

# Huolin L Xin

## List of Publications by Year in descending order

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311  
papers

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citing authors

#	ARTICLE	IF	CITATIONS
1	Multicolor Photonic Pigments for Rotation-Asymmetric Mechanochromic Devices. <i>Advanced Materials</i> , 2022, 34, e2107398.	11.1	27
2	Collective Plasmon Coupling in Gold Nanoparticle Clusters for Highly Efficient Photothermal Therapy. <i>ACS Nano</i> , 2022, 16, 910-920.	7.3	65
3	Modulating the Electronic Structure of Nickel Sulfide Electrocatalysts by Chlorine Doping toward Highly Efficient Alkaline Hydrogen Evolution. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 6869-6875.	4.0	25
4	Altering Ligand Fields in Single-Atom Sites through Second-Shell Anion Modulation Boosts the Oxygen Reduction Reaction. <i>Journal of the American Chemical Society</i> , 2022, 144, 2197-2207.	6.6	183
5	Multicolor Photonic Pigments for Rotation-Asymmetric Mechanochromic Devices ( <i>Adv. Mater.</i> 4/2022). <i>Advanced Materials</i> , 2022, 34, .	11.1	1
6	Highly Selective Oxygen Reduction to Hydrogen Peroxide on a Carbon-Supported Single-Atom Pd Electrocatalyst. <i>ACS Catalysis</i> , 2022, 12, 4156-4164.	5.5	44
7	Accelerated Degradation in a Quasi-Single-Crystalline Layered Oxide Cathode for Lithium-Ion Batteries Caused by Residual Grain Boundaries. <i>Nano Letters</i> , 2022, 22, 3818-3824.	4.5	31
8	Promoting the water dissociation of nickel sulfide electrocatalyst through introducing cationic vacancies for accelerated hydrogen evolution kinetics in alkaline media. <i>Journal of Catalysis</i> , 2022, 410, 112-120.	3.1	14
9	A single-atom library for guided monometallic and concentration-complex multimetallic designs. <i>Nature Materials</i> , 2022, 21, 681-688.	13.3	145
10	An electrochemically stable homogeneous glassy electrolyte formed at room temperature for all-solid-state sodium batteries. <i>Nature Communications</i> , 2022, 13, .	5.8	62
11	Metal-Confined Synthesis of ZnS <sub>2</sub> Monolayer Catalysts for Dinitrogen Electroreduction. <i>ACS Catalysis</i> , 2022, 12, 6809-6815.	5.5	6
12	Design of Ru-Ni diatomic sites for efficient alkaline hydrogen oxidation. <i>Science Advances</i> , 2022, 8, .	4.7	89
13	Ultrafast Preparation of Nonequilibrium FeNi Spinels by Magnetic Induction Heating for Unprecedented Oxygen Evolution Electrocatalysis. <i>Research</i> , 2022, 2022, .	2.8	7
14	Characterization of the structure and chemistry of the solid-electrolyte interface by cryo-EM leads to high-performance solid-state Li-metal batteries. <i>Nature Nanotechnology</i> , 2022, 17, 768-776.	15.6	75
15	X-Ray Induced Chemical Reaction Revealed by In Situ X-Ray Diffraction and Scanning X-Ray Microscopy in 15 nm Resolution. <i>Journal of Electrochemical Energy Conversion and Storage</i> , 2022, 19, .	1.1	0
16	Structure evolution of PtCu nanoframes from disordered to ordered for the oxygen reduction reaction. <i>Applied Catalysis B: Environmental</i> , 2021, 282, 119617.	10.8	80
17	Surface engineering of PdFe ordered intermetallics for efficient oxygen reduction electrocatalysis. <i>Chemical Engineering Journal</i> , 2021, 408, 127297.	6.6	27
18	Modulating Single-Atom Palladium Sites with Copper for Enhanced Ambient Ammonia Electrosynthesis. <i>Angewandte Chemie</i> , 2021, 133, 349-354.	1.6	44

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19	Polarization-Modulated Multidirectional Photothermal Actuators. <i>Advanced Materials</i> , 2021, 33, e2006367.	11.1	35
20	Rhombohedral Ordered Intermetallic Nanocatalyst Boosts the Oxygen Reduction Reaction. <i>ACS Catalysis</i> , 2021, 11, 184-192.	5.5	51
21	Modulating Single-Atom Palladium Sites with Copper for Enhanced Ambient Ammonia Electrosynthesis. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 345-350.	7.2	150
22	Microscopy and Microanalysis 2020 Virtual. <i>Microscopy Today</i> , 2021, 29, 12-14.	0.2	0
23	TEMLImageNet training library and AtomSegNet deep-learning models for high-precision atom segmentation, localization, denoising, and deblurring of atomic-resolution images. <i>Scientific Reports</i> , 2021, 11, 5386.	1.6	55
24	Activating Edge-Mo of 2H-MoS <sub>2</sub> via Coordination with Pyridinic N=C for pH-Universal Hydrogen Evolution Electrocatalysis. <i>ACS Catalysis</i> , 2021, 11, 4486-4497.	5.5	74
25	Electrolyte Regulating toward Stabilization of Cobalt-Free Ultrahigh-Nickel Layered Oxide Cathode in Lithium-Ion Batteries. <i>ACS Energy Letters</i> , 2021, 6, 1324-1332.	8.8	53
26	Hierarchical nickel valence gradient stabilizes high-nickel content layered cathode materials. <i>Nature Communications</i> , 2021, 12, 2350.	5.8	59
27	Polymorph Evolution Mechanisms and Regulation Strategies of Lithium Metal Anode under Multiphysical Fields. <i>Chemical Reviews</i> , 2021, 121, 5986-6056.	23.0	165
28	Atomic-Scale Observation of O1 Faulted Phase-Induced Deactivation of LiNiO <sub>2</sub> at High Voltage. <i>Nano Letters</i> , 2021, 21, 3657-3663.	4.5	43
29	One-Pot Synthesis of B/P-Codoped Co-Mo Dual-Nanowafers as Electrocatalysts for Overall Water Splitting. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 20024-20033.	4.0	52
30	Constructing FeN <sub>4</sub> /graphitic nitrogen atomic interface for high-efficiency electrochemical CO <sub>2</sub> reduction over a broad potential window. <i>Chem</i> , 2021, 7, 1297-1307.	5.8	133
31	(Invited) Electro-Chemo-Mechanical Degradation of LiNiO <sub>2</sub> -Derived High-Ni-Content Cathode Materials. <i>ECS Meeting Abstracts</i> , 2021, MA2021-01, 74-74.	0.0	0
32	Modification of the Coordination Environment of Active Sites on MoC for High-Efficiency CH <sub>4</sub> Production. <i>Advanced Energy Materials</i> , 2021, 11, 2100044.	10.2	21
33	Ultrahigh-Rate and Long-Life Zinc-Metal Anodes Enabled by Self-Accelerated Cation Migration. <i>Advanced Energy Materials</i> , 2021, 11, 2100982.	10.2	131
34	Resolving atomic-scale phase transformation and oxygen loss mechanism in ultrahigh-nickel layered cathodes for cobalt-free lithium-ion batteries. <i>Matter</i> , 2021, 4, 2013-2026.	5.0	69
35	Super-compression of large electron microscopy time series by deep compressive sensing learning. <i>Patterns</i> , 2021, 2, 100292.	3.1	18
36	TEMLImageNet, AtomSegNet and TomoFillNet, open-source libraries and models that enable defect localization in 2D and 3D atomic resolution images. <i>Microscopy and Microanalysis</i> , 2021, 27, 1456-1457.	0.2	1

