Rolf Erni

List of Publications by Year
in descending order

240 papers	15,126 citations	36303 51 h-index	19190 118 g-index
253 all docs	253 docs citations	253 times ranked	21422 citing authors

#	Article	IF	Citations
1	Potassium-induced surface modification of Cu(In,Ga)Se2 thin films for high-efficiency solar cells. Nature Materials, 2013, 12, 1107-1111.	27.5	1,161
2	Graphene at the Edge: Stability and Dynamics. Science, 2009, 323, 1705-1708.	12.6	1,153
3	Direct Imaging of Lattice Atoms and Topological Defects in Graphene Membranes. Nano Letters, 2008, 8, 3582-3586.	9.1	1,090
4	A Strain-Driven Morphotropic Phase Boundary in BiFeO ₃. Science, 2009, 326, 977-980.	12.6	1,065
5	Determination of the Local Chemical Structure of Graphene Oxide and Reduced Graphene Oxide. Advanced Materials, 2010, 22, 4467-4472.	21.0	1,044
6	Three-dimensional atomic imaging of crystalline nanoparticles. Nature, 2011, 470, 374-377.	27.8	503
7	Atomically thin hexagonal boron nitride probed by ultrahigh-resolution transmission electron microscopy. Physical Review B, 2009, 80, .	3.2	456
8	Atomic-Resolution Imaging with a Sub-50-pm Electron Probe. Physical Review Letters, 2009, 102, 096101.	7.8	440
9	A two-dimensional polymer prepared by organic synthesis. Nature Chemistry, 2012, 4, 287-291.	13.6	376
10	Interface Ferromagnetism and Orbital Reconstruction in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>BiFeO</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:mtext mathvariant="normal">âˆ'</mml:mtext><mml:msub><mml:mi>La</mml:mi><mml:mn>0.7</mml:mn></mml:msub><mml:msub><mml:r Physical Review Letters, 2010, 105, 027201.	7.8	335
11	Detection of Single Atoms and Buried Defects in Three Dimensions by Aberration-Corrected Electron Microscope with 0.5-Å… Information Limit. Microscopy and Microanalysis, 2008, 14, 469-477.	0.4	266
12	A strong electro-optically active lead-free ferroelectric integrated on silicon. Nature Communications, 2013, 4, 1671.	12.8	249
13	Presence of Nanoparticles in Wash Water from Conventional Silver and Nano-silver Textiles. ACS Nano, 2014, 8, 7208-7219.	14.6	231
14	Interface control of bulk ferroelectric polarization. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 9710-9715.	7.1	212
15	Quantitative atomic resolution mapping using high-angle annular dark field scanning transmission electron microscopy. Ultramicroscopy, 2009, 109, 1236-1244.	1.9	195
16	The ground exciton state of formamidinium lead bromide perovskite nanocrystals is a singlet dark state. Nature Materials, 2019, 18, 717-724.	27.5	189
17	Characterization of multi-scale microstructural features in Opalinus Clay. Microporous and Mesoporous Materials, 2013, 170, 83-94.	4.4	152
18	Perovskite-type superlattices from lead halide perovskite nanocubes. Nature, 2021, 593, 535-542.	27.8	152

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19	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
20	Sorption enhanced CO2 methanation. Physical Chemistry Chemical Physics, 2013, 15, 9620.	2.8	130
21	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
22	Direct Imaging of Softâ˘'Hard Interfaces Enabled by Graphene. Nano Letters, 2009, 9, 3365-3369.	9.1	127
23	Metal-decorated multi-wall carbon nanotubes for low temperature gas sensing. Thin Solid Films, 2007, 515, 8322-8327.	1.8	122
24	Atomic Scale Study on Growth and Heteroepitaxy of ZnO Monolayer on Graphene. Nano Letters, 2017, 17, 120-127.	9.1	120
25	Activation of bimetallic AgCu foam electrocatalysts for ethanol formation from CO2 by selective Cu oxidation/reduction. Nano Energy, 2020, 68, 104331.	16.0	102
26	Valence electron energy-loss spectroscopy in monochromated scanning transmission electron microscopy. Ultramicroscopy, 2005, 104, 176-192.	1.9	96
27	Atomic Structure of Highly Strained<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>BiFeO</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:math>Thin Films. Physical Review Letters, 2012, 108, 047601.	7.8	96
28	Dynamics and control of active sites in hierarchically nanostructured cobalt phosphide/chalcogenide-based electrocatalysts for water splitting. Energy and Environmental Science, 2022, 15, 727-739.	30.8	96
29	Coarsening- and creep resistance of precipitation-strengthened Alâ€"Mgâ€"Zr alloys processed by selective laser melting. Acta Materialia, 2020, 188, 192-202.	7.9	89
30	Decorating carbon nanotubes with nickel nanoparticles. Chemical Physics Letters, 2007, 436, 368-372.	2.6	88
31	The impact of surface and retardation losses on valence electron energy-loss spectroscopy. Ultramicroscopy, 2008, 108, 84-99.	1.9	82
32	Clean and highly ordered graphene synthesized in the gas phase. Chemical Communications, 2009, , 6095.	4.1	82
33	Electron-beam mapping of plasmon resonances in electromagnetically interacting gold nanorods. Physical Review B, 2009, 80, .	3.2	78
34	Direct Evidence of Surface Reduction in Monoclinic BiVO₄. Chemistry of Materials, 2015, 27, 3593-3600.	6.7	78
35	Background, status and future of the Transmission Electron Aberration-corrected Microscope project. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2009, 367, 3795-3808.	3.4	77
36	Stability and dynamics of small molecules trapped on graphene. Physical Review B, 2010, 82, .	3.2	71

