Miaofang Chi

List of Publications by Year
in descending order

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321 papers	30,201 citations	4388 86 h-index	5120 166 g-index
342 all docs	342 docs citations	342 times ranked	31921 citing authors

#	Article	IF	Citations
1	Highly Crystalline Multimetallic Nanoframes with Three-Dimensional Electrocatalytic Surfaces. Science, 2014, 343, 1339-1343.	12.6	2,376
2	Multiple-Filled Skutterudites: High Thermoelectric Figure of Merit through Separately Optimizing Electrical and Thermal Transports. Journal of the American Chemical Society, 2011, 133, 7837-7846.	13.7	1,242
3	High electronic conductivity as the origin of lithium dendrite formation within solid electrolytes. Nature Energy, 2019, 4, 187-196.	39.5	1,099
4	Platinum-based nanocages with subnanometer-thick walls and well-defined, controllable facets. Science, 2015, 349, 412-416.	12.6	854
5	Comet 81P/Wild 2 Under a Microscope. Science, 2006, 314, 1711-1716.	12.6	848
6	Identifying surface structural changes in layered Li-excess nickel manganese oxides in high voltage lithium ion batteries: A joint experimental and theoretical study. Energy and Environmental Science, 2011, 4, 2223.	30.8	728
7	Mineralogy and Petrology of Comet 81P/Wild 2 Nucleus Samples. Science, 2006, 314, 1735-1739.	12.6	589
8	Solid Electrolyte: the Key for Highâ€Voltage Lithium Batteries. Advanced Energy Materials, 2015, 5, 1401408.	19.5	544
9	Design and Synthesis of Bimetallic Electrocatalyst with Multilayered Pt-Skin Surfaces. Journal of the American Chemical Society, 2011, 133, 14396-14403.	13.7	541
10	Palladiumâ€“platinum core-shell icosahedra with substantially enhanced activity and durability towards oxygen reduction. Nature Communications, 2015, 6, 7594.	12.8	440
11	Core/Shell Pd/FePt Nanoparticles as an Active and Durable Catalyst for the Oxygen Reduction Reaction. Journal of the American Chemical Society, 2010, 132, 7848-7849.	13.7	366
12	Efficient electrically powered CO2-to-ethanol via suppression of deoxygenation. Nature Energy, 2020, 5, 478-486.	39.5	363
13	Softâ€Templated Mesoporous Carbonâ€Carbon Nanotube Composites for High Performance Lithiumâ€Ion Batteries. Advanced Materials, 2011, 23, 4661-4666.	21.0	352
14	Hard-Magnet L10-CoPt Nanoparticles Advance Fuel Cell Catalysis. Joule, 2019, 3, 124-135.	24.0	326
15	Highly Stable Silver Nanoplates for Surface Plasmon Resonance Biosensing. Angewandte Chemie - International Edition, 2012, 51, 5629-5633.	13.8	313
16	A long-life lithium-ion battery with a highly porous TiNb₂O₇ anode for large-scale electrical energy storage. Energy and Environmental Science, 2014, 7, 2220-2226.	30.8	312
17	Interfacial Stability of Li Metalâ€“Solid Electrolyte Elucidated via in Situ Electron Microscopy. Nano Letters, 2016, 16, 7030-7036.	9.1	309
18	Synthesis of Oxidation-Resistant Cupronickel Nanowires for Transparent Conducting Nanowire Networks. Nano Letters, 2012, 12, 3193-3199.	9.1	297

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19	Pd@Pt Coreâ€“Shell Concave Decahedra: A Class of Catalysts for the Oxygen Reduction Reaction with Enhanced Activity and Durability. Journal of the American Chemical Society, 2015, 137, 15036-15042.	13.7	296
