

Rolf Erni

List of Publications by Year in descending order

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240
papers

15,126
citations

36303

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19190

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docs citations

253
times ranked

21422
citing authors

#	ARTICLE	IF	CITATIONS
1	Dynamics and control of active sites in hierarchically nanostructured cobalt phosphide/chalcogenide-based electrocatalysts for water splitting. <i>Energy and Environmental Science</i> , 2022, 15, 727-739.	30.8	96
2	Improving the lifetime of hybrid CoPc@MWCNT catalysts for selective electrochemical CO ₂ -to-CO conversion. <i>Journal of Catalysis</i> , 2022, 407, 198-205.	6.2	11
3	Machine learning in scanning transmission electron microscopy. <i>Nature Reviews Methods Primers</i> , 2022, 2, .	21.2	59
4	Structural Diversity in Multicomponent Nanocrystal Superlattices Comprising Lead Halide Perovskite Nanocubes. <i>ACS Nano</i> , 2022, 16, 7210-7232.	14.6	18
5	Ultra-narrow room-temperature emission from single CsPbBr ₃ perovskite quantum dots. <i>Nature Communications</i> , 2022, 13, 2587.	12.8	66
6	Topo-Layer Engineering Reshapes Charge Transfer at Polar Oxide Interfaces. <i>Advanced Materials</i> , 2022, 34, .	21.0	8
7	Structure Matters – Direct In-situ Observation of Cluster Nucleation at Atomic Scale in a Liquid Phase. <i>ChemNanoMat</i> , 2021, 7, 110-116.	2.8	10
8	Millisecond photonic sintering of iron oxide doped alumina ceramic coatings. <i>Scientific Reports</i> , 2021, 11, 3536.	3.3	7
9	Limitations of identical location SEM as a method of degradation studies on surfactant capped nanoparticle electrocatalysts. <i>Journal of Catalysis</i> , 2021, 394, 58-66.	6.2	16
10	Reversible Phase Transformations in Novel Ce-Substituted Perovskite Oxide Composites for Solar Thermochemical Redox Splitting of CO ₂ . <i>Advanced Energy Materials</i> , 2021, 11, 2003532.	19.5	18
11	Atomic Mechanisms of Nanocrystallization via Cluster-Clouds in Solution Studied by Liquid-Phase Scanning Transmission Electron Microscopy. <i>Nano Letters</i> , 2021, 21, 2861-2869.	9.1	20
12	High conductivity InAlN/GaN multi-channel two-dimensional electron gases. <i>Semiconductor Science and Technology</i> , 2021, 36, 055020.	2.0	4
13	Perovskite-type superlattices from lead halide perovskite nanocubes. <i>Nature</i> , 2021, 593, 535-542.	27.8	152
14	The nucleation, radial growth, and bonding of TiO ₂ deposited via atomic layer deposition on single-walled carbon nanotubes. <i>Applied Surface Science</i> , 2021, 555, 149662.	6.1	3
15	Magnetolectric coupling in micropatterned BaTiO ₃ /CoFe ₂ O ₄ epitaxial thin film structures: Augmentation and site-dependency. <i>Applied Physics Letters</i> , 2021, 119, .	3.3	10
16	Shape-Directed Co-Assembly of Lead Halide Perovskite Nanocubes with Dielectric Nanodisks into Binary Nanocrystal Superlattices. <i>ACS Nano</i> , 2021, 15, 16488-16500.	14.6	25
17	Unraveling the shell growth pathways of Pd-Pt core-shell nanocubes at atomic level by in situ liquid cell electron microscopy. <i>Applied Physics Reviews</i> , 2021, 8, 041407.	11.3	4
18	Multi-step atomic mechanism of platinum nanocrystals nucleation and growth revealed by in-situ liquid cell STEM. <i>Scientific Reports</i> , 2021, 11, 23965.	3.3	13