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37	Synergic grain boundary segregation and precipitation in W- and W-Mo-containing high-entropy borides. <i>Journal of the European Ceramic Society</i> , 2021, 41, 5380-5387.	2.8	23
38	Bulk high-entropy hexaborides. <i>Journal of the European Ceramic Society</i> , 2021, 41, 5775-5781.	2.8	22
39	In-situ TEM revisiting $\text{NH}_4\text{V}_4\text{O}_{10}$ to unveil the unknown sodium storage mechanism as an anode material. <i>Nano Energy</i> , 2021, 87, 106182.	8.2	10
40	Atomically Isolated Rh Sites within Highly Branched $\text{Rh}_2\text{Sb}$ Nanostructures Enhance Bifunctional Hydrogen Electrocatalysis. <i>Advanced Materials</i> , 2021, 33, e2105049.	11.1	48
41	On the synthesis of bi-magnetic manganese ferrite-based core-shell nanoparticles. <i>Nanoscale Advances</i> , 2021, 3, 1612-1623.	2.2	11
42	Local Modulation of Single-Atomic Mn Sites for Enhanced Ambient Ammonia Electrosynthesis. <i>ACS Catalysis</i> , 2021, 11, 509-516.	5.5	93
43	3D atomic imaging of low-coordinated active sites in solid-state dealloyed hierarchical nanoporous gold. <i>Journal of Materials Chemistry A</i> , 2021, 9, 25513-25521.	5.2	3
44	Self-Limitations of Heat Release in Coupled Core-Shell Spinel Ferrite Nanoparticles: Frequency, Time, and Temperature Dependencies. <i>Nanomaterials</i> , 2021, 11, 2848.	1.9	5
45	Probing Activities of Individual Catalytic Nanoflakes by Tunneling Mode of Scanning Electrochemical Microscopy. <i>Journal of Physical Chemistry C</i> , 2021, 125, 25525-25532.	1.5	7
46	Chemomechanically Stable Ultrahigh-Ni Single-Crystalline Cathodes with Improved Oxygen Retention and Delayed Phase Degradations. <i>Nano Letters</i> , 2021, 21, 9797-9804.	4.5	38
47	Hydrophobic Molecule Monolayer Brush-Tethered Zinc Anodes for Aqueous Zinc Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 60092-60098.	4.0	18
48	Ultrafine $\text{SmMn}_2\text{O}_5$ - $\gamma$ electrocatalysts with modest oxygen deficiency for highly-efficient pH-neutral magnesium-air batteries. <i>Journal of Power Sources</i> , 2020, 449, 227482.	4.0	24
49	Three-Dimensional Atomic Structure of Grain Boundaries Resolved by Atomic-Resolution Electron Tomography. <i>Matter</i> , 2020, 3, 1999-2011.	5.0	34
50	Atomic Modulation Engineering of Hexagon-Shaped $\text{CeO}_2$ Nanocrystals by <i>In Situ</i> Sculpturing of an Electron Beam. <i>Journal of Physical Chemistry C</i> , 2020, 124, 17006-17014.	1.5	3
51	Trifunctional Single-Atomic Ru Sites Enable Efficient Overall Water Splitting and Oxygen Reduction in Acidic Media. <i>Small</i> , 2020, 16, e2002888.	5.2	120
52	Tailoring the Antipoisoning Performance of Pd for Formic Acid Electrooxidation via an Ordered PdBi Intermetallic. <i>ACS Catalysis</i> , 2020, 10, 9977-9985.	5.5	75
53	Combining structurally ordered intermetallics with N-doped carbon confinement for efficient and anti-poisoning electrocatalysis. <i>Applied Catalysis B: Environmental</i> , 2020, 279, 119370.	10.8	55
54	A disordered rock salt anode for fast-charging lithium-ion batteries. <i>Nature</i> , 2020, 585, 63-67.	13.7	326

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55	Composition-tunable Antiperovskite $\text{CuIn}_2\text{NNi}_3$ as Superior Electrocatalysts for the Hydrogen Evolution Reaction. <i>Angewandte Chemie</i> , 2020, 132, 17641-17646.	1.6	7
56	High-Performance Nitrogen-Doped Intermetallic PtNi Catalyst for the Oxygen Reduction Reaction. <i>ACS Catalysis</i> , 2020, 10, 10637-10645.	5.5	98
57	Diatomite-derived Hierarchical Porous Crystalline-Amorphous Network for High-Performance and Sustainable Si Anodes. <i>Advanced Functional Materials</i> , 2020, 30, 2005956.	7.8	36
58	The sensitive surface chemistry of Co-free, Ni-rich layered oxides: identifying experimental conditions that influence characterization results. <i>Journal of Materials Chemistry A</i> , 2020, 8, 17487-17497.	5.2	41
59	Modulation of Single-Atom Metal Sites for Enhanced Ambient Ammonia Electrosynthesis. <i>Microscopy and Microanalysis</i> , 2020, 26, 2794-2796.	0.2	1
60	0.7-Å Resolution Electron Tomography Enabled by Deep-Learning-Aided Information Recovery. <i>Advanced Intelligent Systems</i> , 2020, 2, 2000152.	3.3	22
61	Self-Optimized Ligand Effect in $\text{Li}_2\text{-PtPdFe}$ Intermetallic for Efficient and Stable Alkaline Hydrogen Oxidation Reaction. <i>ACS Catalysis</i> , 2020, 10, 15207-15216.	5.5	64
62	AtomSegNet and TomoFillNet—Two Deep Learning Open-Source Apps for Superresolution Processing of Atomic Resolution Images and Missing-wedge Information inpainting in Electron Tomograms. <i>Microscopy and Microanalysis</i> , 2020, 26, 926-926.	0.2	1
63	Atomic-configuration Modulation of Active Sites on Electrocatalysts. <i>Microscopy and Microanalysis</i> , 2020, 26, 3014-3014.	0.2	0
64	Enhancing surface oxygen retention through theory-guided doping selection in $\text{LiNi}_2\text{O}$ for next-generation lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2020, 8, 23293-23303.	5.2	44
65	Electronic structure and oxophilicity optimization of mono-layer Pt for efficient electrocatalysis. <i>Nano Energy</i> , 2020, 74, 104877.	8.2	39
66	Sulphur modulated $\text{Ni}_3\text{FeN}$ supported on N/S co-doped graphene boosts rechargeable/flexible Zn-air battery performance. <i>Applied Catalysis B: Environmental</i> , 2020, 274, 119086.	10.8	73
67	Three-Dimensional Patterning of Nanoparticles by Molecular Stamping. <i>ACS Nano</i> , 2020, 14, 6823-6833.	7.3	42
68	Valence-programmable nanoparticle architectures. <i>Nature Communications</i> , 2020, 11, 2279.	5.8	37
69	Coupled hard-soft spinel ferrite-based core-shell nanoarchitectures: magnetic properties and heating abilities. <i>Nanoscale Advances</i> , 2020, 2, 3191-3201.	2.2	32
70	Creating compressive stress at the $\text{NiOOH/NiO}$ interface for water oxidation. <i>Journal of Materials Chemistry A</i> , 2020, 8, 10747-10754.	5.2	47
71	Stable and Efficient Single-Atom Zn Catalyst for $\text{CO}_2$ Reduction to $\text{CH}_4$ . <i>Journal of the American Chemical Society</i> , 2020, 142, 12563-12567.	6.6	358
72	Highly active N-doped carbon encapsulated Pd-Fe intermetallic nanoparticles for the oxygen reduction reaction. <i>Nano Research</i> , 2020, 13, 2365-2370.	5.8	44