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37	An Astronomical 2175 A Feature in Interplanetary Dust Particles. Science, 2005, 307, 244-247.	12.6	70
38	Measurement of effective source distribution and its importance for quantitative interpretation of STEM images. Ultramicroscopy, 2010, 110, 952-957.	1.9	67
39	Ultra-narrow room-temperature emission from single CsPbBr3 perovskite quantum dots. Nature Communications, 2022, 13, 2587.	12.8	66
40	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
41	Copper sulfide nanoparticles as high-performance cathode materials for Mg-ion batteries. Scientific Reports, 2019, 9, 7988.	3.3	64
42	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
43	Impact of sonication pretreatment on carbon nanotubes: A transmission electron microscopy study. Carbon, 2013, 61, 404-411.	10.3	62
44	High purity graphenes prepared by a chemical intercalation method. Nanoscale, 2010, 2, 2139.	5.6	61
45	Urchin-inspired zinc oxide as building blocks for nanostructured solar cells. Nano Energy, 2012, 1, 696-705.	16.0	61
46	Machine learning in scanning transmission electron microscopy. Nature Reviews Methods Primers, 2022, 2, .	21.2	59
47	Novel hybrid materials for gas sensing applications made of metal-decorated MWCNTs dispersed on nano-particle metal oxides. Sensors and Actuators B: Chemical, 2008, 131, 174-182.	7.8	57
48	Strain-driven oxygen deficiency in multiferroic<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>SrMnO</mml:mi><mml:mn>3</mml:mn></mml:msub></ films. Physical Review B, 2016, 94, .	3.2	56
49	Quantification of the size-dependent energy gap of individual CdSe quantum dots by valence electron energy-loss spectroscopy. Ultramicroscopy, 2007, 107, 267-273.	1.9	55
50	Microwave-Assisted Nonaqueous Solâ€"Gel Synthesis: From Al:ZnO Nanoparticles to Transparent Conducting Films. ACS Sustainable Chemistry and Engineering, 2013, 1, 152-160.	6.7	54
51	Periodic Giant Polarization Gradients in Doped BiFeO₃ Thin Films. Nano Letters, 2018, 18, 717-724.	9.1	54
52	High-Mobility In₂O₃:H Electrodes for Four-Terminal Perovskite/CuInSe₂ Tandem Solar Cells. ACS Nano, 2020, 14, 7502-7512.	14.6	54
53	Local indium segregation and bang gap variations in high efficiency green light emitting InGaN/GaN diodes. Solid State Communications, 2006, 137, 230-234.	1.9	53
54	Tunable Nanosynthesis of Composite Materials by Electronâ€Impact Reaction. Angewandte Chemie - International Edition, 2010, 49, 8880-8884.	13.8	51