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19	Probing local order in multiferroics by transmission electron microscopy. <i>Physical Sciences Reviews</i> , 2020, 5, .	0.8	6
20	The Structure of Sub- \AA m Platinum Clusters at Elevated Temperatures. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 839-845.	13.8	29
21	The Structure of Sub- \AA m Platinum Clusters at Elevated Temperatures. <i>Angewandte Chemie</i> , 2020, 132, 849-855.	2.0	7
22	Activation of bimetallic AgCu foam electrocatalysts for ethanol formation from CO ₂ by selective Cu oxidation/reduction. <i>Nano Energy</i> , 2020, 68, 104331.	16.0	102
23	Atomic mechanisms of gold nanoparticle growth in ionic liquids studied by <i>in situ</i> scanning transmission electron microscopy. <i>Nanoscale</i> , 2020, 12, 22511-22517.	5.6	17
24	Disentangling nanoscale electric and magnetic fields by time-reversal operation in differential phase-contrast STEM. <i>Applied Physics Letters</i> , 2020, 117, .	3.3	8
25	Understanding and Optimizing Ultra-Thin Coordination Polymer Derivatives with High Oxygen Evolution Performance. <i>Advanced Energy Materials</i> , 2020, 10, 2002228.	19.5	28
26	Responsive Nanofibers with Embedded Hierarchical Lipid Self-Assemblies. <i>Langmuir</i> , 2020, 36, 11787-11797.	3.5	6
27	High-Mobility In ₂ O ₃ :H Electrodes for Four-Terminal Perovskite/CuInSe ₂ Tandem Solar Cells. <i>ACS Nano</i> , 2020, 14, 7502-7512.	14.6	54
28	Activation Matters: Hysteresis Effects during Electrochemical Looping of Colloidal Ag Nanowire Catalysts. <i>ACS Catalysis</i> , 2020, 10, 8503-8514.	11.2	19
29	Self-Templating Strategies for Transition Metal Sulfide Nanoboxes as Robust Bifunctional Electrocatalysts. <i>Chemistry of Materials</i> , 2020, 32, 1371-1383.	6.7	50
30	Coarsening- and creep resistance of precipitation-strengthened Al-Mg-Zr alloys processed by selective laser melting. <i>Acta Materialia</i> , 2020, 188, 192-202.	7.9	89
31	Multi-resolution convolutional neural networks for inverse problems. <i>Scientific Reports</i> , 2020, 10, 5730.	3.3	17
32	Imaging and quantification of charged domain walls in BiFeO ₃ . <i>Nanoscale</i> , 2020, 12, 9186-9193.	5.6	25
33	Atomic-resolution differential phase contrast STEM on ferroelectric materials: A mean-field approach. <i>Physical Review B</i> , 2020, 101, .	3.2	11
34	Atomic structure and electronic properties of planar defects in SrFe ₂ O ₃ thin films. <i>Physical Review Materials</i> , 2020, 4, .	2.4	1
35	Noise2Atom: unsupervised denoising for scanning transmission electron microscopy images. <i>Applied Microscopy</i> , 2020, 50, 23.	1.4	27
36	Dynamic Role of Cluster Cocatalysts on Molecular Photoanodes for Water Oxidation. <i>Journal of the American Chemical Society</i> , 2019, 141, 12839-12848.	13.7	29