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73	Composition-Tunable Antiperovskite Cu <sub>2</sub> In <sub>1-x</sub> Ni <sub>3</sub> as Superior Electrocatalysts for the Hydrogen Evolution Reaction. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 17488-17493.	7.2	39
74	Ligand-Assisted Solid-State Transformation of Nanoparticles. <i>Chemistry of Materials</i> , 2020, 32, 3271-3277.	3.2	13
75	FeMo sub-nanoclusters/single atoms for neutral ammonia electrosynthesis. <i>Nano Energy</i> , 2020, 77, 105078.	8.2	56
76	Ordered three-dimensional nanomaterials using DNA-prescribed and valence-controlled material voxels. <i>Nature Materials</i> , 2020, 19, 789-796.	13.3	172
77	Promoting H <sub>2</sub> O <sub>2</sub> production via 2-electron oxygen reduction by coordinating partially oxidized Pd with defect carbon. <i>Nature Communications</i> , 2020, 11, 2178.	5.8	209
78	Nanoscale x-ray and electron tomography. <i>MRS Bulletin</i> , 2020, 45, 264-271.	1.7	12
79	Optimizing electron density of nickel sulfide electrocatalysts through sulfur vacancy engineering for alkaline hydrogen evolution. <i>Journal of Materials Chemistry A</i> , 2020, 8, 18207-18214.	5.2	31
80	Artificial Intelligence Enabled Information inpainting and Artifact Removal for Electron Tomography. <i>Microscopy and Microanalysis</i> , 2020, 26, 664-665.	0.2	2
81	In Situ Visualization of Structural Evolution and Fissure Breathing in (De)lithiated H <sub>2</sub> V <sub>3</sub> O <sub>8</sub> Nanorods. <i>ACS Energy Letters</i> , 2019, 4, 2081-2090.	8.8	19
82	Diagnostic Study of Lithium-Rich Cathode Materials at Primary and Sub-Primary Particle Level by Using Chemical-Sensitive STEM Tomography, Aberration-Corrected Imaging and EELS. <i>Microscopy and Microanalysis</i> , 2019, 25, 2056-2057.	0.2	0
83	Scalable synthesis of dispersible iron carbide (Fe <sub>3</sub> C) nanoparticles by "nanocasting"™. <i>Journal of Materials Chemistry A</i> , 2019, 7, 19506-19512.	5.2	19
84	Supercluster-Coupled Crystal Growth in Metallic Glass Forming Liquids. <i>Microscopy and Microanalysis</i> , 2019, 25, 1410-1411.	0.2	0
85	Fluorine-Anion-Modulated Electron Structure of Nickel Sulfide Nanosheet Arrays for Alkaline Hydrogen Evolution. <i>ACS Energy Letters</i> , 2019, 4, 2905-2912.	8.8	159
86	High-Angular Splitting Electron Vortex Beams Generated by Topological Defects. <i>Microscopy and Microanalysis</i> , 2019, 25, 88-89.	0.2	3
87	In-Situ Observation of Concurrent Oxidation and Mechanical Deformation in Al and Zr. <i>Microscopy and Microanalysis</i> , 2019, 25, 1912-1913.	0.2	0
88	A joint deep learning model to recover information and reduce artifacts in missing-wedge sinograms for electron tomography and beyond. <i>Scientific Reports</i> , 2019, 9, 12803.	1.6	51
89	Ultrasensitive Detection of Dopamine with Carbon Nanopipets. <i>Analytical Chemistry</i> , 2019, 91, 12935-12941.	3.2	33
90	Targeted Surface Doping with Reversible Local Environment Improves Oxygen Stability at the Electrochemical Interfaces of Nickel-Rich Cathode Materials. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 37885-37891.	4.0	33

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91	Direct high-resolution mapping of electrocatalytic activity of semi-two-dimensional catalysts with single-edge sensitivity. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 11618-11623.	3.3	65
92	Elucidating the Limit of Li Insertion into the Spinel $\text{Li}_4\text{Ti}_5\text{O}_{12}$ . , 2019, 1, 96-102.		45
93	Atomic-level tunnel engineering of todorokite $\text{MnO}_2$ for precise evaluation of lithium storage mechanisms by in situ transmission electron microscopy. Nano Energy, 2019, 63, 103840.	8.2	17
94	Structural Degradation of Layered Cathode Materials in Lithium-Ion Batteries Induced by Ball Milling. Journal of the Electrochemical Society, 2019, 166, A1964-A1971.	1.3	28
95	Conversion of $\text{CO}_2$ on a highly active and stable $\text{Cu}/\text{FeO}_x/\text{CeO}_2$ catalyst: tuning catalytic performance by oxide-oxide interactions. Catalysis Science and Technology, 2019, 9, 3735-3742.	2.1	28
96	Organic Heterojunctions Formed by Interfacing Two Single Crystals from a Mixed Solution. Journal of the American Chemical Society, 2019, 141, 10007-10015.	6.6	31
97	In Situ Visualization of Interfacial Sodium Transport and Electrochemistry between Few-Layer Phosphorene. Small Methods, 2019, 3, 1900061.	4.6	15
98	Quantification of Charge Transfer at the Interfaces of Oxide Thin Films. Journal of Physical Chemistry A, 2019, 123, 4632-4637.	1.1	5
99	Rational synthesis and electrochemical performance of $\text{LiVOPO}_4$ polymorphs. Journal of Materials Chemistry A, 2019, 7, 8423-8432.	5.2	20
100	In situ visualization of sodium transport and conversion reactions of $\text{FeS}_2$ nanotubes made by morphology engineering. Nano Energy, 2019, 60, 424-431.	8.2	41
101	Anomalous metal segregation in lithium-rich material provides design rules for stable cathode in lithium-ion battery. Nature Communications, 2019, 10, 1650.	5.8	60
102	One-Nanometer-Thick $\text{Pt}_3\text{Ni}$ Bimetallic Alloy Nanowires Advanced Oxygen Reduction Reaction: Integrating Multiple Advantages into One Catalyst. ACS Catalysis, 2019, 9, 4488-4494.	5.5	126
103	Atomistic Defect Makes a Phase Plate for the Generation and High-Angular Splitting of Electron Vortex Beams. ACS Nano, 2019, 13, 3964-3970.	7.3	3
104	Supercluster-coupled crystal growth in metallic glass forming liquids. Nature Communications, 2019, 10, 915.	5.8	30
105	Highly Active and Stable Carbon Nanosheets Supported Iron Oxide for Fischer-Tropsch to Olefins Synthesis. ChemCatChem, 2019, 11, 1625-1632.	1.8	8
106	Unusual strain effect of a Pt-based $\text{L1}_0$ face-centered tetragonal core in core/shell nanoparticles for the oxygen reduction reaction. Physical Chemistry Chemical Physics, 2019, 21, 6477-6484.	1.3	22
107	TEM-Assisted Fabrication of Sub-10 nm Scanning Electrochemical Microscopy Tips. Analytical Chemistry, 2019, 91, 15355-15359.	3.2	16
108	Optimizing PtFe intermetallics for oxygen reduction reaction: from DFT screening to <i>in situ</i> XAFS characterization. Nanoscale, 2019, 11, 20301-20306.	2.8	33