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55	Strain-induced ferroelectricity and spin-lattice coupling in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>SrMn</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math> thin films. Physical Review B, 2018, 97, .	3.2	51
56	Distortion and Segregation in a Dislocation Core Region at Atomic Resolution. Physical Review Letters, 2005, 95, 145501.	7.8	50
57	Self-Templating Strategies for Transition Metal Sulfide Nanoboxes as Robust Bifunctional Electrocatalysts. Chemistry of Materials, 2020, 32, 1371-1383.	6.7	50
58	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
59	Band transitions in wurtzite GaN and InN determined by valence electron energy loss spectroscopy. Solid State Communications, 2005, 135, 340-344.	1.9	46
60	Binary Superlattices from Colloidal Nanocrystals and Giant Polyoxometalate Clusters. Nano Letters, 2013, 13, 1699-1705.	9.1	46
61	The effect of Ni in Pdâ€"Ni/(Ce,Zr)O/AlO catalysts used for stoichiometric CO and NO elimination. Part 1: Nanoscopic characterization of the catalysts. Journal of Catalysis, 2005, 235, 251-261.	6.2	44
62	The ultrathin limit of improper ferroelectricity. Nature Communications, 2019, 10, 5591.	12.8	44
63	Quantitative characterisation of chemical inhomogeneities in â€"Ag using high-resolution Z-contrast STEM. Ultramicroscopy, 2003, 94, 125-133.	1.9	43
64	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
65	Controlling tetragonality and crystalline orientation in BaTiO₃nano-layers grown on Si. Nanotechnology, 2013, 24, 285701.	2.6	43
66	Formation of Au Nanoparticles in Liquid Cell Transmission Electron Microscopy: From a Systematic Study to Engineered Nanostructures. Chemistry of Materials, 2017, 29, 10518-10525.	6.7	43
67	Synthesis of hydrophilic and hydrophobic carbon quantum dots from waste of wine fermentation. Royal Society Open Science, 2017, 4, 170900.	2.4	42
68	Method to measure spatial coherence of subangstrom electron beams. Applied Physics Letters, 2008, 93, .	3.3	41
69	A General Approach To Fabricate Fe₃O₄ Nanoparticles Decorated with Pd, Au, and Rh: Magnetically Recoverable and Reusable Catalysts for Suzuki Cï£¿C Crossâ€Coupling Reactions, Hydrogenation, and Sequential Reactions. Chemistry - A European Journal, 2013, 19, 11963-11974.	3.3	41
70	Frustrated Octahedral Tilting Distortion in the Incommensurately Modulated Li3xNd2/3â€"xTiO3Perovskites. Chemistry of Materials, 2013, 25, 2670-2683.	6.7	41
71	Morphology and crystallinity control of ultrathin TiO₂ layers deposited on carbon nanotubes by temperature-step atomic layer deposition. Nanoscale, 2015, 7, 10622-10633.	5.6	41
72	Approaching the Limits of Strength: Measuring the Uniaxial Compressive Strength of Diamond at Small Scales. Nano Letters, 2016, 16, 812-816.	9.1	41

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73	Atomic-resolution imaging of lithium in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Al</mml:mtext></mml:mrow><mml:mn>3</mml:mn></mml:ms Physical Review B, 2009, 80, .	3.2	40
74	Two-dimensional nucleation and growth mechanism explaining graphene oxide structures. Physical Review B, 2012, 86, .	3.2	39
75	Orientation-controlled nanotwinned copper prepared by electrodeposition. Electrochimica Acta, 2015, 178, 458-467.	5.2	39
76	Highly Mismatched, Dislocationâ€Free SiGe/Si Heterostructures. Advanced Materials, 2016, 28, 884-888.	21.0	37
77	An integration path for gate-first UTB III-V-on-insulator MOSFETs with silicon, using direct wafer bonding and donor wafer recycling. , 2012, , .		36
78	Manipulating the reaction path of the CO₂ hydrogenation reaction in molecular sieves. Catalysis Science and Technology, 2015, 5, 4613-4621.	4.1	36
79	Combined HREM and HAADF Scanning Transmission Electron Microscopy:Â A Powerful Tool for Investigating Structural Changes in Thermally Aged Ceriaâ^'Zirconia Mixed Oxides. Chemistry of Materials, 2005, 17, 4282-4285.	6.7	35
80	Hematiteâ€"NiO/Î±-Ni(OH)2 heterostructure photoanodes with high electrocatalytic current density and charge storage capacity. Physical Chemistry Chemical Physics, 2013, 15, 12648.	2.8	34
81	Understanding and Controlling Nucleation and Growth of TiO₂ Deposited on Multiwalled Carbon Nanotubes by Atomic Layer Deposition. Journal of Physical Chemistry C, 2015, 119, 3379-3387.	3.1	34
82	Enhanced Carrier Collection from CdS Passivated Grains in Solution-Processed Cu2ZnSn(S,Se)4 Solar Cells. ACS Applied Materials & Interfaces, 2015, 7, 12141-12146.	8.0	33
83	Diamond Nucleation by Carbon Transport from Buried Nanodiamond TiO₂ Solâ€Gel Composites. Advanced Materials, 2009, 21, 670-673.	21.0	32
84	Direct Imaging of Dopant Clustering in Metalâ€"Oxide Nanoparticles. ACS Nano, 2012, 6, 7077-7083.	14.6	32
85	Promoting Photochemical Water Oxidation with Metallic Band Structures. Journal of the American Chemical Society, 2016, 138, 1527-1535.	13.7	32
86	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
87	InAlN underlayer for near ultraviolet InGaN based light emitting diodes. Applied Physics Express, 2019, 12, 034002.	2.4	32
88	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
89	Methanol steam reforming catalysts derived by reduction of perovskite-type oxides LaCo_{1â^'xâ^'y}Pd_xZn_yO_{3Â±Î´}. Catalysis Science and Technology, 2016, 6, 1455-1468.	4.1	31
90	Structural defects in cubic semiconductors characterized by aberration-corrected scanning transmission electron microscopy. Ultramicroscopy, 2017, 176, 11-22.	1.9	31