20	Direct exfoliation of natural graphite into micrometre size few layers graphene sheets using ionic liquids. Chemical Communications, 2010, 46, 4487.	4.1	295
21	A Highly Active Titanium Dioxide Based Visibleâ€Light Photocatalyst with Nonmetal Doping and Plasmonic Metal Decoration. Angewandte Chemie - International Edition, 2011, 50, 7088-7092.	13.8	290
22	Impact Features on Stardust: Implications for Comet 81P/Wild 2 Dust. Science, 2006, 314, 1716-1719.	12.6	286
23	Understanding memristive switching via in situ characterization and device modeling. Nature Communications, 2019, 10, 3453.	12.8	275
24	Fully Alloyed Ag/Au Nanospheres: Combining the Plasmonic Property of Ag with the Stability of Au. Journal of the American Chemical Society, 2014, 136, 7474-7479.	13.7	272
25	Mn versus Al in Layered Oxide Cathodes in Lithiumâ€Ion Batteries: A Comprehensive Evaluation on Longâ€Term Cyclability. Advanced Energy Materials, 2018, 8, 1703154.	19.5	260
26	Highâ€Selectivity Electrochemical Conversion of CO₂ to Ethanol using a Copper Nanoparticle/Nâ€Doped Graphene Electrode. ChemistrySelect, 2016, 1, 6055-6061.	1.5	251
27	Correlation Between Oxygen Vacancy, Microstrain, and Cation Distribution in Lithium-Excess Layered Oxides During the First Electrochemical Cycle. Chemistry of Materials, 2013, 25, 1621-1629.	6.7	242
28	Uncovering the roles of oxygen vacancies in cation migration in lithium excess layered oxides. Physical Chemistry Chemical Physics, 2014, 16, 14665-14668.	2.8	240
29	Two-dimensional GaSe/MoSe ₂ misfit bilayer heterojunctions by van der Waals epitaxy. Science Advances, 2016, 2, e1501882.	10.3	239
30	High-entropy nanoparticles: Synthesis-structure-property relationships and data-driven discovery. Science, 2022, 376, eabn3103.	12.6	239
31	Self-organized amorphous TiO2 nanotube arrays on porous Ti foam for rechargeable lithium and sodium ion batteries. Journal of Power Sources, 2013, 222, 461-466.	7.8	235
32	A Facile Synthesis of MPd (M = Co, Cu) Nanoparticles and Their Catalysis for Formic Acid Oxidation. Nano Letters, 2012, 12, 1102-1106.	9.1	233
33	Composition-Controlled Synthesis of Bimetallic PdPt Nanoparticles and Their Electro-oxidation of Methanol. Chemistry of Materials, 2011, 23, 4199-4203.	6.7	232
34	Local electronic structure variation resulting in Li â€˜filamentâ€™ formation within solid electrolytes. Nature Materials, 2021, 20, 1485-1490.	27.5	226
35	Facile Synthesis of Sub-20 nm Silver Nanowires through a Bromide-Mediated Polyol Method. ACS Nano, 2016, 10, 7892-7900.	14.6	223
36	Controlled Vapor Phase Growth of Single Crystalline, Two-Dimensional GaSe Crystals with High Photoresponse. Scientific Reports, 2014, 4, 5497.	3.3	222

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37	Atomic-scale origin of the large grain-boundary resistance in perovskite Li-ion-conducting solid electrolytes. Energy and Environmental Science, 2014, 7, 1638.	30.8	219
38	Correlation Between Surface Chemistry and Electrocatalytic Properties of Monodisperse Pt_xNi_{1â€x} Nanoparticles. Advanced Functional Materials, 2011, 21, 147-152.	14.9	218
39	Rational Design of Bi Nanoparticles for Efficient Electrochemical CO₂ Reduction: The Elucidation of Size and Surface Condition Effects. ACS Catalysis, 2016, 6, 6255-6264.	11.2	212