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109	Dopant Distribution in Co-Free High-Energy Layered Cathode Materials. <i>Chemistry of Materials</i> , 2019, 31, 9769-9776.	3.2	110
110	Amorphization activated ruthenium-tellurium nanorods for efficient water splitting. <i>Nature Communications</i> , 2019, 10, 5692.	5.8	312
111	Electronic Tuning of Metal Nanoparticles for Highly Efficient Photocatalytic Hydrogen Peroxide Production. <i>ACS Catalysis</i> , 2019, 9, 626-631.	5.5	84
112	Memristor crossbar arrays with 6-nm half-pitch and 2-nm critical dimension. <i>Nature Nanotechnology</i> , 2019, 14, 35-39.	15.6	381
113	Innertiteltitelbild: Atomically Dispersed Molybdenum Catalysts for Efficient Ambient Nitrogen Fixation ( <i>Angew. Chem.</i> 8/2019). <i>Angewandte Chemie</i> , 2019, 131, 2547-2547.	1.6	7
114	Pt-Ni Seed-Core-Frame Hierarchical Nanostructures and Their Conversion to Nanoframes for Enhanced Methanol Electro-Oxidation. <i>Catalysts</i> , 2019, 9, 39.	1.6	8
115	Bimetallic synergy in cobalt-palladium nanocatalysts for CO oxidation. <i>Nature Catalysis</i> , 2019, 2, 78-85.	16.1	195
116	Atomically Dispersed Molybdenum Catalysts for Efficient Ambient Nitrogen Fixation. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 2321-2325.	7.2	543
117	Atomically Dispersed Molybdenum Catalysts for Efficient Ambient Nitrogen Fixation. <i>Angewandte Chemie</i> , 2019, 131, 2343-2347.	1.6	95
118	Regioselective surface encoding of nanoparticles for programmable self-assembly. <i>Nature Materials</i> , 2019, 18, 169-174.	13.3	153
119	(Invited) Evolution of Redox Couples in Li- and Mn-Rich Cathode Materials and Mitigation of Voltage Fade by Reducing Oxygen Release. <i>ECS Meeting Abstracts</i> , 2019, , .	0.0	0
120	Recent Advances of Structurally Ordered Intermetallic Nanoparticles for Electrocatalysis. <i>ACS Catalysis</i> , 2018, 8, 3237-3256.	5.5	245
121	Anomalous Conductivity Tailored by Domain-Boundary Transport in Crystalline Bismuth Vanadate Photoanodes. <i>Chemistry of Materials</i> , 2018, 30, 1677-1685.	3.2	35
122	Liquid-Like, Self-Healing Aluminum Oxide during Deformation at Room Temperature. <i>Nano Letters</i> , 2018, 18, 2492-2497.	4.5	91
123	Effects of crystal phase and composition on structurally ordered Pt-Co-Ni/C ternary intermetallic electrocatalysts for the formic acid oxidation reaction. <i>Journal of Materials Chemistry A</i> , 2018, 6, 5848-5855.	5.2	66
124	Oxygen Release Induced Chemomechanical Breakdown of Layered Cathode Materials. <i>Nano Letters</i> , 2018, 18, 3241-3249.	4.5	237
125	Sub-nm ruthenium cluster as an efficient and robust catalyst for decomposition and synthesis of ammonia: Break the size shackles. <i>Nano Research</i> , 2018, 11, 4774-4785.	5.8	49
126	Growth of Nanoparticles with Desired Catalytic Functions by Controlled Doping-Segregation of Metal in Oxide. <i>Chemistry of Materials</i> , 2018, 30, 1585-1592.	3.2	11



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127	Coupled s-p-d Exchange in Facet-Controlled Pd <sub>3</sub> Pb Tripods Enhances Oxygen Reduction Catalysis. <i>CheM</i> , 2018, 4, 359-371.	5.8	100
128	Correction to Porous Structured Ni-Fe-P Nanocubes Derived from a Prussian Blue Analogue as an Electrocatalyst for Efficient Overall Water Splitting. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 3152-3152.	4.0	3
129	From a ZIF-8 polyhedron to three-dimensional nitrogen doped hierarchical porous carbon: an efficient electrocatalyst for the oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , 2018, 6, 10731-10739.	5.2	111
130	Depth-Dependent Redox Behavior of LiNi <sub>0.6</sub> Mn <sub>0.2</sub> Co <sub>0.2</sub> O <sub>2</sub> . <i>Journal of the Electrochemical Society</i> , 2018, 165, A696-A704.	1.3	123
131	Heteroatom (P, B, or S) incorporated NiFe-based nanocubes as efficient electrocatalysts for the oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2018, 6, 7062-7069.	5.2	98
132	Dendritic Core-Frame and Frame Multimetallic Rhombic Dodecahedra: A Comparison Study of Composition and Structure Effects on Electrocatalysis of Methanol Oxidation. <i>ChemNanoMat</i> , 2018, 4, 76-87.	1.5	11
133	Theory-driven design of high-valence metal sites for water oxidation confirmed using in situ soft X-ray absorption. <i>Nature Chemistry</i> , 2018, 10, 149-154.	6.6	476
134	Deep Learning Based Atom Segmentation and Noise and Missing-Wedge Reduction for Electron Tomography. <i>Microscopy and Microanalysis</i> , 2018, 24, 504-505.	0.2	7
135	Deciphering the Cathode-Electrolyte Interfacial Chemistry in Sodium Layered Cathode Materials. <i>Advanced Energy Materials</i> , 2018, 8, 1801975.	10.2	111
136	Tailoring Surface Opening of Hollow Nanocubes and Their Application as Nanocargo Carriers. <i>ACS Central Science</i> , 2018, 4, 1742-1750.	5.3	13
137	Garnet Electrolyte Surface Degradation and Recovery. <i>ACS Applied Energy Materials</i> , 2018, 1, 7244-7252.	2.5	81
138	Composition-dependent electrocatalytic activities of NiFe-based selenides for the oxygen evolution reaction. <i>Electrochimica Acta</i> , 2018, 291, 64-72.	2.6	58
139	Stabilizing and Activating Metastable Nickel Nanocrystals for Highly Efficient Hydrogen Evolution Electrocatalysis. <i>ACS Nano</i> , 2018, 12, 11625-11631.	7.3	55
140	Single-Atom Pt Catalyst for Effective C-F Bond Activation via Hydrodefluorination. <i>ACS Catalysis</i> , 2018, 8, 9353-9358.	5.5	70
141	Retrieving the energy-loss function from valence electron energy-loss spectrum: Separation of bulk-, surface-losses and Cherenkov radiation. <i>Ultramicroscopy</i> , 2018, 194, 175-181.	0.8	8
142	Atomic rearrangement from disordered to ordered Pd-Fe nanocatalysts with trace amount of Pt decoration for efficient electrocatalysis. <i>Nano Energy</i> , 2018, 50, 70-78.	8.2	66
143	Tuning the electrocatalytic activity of Pt by structurally ordered PdFe/C for the hydrogen oxidation reaction in alkaline media. <i>Journal of Materials Chemistry A</i> , 2018, 6, 11346-11352.	5.2	41
144	Investigation of the multiplet features of SrTiO <sub>3</sub> in X-ray absorption spectra based on configuration interaction calculations. <i>Journal of Synchrotron Radiation</i> , 2018, 25, 777-784.	1.0	10

#	ARTICLE	IF	CITATIONS
145	Evolution of redox couples in Li- and Mn-rich cathode materials and mitigation of voltage fade by reducing oxygen release. <i>Nature Energy</i> , 2018, 3, 690-698.	19.8	675
146	Bimetallic Nanoparticle Oxidation in Three Dimensions by Chemically Sensitive Electron Tomography and <i>in Situ</i> Transmission Electron Microscopy. <i>ACS Nano</i> , 2018, 12, 7866-7874.	7.3	49
147	Controllable construction of flower-like FeS/Fe <sub>2</sub> O <sub>3</sub> composite for lithium storage. <i>Journal of Power Sources</i> , 2018, 392, 193-199.	4.0	50
148	Selective Electrocatalytic Reduction of CO <sub>2</sub> into CO at Small, Thiol-Capped Au/Cu Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2018, 122, 27991-28000.	1.5	44
149	Charge Transport Modulation in PbSe Nanocrystal Solids by Au <sub>x</sub> Ag <sub>1-x</sub> Nanoparticle Doping. <i>ACS Nano</i> , 2018, 12, 9091-9100.	7.3	20
150	Achieving High Cycling Rates via In Situ Generation of Active Nanocomposite Metal Anodes. <i>ACS Applied Energy Materials</i> , 2018, 1, 4651-4661.	2.5	19
151	Visualizing the toughening origins of gel-grown calcite single-crystal composites. <i>Chinese Chemical Letters</i> , 2018, 29, 1666-1670.	4.8	12
152	Accelerated Evolution of Surface Chemistry Determined by Temperature and Cycling History in Nickel-Rich Layered Cathode Materials. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 23842-23850.	4.0	52
153	Investigation of Degradation Pathway in High Ni-Content Cathode Materials at Primary and Secondary Particle Level By Multi-Scale Characterization. <i>ECS Meeting Abstracts</i> , 2018, , .	0.0	0
154	Anatomy of Ag/Hafnia-Based Selectors with 10 <sup>10</sup> Nonlinearity. <i>Advanced Materials</i> , 2017, 29, 1604457.	11.1	292
155	A closer look at the physical and optical properties of gold nanostars: an experimental and computational study. <i>Nanoscale</i> , 2017, 9, 3766-3773.	2.8	47
156	A New Anion Receptor for Improving the Interface between Lithium- and Manganese-Rich Layered Oxide Cathode and the Electrolyte. <i>Chemistry of Materials</i> , 2017, 29, 2141-2149.	3.2	44
157	Collisions of Ir Oxide Nanoparticles with Carbon Nanopipettes: Experiments with One Nanoparticle. <i>Analytical Chemistry</i> , 2017, 89, 2880-2885.	3.2	51
158	A general approach for the direct fabrication of metal oxide-based electrocatalysts for efficient bifunctional oxygen electrodes. <i>Sustainable Energy and Fuels</i> , 2017, 1, 823-831.	2.5	24
159	Optimizing the ORR activity of Pd based nanocatalysts by tuning their strain and particle size. <i>Journal of Materials Chemistry A</i> , 2017, 5, 9867-9872.	5.2	98
160	Shape-Specific Patterning of Polymer-Functionalized Nanoparticles. <i>ACS Nano</i> , 2017, 11, 4995-5002.	7.3	63
161	Intermediate selectivity in the oxidation of phenols using plasmonic Au/ZnO photocatalysts. <i>Nanoscale</i> , 2017, 9, 9359-9364.	2.8	8
162	High-rate and long-life lithium-ion battery performance of hierarchically hollow-structured NiCo <sub>2</sub> O <sub>4</sub> /CNT nanocomposite. <i>Electrochimica Acta</i> , 2017, 244, 8-15.	2.6	39

