAs/GaSb superlattices: A correlative study. <i>Journal of Applied Physics</i> , 2013 , 113, 103511	2.5	37
95	Determination of fluctuations in local symmetry and measurement by convergent beam electron diffraction: applications to a relaxor-based ferroelectric crystal after thermal annealing. <i>Journal of Applied Crystallography</i> , 2013 , 46, 1331-1337	3.8	22
94	Chemical sensors based on randomly stacked graphene flakes. <i>Applied Physics Letters</i> , 2012 , 100, 033111	3.4	45
93	Electrons for single molecule diffraction and imaging. <i>Ultramicroscopy</i> , 2012 , 119, 72-7	3.1	1
92	Symmetry of piezoelectric (1-x)Pb(Mg _{1/3} Nb _{2/3})O ₃ -xPbTiO ₃ (x=0.31) single crystal at different length scales in the morphotropic phase boundary region. <i>Physical Review B</i> , 2012 , 86,	3.3	22

91	Structure of the oxygen-annealed chalcogenide superconductor Fe _{1.08} Te _{0.55} Se _{0.45} O _x . <i>Physical Review B</i> , 2012 , 85,	3.3	14
90	Electron beam stimulated molecular motions. <i>ACS Nano</i> , 2011 , 5, 3367-72	16.7	13
89	Phase separation in the iron chalcogenide superconductor Fe _{1+y} Te _x Se _{1-x} . <i>New Journal of Physics</i> , 2011 , 13, 053031	2.9	33
88	Electron-beam-induced growth of TiO(2) nanostructures. <i>Microscopy and Microanalysis</i> , 2011 , 17, 274-8	0.5	4
87	Time-dependent, protein-directed growth of gold nanoparticles within a single crystal of lysozyme. <i>Nature Nanotechnology</i> , 2011 , 6, 93-7	28.7	179
86	TEM observation of growth and phase transformation in nanometer-sized titanium oxide powder. <i>Journal of Materials Science</i> , 2011 , 46, 1780-1788	4.3	13
85	Construction of an organic crystal structural model based on combined electron and powder X-ray diffraction data and the charge flipping algorithm. <i>Ultramicroscopy</i> , 2011 , 111, 812-6	3.1	4
84	Interface analysis of Ti/Al/Ti/Au ohmic contacts with regrown n+-GaN layers using molecular beam epitaxy. <i>Surface and Interface Analysis</i> , 2011 , 43, 1627-1631	1.5	3
83	In(x)Ga(1-x)As nanowires on silicon: one-dimensional heterogeneous epitaxy, bandgap engineering, and photovoltaics. <i>Nano Letters</i> , 2011 , 11, 4831-8	11.5	126
82	Combining real and reciprocal space information for aberration free coherent electron diffractive imaging. <i>Ultramicroscopy</i> , 2011 , 111, 817-23	3.1	13
81	Strain-balanced InAs/GaSb type-II superlattice structures and photodiodes grown on InAs substrates by metalorganic chemical vapor deposition. <i>Applied Physics Letters</i> , 2011 , 99, 011109	3.4	17
80	Atomistic modeling of nanoscale patterning of L12 order induced by ion irradiation. <i>Journal of Applied Physics</i> , 2010 , 108, 054302	2.5	5
79	Comment on "Structural preablation dynamics of graphite observed by ultrafast electron crystallography". <i>Physical Review Letters</i> , 2010 , 105, 059603; author reply 059604	7.4	16
78	Electrical transport in small bundles of single-walled carbon nanotubes: Intertube interaction and effects of tube deformation. <i>Applied Physics Letters</i> , 2010 , 96, 173107	3.4	26
77	Ion-beam induced domain structure in piezoelectric PMN-PT single crystal. <i>Applied Physics Letters</i> , 2010 , 97, 261910	3.4	6
76	Equilibrium shapes and triple line energy of epitaxial gold nanocrystals supported on TiO ₂ (110). <i>Physical Review B</i> , 2010 , 82,	3.3	31
75	Nonlithographic patterning and metal-assisted chemical etching for manufacturing of tunable light-emitting silicon nanowire arrays. <i>Nano Letters</i> , 2010 , 10, 1582-8	11.5	181
74	Anisotropic strain-induced curvature in type-II CdSe/CdTe nanorod heterostructures. <i>Journal of the American Chemical Society</i> , 2010 , 132, 3286-8	16.4	39