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37	Template-Assisted in Situ Synthesis of Ag@Au Bimetallic Nanostructures Employing Liquid-Phase Transmission Electron Microscopy. ACS Nano, 2019, 13, 13333-13342.	14.6	32
38	Reliability of two embedded atom models for the description of Ag@Au nanoalloys. Journal of Chemical Physics, 2019, 151, 064105.	3.0	9
39	InAlN underlayer for near ultraviolet InGaN based light emitting diodes. Applied Physics Express, 2019, 12, 034002.	2.4	32
40	Atomic-scale structural characterization of grain boundaries in epitaxial Ge/Si microcrystals by HAADF-STEM. Acta Materialia, 2019, 167, 159-166.	7.9	5
41	Buried In-Plane Ferroelectric Domains in Fe-Doped Single-Crystalline Aurivillius Thin Films. ACS Applied Electronic Materials, 2019, 1, 1019-1028.	4.3	27
42	Synthesis and Characterization of Degradation-Resistant Cu@CuPd Nanowire Catalysts for the Efficient Production of Formate and CO from CO ₂ . ChemElectroChem, 2019, 6, 3189-3198.	3.4	15
43	Copper sulfide nanoparticles as high-performance cathode materials for Mg-ion batteries. Scientific Reports, 2019, 9, 7988.	3.3	64
44	Effect of thermal annealing on the interface quality of Ge/Si heterostructures. Scripta Materialia, 2019, 170, 52-56.	5.2	7
45	The ground exciton state of formamidinium lead bromide perovskite nanocrystals is a singlet dark state. Nature Materials, 2019, 18, 717-724.	27.5	189
46	Transition metal trifluoroacetates (M=Fe, Co, Mn) as precursors for uniform colloidal metal difluoride and phosphide nanoparticles. Scientific Reports, 2019, 9, 6613.	3.3	11
47	Zeolite-Templated Carbon as the Cathode for a High Energy Density Dual-Ion Battery. ACS Applied Materials & Interfaces, 2019, 11, 17686-17696.	8.0	32
48	In situ Template Assisted Growth of Ag@Au Bimetallic Nanostructures. Microscopy and Microanalysis, 2019, 25, 41-42.	0.4	0
49	The ultrathin limit of improper ferroelectricity. Nature Communications, 2019, 10, 5591.	12.8	44
50	Formation of gold nanoparticles in a free-standing ionic liquid triggered by heat and electron irradiation. Micron, 2019, 117, 16-21.	2.2	14
51	Structure and properties of edge dislocations in BiFeO ₃ . Physical Review Materials, 2019, 3, .	2.4	7
52	Differentiation of dental restorative materials combining energy-dispersive X-ray fluorescence spectroscopy and post-mortem CT. Forensic Science, Medicine, and Pathology, 2018, 14, 163-173.	1.4	4
53	Reinforced and superinsulating silica aerogel through in situ cross-linking with silane terminated prepolymers. Acta Materialia, 2018, 147, 322-328.	7.9	28
54	Popcorn-Shaped Fe ₃ O ₄ (Wüstite) Nanoparticles from a Single-Source Precursor: Colloidal Synthesis and Magnetic Properties. Chemistry of Materials, 2018, 30, 1249-1256.	6.7	21

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55	Periodic Giant Polarization Gradients in Doped BiFeO ₃ Thin Films. Nano Letters, 2018, 18, 717-724.	9.1	54
56	Voids and compositional inhomogeneities in Cu(In,Ga)Se ₂ thin films: evolution during growth and impact on solar cell performance. Science and Technology of Advanced Materials, 2018, 19, 871-882.	6.1	23
57	ALD-Zn _x Ti _y O as Window Layer in Cu(In,Ga)Se ₂ Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 43603-43609.	8.0	20
58	Liquid Phase Studies of Nanomaterials. Chimia, 2018, 72, 727.	0.6	1
59	Epitaxial Thin Films as a Model System for Li-Ion Conductivity in Li ₄ Ti ₅ O ₁₂ . ACS Applied Materials & Interfaces, 2018, 10, 44494-44500.	8.0	17
60	HAADF-STEM Investigation of III-V Semiconductors Grown on Nanopatterned Si(001) Substrates. Microscopy and Microanalysis, 2018, 24, 140-141.	0.4	0
61	Dopant-Induced Modifications of Ga _x In _(1-x) P Nanowire-Based p-n Junctions Monolithically Integrated on Si(111). ACS Applied Materials & Interfaces, 2018, 10, 32588-32596.	8.0	18
62	A comparative study of defect formation in GaAs nanocrystals selectively grown on nanopatterned and flat Si(001) substrates. Micron, 2018, 113, 83-90.	2.2	0
63	Strain-induced ferroelectricity and spin-lattice coupling in SrMnO_3 thin films. Physical Review B, 2018, 97, .	3.2	51
64	Stair-rod dislocation cores acting as one-dimensional charge channels in GaAs nanowires. Physical Review Materials, 2018, 2, .	2.4	1
65	Atomic Layer Deposition of Titanium Oxide on Single-Layer Graphene: An Atomic-Scale Study toward Understanding Nucleation and Growth. Chemistry of Materials, 2017, 29, 2232-2238.	6.7	23
66	Structural and optical characterization of GaAs nano-crystals selectively grown on Si nano-tips by MOVPE. Nanotechnology, 2017, 28, 135301.	2.6	19
67	Bi-modal nanoheteroepitaxy of GaAs on Si by metal organic vapor phase epitaxy. Nanotechnology, 2017, 28, 135701.	2.6	15
68	Selective Nucleation of GaAs on Si Nanofacets. Small, 2017, 13, 1603122.	10.0	7
69	Atomic Scale Study on Growth and Heteroepitaxy of ZnO Monolayer on Graphene. Nano Letters, 2017, 17, 120-127.	9.1	120
70	Epitaxial Growth of ZnO Monolayer on Graphene: The Thinnest Metal Oxide Semiconductor. Microscopy and Microanalysis, 2017, 23, 1434-1435.	0.4	4
71	Strain relaxation in epitaxial GaAs/Si (001) nanostructures. Philosophical Magazine, 2017, 97, 2845-2857.	1.6	8
72	Understanding the Effect of Doping and Epitaxial Strain on the Ferroelectric Polarization of Layered Perovskite Thin Films. Microscopy and Microanalysis, 2017, 23, 1606-1607.	0.4	0