#	ARTICLE	IF	CITATIONS
163	Three-dimensional crossbar arrays of self-rectifying Si/SiO <sub>2</sub> /Si memristors. Nature Communications, 2017, 8, 15666.	5.8	153
164	Supra-Nanoparticle Functional Assemblies through Programmable Stacking. ACS Nano, 2017, 11, 7036-7048.	7.3	32
165	Amorphous Lithium Lanthanum Titanate for Solid-State Microbatteries. Journal of the Electrochemical Society, 2017, 164, A6268-A6273.	1.3	35
166	Synchrotron X-ray Analytical Techniques for Studying Materials Electrochemistry in Rechargeable Batteries. Chemical Reviews, 2017, 117, 13123-13186.	23.0	390
167	Long-range ordering of composites for organic electronics: TIPS-pentacene single crystals with incorporated nano-fibers. Chinese Chemical Letters, 2017, 28, 2121-2124.	4.8	20
168	A spongy nickel-organic CO <sub>2</sub> reduction photocatalyst for nearly 100% selective CO production. Science Advances, 2017, 3, e1700921.	4.7	175
169	Porous Structured Ni-Fe-P Nanocubes Derived from a Prussian Blue Analogue as an Electrocatalyst for Efficient Overall Water Splitting. ACS Applied Materials & Interfaces, 2017, 9, 26134-26142.	4.0	220
170	Spinel Ferrite Core-Shell Nanostructures by a Versatile Solvothermal Seed-Mediated Growth Approach and Study of Their Nanointerfaces. ACS Nano, 2017, 11, 7889-7900.	7.3	59
171	Dissolution of Pt during Oxygen Reduction Reaction Produces Pt Nanoparticles. Analytical Chemistry, 2017, 89, 12618-12621.	3.2	24
172	MCM-41 support for ultrasmall Fe <sub>2</sub> O <sub>3</sub> nanoparticles for H <sub>2</sub> S removal. Journal of Materials Chemistry A, 2017, 5, 21688-21698.	5.2	51
173	Memristors with diffusive dynamics as synaptic emulators for neuromorphic computing. Nature Materials, 2017, 16, 101-108.	13.3	1,655
174	Anomalous Growth Rate of Ag Nanocrystals Revealed by in situ STEM. Scientific Reports, 2017, 7, 16420.	1.6	7
175	Intricate Physics of Coherent Electron Beam/Oxide Materials Interaction Revealed by 4D Inline Holography-Electron Ptychography. Microscopy and Microanalysis, 2017, 23, 1632-1633.	0.2	0
176	Detection of magnetic circular dichroism in amorphous materials utilizing a single-crystalline overlayer. Physical Review Materials, 2017, 1, .	0.9	6
177	Primary and Sub-Primary Particle Level Lithium Ion Battery Diagnostics Using Chemical-Sensitive STEM Tomography, Aberration-Corrected Imaging and EELS. ECS Meeting Abstracts, 2017, , .	0.0	0
178	(Invited) Visualizing Electrochemical Reactions at the Nanoscale By in-Situ TEM. ECS Meeting Abstracts, 2017, , .	0.0	0
179	Scanning Spreading Resistance Microscopy (SSRM): High-Resolution 2D and 3D Carrier Mapping of Semiconductor Nanostructures. , 2017, , 419-488.		0
180	Detection of Magnetic Circular Dichroism in Amorphous Materials Utilizing a Single-Crystalline Overlayer. , 2016, , .		0

#	ARTICLE	IF	CITATIONS
181	Quantification and Sensible Correction for Energy-Loss- and Thickness-Dependent Contrast Complications in Atomic-Scale Electron Energy-Loss Spectroscopy. <i>Microscopy and Microanalysis</i> , 2016, 22, 886-887.	0.2	0
182	Combining post-specimen aberration correction and direct electron detection to image molecular structure in liquid crystal polymers. <i>Microscopy and Microanalysis</i> , 2016, 22, 1924-1925.	0.2	5
183	Interrogation of bimetallic particle oxidation in three dimensions at the nanoscale. <i>Nature Communications</i> , 2016, 7, 13335.	5.8	65
184	Towards a portable open-source tomography toolbox: Containerizing tomography software with docker. <i>AIP Conference Proceedings</i> , 2016, , .	0.3	0
185	Sub-10 nm Ta Channel Responsible for Superior Performance of a HfO <sub>2</sub> Memristor. <i>Scientific Reports</i> , 2016, 6, 28525.	1.6	177
186	Nitrogen-doped carbon nanofibers derived from polypyrrole coated bacterial cellulose as high-performance electrode materials for supercapacitors and Li-ion batteries. <i>Electrochimica Acta</i> , 2016, 210, 130-137.	2.6	59
187	Effects of cathode electrolyte interfacial (CEI) layer on long term cycling of all-solid-state thin-film batteries. <i>Journal of Power Sources</i> , 2016, 324, 342-348.	4.0	82
188	In Situ STEM-EELS Observation of Nanoscale Interfacial Phenomena in All-Solid-State Batteries. <i>Nano Letters</i> , 2016, 16, 3760-3767.	4.5	278
189	Explore the Effects of Microstructural Defects on Voltage Fade of Li- and Mn-Rich Cathodes. <i>Nano Letters</i> , 2016, 16, 5999-6007.	4.5	64
190	Nanoparticles Incorporated inside Single-Crystals: Enhanced Fluorescent Properties. <i>Chemistry of Materials</i> , 2016, 28, 7537-7543.	3.2	52
191	Probing microstructure and phase evolution of $\hat{I}\pm$ -MoO <sub>3</sub> nanobelts for sodium-ion batteries by in situ transmission electron microscopy. <i>Nano Energy</i> , 2016, 27, 447-456.	8.2	58
192	Ultralow content of Pt on Pd-Co-Cu/C ternary nanoparticles with excellent electrocatalytic activity and durability for the oxygen reduction reaction. <i>Nano Energy</i> , 2016, 27, 475-481.	8.2	26
193	Surface patterning of nanoparticles with polymer patches. <i>Nature</i> , 2016, 538, 79-83.	13.7	257
194	Direct observation of electronic-liquid-crystal phase transitions and their microscopic origin in La <sub>1/3</sub> Ca <sub>2/3</sub> MnO <sub>3</sub> . <i>Scientific Reports</i> , 2016, 6, 37624.	1.6	11
195	In situ TEM probing of crystallization form-dependent sodiation behavior in ZnO nanowires for sodium-ion batteries. <i>Nano Energy</i> , 2016, 30, 771-779.	8.2	57
196	Pt skin on Pd-Co-Zn/C ternary nanoparticles with enhanced Pt efficiency toward ORR. <i>Nanoscale</i> , 2016, 8, 14793-14802.	2.8	22
197	Metal segregation in hierarchically structured cathode materials for high-energy lithium batteries. <i>Nature Energy</i> , 2016, 1, .	19.8	209
198	Anomalously deep polarization in $\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \text{SrTi} \langle \text{mml:mi} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle \text{O} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 3 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle (001)$ interfaced with an epitaxial ultrathin manganite film. <i>Physical Review B</i> , 2016, 94, .	1.1	14

