Zhichuan J Xu

List of Publications by Year
in descending order

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371 papers	46,891 citations	1043 113 h-index	2125 203 g-index
385 all docs	385 docs citations	385 times ranked	41966 citing authors

#	Article	IF	Citations
1	A review on fundamentals for designing oxygen evolution electrocatalysts. Chemical Society Reviews, 2020, 49, 2196-2214.	18.7	1,466
2	Synthesis, Functionalization, and Biomedical Applications of Multifunctional Magnetic Nanoparticles. Advanced Materials, 2010, 22, 2729-2742.	11.1	1,260
3	Platinumâ^'Gold Nanoparticles: A Highly Active Bifunctional Electrocatalyst for Rechargeable Lithiumâ^'Air Batteries. Journal of the American Chemical Society, 2010, 132, 12170-12171.	6.6	1,171
4	Chemical and structural origin of lattice oxygen oxidation in Coâ€“Zn oxyhydroxide oxygen evolution electrocatalysts. Nature Energy, 2019, 4, 329-338.	19.8	977
5	Magnetic Core/Shell Fe3O4/Au and Fe3O4/Au/Ag Nanoparticles with Tunable Plasmonic Properties. Journal of the American Chemical Society, 2007, 129, 8698-8699.	6.6	853
6	Recommended Practices and Benchmark Activity for Hydrogen and Oxygen Electrocatalysis in Water Splitting and Fuel Cells. Advanced Materials, 2019, 31, e1806296.	11.1	841
7	Cation and anion immobilization through chemical bonding enhancement with fluorides for stable halide perovskite solar cells. Nature Energy, 2019, 4, 408-415.	19.8	831
8	A Eu ³⁺ -Eu ²⁺ ion redox shuttle imparts operational durability to Pb-I perovskite solar cells. Science, 2019, 363, 265-270.	6.0	793
9	Recent Development of Molybdenum Sulfides as Advanced Electrocatalysts for Hydrogen Evolution Reaction. ACS Catalysis, 2014, 4, 1693-1705.	5.5	769
10	State of the Art and Prospects for Halide Perovskite Nanocrystals. ACS Nano, 2021, 15, 10775-10981.	7.3	705
11	A Voltageâ€Boosting Strategy Enabling a Lowâ€Frequency, Flexible Electromagnetic Wave Absorption Device. Advanced Materials, 2018, 30, e1706343.	11.1	691
12	Iron-facilitated dynamic active-site generation on spinel CoAl2O4 with self-termination of surface reconstruction for water oxidation. Nature Catalysis, 2019, 2, 763-772.	16.1	678
13	Recent progress in layered transition metal carbides and/or nitrides (MXenes) and their composites: synthesis and applications. Journal of Materials Chemistry A, 2017, 5, 3039-3068.	5.2	625
14	Black Phosphorus Quantum Dots. Angewandte Chemie - International Edition, 2015, 54, 3653-3657.	7.2	594
15	Cations in Octahedral Sites: A Descriptor for Oxygen Electrocatalysis on Transitionâ€Metal Spinels. Advanced Materials, 2017, 29, 1606800.	11.1	525
16	Oleylamine as Both Reducing Agent and Stabilizer in a Facile Synthesis of Magnetite Nanoparticles. Chemistry of Materials, 2009, 21, 1778-1780.	3.2	503
17	Enhancing the Stability of CH₃NH₃PbBr₃ Quantum Dots by Embedding in Silica Spheres Derived from Tetramethyl Orthosilicate in â€œWaterlessâ€•Toluene. Journal of the American Chemical Society, 2016, 138, 5749-5752.	6.6	501
18	A Review on Design Strategies for Carbon Based Metal Oxides and Sulfides Nanocomposites for High Performance Li and Na Ion Battery Anodes. Advanced Energy Materials, 2017, 7, 1601424.	10.2	486

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19	Approaches for measuring the surface areas of metal oxide electrocatalysts for determining their intrinsic electrocatalytic activity. Chemical Society Reviews, 2019, 48, 2518-2534.	18.7	483
20	Defect Engineering in Two Common Types of Dielectric Materials for Electromagnetic Absorption Applications. Advanced Functional Materials, 2019, 29, 1901236.	7.8	469