40	Novel Pt/Mg(In)(Al)O catalysts for ethane and propane dehydrogenation. Journal of Catalysis, 2011, 282, 165-174.	6.2	206
41	Functional links between Pt single crystal morphology and nanoparticles with different size and shape: the oxygen reduction reaction case. Energy and Environmental Science, 2014, 7, 4061-4069.	30.8	205
42	Comparison of Comet 81P/Wild 2 Dust with Interplanetary Dust from Comets. Science, 2008, 319, 447-450.	12.6	199
43	Entropy-stabilized metal oxide solid solutions as CO oxidation catalysts with high-temperature stability. Journal of Materials Chemistry A, 2018, 6, 11129-11133.	10.3	196
44	On the Design of Highâ€Efficiency Thermoelectric Clathrates through a Systematic Crossâ€Substitution of Framework Elements. Advanced Functional Materials, 2010, 20, 755-763.	14.9	195
45	Room-Temperature Multiferroic Hexagonal<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>LuFeO</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:math>Films. Physical Review Letters, 2013, 110, 237601.	7.8	195
46	Ni/Pd core/shell nanoparticles supported on graphene as a highly active and reusable catalyst for Suzuki-Miyaura cross-coupling reaction. Nano Research, 2013, 6, 10-18.	10.4	184
47	Crystal Structural Effect of AuCu Alloy Nanoparticles on Catalytic CO Oxidation. Journal of the American Chemical Society, 2017, 139, 8846-8854.	13.7	181
48	Polyol Synthesis of Ultrathin Pd Nanowires via Attachmentâ€Based Growth and Their Enhanced Activity towards Formic Acid Oxidation. Advanced Functional Materials, 2014, 24, 131-139.	14.9	173
49	Interphase Morphology between a Solid-State Electrolyte and Lithium Controls Cell Failure. ACS Energy Letters, 2019, 4, 591-599.	17.4	168
50	Synthesis and Characterization of Multimetallic Pd/Au and Pd/Au/FePt Core/Shell Nanoparticles. Angewandte Chemie - International Edition, 2010, 49, 9368-9372.	13.8	167
51	Synthesis and Catalytic Properties of Auâ€“Pd Nanoflowers. ACS Nano, 2011, 5, 6119-6127.	14.6	163
52	Phosphonium-Organophosphate Ionic Liquids as Lubricant Additives: Effects of Cation Structure on Physicochemical and Tribological Characteristics. ACS Applied Materials & Interfaces, 2014, 6, 22585-22593.	8.0	163
53	Comparison of an oil-miscible ionic liquid and ZDDP as a lubricant anti-wear additive. Tribology International, 2014, 71, 88-97.	5.9	161
54	Surface faceting and elemental diffusion behaviour at atomic scale for alloy nanoparticles during in situ annealing. Nature Communications, 2015, 6, 8925.	12.8	159

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55	Denary oxide nanoparticles as highly stable catalysts for methane combustion. Nature Catalysis, 2021, 4, 62-70.	34.4	153
56	Lab-in-a-Shell: Encapsulating Metal Clusters for Size Sieving Catalysis. Journal of the American Chemical Society, 2014, 136, 11260-11263.	13.7	152
57	Long-Term Cyclability of NCM-811 at High Voltages in Lithium-Ion Batteries: an In-Depth Diagnostic Study. Chemistry of Materials, 2020, 32, 7796-7804.	6.7	152
58	Multimetallic Core/Interlayer/Shell Nanostructures as Advanced Electrocatalysts. Nano Letters, 2014, 14, 6361-6367.	9.1	146
59	Comparing Wild 2 particles to chondrites and IDPs. Meteoritics and Planetary Science, 2008, 43, 261-272.	1.6	136