#	ARTICLE	IF	CITATIONS
199	Nanoscale Origins of Ferroelastic Domain Wall Mobility in Ferroelectric Multilayers. ACS Nano, 2016, 10, 10126-10134.	7.3	11
200	Spontaneous incorporation of gold in palladium-based ternary nanoparticles makes durable electrocatalysts for oxygen reduction reaction. Nature Communications, 2016, 7, 11941.	5.8	67
201	Increasing the Dimensionality of In-situ Electron Microscopy Data Sets by On-the-fly and Analytical Electron Tomography. Microscopy and Microanalysis, 2016, 22, 724-725.	0.2	1
202	Solution-Processable Glass Li <sub>4</sub> Sn <sub>4</sub> Superionic Conductors for All-Solid-State Li-Ion Batteries. Advanced Materials, 2016, 28, 1874-1883.	11.1	265
203	Hollow-Structured Carbon-Supported Nickel Cobaltite Nanoparticles as an Efficient Bifunctional Electrocatalyst for the Oxygen Reduction and Evolution Reactions. ChemCatChem, 2016, 8, 736-742.	1.8	70
204	Supramolecular gel-assisted synthesis of double shelled Co@CoO@N-C/C nanoparticles with synergistic electrocatalytic activity for the oxygen reduction reaction. Nanoscale, 2016, 8, 4681-4687.	2.8	74
205	Facet Control of Gold Nanorods. ACS Nano, 2016, 10, 2960-2974.	7.3	131
206	Homogeneously dispersed multimetal oxygen-evolving catalysts. Science, 2016, 352, 333-337.	6.0	1,948
207	Rational design of three-dimensional nitrogen and phosphorus co-doped graphene nanoribbons/CNTs composite for the oxygen reduction. Chinese Chemical Letters, 2016, 27, 597-601.	4.8	51
208	Lattice engineering through nanoparticle-DNA frameworks. Nature Materials, 2016, 15, 654-661.	13.3	198
209	Diamond family of nanoparticle superlattices. Science, 2016, 351, 582-586.	6.0	331
210	Nitrogen and sulfur co-doping of partially exfoliated MWCNTs as 3-D structured electrocatalysts for the oxygen reduction reaction. Journal of Materials Chemistry A, 2016, 4, 5678-5684.	5.2	66
211	Three-dimensional hollow-structured binary oxide particles as an advanced anode material for high-rate and long cycle life lithium-ion batteries. Nano Energy, 2016, 20, 212-220.	8.2	53
212	Boosting the electron mobility of solution-grown organic single crystals via reducing the amount of polar solvent residues. Materials Horizons, 2016, 3, 119-123.	6.4	64
213	Sodiation Kinetics of Metal Oxide Conversion Electrodes: A Comparative Study with Lithiation. ECS Meeting Abstracts, 2016, , .	0.0	0
214	Highly Efficient Nitrogen and Sulfur Co-Doped Three-Dimensional Graphene-Based Nanocatalysts for the ORR. ECS Meeting Abstracts, 2016, , .	0.0	0
215	Using New Quasi in-Situ TEM Technique to Study Structural Changes of Electrode Materials for Li-Ion and Na-Ion Batteries. ECS Meeting Abstracts, 2016, , .	0.0	0
216	Ultra-Low Amount of Pt Decorated Pd-Based Nanoparticles for the Oxygen Reduction Reaction. ECS Meeting Abstracts, 2016, , .	0.0	0

#	ARTICLE	IF	CITATIONS
217	Important Roles of Crystallinity in Voltage Fade of Li- and Mn-Rich Cathodes Exemplified By Li <sub>2</sub> Ru <sub>0.5</sub> Mn <sub>0.5</sub> O <sub>3</sub> Studies. ECS Meeting Abstracts, 2016, , .	0.0	0
218	Molybdenum-Based Nanomaterials As High Efficient Electrocatalysts for HER. ECS Meeting Abstracts, 2016, , .	0.0	0
219	Quantitative Nanostructure Analysis of Silver Vanadium Phosphorus Oxide (Ag <sub>2</sub> VO <sub>2</sub> PO <sub>4</sub> ) Battery Material Using X-Ray and Electron Microscopy. ECS Meeting Abstracts, 2016, , .	0.0	0
220	Structural Stability of Nickel-Rich Layered Cathode Materials. ECS Meeting Abstracts, 2016, , .	0.0	0
221	Revealing Corrosion Chemistry in Lithium Ion Battery and Beyond—a Tale of Two "Cities". ECS Meeting Abstracts, 2016, , .	0.0	0
222	Understanding growth mechanisms of epitaxial manganese oxide (Mn <sub>3</sub> O <sub>4</sub> ) nanostructures on strontium titanate (STO) oxide substrates. MRS Communications, 2015, 5, 277-284.	0.8	4
223	Periodic Artifact Reduction in Fourier Transforms of Full Field Atomic Resolution Images. Microscopy and Microanalysis, 2015, 21, 436-441.	0.2	13
224	Periodic Artifact Reduction in Fourier Transforms of Full Field Atomic Resolution Images. Microscopy and Microanalysis, 2015, 21, 2253-2254.	0.2	0
225	In situ Studies of the Reaction-Driven Restructuring of Ni-Co Core-Shell Nanoparticles. Microscopy and Microanalysis, 2015, 21, 637-638.	0.2	4
226	Contrasting Reaction Modality between Electrochemical Sodiation and Lithiation in NiO Conversion Electrode Materials. Microscopy and Microanalysis, 2015, 21, 325-326.	0.2	2
227	Toward 5D Imaging in an In-Situ Environmental TEM. Microscopy and Microanalysis, 2015, 21, 795-796.	0.2	0
228	Revealing Near-Surface to Interior Redox upon Lithiation in Conversion Electrode Materials Using Electron Microscopy. Microscopy and Microanalysis, 2015, 21, 1369-1370.	0.2	0
229	Prescribed nanoparticle cluster architectures and low-dimensional arrays built using octahedral DNA origami frames. Nature Nanotechnology, 2015, 10, 637-644.	15.6	243
230	Transitions from Near-Surface to Interior Redox upon Lithiation in Conversion Electrode Materials. Nano Letters, 2015, 15, 1437-1444.	4.5	97
231	Ambipolar charge transport of TIPS-pentacene single-crystals grown from non-polar solvents. Materials Horizons, 2015, 2, 344-349.	6.4	59
232	Sub-50-nm self-assembled nanotextures for enhanced broadband antireflection in silicon solar cells. Nature Communications, 2015, 6, 5963.	5.8	230
233	Solution-grown Organic Single-Crystalline Donor-Acceptor Heterojunctions for Photovoltaics. Angewandte Chemie, 2015, 127, 970-974.	1.6	11
234	Hierarchical, Ultrathin Single-Crystal Nanowires of CdS Conveniently Produced in Laser-Induced Thermal Field. Langmuir, 2015, 31, 8162-8167.	1.6	2