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73	Formation of Au Nanoparticles in Liquid Cell Transmission Electron Microscopy: From a Systematic Study to Engineered Nanostructures. <i>Chemistry of Materials</i> , 2017, 29, 10518-10525.	6.7	43
74	Strain Engineering in Highly Mismatched SiGe/Si Heterostructures. <i>Materials Science in Semiconductor Processing</i> , 2017, 70, 117-122.	4.0	8
75	Strain relaxation in epitaxial Ge crystals grown on patterned Si(001) substrates. <i>Scripta Materialia</i> , 2017, 127, 169-172.	5.2	12
76	Structural defects in cubic semiconductors characterized by aberration-corrected scanning transmission electron microscopy. <i>Ultramicroscopy</i> , 2017, 176, 11-22.	1.9	31
77	Investigation of dielectric properties and microstructure of sintered $13\text{Li}_2\text{O} \cdot 67\text{SiO}_2 \cdot 14.49\text{Al}_2\text{O}_3 \cdot 3\text{TiO}_2 \cdot 0.4\text{BaO} \cdot 0.97\text{ZnO}$ glass-ceramics. <i>Journal of the European Ceramic Society</i> , 2017, 37, 631-639.	5.7	22
78	Synthesis of hydrophilic and hydrophobic carbon quantum dots from waste of wine fermentation. <i>Royal Society Open Science</i> , 2017, 4, 170900.	2.4	42
79	A tool for automatic recognition of [110] tilt grain boundaries in zincblende-type crystals. <i>Journal of Applied Crystallography</i> , 2017, 50, 1299-1306.	4.5	4
80	Site controlled InAs/GaAs nanostructures on Si nano-tips. , 2017, , .		0
81	Highly Mismatched, Dislocation-Free SiGe/Si Heterostructures. <i>Advanced Materials</i> , 2016, 28, 884-888.	21.0	37
82	Enhancing elastic stress relaxation in SiGe/Si heterostructures by Si pillar necking. <i>Applied Physics Letters</i> , 2016, 109, 182112.	3.3	3
83	Band gap widening at random CIGS grain boundary detected by valence electron energy loss spectroscopy. <i>Applied Physics Letters</i> , 2016, 109, .	3.3	19
84	On the validity of the ÅErenkov limit as a criterion for precise band gap measurements by VEELS. <i>Ultramicroscopy</i> , 2016, 160, 80-83.	1.9	13
85	Assessment of off-axis and in-line electron holography for measurement of potential variations in Cu(In,Ga)Se ₂ thin-film solar cells. <i>Advanced Structural and Chemical Imaging</i> , 2016, 2, .	4.0	6
86	Strain-driven oxygen deficiency in multiferroic SrMnO_3 films. <i>Physical Review B</i> , 2016, 94, .		0
87	Coherent Chromatic Effect in the Transmission Electron Microscope. <i>Physical Review Letters</i> , 2016, 116, 116101.	7.8	0
88	Elastic and Plastic Stress Relaxation in Highly Mismatched SiGe/Si Crystals. <i>MRS Advances</i> , 2016, 1, 3403-3408.	0.9	1
89	From plastic to elastic stress relaxation in highly mismatched SiGe/Si heterostructures. <i>Acta Materialia</i> , 2016, 114, 97-105.	7.9	7
90	High Conformity and Large Domain Monocrystalline Anatase on Multiwall Carbon Nanotube Core-Shell Nanostructure: Synthesis, Structure, and Interface. <i>Chemistry of Materials</i> , 2016, 28, 3488-3496.	6.7	23