60	Electrical and thermal conductivity of low temperature CVD graphene: the effect of disorder. Nanotechnology, 2011, 22, 275716.	2.6	132
61	Integrated Nano-Domains of Disordered and Ordered Spinel Phases in LiNi_{0.5}Mn_{1.5}O₄ for Li-Ion Batteries. Chemistry of Materials, 2014, 26, 4377-4386.	6.7	132
62	Rational Development of Ternary Alloy Electrocatalysts. Journal of Physical Chemistry Letters, 2012, 3, 1668-1673.	4.6	130
63	Interfaces in Heterogeneous Catalysts: Advancing Mechanistic Understanding through Atomic-Scale Measurements. Accounts of Chemical Research, 2017, 50, 787-795.	15.6	128
64	Efficient upgrading of CO to C3 fuel using asymmetric C-C coupling active sites. Nature Communications, 2019, 10, 5186.	12.8	127
65	Synthesis of Homogeneous Pt-Bimetallic Nanoparticles as Highly Efficient Electrocatalysts. ACS Catalysis, 2011, 1, 1355-1359.	11.2	124
66	Ru Octahedral Nanocrystals with a Face-Centered Cubic Structure, {111} Facets, Thermal Stability up to 400 Â°C, and Enhanced Catalytic Activity. Journal of the American Chemical Society, 2019, 141, 7028-7036.	13.7	122
67	Controlling the Surface Oxidation of Cu Nanowires Improves Their Catalytic Selectivity and Stability toward C₂₊ Products in CO₂ Reduction. Angewandte Chemie - International Edition, 2021, 60, 1909-1915.	13.8	122
68	In-Plane Heterojunctions Enable Multiphasic Two-Dimensional (2D) MoS₂ Nanosheets As Efficient Photocatalysts for Hydrogen Evolution from Water Reduction. ACS Catalysis, 2016, 6, 6723-6729.	11.2	116
69	Excellent Stability of a Lithiumâ€Ionâ€Conducting Solid Electrolyte upon Reversible Li⁺/H⁺ Exchange in Aqueous Solutions. Angewandte Chemie - International Edition, 2015, 54, 129-133.	13.8	112
70	Understanding the Low-Voltage Hysteresis of Anionic Redox in Na₂Mn₃O₇. Chemistry of Materials, 2019, 31, 3756-3765.	6.7	112
71	Quantitative Analysis of the Reduction Kinetics Responsible for the One-Pot Synthesis of Pdâ€“Pt Bimetallic Nanocrystals with Different Structures. Journal of the American Chemical Society, 2016, 138, 12263-12270.	13.7	111
72	Synthesis and Characterization of Ru Cubic Nanocages with a Face-Centered Cubic Structure by Templating with Pd Nanocubes. Nano Letters, 2016, 16, 5310-5317.	9.1	110

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73	Probing the electrode/electrolyte interface in the lithium excess layered oxide Li1.2Ni0.2Mn0.6O2. Physical Chemistry Chemical Physics, 2013, 15, 11128.	2.8	107
74	Tertiary and Quaternary Ammonium-Phosphate Ionic Liquids as Lubricant Additives. Tribology Letters, 2016, 63, 1.	2.6	107
75	A refractory inclusion returned by Stardust from comet 81P/Wild 2. Meteoritics and Planetary Science, 2008, 43, 1861-1877.	1.6	106
76	Direct Assembly of Hydrophobic Nanoparticles to Multifunctional Structures. Nano Letters, 2011, 11, 3404-3412.	9.1	104
77	Van der Waals Epitaxial Growth of Two-Dimensional Single-Crystalline GaSe Domains on Graphene. ACS Nano, 2015, 9, 8078-8088.	14.6	103
78	Extreme mixing in nanoscale transition metal alloys. Matter, 2021, 4, 2340-2353.	10.0	102
79	Ptâ€Irâ€Pd Trimetallic Nanocages as a Dual Catalyst for Efficient Oxygen Reduction and Evolution Reactions in Acidic Media. Advanced Energy Materials, 2020, 10, 1904114.	19.5	100