#	ARTICLE	IF	CITATIONS
235	Tailoring the surface properties of $\text{LiNi}_{0.4}\text{Mn}_{0.4}\text{Co}_{0.2}\text{O}_2$ by titanium substitution for improved high voltage cycling performance. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 21778-21781.	1.3	24
236	Superlattices assembled through shape-induced directional binding. <i>Nature Communications</i> , 2015, 6, 6912.	5.8	188
237	Large-scale fabrication of field-effect transistors based on solution-grown organic single crystals. <i>Science Bulletin</i> , 2015, 60, 1122-1127.	4.3	20
238	Synergistic enhancement of nitrogen and sulfur co-doped graphene with carbon nanosphere insertion for the electrocatalytic oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , 2015, 3, 7727-7731.	5.2	61
239	Interfacing Solution-Grown $\text{C}_{60}$ and $(3\text{-Pyrrrolinium})(\text{CdCl}_3)$ Single Crystals for High-Mobility Transistor-Based Memory Devices. <i>Advanced Materials</i> , 2015, 27, 4476-4480.	11.1	48
240	Bubble nucleation and migration in a lead-iron hydr(oxide) core-shell nanoparticle. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 12928-12932.	3.3	19
241	Sodiation Kinetics of Metal Oxide Conversion Electrodes: A Comparative Study with Lithiation. <i>Nano Letters</i> , 2015, 15, 5755-5763.	4.5	122
242	Enhanced electrocatalytic activity and stability of $\text{Pd}_3\text{V/C}$ nanoparticles with a trace amount of Pt decoration for the oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , 2015, 3, 20966-20972.	5.2	12
243	Structurally ordered Pt-Zn/C series nanoparticles as efficient anode catalysts for formic acid electrooxidation. <i>Journal of Materials Chemistry A</i> , 2015, 3, 22129-22135.	5.2	46
244	Synergistic synthesis of quasi-monocrystal CdS nanoboxes with high-energy facets. <i>Journal of Materials Chemistry A</i> , 2015, 3, 23106-23112.	5.2	5
245	Solution-Grown Organic Single-Crystalline Donor-Acceptor Heterojunctions for Photovoltaics. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 956-960.	7.2	65
246	3D hollow structured $\text{Co}_2\text{FeO}_4/\text{MWCNT}$ as an efficient non-precious metal electrocatalyst for oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , 2015, 3, 1601-1608.	5.2	48
247	Interfacial dislocations in (111) oriented $(\text{Ba}_{0.7}\text{Sr}_{0.3})\text{TiO}_3$ films on $\text{SrTiO}_3$ single crystal. <i>Applied Physics Letters</i> , 2015, 107, 141605.	1.5	2
248	Energy-loss- and thickness-dependent contrast in atomic-scale electron energy-loss spectroscopy. <i>Physical Review B</i> , 2014, 90, .	1.1	3
249	Aperture-scanning Fourier ptychography for 3D refocusing and super-resolution macroscopic imaging. <i>Optics Express</i> , 2014, 22, 13586.	1.7	166
250	Surface reconstruction and chemical evolution of stoichiometric layered cathode materials for lithium-ion batteries. <i>Nature Communications</i> , 2014, 5, 3529.	5.8	1,118
251	Visualization of Electrode-Electrolyte Interfaces in $\text{LiPF}_6/\text{EC/DEC}$ Electrolyte for Lithium Ion Batteries via in Situ TEM. <i>Nano Letters</i> , 2014, 14, 1745-1750.	4.5	304
252	Conformal coating of $\text{TiO}_2$ nanorods on a 3-D CNT scaffold by using a CNT film as a nanoreactor: a free-standing and binder-free Li-ion anode. <i>Journal of Materials Chemistry A</i> , 2014, 2, 2701.	5.2	46



#	ARTICLE	IF	CITATIONS
253	Highly Crystalline Multimetallic Nanoframes with Three-Dimensional Electrocatalytic Surfaces. <i>Science</i> , 2014, 343, 1339-1343.	6.0	2,376
254	Phase evolution for conversion reaction electrodes in lithium-ion batteries. <i>Nature Communications</i> , 2014, 5, 3358.	5.8	163
255	Recent Progress on Mesoporous Carbon Materials for Advanced Energy Conversion and Storage. <i>Particle and Particle Systems Characterization</i> , 2014, 31, 515-539.	1.2	77
256	Influence of synthesis conditions on the surface passivation and electrochemical behavior of layered cathode materials. <i>Journal of Materials Chemistry A</i> , 2014, 2, 19833-19840.	5.2	43
257	Nanostructured flexible Mg-modified $\text{LiMnPO}_4$ matrix as high-rate cathode materials for Li-ion batteries. <i>Journal of Materials Chemistry A</i> , 2014, 2, 6368-6373.	5.2	47
258	Profiling the nanoscale gradient in stoichiometric layered cathode particles for lithium-ion batteries. <i>Energy and Environmental Science</i> , 2014, 7, 3077.	15.6	170
259	Facet development during platinum nanocube growth. <i>Science</i> , 2014, 345, 916-919.	6.0	429
260	Deterministic arbitrary switching of polarization in a ferroelectric thin film. <i>Nature Communications</i> , 2014, 5, 4971.	5.8	35
261	Is there a Stobbs factor in atomic-resolution STEM-EELS mapping?. <i>Ultramicroscopy</i> , 2014, 139, 38-46.	0.8	27
262	Revealing the Atomic Restructuring of Pt-Co Nanoparticles. <i>Nano Letters</i> , 2014, 14, 3203-3207.	4.5	162
263	A 3-D Phase Evolution Panorama Uncovered Using a Grid-in-a-Coin Cell Method for Conversion Reaction Electrodes in Lithium-ion Batteries. <i>Microscopy and Microanalysis</i> , 2014, 20, 444-445.	0.2	0
264	A Model Based Method for Tomographic Reconstructions of Nanoparticle Assemblies. <i>Microscopy and Microanalysis</i> , 2014, 20, 808-809.	0.2	1
265	Mesoporous CNT@TiO <sub>2</sub> -C Nanocable with Extremely Durable High Rate Capability for Lithium-Ion Battery Anodes. <i>Scientific Reports</i> , 2014, 4, 3729.	1.6	116
266	Chemical and Structural Stability of Lithium-Ion Battery Electrode Materials under Electron Beam. <i>Scientific Reports</i> , 2014, 4, 5694.	1.6	108
267	Self-assembled V <sub>2</sub> O <sub>5</sub> nanosheets/reduced graphene oxide hierarchical nanocomposite as a high-performance cathode material for lithium ion batteries. <i>Journal of Materials Chemistry A</i> , 2013, 1, 10814.	5.2	114
268	One-pot synthesis of carbon coated-SnO <sub>2</sub> /graphene-sheet nanocomposite with highly reversible lithium storage capability. <i>Journal of Power Sources</i> , 2013, 232, 152-158.	4.0	91
269	Epitaxial Bi <sub>5</sub> Ti <sub>3</sub> FeO <sub>15</sub> CoFe <sub>2</sub> O <sub>4</sub> Pillar Matrix Multiferroic Nanostructures. <i>ACS Nano</i> , 2013, 7, 11079-11086.	7.3	55
270	Structurally ordered intermetallic platinum-cobalt core-shell nanoparticles with enhanced activity and stability as oxygen reduction electrocatalysts. <i>Nature Materials</i> , 2013, 12, 81-87.	13.3	1,768