73	Free folding of suspended graphene sheets by random mechanical stimulation. <i>Physical Review Letters</i> , 2010 , 104, 166805	7.4	124
72	Visualizing materials chemistry at atomic resolution. <i>Analytical Chemistry</i> , 2010 , 82, 2599-607	7.8	28
71	Ambient photodoping of p-type organic nanofibers: highly efficient photoswitching and electrical vapor sensing of amines. <i>Chemical Communications</i> , 2010 , 46, 4127-9	5.8	55
70	The formation and utility of sub-angstrom to nanometer-sized electron probes in the aberration-corrected transmission electron microscope at the University of Illinois. <i>Microscopy and Microanalysis</i> , 2010 , 16, 183-93	0.5	28
69	Ultrathin n-type organic nanoribbons with high photoconductivity and application in optoelectronic vapor sensing of explosives. <i>Journal of the American Chemical Society</i> , 2010 , 132, 5743-50	16.4	210
68	DNA Sensing using Nano-crystalline Surface Enhanced Al(2)O(3) Nanopore Sensors. <i>Advanced Functional Materials</i> , 2010 , 20, 1266-1275	15.6	140
67	New optical absorption bands in atomic-layer superlattices. <i>Advanced Materials</i> , 2010 , 22, 1136-9	24	21
66	Probing interfacial electronic structures in atomic layer LaMnO(3) and SrTiO(3) superlattices. <i>Advanced Materials</i> , 2010 , 22, 1156-60	24	63
65	Effect of WC or NbC addition on lattice parameter of surrounding structure in Ti(C0.7N0.3)Ni cermet investigated by TEM/CBED. <i>Journal of the European Ceramic Society</i> , 2010 , 30, 2131-2138	6	22
64	Instability, intermixing and electronic structure at the epitaxial LaAlO3/SrTiO3(001) heterojunction. <i>Surface Science Reports</i> , 2010 , 65, 317-352	12.9	241
63	Implications for Ultrafast Reflection Electron Diffraction from Temporal and Spatial Evolution of Transient Electric Fields. <i>Materials Research Society Symposia Proceedings</i> , 2009 , 1230, 1		
62	Beam to String Transition of Vibrating Carbon Nanotubes Under Axial Tension. <i>Advanced Functional Materials</i> , 2009 , 19, 1753-1758	15.6	34
61	Sub-angstrom-resolution diffractive imaging of single nanocrystals. <i>Nature Physics</i> , 2009 , 5, 129-133	16.2	76
60	Structure and diameter-dependent bond lengths of a multi-walled carbon nanotube revealed by electron diffraction. <i>Carbon</i> , 2009 , 47, 3515-3528	10.4	18
59	Structural characterization of Pt-Pd and Pd-Pt core-shell nanoclusters at atomic resolution. <i>Journal of the American Chemical Society</i> , 2009 , 131, 8683-9	16.4	98
58	Highly Polarized and Self-Waveguided Emission from Single-Crystalline Organic Nanobelts. <i>Chemistry of Materials</i> , 2009 , 21, 2930-2934	9.6	96
57	Direct measurement of transient electric fields induced by ultrafast pulsed laser irradiation of silicon. <i>Applied Physics Letters</i> , 2009 , 94, 251103	3.4	44
56	The Microstructure and Mechanical Behavior of Deformed Silicon. <i>Journal of the Korean Ceramic Society</i> , 2009 , 46, 510-514	2.2	

55	Coordination-dependent surface atomic contraction in nanocrystals revealed by coherent diffraction. <i>Nature Materials</i> , 2008 , 7, 308-13	27	296
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