21	Biomass-Derived Porous Carbon-Based Nanostructures for Microwave Absorption. Nano-Micro Letters, 2019, 11, 24.	14.4	421
22	Recent developments in electrode materials for sodium-ion batteries. Journal of Materials Chemistry A, 2015, 3, 9353-9378.	5.2	413
23	Heterostructured Electrocatalysts for Hydrogen Evolution Reaction Under Alkaline Conditions. Nano-Micro Letters, 2018, 10, 75.	14.4	412
24	Formation of Uniform Fe₃O₄ Hollow Spheres Organized by Ultrathin Nanosheets and Their Excellent Lithium Storage Properties. Advanced Materials, 2015, 27, 4097-4101.	11.1	396
25	Recent Development of Oxygen Evolution Electrocatalysts in Acidic Environment. Advanced Materials, 2021, 33, e2006328.	11.1	392
26	Conversion of invisible metal-organic frameworks to luminescent perovskite nanocrystals for confidential information encryption and decryption. Nature Communications, 2017, 8, 1138.	5.8	374
27	Encapsulating MWNTs into Hollow Porous Carbon Nanotubes: A Tubeâ€inâ€Tube Carbon Nanostructure for Highâ€Performance Lithiumâ€Sulfur Batteries. Advanced Materials, 2014, 26, 5113-5118.	11.1	360
28	Highly Luminescent and Ultrastable CsPbBr₃ Perovskite Quantum Dots Incorporated into a Silica/Alumina Monolith. Angewandte Chemie - International Edition, 2017, 56, 8134-8138.	7.2	355
29	Enlarged Coï£¿O Covalency in Octahedral Sites Leading to Highly Efficient Spinel Oxides for Oxygen Evolution Reaction. Advanced Materials, 2018, 30, e1802912.	11.1	338
30	Oneâ€Pot Synthesis of Highly Anisotropic Fiveâ€Foldâ€Twinned PtCu Nanoframes Used as a Bifunctional Electrocatalyst for Oxygen Reduction and Methanol Oxidation. Advanced Materials, 2016, 28, 8712-8717.	11.1	336
31	Exploration of Crystallization Kinetics in Quasi Two-Dimensional Perovskite and High Performance Solar Cells. Journal of the American Chemical Society, 2018, 140, 459-465.	6.6	327
32	Chemical Reduction of Intrinsic Defects in Thicker Heterojunction Planar Perovskite Solar Cells. Advanced Materials, 2017, 29, 1606774.	11.1	318
33	Morphology Evolution and Degradation of CsPbBr₃ Nanocrystals under Blue Light-Emitting Diode Illumination. ACS Applied Materials & Interfaces, 2017, 9, 7249-7258.	4.0	314
34	Strategies for design of electrocatalysts for hydrogen evolution under alkaline conditions. Materials Today, 2020, 36, 125-138.	8.3	308
35	A brief introduction to the fabrication and synthesis of graphene based composites for the realization of electromagnetic absorbing materials. Journal of Materials Chemistry C, 2017, 5, 491-512.	2.7	305
36	Well-dispersed single-walled carbon nanotube/polyaniline composite films. Carbon, 2003, 41, 2731-2736.	5.4	302

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37	Interface Polarization Strategy to Solve Electromagnetic Wave Interference Issue. ACS Applied Materials & Interfaces, 2017, 9, 5660-5668.	4.0	300
38	A Flexible Microwave Shield with Tunable Frequencyâ€Transmission and Electromagnetic Compatibility. Advanced Functional Materials, 2019, 29, 1900163.	7.8	299
39	Tunneling Diode Based on WSe₂/SnS₂ Heterostructure Incorporating High Detectivity and Responsivity. Advanced Materials, 2018, 30, 1703286.	11.1	293
40	Interface Strategy To Achieve Tunable High Frequency Attenuation. ACS Applied Materials & Interfaces, 2016, 8, 6529-6538.	4.0	285
41	Covalency competition dominates the water oxidation structureâ€“activity relationship on spinel oxides. Nature Catalysis, 2020, 3, 554-563.	16.1	284
42	Controlled Synthesis and Chemical Conversions of FeO Nanoparticles. Angewandte Chemie - International Edition, 2007, 46, 6329-6332.	7.2	266