#	ARTICLE	IF	CITATIONS
271	Selective Placement of Faceted Metal Tips on Semiconductor Nanorods. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 980-982.	7.2	43
272	Giant Magnetoresistive Phosphoric Acid Doped Polyaniline@Silica Nanocomposites. <i>Journal of Physical Chemistry C</i> , 2013, 117, 6426-6436.	1.5	70
273	Coalescence in the Thermal Annealing of Nanoparticles: An in Situ STEM Study of the Growth Mechanisms of Ordered Pt@Fe Nanoparticles in a KCl Matrix. <i>Chemistry of Materials</i> , 2013, 25, 1436-1442.	3.2	72
274	Scanning Confocal Electron Energy-Loss Microscopy Using Valence-Loss Signals. <i>Microscopy and Microanalysis</i> , 2013, 19, 1036-1049.	0.2	7
275	<i>In Situ</i> TEM Study of Catalytic Nanoparticle Reactions in Atmospheric Pressure Gas Environment. <i>Microscopy and Microanalysis</i> , 2013, 19, 1558-1568.	0.2	72
276	Data Processing for Atomic Resolution Electron Energy Loss Spectroscopy. <i>Microscopy and Microanalysis</i> , 2012, 18, 667-675.	0.2	103
277	Tuning Oxygen Reduction Reaction Activity via Controllable Dealloying: A Model Study of Ordered Cu <sub>3</sub> Pt/C Intermetallic Nanocatalysts. <i>Nano Letters</i> , 2012, 12, 5230-5238.	4.5	291
278	Atomic-Scale Compositional Mapping and 3-Dimensional Electron Microscopy of Dealloyed PtCo <sub>3</sub> Catalyst Nanoparticles with Spongy Multi-Core/Shell Structures. <i>Journal of the Electrochemical Society</i> , 2012, 159, F554-F559.	1.3	26
279	Determining On-Axis Crystal Thickness with Quantitative Position-Averaged Incoherent Bright-Field Signal in an Aberration-Corrected STEM. <i>Microscopy and Microanalysis</i> , 2012, 18, 720-727.	0.2	13
280	Comparison between Dealloyed PtCo <sub>3</sub> and PtCu <sub>3</sub> Cathode Catalysts for Proton Exchange Membrane Fuel Cells. <i>Journal of Physical Chemistry C</i> , 2012, 116, 19877-19885.	1.5	90
281	Fano resonance in atomic-resolution spectroscopic imaging of solids. <i>Physical Review B</i> , 2012, 86, .	1.1	6
282	On-Column $\pi$ Bound State with Topological Charge $\hat{A} \pm 1$ Excited by an Atomic-Size Vortex Beam in an Aberration-Corrected Scanning Transmission Electron Microscope. <i>Microscopy and Microanalysis</i> , 2012, 18, 711-719.	0.2	24
283	Revealing Correlation of Valence State with Nanoporous Structure in Cobalt Catalyst Nanoparticles by <i>In Situ</i> Environmental TEM. <i>ACS Nano</i> , 2012, 6, 4241-4247.	7.3	84
284	Three-Dimensional Tracking and Visualization of Hundreds of Pt@Co Fuel Cell Nanocatalysts During Electrochemical Aging. <i>Nano Letters</i> , 2012, 12, 4417-4423.	4.5	162
285	Atomic-Resolution Spectroscopic Imaging of Ensembles of Nanocatalyst Particles Across the Life of a Fuel Cell. <i>Nano Letters</i> , 2012, 12, 490-497.	4.5	161
286	Channeling of a subangstrom electron beam in a crystal mapped to two-dimensional molecular orbitals. <i>Physical Review B</i> , 2012, 86, .	1.1	23
287	Facile Synthesis of Carbon-Supported Pd@Co Core@Shell Nanoparticles as Oxygen Reduction Electrocatalysts and Their Enhanced Activity and Stability with Monolayer Pt Decoration. <i>Chemistry of Materials</i> , 2012, 24, 2274-2281.	3.2	163
288	In Situ Observation of Oscillatory Growth of Bismuth Nanoparticles. <i>Nano Letters</i> , 2012, 12, 1470-1474.	4.5	114

#	ARTICLE	IF	CITATIONS
289	SnS <sub>2</sub> nanoparticle loaded graphene nanocomposites for superior energy storage. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 6981.	1.3	79
290	Analytical electron microscopy of black carbon and microaggregated mineral matter in Amazonian dark Earth. <i>Journal of Microscopy</i> , 2012, 245, 129-139.	0.8	18
291	Extended Depth of Field for High-Resolution Scanning Transmission Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2011, 17, 75-80.	0.2	44
292	Calcite Prisms from Mollusk Shells ( <i>Atrina Rigida</i> ): Swiss-Cheese-Like Organic-Inorganic Single-Crystal Composites. <i>Advanced Functional Materials</i> , 2011, 21, 2028-2034.	7.8	104
293	Three-Dimensional Imaging in Aberration-Corrected Electron Microscopes. <i>Microscopy and Microanalysis</i> , 2010, 16, 445-455.	0.2	33
294	Block Copolymer Self-Assembly-Directed Single-Crystal Homo- and Heteroepitaxial Nanostructures. <i>Science</i> , 2010, 330, 214-219.	6.0	108
295	Three-dimensional imaging of pore structures inside low- $\epsilon^p$ dielectrics. <i>Applied Physics Letters</i> , 2010, 96, .	1.5	19
296	A new spin on electron beams. <i>Nature Nanotechnology</i> , 2010, 5, 764-765.	15.6	7
297	Pt-Decorated PdCo@Pd/C Core-Shell Nanoparticles with Enhanced Stability and Electrocatalytic Activity for the Oxygen Reduction Reaction. <i>Journal of the American Chemical Society</i> , 2010, 132, 17664-17666.	6.6	300
298	Atomic-resolution spectroscopic imaging of oxide interfaces. <i>Philosophical Magazine</i> , 2010, 90, 4731-4749.	0.7	57
299	Aberration-corrected ADF-STEM depth sectioning and prospects for reliable 3D imaging in S/TEM. <i>Journal of Electron Microscopy</i> , 2009, 58, 157-165.	0.9	77
300	Visualizing the 3D Internal Structure of Calcite Single Crystals Grown in Agarose Hydrogels. <i>Science</i> , 2009, 326, 1244-1247.	6.0	257
301	Effect of biaxial strain on the electrical and magnetic properties of (001) La <sub>0.7</sub> Sr <sub>0.3</sub> MnO <sub>3</sub> thin films. <i>Applied Physics Letters</i> , 2009, 95, .	1.5	184
302	Aberration-Corrected STEM Imaging and 2-D Elemental-Resolved Valence-EELS Mapping of Ru-TaN Ultrathin Barrier Layer. <i>Microscopy and Microanalysis</i> , 2009, 15, 1198-1199.	0.2	0
303	Prospects for Reliable 3D Imaging in Aberration-corrected STEM, TEM and SCEM. <i>Microscopy and Microanalysis</i> , 2009, 15, 1474-1475.	0.2	5
304	Electron Channeling Artifacts in Silicon [211] Using Aberration-Corrected STEM. <i>Microscopy and Microanalysis</i> , 2009, 15, 1492-1493.	0.2	1
305	Measurements of Porous Networks in Low- $k$ Dielectric by Three-dimensional Electron Tomography. <i>Microscopy and Microanalysis</i> , 2009, 15, 1240-1241.	0.2	1
306	Analytic derivation of optimal imaging conditions for incoherent imaging in aberration-corrected electron microscopes. <i>Ultramicroscopy</i> , 2008, 108, 1454-1466.	0.8	62

#	ARTICLE	IF	CITATIONS
307	ALD growth of a mixed-phase novel barrier for seedless copper electroplating applications. , 2008, , .		7
308	Depth sectioning of individual dopant atoms with aberration-corrected scanning transmission electron microscopy. Applied Physics Letters, 2008, 92, .	1.5	55
309	Image Contrast in Sub-Angstrom ADF-STEM. Microscopy and Microanalysis, 2007, 13, .	0.2	0
310	Prospects for Three-Dimensional, Sub-Nanometer Imaging with Aberration-Corrected ADF-STEM. Microscopy and Microanalysis, 2007, 13, .	0.2	0
311	Surface reconstruction and chemical evolution of stoichiometric layered cathode materials for lithium-ion batteries. , 0, .		1