80	Synthesis and characterization of a new catalyst Pt/Mg(Ga)(Al)O for alkane dehydrogenation. Journal of Catalysis, 2010, 274, 192-199.	6.2	97
81	High voltage stability of LiCoO2 particles with a nano-scale Lipon coating. Electrochimica Acta, 2011, 56, 6573-6580.	5.2	91
82	Supported bimetallic PdAu nanoparticles with superior electrocatalytic activity towards methanol oxidation. Journal of Materials Chemistry A, 2013, 1, 9157.	10.3	91
83	Iridiumâ€Based Cubic Nanocages with 1.1â€nmâ€Thick Walls: A Highly Efficient and Durable Electrocatalyst for Water Oxidation in an Acidic Medium. Angewandte Chemie - International Edition, 2019, 58, 7244-7248.	13.8	89
84	Synthesisâ€“Structureâ€“Property Relations in Layered, â€œLi-excessâ€•Oxides Electrode Materials Li[Li[sub 1/3â^'2x/3]Ni[sub x]Mn[sub 2/3â^'x/3]]O[sub 2] (x=1/3, 1/4, and 1/5). Journal of the Electrochemical Society, 2010, 157, A1202.	2.9	88
85	A â€œShipâ€Inâ€Aâ€Bottleâ€•Approach to Synthesis of Polymer Dots@Silica or Polymer Dots@Carbon Coreâ€Shell Nanospheres. Advanced Materials, 2012, 24, 6017-6021.	21.0	88
86	Active and Stable Embedded Au@CeO₂ Catalysts for Preferential Oxidation of CO. Chemistry of Materials, 2010, 22, 4335-4345.	6.7	87
87	Understanding the Role of NH₄F and Al₂O₃ Surface Co-modification on Lithium-Excess Layered Oxide Li_{1.2}Ni_{0.2}Mn_{0.6}O₂. ACS Applied Materials & Interfaces, 2015, 7, 19189-19200.	8.0	87
88	Phase Transitions, Phase Coexistence, and Piezoelectric Switching Behavior in Highly Strained BiFeO₃ Films. Advanced Materials, 2013, 25, 5561-5567.	21.0	84
89	Sub-Ã…ngstrom electric field measurements on a universal detector in a scanning transmission electron microscope. Advanced Structural and Chemical Imaging, 2018, 4, 10.	4.0	84
90	Ternary CoPtAu Nanoparticles as a General Catalyst for Highly Efficient Electroâ€oxidation of Liquid Fuels. Angewandte Chemie - International Edition, 2019, 58, 11527-11533.	13.8	83

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91	Lithiumâ€Ion Batteries: Solid Electrolyte: the Key for Highâ€Voltage Lithium Batteries (Adv. Energy Mater.) Tj ETQq1 1 0.784314 rgBT /C	19.5	82
92	Probing the initiation of voltage decay in Li-rich layered cathode materials at the atomic scale. Journal of Materials Chemistry A, 2015, 3, 5385-5391.	10.3	81
93	Stabilizing gold clusters by heterostructured transition-metal oxideâ€“mesoporous silica supports for enhanced catalytic activities for CO oxidation. Chemical Communications, 2012, 48, 11413.	4.1	80
94	Kinetically Controlled Synthesis of Pdâ€“Cu Janus Nanocrystals with Enriched Surface Structures and Enhanced Catalytic Activities toward CO₂ Reduction. Journal of the American Chemical Society, 2021, 143, 149-162.	13.7	77
95	Advanced analytical electron microscopy for lithium-ion batteries. NPG Asia Materials, 2015, 7, e193-e193.	7.9	76
96	Anisotropic Strain Tuning of L1₀ Ternary Nanoparticles for Oxygen Reduction. Journal of the American Chemical Society, 2020, 142, 19209-19216.	13.7	76
97	Coreâ€“Shell Nanostructured Cobaltâ€“Platinum Electrocatalysts with Enhanced Durability. ACS Catalysis, 2018, 8, 35-42.	11.2	72