43	Surface Composition Tuning of Auâ€“Pt Bimetallic Nanoparticles for Enhanced Carbon Monoxide and Methanol Electro-oxidation. Journal of the American Chemical Society, 2013, 135, 7985-7991.	6.6	266
44	Suppression of temperature quenching in perovskite nanocrystals for efficient and thermally stable light-emitting diodes. Nature Photonics, 2021, 15, 379-385.	15.6	260
45	Impact of Surface Area in Evaluation of Catalyst Activity. Joule, 2018, 2, 1024-1027.	11.7	258
46	Ultrathin Graphdiyne Nanosheets Grown Inâ€…Situ on Copper Nanowires and Their Performance as Lithiumâ€Ion Battery Anodes. Angewandte Chemie - International Edition, 2018, 57, 774-778.	7.2	257
47	Vertically oriented MoS₂ and WS₂ nanosheets directly grown on carbon cloth as efficient and stable 3-dimensional hydrogen-evolving cathodes. Journal of Materials Chemistry A, 2015, 3, 131-135.	5.2	254
48	Tailoring the Co 3d-O 2p Covalency in LaCoO₃ by Fe Substitution To Promote Oxygen Evolution Reaction. Chemistry of Materials, 2017, 29, 10534-10541.	3.2	254
49	Exceptionally active iridium evolved from a pseudo-cubic perovskite for oxygen evolution in acid. Nature Communications, 2019, 10, 572.	5.8	254
50	Recent progress in metalâ€“organic polymers as promising electrodes for lithium/sodium rechargeable batteries. Journal of Materials Chemistry A, 2019, 7, 4259-4290.	5.2	249
51	Emerging inâ€plane anisotropic twoâ€dimensional materials. InformaÄnÃ-MateriÃ¡ly, 2019, 1, 54-73.	8.5	247
52	Fe/N/C hollow nanospheres by Fe(<scp>iii</scp>)-dopamine complexation-assisted one-pot doping as nonprecious-metal electrocatalysts for oxygen reduction. Nanoscale, 2015, 7, 1501-1509.	2.8	242
53	Spin-polarized oxygen evolution reaction under magnetic field. Nature Communications, 2021, 12, 2608.	5.8	242
54	Spinâ€Related Electron Transfer and Orbital Interactions in Oxygen Electrocatalysis. Advanced Materials, 2020, 32, e2003297.	11.1	240

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55	Hydrogenation Driven Conductive Na₂Ti₃O₇ Nanoarrays as Robust Binder-Free Anodes for Sodium-Ion Batteries. Nano Letters, 2016, 16, 4544-4551.	4.5	235
56	A Flexible and Lightweight Biomass-Reinforced Microwave Absorber. Nano-Micro Letters, 2020, 12, 125.	14.4	234
57	Surface Composition Dependent Ligand Effect in Tuning the Activity of Nickelâ€“Copper Bimetallic Electrocatalysts toward Hydrogen Evolution in Alkaline. Journal of the American Chemical Society, 2020, 142, 7765-7775.	6.6	234
58	Core/Shell Nanoparticles as Electrocatalysts for Fuel Cell Reactions. Advanced Materials, 2008, 20, 4342-4347.	11.1	231
59	Electrical promotion of spatially photoinduced charge separation via interfacial-built-in quasi-alloying effect in hierarchical Zn2In2S5/Ti3C2(O, OH)x hybrids toward efficient photocatalytic hydrogen evolution and environmental remediation. Applied Catalysis B: Environmental, 2019, 245, 290-301.	10.8	229
60	Shifting Oxygen Charge Towards Octahedral Metal: A Way to Promote Water Oxidation on Cobalt Spinel Oxides. Angewandte Chemie - International Edition, 2019, 58, 6042-6047.	7.2	226
61	Highly Ordered Self-Assembly with Large Area of Fe3O4 Nanoparticles and the Magnetic Properties. Journal of Physical Chemistry B, 2005, 109, 23233-23236.	1.2	225
62	Superior Sodium Storage in Na₂Ti₃O₇ Nanotube Arrays through Surface Engineering. Advanced Energy Materials, 2016, 6, 1502568.	10.2	219
63	2D GeP: An Unexploited Lowâ€Symmetry Semiconductor with Strong Inâ€Plane Anisotropy. Advanced Materials, 2018, 30, e1706771.	11.1	219
64	Mastering Surface Reconstruction of Metastable Spinel Oxides for Better Water Oxidation. Advanced Materials, 2019, 31, e1807898.	11.1	215