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91	Promoting Photochemical Water Oxidation with Metallic Band Structures. Journal of the American Chemical Society, 2016, 138, 1527-1535.	13.7	32
92	Electron energy loss spectroscopy analysis of the interaction of Cr and V with MWCNTs. Micron, 2016, 84, 37-42.	2.2	3
93	Approaching the Limits of Strength: Measuring the Uniaxial Compressive Strength of Diamond at Small Scales. Nano Letters, 2016, 16, 812-816.	9.1	41
94	Methanol steam reforming catalysts derived by reduction of perovskite-type oxides $\text{LaCo}_{1-x}\text{Pd}_x\text{Zn}_y\text{O}_{3\pm l}$. Catalysis Science and Technology, 2016, 6, 1455-1468.	4.1	31
95	Analysis of edge threading dislocations $\rho = 12 \times 10^6 \%$ in three dimensional Ge crystals grown on (001)-Si substrates. Applied Physics Letters, 2015, 107, .	3.3	5
96	Composition dependent self-regenerative property of perovskite-type oxides. Physica Status Solidi - Rapid Research Letters, 2015, 9, 282-287.	2.4	10
97	Formation of pure Cu nanocrystals upon post-growth annealing of Cu-C material obtained from focused electron beam induced deposition: comparison of different methods. Beilstein Journal of Nanotechnology, 2015, 6, 1508-1517.	2.8	17
98	Enhanced Carrier Collection from CdS Passivated Grains in Solution-Processed $\text{Cu}_2\text{ZnSn}(\text{S},\text{Se})_4$ Solar Cells. ACS Applied Materials & Interfaces, 2015, 7, 12141-12146.	8.0	33
99	Barium-titanate integrated with silicon photonics for ultra-efficient electro-optical performance. , 2015, , .		0
100	Orientation-controlled nanotwinned copper prepared by electrodeposition. Electrochimica Acta, 2015, 178, 458-467.	5.2	39
101	Understanding and Controlling Nucleation and Growth of TiO_2 Deposited on Multiwalled Carbon Nanotubes by Atomic Layer Deposition. Journal of Physical Chemistry C, 2015, 119, 3379-3387.	3.1	34
102	Mechanical behavior of intragranular, nano-porous electrodeposited zinc oxide. Thin Solid Films, 2015, 578, 174-179.	1.8	4
103	Intergranular pore space evolution in MX80 bentonite during a long-term experiment. Applied Clay Science, 2015, 104, 150-159.	5.2	8
104	Morphology and crystallinity control of ultrathin TiO_2 layers deposited on carbon nanotubes by temperature-step atomic layer deposition. Nanoscale, 2015, 7, 10622-10633.	5.6	41
105	Inexpensive Antimony Nanocrystals and Their Composites with Red Phosphorus as High-Performance Anode Materials for Na-ion Batteries. Scientific Reports, 2015, 5, 8418.	3.3	64
106	Direct Evidence of Surface Reduction in Monoclinic BiVO_4 . Chemistry of Materials, 2015, 27, 3593-3600.	6.7	78
107	Carbon-metal interfaces analyzed by aberration-corrected TEM: How copper and nickel nanoparticles interact with MWCNTs. Micron, 2015, 72, 52-58.	2.2	15
108	Integration of GaN Crystals on Micropatterned Si(0 0 1) Substrates by Plasma-Assisted Molecular Beam Epitaxy. Crystal Growth and Design, 2015, 15, 4886-4892.	3.0	10