98	An ultrastable heterostructured oxide catalyst based on high-entropy materials: A new strategy toward catalyst stabilization via synergistic interfacial interaction. Applied Catalysis B: Environmental, 2020, 276, 119155.	20.2	72
99	Tailored recovery of carbons from waste tires for enhanced performance as anodes in lithium-ion batteries. RSC Advances, 2014, 4, 38213.	3.6	70
100	Enhanced Photoreversible Color Switching of Redox Dyes Catalyzed by Bariumâ€Doped TiO₂ Nanocrystals. Angewandte Chemie - International Edition, 2015, 54, 1321-1326.	13.8	70
101	Catalytic System Based on Sub-2 nm Pt Particles and Its Extraordinary Activity and Durability for Oxygen Reduction. Nano Letters, 2019, 19, 4997-5002.	9.1	68
102	Synthesis of Ru Icosahedral Nanocages with a Face-Centered-Cubic Structure and Evaluation of Their Catalytic Properties. ACS Catalysis, 2018, 8, 6948-6960.	11.2	66
103	Heterostructured catalysts prepared by dispersing Au@Fe2O3 coreâ€“shell structures on supports and their performance in CO oxidation. Catalysis Today, 2011, 160, 87-95.	4.4	65
104	Self-aligned Cuâ€“Si coreâ€“shell nanowire array as a high-performance anode for Li-ion batteries. Journal of Power Sources, 2012, 198, 312-317.	7.8	65
105	A novel method combining additive manufacturing and alloy infiltration for NdFeB bonded magnet fabrication. Journal of Magnetism and Magnetic Materials, 2017, 438, 163-167.	2.3	65
106	Facile Synthesis and Characterization of Pd@Ir_{nL} (n = 1â€“4) Coreâ€“Shell Nanocubes for Highly Efficient Oxygen Evolution in Acidic Media. Chemistry of Materials, 2019, 31, 5867-5875.	6.7	65
107	Unrivaled combination of surface area and pore volume in micelle-templated carbon for supercapacitor energy storage. Journal of Materials Chemistry A, 2017, 5, 13511-13525.	10.3	63
108	Mesoporous carbonâ€“Cr2O3 composite as an anode material for lithium ion batteries. Journal of Power Sources, 2012, 205, 495-499.	7.8	62

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109	In situ X-ray diffraction study of the lithium excess layered oxide compound Li[Li0.2Ni0.2Mn0.6]O2 during electrochemical cycling. Solid State Ionics, 2012, 207, 44-49.	2.7	62
110	Controlled Synthesis of Nanosized Palladium icosahedra and Their Catalytic Activity towards Formicâ€Acid Oxidation. ChemSusChem, 2013, 6, 1923-1930.	6.8	62
111	Big Data Analytics for Scanning Transmission Electron Microscopy Ptychography. Scientific Reports, 2016, 6, 26348.	3.3	62
112	Plating Precious Metals on Nonprecious Metal Nanoparticles for Sustainable Electrocatalysts. Nano Letters, 2017, 17, 3391-3395.	9.1	61
113	Island Growth in the Seed-Mediated Overgrowth of Monometallic Colloidal Nanostructures. CheM, 2017, 3, 678-690.	11.7	61
114	Confined Lithiumâ€“Sulfur Reactions in Narrow-Diameter Carbon Nanotubes Reveal Enhanced Electrochemical Reactivity. ACS Nano, 2018, 12, 9775-9784.	14.6	61
115	Dynamic scan control in STEM: spiral scans. Advanced Structural and Chemical Imaging, 2016, 2, .	4.0	59
116	Co:CdS Diluted Magnetic Semiconductor Nanoparticles: Radiation Synthesis, Dopantâ^'Defect Complex Formation, and Unexpected Magnetism. Chemistry of Materials, 2008, 20, 440-446.	6.7	56
117	Facile Synthesis of Ru-Based Octahedral Nanocages with Ultrathin Walls in a Face-Centered Cubic Structure. Chemistry of Materials, 2017, 29, 9227-9237.	6.7	55