65	Surface Segregation in Bimetallic Nanoparticles: A Critical Issue in Electrocatalyst Engineering. Small, 2015, 11, 3221-3246.	5.2	208
66	Highâ€Rate and Ultralong Cycleâ€Life Potassium Ion Batteries Enabled by In Situ Engineering of Yolkâ€“Shell FeS₂@C Structure on Graphene Matrix. Advanced Energy Materials, 2018, 8, 1802565.	10.2	207
67	Boosting Sodium Storage in TiO₂ Nanotube Arrays through Surface Phosphorylation. Advanced Materials, 2018, 30, 1704337.	11.1	201
68	Significance of Engineering the Octahedral Units to Promote the Oxygen Evolution Reaction of Spinel Oxides. Advanced Materials, 2019, 31, e1902509.	11.1	201
69	Boosting Electrochemical CO₂ Reduction on Metalâ€“Organic Frameworks via Ligand Doping. Angewandte Chemie - International Edition, 2019, 58, 4041-4045.	7.2	199
70	Toward a Highâ€Performance Allâ€Plastic Full Battery with a'Single Organic Polymer as Both Cathode and Anode. Advanced Energy Materials, 2018, 8, 1703509.	10.2	189
71	Manipulation of facet orientation in hybrid perovskite polycrystalline films by cation cascade. Nature Communications, 2018, 9, 2793.	5.8	189
72	Recent Progress on 2D Nobleâ€Transitionâ€Metal Dichalcogenides. Advanced Functional Materials, 2019, 29, 1904932.	7.8	186

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73	Spin pinning effect to reconstructed oxyhydroxide layer on ferromagnetic oxides for enhanced water oxidation. Nature Communications, 2021, 12, 3634.	5.8	186
74	Linking Hydrophilic Macromolecules to Monodisperse Magnetite (Fe3O4) Nanoparticles via Trichloro-s-triazine. Chemistry of Materials, 2006, 18, 5401-5403.	3.2	185
75	Impacts of alkaline on the defects property and crystallization kinetics in perovskite solar cells. Nature Communications, 2019, 10, 1112.	5.8	185
76	Ceramic-like stable CsPbBr3 nanocrystals encapsulated in silica derived from molecular sieve templates. Nature Communications, 2020, 11, 31.	5.8	185
77	Graphitic C 3 N 4 modified by Ni 2 P cocatalyst: An efficient, robust and low cost photocatalyst for visible-light-driven H 2 evolution from water. Chemical Engineering Journal, 2017, 315, 296-303.	6.6	184
78	In Situ X-ray Absorption Spectroscopy Studies of Nanoscale Electrocatalysts. Nano-Micro Letters, 2019, 11, 47.	14.4	181
79	Magnetic Biochar Decorated with ZnS Nanocrytals for Pb (II) Removal. ACS Sustainable Chemistry and Engineering, 2015, 3, 125-132.	3.2	180
80	The Comprehensive Understanding of as an Evaluation Parameter for Electrochemical Water Splitting. Small Methods, 2018, 2, 1800168.	4.6	180
81	Fewâ€Layered PtS₂ Phototransistor on hâ€BN with High Gain. Advanced Functional Materials, 2017, 27, 1701011.	7.8	176
82	Nanoengineered PtCo and PtNi Catalysts for Oxygen Reduction Reaction: An Assessment of the Structural and Electrocatalytic Properties. Journal of Physical Chemistry C, 2011, 115, 1682-1694.	1.5	173
83	An Airâ€Stable Densely Packed Phosphoreneâ€“Graphene Composite Toward Advanced Lithium Storage Properties. Advanced Energy Materials, 2016, 6, 1600453.	10.2	167
84	Zinc ions surface-doped titanium dioxide nanotubes and its photocatalysis activity for degradation of methyl orange in water. Journal of Molecular Catalysis A, 2005, 226, 123-127.	4.8	160
85	Solution-processed nitrogen-rich graphene-like holey conjugated polymer for efficient lithium ion storage. Nano Energy, 2017, 41, 117-127.	8.2	159
86	Twoâ€Dimensional (2D) Covalent Organic Framework as Efficient Cathode for Binderâ€free Lithiumâ€Ion Battery. ChemSusChem, 2020, 13, 2457-2463.	3.6	159