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109	Confined Epitaxial Lateral Overgrowth (CELO): A novel concept for scalable integration of CMOS-compatible InGaAs-on-insulator MOSFETs on large-area Si substrates. , 2015, , .		49
110	Manipulating the reaction path of the CO ₂ hydrogenation reaction in molecular sieves. Catalysis Science and Technology, 2015, 5, 4613-4621.	4.1	36
111	Monodisperse SnSb nanocrystals for Li-ion and Na-ion battery anodes: synergy and dissonance between Sn and Sb. Nanoscale, 2015, 7, 455-459.	5.6	128
112	Growth and characterization of CNT@TiO ₂ heterostructures. Beilstein Journal of Nanotechnology, 2014, 5, 946-955.	2.8	25
113	Silicon carbide embedded in carbon nanofibres: structure and band gap determination. Physical Chemistry Chemical Physics, 2014, 16, 24437-24442.	2.8	7
114	Local Band Gap Measurements by VEELS of Thin Film Solar Cells. Microscopy and Microanalysis, 2014, 20, 1246-1253.	0.4	20
115	Nanoscale phase separation in perovskites revisited. Nature Materials, 2014, 13, 216-217.	27.5	10
116	Single-step functionalization of vertically aligned MWCNTs with Cu and Ni by chemical reduction of copper and nickel acetyl acetonate in benzyl alcohol. Carbon, 2014, 73, 146-154.	10.3	8
117	Monodisperse Colloidal Gallium Nanoparticles: Synthesis, Low Temperature Crystallization, Surface Plasmon Resonance and Li-Ion Storage. Journal of the American Chemical Society, 2014, 136, 12422-12430.	13.7	133
118	Reply to Comment on "Frustrated Octahedral Tilting Distortion in the Incommensurately Modulated Li ₃ Nd _{2/3} TiO ₃ Perovskites". Chemistry of Materials, 2014, 26, 1288-1288.	6.7	2
119	Mesoporosity in Photocatalytically Active Oxynitride Single Crystals. Journal of Physical Chemistry C, 2014, 118, 20940-20947.	3.1	22
120	Presence of Nanoparticles in Wash Water from Conventional Silver and Nano-silver Textiles. ACS Nano, 2014, 8, 7208-7219.	14.6	231
121	Surface Reduction in Monoclinic BiVO ₄ for Photocatalytic Applications. Microscopy and Microanalysis, 2014, 20, 436-437.	0.4	0
122	Real space crystallography of a complex metallic alloy: high-angle annular dark-field scanning transmission electron microscopy of o-Al ₄ (Cr,Fe). Journal of Applied Crystallography, 2014, 47, 1026-1031.	4.5	5
123	A General Approach To Fabricate Fe ₃ O ₄ Nanoparticles Decorated with Pd, Au, and Rh: Magnetically Recoverable and Reusable Catalysts for Suzuki C-C Cross-Coupling Reactions, Hydrogenation, and Sequential Reactions. Chemistry - A European Journal, 2013, 19, 11963-11974.	3.3	41
124	Hematite@NiO/Ni(OH) ₂ heterostructure photoanodes with high electrocatalytic current density and charge storage capacity. Physical Chemistry Chemical Physics, 2013, 15, 12648.	2.8	34
125	Controlling tetragonality and crystalline orientation in BaTiO ₃ nano-layers grown on Si. Nanotechnology, 2013, 24, 285701.	2.6	43
126	Impact of sonication pretreatment on carbon nanotubes: A transmission electron microscopy study. Carbon, 2013, 61, 404-411.	10.3	62

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127	Characterization of multi-scale microstructural features in Opalinus Clay. <i>Microporous and Mesoporous Materials</i> , 2013, 170, 83-94.	4.4	152
128	Potassium-induced surface modification of Cu(In,Ga)Se ₂ thin films for high-efficiency solar cells. <i>Nature Materials</i> , 2013, 12, 1107-1111.	27.5	1,161
129	Sorption enhanced CO ₂ methanation. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 9620.	2.8	130
130	Quantifying the low-energy limit and spectral resolution in valence electron energy loss spectroscopy. <i>Ultramicroscopy</i> , 2013, 124, 130-138.	1.9	13
131	Direct Evidence of Stacking Disorder in the Mixed Ionic-Electronic Conductor Sr ₄ Fe ₆ O ₁₂ ⁺ . <i>ACS Nano</i> , 2013, 7, 3078-3085.	14.6	7
132	Influence of surface oxidation on the valence electron energy-loss spectrum of wurtzite aluminum nitride. <i>Applied Physics Letters</i> , 2013, 102, 061902.	3.3	4
133	Binary Superlattices from Colloidal Nanocrystals and Giant Polyoxometalate Clusters. <i>Nano Letters</i> , 2013, 13, 1699-1705.	9.1	46
134	A strong electro-optically active lead-free ferroelectric integrated on silicon. <i>Nature Communications</i> , 2013, 4, 1671.	12.8	249
135	Microwave-Assisted Nonaqueous Sol-Gel Synthesis: From Al:ZnO Nanoparticles to Transparent Conducting Films. <i>ACS Sustainable Chemistry and Engineering</i> , 2013, 1, 152-160.	6.7	54
136	Frustrated Octahedral Tilting Distortion in the Incommensurately Modulated Li ₃ Nd _{2/3} TiO ₃ Perovskites. <i>Chemistry of Materials</i> , 2013, 25, 2670-2683.	6.7	41
137	Electro-Optical Active Barium Titanate Thin Films in Silicon Photonics Devices. , 2013, , .		8
138	Quantum Confinement in Germanium Quantum Dots Observed by Electron Energy-Loss Spectroscopy. <i>Microscopy and Microanalysis</i> , 2013, 19, 1486-1487.	0.4	0
139	Defects in Two Dimensional Crystals: An Ultra-high Resolution Aberration-corrected Electron Microscopy Study. <i>Microscopy and Microanalysis</i> , 2013, 19, 618-619.	0.4	0
140	Two-dimensional nucleation and growth mechanism explaining graphene oxide structures. <i>Physical Review B</i> , 2012, 86, .	3.2	39
141	Interface control of bulk ferroelectric polarization. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 9710-9715.	7.1	212
142	Defects in Two Dimensional Crystals: An Ultra-high Resolution Aberration-corrected Electron Microscopy Study. <i>Microscopy and Microanalysis</i> , 2012, 18, 1516-1517.	0.4	0
143	An integration path for gate-first UTB III-V-on-insulator MOSFETs with silicon, using direct wafer bonding and donor wafer recycling. , 2012, , .		36
144	Direct Imaging of Dopant Clustering in Metal-Oxide Nanoparticles. <i>ACS Nano</i> , 2012, 6, 7077-7083.	14.6	32