118	Construction of a Nanoporous Highly Crystalline Hexagonal Boron Nitride from an Amorphous Precursor for Catalytic Dehydrogenation. Angewandte Chemie - International Edition, 2019, 58, 10626-10630.	13.8	55
119	Epitaxial Nanosheetâ€“Nanowire Heterostructures. Nano Letters, 2013, 13, 948-953.	9.1	54
120	Role of LiCoO₂ Surface Terminations in Oxygen Reduction and Evolution Kinetics. Journal of Physical Chemistry Letters, 2015, 6, 1357-1362.	4.6	54
121	Nanostructure and Composition of Tribo-Boundary Films Formed in Ionic Liquid Lubrication. Tribology Letters, 2011, 43, 205-211.	2.6	53
122	Understanding the Thermal Stability of Palladiumâ€“Platinum Coreâ€“Shell Nanocrystals by In Situ Transmission Electron Microscopy and Density Functional Theory. ACS Nano, 2017, 11, 4571-4581.	14.6	53
123	A mutation in calsequestrin, CASQ2D307H, impairs Sarcoplasmic Reticulum Ca2+ handling and causes complex ventricular arrhythmias in mice. Cardiovascular Research, 2007, 75, 69-78.	3.8	52
124	A Perspective on Coatings to Stabilize High-Voltage Cathodes: LiMn_{1.5}Ni_{0.5}O₄with Sub-Nanometer Lipon Cycled with LiPF₆Electrolyte. Journal of the Electrochemical Society, 2013, 160, A3113-A3125.	2.9	51
125	A Memristor with Low Switching Current and Voltage for 1S1R Integration and Array Operation. Advanced Electronic Materials, 2020, 6, 1901411.	5.1	51
126	Facile synthesis of Ag@Au coreâ€“sheath nanowires with greatly improved stability against oxidation. Chemical Communications, 2017, 53, 1965-1968.	4.1	50

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127	Understanding the Impact of Surface Reconstruction of Perovskite Catalysts on CH₄ Activation and Combustion. ACS Catalysis, 2018, 8, 10306-10315.	11.2	50
128	In Situ Strong Metalâ€“Support Interaction (SMSI) Affects Catalytic Alcohol Conversion. ACS Catalysis, 2021, 11, 1938-1945.	11.2	50
129	Site Mixing for Engineering Magnetic Topological Insulators. Physical Review X, 2021, 11, .	8.9	50
130	Effect of Surface Structure of TiO₂ Nanoparticles on CO₂ Adsorption and SO₂ Resistance. ACS Sustainable Chemistry and Engineering, 2017, 5, 9295-9306.	6.7	49
131	Multi-principal elemental intermetallic nanoparticles synthesized via a disorder-to-order transition. Science Advances, 2022, 8, eabm4322.	10.3	49
132	Elucidating the mobility of H⁺and Li⁺ions in (Li_{6.25â^'x}H_xAl_{0.25})La₃Zr₂O₁₂δ correlative neutron and electron spectroscopy. Energy and Environmental Science, 2019, 12, 945-951.	33.8	48
133	Growth and structure of PbVO3 thin films. Applied Physics Letters, 2007, 90, 062903.	3.3	47
134	Fabrication of Subâ€Micrometerâ€Thick Solid Electrolyte Membranes of Î²â€Li₃PS₄ via Tiled Assembly of Nanoscale, Plateâ€Like Building Blocks. Advanced Energy Materials, 2018, 8, 1800014.	19.5	47
135	Ruthenium Nanoframes in the Face-Centered Cubic Phase: Facile Synthesis and Their Enhanced Catalytic Performance. ACS Nano, 2019, 13, 7241-7251.	14.6	47
136	Mesoscopic Framework Enables Facile Ionic Transport in Solid Electrolytes for Li Batteries. Advanced Energy Materials, 2016, 6, 1600053.	19.5	46
137	Pdâ€Ru Alloy Nanocages with a Faceâ€Centered Cubic Structure and Their Enhanced Activity toward the Oxidation of Ethylene Glycol and Glycerol. Small Methods, 2020, 4, 1900843.	8.6	46