87	A Facile Synthesis of SmCo₅ Magnets from Core/Shell Co/Sm₂O₃ Nanoparticles. Advanced Materials, 2007, 19, 3349-3352.	11.1	157
88	Compositional dependence of the stability of AuCu alloy nanoparticles. Chemical Communications, 2012, 48, 5626.	2.2	153
89	Highly Luminescent and Ultrastable CsPbBr₃ Perovskite Quantum Dots Incorporated into a Silica/Alumina Monolith. Angewandte Chemie, 2017, 129, 8246-8250.	1.6	153
90	The intrinsic properties of FA_(1â^'x)MA_xPbI₃ perovskite single crystals. Journal of Materials Chemistry A, 2017, 5, 8537-8544.	5.2	152

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91	Tuning of lattice oxygen reactivity and scaling relation to construct better oxygen evolution electrocatalyst. Nature Communications, 2021, 12, 3992.	5.8	151
92	Achieving tunable electromagnetic absorber via graphene/carbon sphere composites. Carbon, 2016, 110, 130-137.	5.4	149
93	Submillimeter 2D Bi₂Se₃ Flakes toward Highâ€Performance Infrared Photodetection at Optical Communication Wavelength. Advanced Functional Materials, 2018, 28, 1802707.	7.8	149
94	Engineering Highâ€Spin State Cobalt Cations in Spinel Zinc Cobalt Oxide for Spin Channel Propagation and Active Site Enhancement in Water Oxidation. Angewandte Chemie - International Edition, 2021, 60, 14536-14544.	7.2	149
95	Unconventional Mn Vacancies in Mnâ€“Fe Prussian Blue Analogs: Suppressing Jahn-Teller Distortion for Ultrastable Sodium Storage. CheM, 2020, 6, 1804-1818.	5.8	148
96	Titanium dioxide doped polyaniline. Materials Science and Engineering C, 2005, 25, 444-447.	3.8	147
97	Magnetic iron oxide nanoparticles: Synthesis and surface coating techniques for biomedical applications. Chinese Physics B, 2014, 23, 037503.	0.7	145
98	Integrated multifunctional macrostructures for electromagnetic wave absorption and shielding. Journal of Materials Chemistry A, 2020, 8, 24368-24387.	5.2	145
99	Fuel cell technology: nano-engineered multimetallic catalysts. Energy and Environmental Science, 2008, 1, 454.	15.6	144
100	A novel method for the sequential removal and separation of multiple heavy metals from wastewater. Journal of Hazardous Materials, 2018, 342, 617-624.	6.5	143
101	Superexchange Effects on Oxygen Reduction Activity of Edgeâ€Sharing [Co_xMn_{1â^'}_xO₆] Octahedra in Spinel Oxide. Advanced Materials, 2018, 30, 1705407.	11.1	142
102	One-pot synthesis of Fe3O4 nanoprisms with controlled electrochemical properties. Chemical Communications, 2010, 46, 3920.	2.2	140
103	Highly Inâ€Plane Anisotropic 2D GeAs₂ for Polarizationâ€Sensitive Photodetection. Advanced Materials, 2018, 30, e1804541.	11.1	140
104	The Progress of Interface Design in Perovskiteâ€Based Solar Cells. Advanced Energy Materials, 2016, 6, 1600460.	10.2	139
105	Redox Processes of Manganese Oxide in Catalyzing Oxygen Evolution and Reduction: An in Situ Soft X-ray Absorption Spectroscopy Study. Journal of Physical Chemistry C, 2017, 121, 17682-17692.	1.5	138
106	Novel Preparation of Nâ€Doped SnO₂ Nanoparticles via Laserâ€Assisted Pyrolysis: Demonstration of Exceptional Lithium Storage Properties. Advanced Materials, 2017, 29, 1603286.	11.1	132
107	Bioinspired Multifunctional Vanadium Dioxide: Improved Thermochromism and Hydrophobicity. Langmuir, 2014, 30, 10766-10771.	1.6	131
108	Anodic Oxidation Enabled Cation Leaching for Promoting Surface Reconstruction in Water Oxidation. Angewandte Chemie - International Edition, 2021, 60, 7418-7425.	7.2	130

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109	Electrochemical production of lactic acid from glycerol oxidation catalyzed by AuPt nanoparticles. Journal of Catalysis, 2017, 356, 14-21.	3.1	128