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145	Passing the limit of electrodeposition: "Gas template"™ H ₂ nanobubbles for growing highly crystalline nanoporous ZnO. Nano Energy, 2012, 1, 742-750.	16.0	14
146	Urchin-inspired zinc oxide as building blocks for nanostructured solar cells. Nano Energy, 2012, 1, 696-705.	16.0	61
147	A two-dimensional polymer prepared by organic synthesis. Nature Chemistry, 2012, 4, 287-291.	13.6	376
148	Quantum confinement of volume plasmons and interband transitions in germanium nanocrystals. Physical Review B, 2012, 86, .	3.2	12
149	Defect controlled room temperature ferromagnetism in Co-doped barium titanate nanocrystals. Nanotechnology, 2012, 23, 025702.	2.6	27
150	Formation Mechanism of LiFePO ₄ Sticks Grown by a Microwave-Assisted Liquid-Phase Process. Small, 2012, 8, 2231-2238.	10.0	20
151	Atomic Structure of Highly Strained BiFeO_3 Thin Films. Physical Review Letters, 2012, 108, 047601.	7.8	96
152	Nanoindentation response of an ion irradiated Zr-based bulk metallic glass. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 532, 407-413.	5.6	43
153	A Chemists Method for Making Pure Clean Graphene. Carbon Nanostructures, 2012, , 129-136.	0.1	0
154	Hydrothermal Treatment of a Hematite Film Leads to Highly Oriented Faceted Nanostructures with Enhanced Photocurrents. Chemistry of Materials, 2011, 23, 2051-2061.	6.7	63
155	Atomic-scale Interaction Dynamics in Few-layer Hexagonal Boron Nitride (h-BN). Microscopy and Microanalysis, 2011, 17, 1258-1259.	0.4	1
156	Making the probe the center of the experiment. Physics Magazine, 2011, 4, .	0.1	0
157	Three-dimensional atomic imaging of crystalline nanoparticles. Nature, 2011, 470, 374-377.	27.8	503
158	Vacancy growth and migration dynamics in atomically thin hexagonal boron nitride under electron beam irradiation. Physica Status Solidi - Rapid Research Letters, 2011, 5, 295-297.	2.4	24
159	Impact of substrate material and annealing conditions on the microstructure and chemistry of yttria-stabilized-zirconia thin films. Journal of Power Sources, 2011, 196, 7372-7382.	7.8	22
160	Characterization of wurtzite ZnO using valence electron energy loss spectroscopy. Physical Review B, 2011, 84, .	3.2	20
161	Ultra-High-Resolution Transmission Electron Microscopy of Atomically Thin Hexagonal Boron Nitride (h-BN). Microscopy and Microanalysis, 2010, 16, 120-121.	0.4	1
162	Atomic Configuration of Planar Defects in Multiferroic Ca-doped BiFeO ₃ Films. Microscopy and Microanalysis, 2010, 16, 96-97.	0.4	1

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