138	Revealing the Preferred Interlayer Orientations and Stackings of Twoâ€Dimensional Bilayer Gallium Selenide Crystals. Angewandte Chemie - International Edition, 2015, 54, 2712-2717.	13.8	45
139	In situ TEM observation of the electrochemical lithiation of N-doped anatase TiO₂ nanotubes as anodes for lithium-ion batteries. Journal of Materials Chemistry A, 2017, 5, 20651-20657.	10.3	45
140	Charge Separation in a Niobate Nanosheet Photocatalyst Studied with Photochemical Labeling. Langmuir, 2010, 26, 7254-7261.	3.5	44
141	Graphitized hollow carbon spheres and yolk-structured carbon spheres fabricated by metal-catalyst-free chemical vapor deposition. Carbon, 2016, 101, 57-61.	10.3	44
142	Maximizing the Catalytic Performance of Pd@Au_xPd_{1â^'x} Nanocubes in H₂O₂ Production by Reducing Shell Thickness to Increase Compositional Stability. Angewandte Chemie - International Edition, 2021, 60, 19643-19647.	13.8	44
143	Rational Defect Introduction in Silicon Nanowires. Nano Letters, 2013, 13, 1928-1933.	9.1	43
144	Reciprocal Salt Flux Growth of LiFePO₄ Single Crystals with Controlled Defect Concentrations. Chemistry of Materials, 2013, 25, 4574-4584.	6.7	43

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145	Comparison of the tribological behavior of steelâ€“steel and Si3N4â€“steel contacts in lubricants with ZDDP or ionic liquid. Wear, 2014, 319, 172-183.	3.1	43
146	Direct in Situ Observation and Analysis of the Formation of Palladium Nanocrystals with High-Index Facets. Nano Letters, 2018, 18, 7004-7013.	9.1	42
147	Solution-Phase Synthesis of PdH_{0.706} Nanocubes with Enhanced Stability and Activity toward Formic Acid Oxidation. Journal of the American Chemical Society, 2022, 144, 2556-2568.	13.7	42
148	Improving corrosion resistance of AZ31B magnesium alloy via a conversion coating produced by a protic ammonium-phosphate ionic liquid. Thin Solid Films, 2014, 568, 44-51.	1.8	41
149	New Chemical Route for the Synthesis of Î²-Na_{0.33}V₂O₅ and Its Fully Reversible Li Intercalation. ACS Applied Materials & Interfaces, 2015, 7, 7025-7032.	8.0	41
150	Antisite Pairs Suppress the Thermal Conductivity of BAs. Physical Review Letters, 2018, 121, 105901.	7.8	41
151	Facile One-Pot Synthesis of Pd@Pt_{1L} Octahedra with Enhanced Activity and Durability toward Oxygen Reduction. Chemistry of Materials, 2019, 31, 1370-1380.	6.7	41
152	Unveiling the Role of Al₂O₃ in Preventing Surface Reconstruction During High-Voltage Cycling of Lithium-Ion Batteries. ACS Applied Energy Materials, 2019, 2, 1308-1313.	5.1	41
153	Practical application of fractional Brownian Motion and noise to synthetic hydrology. Water Resources Research, 1973, 9, 1523-1533.	4.2	39
154	TiO2 nanotube arrays grown in ionic liquids: high-efficiency in photocatalysis and pore-widening. Journal of Materials Chemistry, 2011, 21, 9487.	6.7	38
155	Pt3Re alloy nanoparticles as electrocatalysts for the oxygen reduction reaction. Nano Energy, 2016, 20, 202-211.	16.0	38
156	Tire-derived carbon for catalytic preparation of biofuels from feedstocks containing free fatty acids. Carbon Resources Conversion, 2018, 1, 165-173.	5.9	38
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