110	Stabilizing Interface pH by Nâ€Modified Graphdiyne for Dendriteâ€Free and Highâ€Rate Aqueous Znâ€Ion Batteries. Angewandte Chemie - International Edition, 2022, 61, .	7.2	124
111	Highly Reversible and Durable Na Storage in Niobium Pentoxide through Optimizing Structure, Composition, and Nanoarchitecture. Advanced Materials, 2017, 29, 1605607.	11.1	122
112	Constructing an Adaptive Heterojunction as a Highly Active Catalyst for the Oxygen Evolution Reaction. Advanced Materials, 2020, 32, e2001292.	11.1	122
113	CsI Preâ€Intercalation in the Inorganic Framework for Efficient and Stable FA_{1â^'}_x Cs_xPbI₃(Cl) Perovskite Solar Cells. Small, 2017, 13, 1700484.	5.2	121
114	Effect of High Dipole Moment Cation on Layered 2D Organicâ€“Inorganic Halide Perovskite Solar Cells. Advanced Energy Materials, 2019, 9, 1803024.	10.2	117
115	Strong In-Plane Anisotropies of Optical and Electrical Response in Layered Dimetal Chalcogenide. ACS Nano, 2017, 11, 10264-10272.	7.3	116
116	Three-dimensional skeleton networks of graphene wrapped polyaniline nanofibers: an excellent structure for high-performance flexible solid-state supercapacitors. Scientific Reports, 2016, 6, 19777.	1.6	115
117	Ultrathin nickel oxide nanosheets for enhanced sodium and lithium storage. Journal of Power Sources, 2015, 274, 755-761.	4.0	114
118	Interlayer Coupling Induced Infrared Response in WS₂/MoS₂ Heterostructures Enhanced by Surface Plasmon Resonance. Advanced Functional Materials, 2018, 28, 1800339.	7.8	114
119	2D Ternary Chalcogenides. Advanced Optical Materials, 2018, 6, 1800058.	3.6	114
120	Ultrathin MnO2 nanoflakes as efficient catalysts for oxygen reduction reaction. Chemical Communications, 2014, 50, 7885.	2.2	113
121	Ternary Ta₂NiSe₅ Flakes for a Highâ€Performance Infrared Photodetector. Advanced Functional Materials, 2016, 26, 8281-8289.	7.8	112
122	Hybrid catalysts for photoelectrochemical reduction of carbon dioxide: a prospective review on semiconductor/metal complex co-catalyst systems. Journal of Materials Chemistry A, 2014, 2, 15228.	5.2	108
123	A Multisite Strategy for Enhancing the Hydrogen Evolution Reaction on a Nanoâ€Pd Surface in Alkaline Media. Advanced Energy Materials, 2017, 7, 1701129.	10.2	108
124	Selfâ€Supported 3D Array Electrodes for Sodium Microbatteries. Advanced Functional Materials, 2018, 28, 1704880.	7.8	108
125	Electrochemical Oxidation of Nitrogen towards Direct Nitrate Production on Spinel Oxides. Angewandte Chemie - International Edition, 2020, 59, 9418-9422.	7.2	108
126	Antiferromagnetic Inverse Spinel Oxide LiCoVO₄ with Spinâ€Polarized Channels for Water Oxidation. Advanced Materials, 2020, 32, e1907976.	11.1	106

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127	Hybrid Organicâ€“Inorganic Materials and Composites for Photoelectrochemical Water Splitting. ACS Energy Letters, 2020, 5, 1487-1497.	8.8	104
128	Raw biomass electroreforming coupled to green hydrogen generation. Nature Communications, 2021, 12, 2008.	5.8	104
129	Biochemistry-Enabled 3D Foams for Ultrafast Battery Cathodes. ACS Nano, 2015, 9, 4628-4635.	7.3	102
130	A Thermodynamically Favored Crystal Orientation in Mixed Formamidinium/Methylammonium Perovskite for Efficient Solar Cells. Advanced Materials, 2019, 31, e1900390.	11.1	101
131	Synthesis of multimodal porous ZnCo2O4 and its electrochemical properties as an anode material for lithium ion batteries. Journal of Power Sources, 2015, 294, 112-119.	4.0	99
132	Persistent Conjugated Backbone and Disordered Lamellar Packing Impart Polymers with Efficient nâ€Doping and High Conductivities. Advanced Materials, 2021, 33, e2005946.	11.1	99