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91	Functionalization of MWCNTs with atomic nitrogen. Micron, 2009, 40, 85-88.	2.2	30
92	Dynamic Role of Cluster Cocatalysts on Molecular Photoanodes for Water Oxidation. Journal of the American Chemical Society, 2019, 141, 12839-12848.	13.7	29
93	The Structure of Subâ€nm Platinum Clusters at Elevated Temperatures. Angewandte Chemie - International Edition, 2020, 59, 839-845.	13.8	29
94	Reinforced and superinsulating silica aerogel through in situ cross-linking with silane terminated prepolymers. Acta Materialia, 2018, 147, 322-328.	7.9	28
95	Understanding and Optimizing Ultraâ€Thin Coordination Polymer Derivatives with High Oxygen Evolution Performance. Advanced Energy Materials, 2020, 10, 2002228.	19.5	28
96	Defect controlled room temperature ferromagnetism in Co-doped barium titanate nanocrystals. Nanotechnology, 2012, 23, 025702.	2.6	27
97	Buried In-Plane Ferroelectric Domains in Fe-Doped Single-Crystalline Aurivillius Thin Films. ACS Applied Electronic Materials, 2019, 1, 1019-1028.	4.3	27
98	Noise2Atom: unsupervised denoising for scanning transmission electron microscopy images. Applied Microscopy, 2020, 50, 23.	1.4	27
99	Prospects for analyzing the electronic properties in nanoscale systems by VEELS. Ultramicroscopy, 2008, 108, 270-276.	1.9	25
100	Growth and characterization of CNTâ€“TiO₂ heterostructures. Beilstein Journal of Nanotechnology, 2014, 5, 946-955.	2.8	25
101	Imaging and quantification of charged domain walls in BiFeO₃. Nanoscale, 2020, 12, 9186-9193.	5.6	25
102	Shape-Directed Co-Assembly of Lead Halide Perovskite Nanocubes with Dielectric Nanodisks into Binary Nanocrystal Superlattices. ACS Nano, 2021, 15, 16488-16500.	14.6	25
103	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
104	High Conformity and Large Domain Monocrystalline Anatase on Multiwall Carbon Nanotube Coreâ€“Shell Nanostructure: Synthesis, Structure, and Interface. Chemistry of Materials, 2016, 28, 3488-3496.	6.7	23
105	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
106	Voids and compositional inhomogeneities in Cu(In,Ga)Se₂ thin films: evolution during growth and impact on solar cell performance. Science and Technology of Advanced Materials, 2018, 19, 871-882.	6.1	23
107	Pyromorphite Growth on Lead-Sulfide Surfaces. Environmental Science & Technology, 2004, 38, 5529-5534.	10.0	22
108	Functionalization of MWCNTs with atomic nitrogen: electronic structure. Journal Physics D: Applied Physics, 2008, 41, 045202.	2.8	22

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109	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
110	Mesoporosity in Photocatalytically Active Oxynitride Single Crystals. Journal of Physical Chemistry C, 2014, 118, 20940-20947.	3.1	22
111	Investigation of dielectric properties and microstructure of sintered 13Â·2Li 2 O âˆ’ 67Â·6SiO 2 âˆ’ 14.49Al 2 O 3 âˆ’ 3Â·3TiO 2 âˆ’ 0.4BaO âˆ’ 0.97ZnO glass-ceramics. Journal of the European Ceramic Society, 2017, 37, 631-639.	5.7	22
112	Retrieving the dielectric function of diamond from valence electron energy-loss spectroscopy. Physical Review B, 2008, 77, .	3.2	21
113	Popcorn-Shaped Fe_{<i>x</i>}O (WÃ¼stite) Nanoparticles from a Single-Source Precursor: Colloidal Synthesis and Magnetic Properties. Chemistry of Materials, 2018, 30, 1249-1256.	6.7	21
114	Structural and ferromagnetic properties of Cu-doped GaN. Journal of Materials Research, 2007, 22, 1396-1405.	2.6	20
115	Using Electrons As a High-Resolution Probe of Optical Modes in Individual Nanowires. Nano Letters, 2009, 9, 4073-4077.	9.1	20
116	Characterization of wurtzite ZnO using valence electron energy loss spectroscopy. Physical Review B, 2011, 84, .	3.2	20
117	Formation Mechanism of LiFePO₄ Sticks Grown by a Microwaveâ€Assisted Liquidâ€Phase Process. Small, 2012, 8, 2231-2238.	10.0	20
118	Local Band Gap Measurements by VEELS of Thin Film Solar Cells. Microscopy and Microanalysis, 2014, 20, 1246-1253.	0.4	20
119	ALD-Zn_{<i>x</i>}Ti_{<i>y</i>}O as Window Layer in Cu(In,Ga)Se₂ Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 43603-43609.	8.0	20
120	Atomic Mechanisms of Nanocrystallization via Cluster-Clouds in Solution Studied by Liquid-Phase Scanning Transmission Electron Microscopy. Nano Letters, 2021, 21, 2861-2869.	9.1	20
121	Band gap widening at random CIGS grain boundary detected by valence electron energy loss spectroscopy. Applied Physics Letters, 2016, 109, .	3.3	19
122	Structural and optical characterization of GaAs nano-crystals selectively grown on Si nano-tips by MOVPE. Nanotechnology, 2017, 28, 135301.	2.6	19
123	Activation Matters: Hysteresis Effects during Electrochemical Looping of Colloidal Ag Nanowire Catalysts. ACS Catalysis, 2020, 10, 8503-8514.	11.2	19
124	Dopant-Induced Modifications of Ga<i>_x</i>In_(1â€“<i>x</i>)P Nanowire-Based pâ€“n Junctions Monolithically Integrated on Si(111). ACS Applied Materials & Interfaces, 2018, 10, 32588-32596.	8.0	18
125	Reversible Phase Transformations in Novel Ceâ€Substituted Perovskite Oxide Composites for Solar Thermochemical Redox Splitting of CO₂. Advanced Energy Materials, 2021, 11, 2003532.	19.5	18
126	Structural Diversity in Multicomponent Nanocrystal Superlattices Comprising Lead Halide Perovskite Nanocubes. ACS Nano, 2022, 16, 7210-7232.	14.6	18

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127	On the internal structure of Guinier-Preston zones in Al-3 at.% Ag. Philosophical Magazine Letters, 2003, 83, 599-609.	1.2	17
128	Analysis of extraterrestrial particles using monochromated electron energy-loss spectroscopy. Micron, 2005, 36, 369-379.	2.2	17
129	Formation of pure Cu nanocrystals upon post-growth annealing of Cuâ€“C material obtained from focused electron beam induced deposition: comparison of different methods. Beilstein Journal of Nanotechnology, 2015, 6, 1508-1517.	2.8	17
130	Epitaxial Thin Films as a Model System for Li-Ion Conductivity in Li₄Ti₅O₁₂. ACS Applied Materials & Interfaces, 2018, 10, 44494-44500.	8.0	17
131	Atomic mechanisms of gold nanoparticle growth in ionic liquids studied by <i>in situ</i> scanning transmission electron microscopy. Nanoscale, 2020, 12, 22511-22517.	5.6	17
132	Multi-resolution convolutional neural networks for inverse problems. Scientific Reports, 2020, 10, 5730.	3.3	17
133	Limitations of identical location SEM as a method of degradation studies on surfactant capped nanoparticle electrocatalysts. Journal of Catalysis, 2021, 394, 58-66.	6.2	16
134	Optimization of exit-plane waves restored from HRTEM through-focal series. Ultramicroscopy, 2010, 110, 151-161.	1.9	15
135	Carbonâ€“metal interfaces analyzed by aberration-corrected TEM: How copper and nickel nanoparticles interact with MWCNTs. Micron, 2015, 72, 52-58.	2.2	15
136	Bi-modal nanoheteroepitaxy of GaAs on Si by metal organic vapor phase epitaxy. Nanotechnology, 2017, 28, 135701.	2.6	15
137	Synthesis and Characterization of Degradationâ€Resistant Cu@CuPd Nanowire Catalysts for the Efficient Production of Formate and CO from CO 2. ChemElectroChem, 2019, 6, 3189-3198.	3.4	15
138	Passing the limit of electrodeposition: â€˜Gas templateâ€™ H2 nanobubbles for growing highly crystalline nanoporous ZnO. Nano Energy, 2012, 1, 742-750.	16.0	14
139	Formation of gold nanoparticles in a free-standing ionic liquid triggered by heat and electron irradiation. Micron, 2019, 117, 16-21.	2.2	14
140	Object-defined Resolution Below 0.5Ã… in Transmission Electron Microscopy - Recent Advances on the TEAM 0.5 Instrument. Microscopy and Microanalysis, 2008, 14, 78-79.	0.4	13
141	Quantifying the low-energy limit and spectral resolution in valence electron energy loss spectroscopy. Ultramicroscopy, 2013, 124, 130-138.	1.9	13
142	On the validity of the ÄŒerenkov limit as a criterion for precise band gap measurements by VEELS. Ultramicroscopy, 2016, 160, 80-83.	1.9	13
143	Multi-step atomic mechanism of platinum nanocrystals nucleation and growth revealed by in-situ liquid cell STEM. Scientific Reports, 2021, 11, 23965.	3.3	13
144	Quantum confinement of volume plasmons and interband transitions in germanium nanocrystals. Physical Review B, 2012, 86, .	3.2	12

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145	Strain relaxation in epitaxial Ge crystals grown on patterned Si(001)Âsubstrates. Scripta Materialia, 2017, 127, 169-172.	5.2	12
146	Transition metal trifluoroacetates (Mâ€‰=â€‰Fe, Co, Mn) as precursors for uniform colloidal metal difluoride and phosphide nanoparticles. Scientific Reports, 2019, 9, 6613.	3.3	11
147	Atomic-resolution differential phase contrast STEM on ferroelectric materials: A mean-field approach. Physical Review B, 2020, 101, .	3.2	11
148	Improving the lifetime of hybrid CoPc@MWCNT catalysts for selective electrochemical CO2-to-CO conversion. Journal of Catalysis, 2022, 407, 198-205.	6.2	11
149	Atomic Scale Analysis of Planar Defects in Polycrystalline Diamond. Microscopy and Microanalysis, 2006, 12, 492-497.	0.4	10
150	Nanoscale phase separation in perovskites revisited. Nature Materials, 2014, 13, 216-217.	27.5	10
151	Composition dependent selfâ€regenerative property of perovskiteâ€type oxides. Physica Status Solidi - Rapid Research Letters, 2015, 9, 282-287.	2.4	10
152	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
153	Structure Matters â€" Direct Inâ€situ Observation of Cluster Nucleation at Atomic Scale in a Liquid Phase. ChemNanoMat, 2021, 7, 110-116.	2.8	10
154	Magnetoelectric coupling in micropatterned BaTiO3/CoFe2O4 epitaxial thin film structures: Augmentation and site-dependency. Applied Physics Letters, 2021, 119, .	3.3	10
155	Zincblende and wurtzite phases in InN epilayers and their respective band transitions. Journal of Crystal Growth, 2006, 288, 225-229.	1.5	9
156	Atomic Structure of Core-Shell Precipitates in Al-Li-Sc-Zr Alloys Studied by Analytical and Aberration-Corrected TEM/STEM. Microscopy and Microanalysis, 2008, 14, 1348-1349.	0.4	9
157	Reliability of two embedded atom models for the description of Ag@Au nanoalloys. Journal of Chemical Physics, 2019, 151, 064105.	3.0	9
158	High-resolution Z-contrast STEM of Guinierâ€"Preston zones in Alâ€"3 at.% Ag. Materials Chemistry and Physics, 2003, 81, 227-229.	4.0	8
159	Bulk interfaces in a Ni-rich Niâ€"Au alloy investigated by high-resolution Z-contrast imaging. Micron, 2004, 35, 695-700.	2.2	8
160	Monochromators and Aberration Correctors: Taking EELS to New Levels of Energy and Spatial Resolution. Journal of Physics: Conference Series, 2006, 26, 59-64.	0.4	8
161	Electro-Optical Active Barium Titanate Thin Films in Silicon Photonics Devices. , 2013, , .		8
162	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

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