133	Valence Change Ability and Geometrical Occupation of Substitution Cations Determine the Pseudocapacitance of Spinel Ferrite XFe₂O₄ (X = Mn, Co, Ni, Fe). Chemistry of Materials, 2016, 28, 4129-4133.	3.2	98
134	Postsynthesis Phase Transformation for CsPbBr₃/Rb₄PbBr₆ Core/Shell Nanocrystals with Exceptional Photostability. ACS Applied Materials & Interfaces, 2018, 10, 23303-23310.	4.0	98
135	1000 h Operational Lifetime Perovskite Solar Cells by Ambient Melting Encapsulation. Advanced Energy Materials, 2020, 10, 1902472.	10.2	98
136	Synthesis, properties and applications of one- and two-dimensional gold nanostructures. Nano Research, 2015, 8, 40-55.	5.8	97
137	Postsynthesis Potassiumâ€Modification Method to Improve Stability of CsPbBr₃ Perovskite Nanocrystals. Advanced Optical Materials, 2018, 6, 1701106.	3.6	95
138	Chemical Vapor Deposition Growth of High Crystallinity Sb₂Se₃ Nanowire with Strong Anisotropy for Nearâ€Infrared Photodetectors. Small, 2019, 15, e1805307.	5.2	93
139	Organic phase synthesis of monodisperse iron oxide nanocrystals using iron chloride as precursor. Nanoscale, 2010, 2, 1027.	2.8	92
140	Î²-Cyclodextrin stabilized magnetic Fe₃S₄ nanoparticles for efficient removal of Pb(<scp>ii</scp>). Journal of Materials Chemistry A, 2015, 3, 15755-15763.	5.2	92
141	General Method for the Synthesis of Ultrastable Core/Shell Quantum Dots by Aluminum Doping. Journal of the American Chemical Society, 2015, 137, 12430-12433.	6.6	91
142	Two-dimensional inorganic molecular crystals. Nature Communications, 2019, 10, 4728.	5.8	91
143	Achieving High Electrocatalytic Efficiency on Copper: A Low-Cost Alternative to Platinum for Hydrogen Generation in Water. ACS Catalysis, 2015, 5, 4115-4120.	5.5	90
144	Liquidâ€Alloyâ€Assisted Growth of 2D Ternary Ga₂In₄S₉ toward Highâ€Performance UV Photodetection. Advanced Materials, 2019, 31, e1806306.	11.1	90

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145	An electron deficiency strategy for enhancing hydrogen evolution on CoP nano-electrocatalysts. Nano Energy, 2018, 50, 273-280.	8.2	89
146	The Spacer Cations Interplay for Efficient and Stable Layered 2D Perovskite Solar Cells. Advanced Energy Materials, 2020, 10, 1901566.	10.2	89
147	Largeâ€Area Aminatedâ€Graphdiyne Thin Films for Direct Methanol Fuel Cells. Angewandte Chemie - International Edition, 2019, 58, 15010-15015.	7.2	88
148	Boosting the performance of organic cathodes through structure tuning. Journal of Materials Chemistry A, 2018, 6, 12985-12991.	5.2	87
149	Switch of the Rate-Determining Step of Water Oxidation by Spin-Selected Electron Transfer in Spinel Oxides. Chemistry of Materials, 2019, 31, 8106-8111.	3.2	87
150	Understanding Fundamentals and Reaction Mechanisms of Electrode Materials for Naâ€ion Batteries. Small, 2018, 14, e1703338.	5.2	86
151	Selfâ€Limited Epitaxial Growth of Ultrathin Nonlayered CdS Flakes for Highâ€Performance Photodetectors. Advanced Functional Materials, 2018, 28, 1800181.	7.8	86
152	NASICON-type Na3Fe2(PO4)3 as a low-cost and high-rate anode material for aqueous sodium-ion batteries. Nano Energy, 2019, 64, 103941.	8.2	83
153	Lowâ€dimensional nanomaterial/Si heterostructureâ€based photodetectors. InformaÄnÃ-MateriÃ¡ly, 2019, 1, 140-163.	8.5	81
154	Transition metal oxides for water oxidation: All about oxyhydroxides?. Science China Materials, 2020, 63, 3-7.	3.5	81
155	Metal Halide Perovskite Nanocrystals in Metalâ€“Organic Framework Host: Not Merely Enhanced Stability. Angewandte Chemie - International Edition, 2021, 60, 7488-7501.	7.2	80
156	Self-supported multicomponent CPO-27 MOF nanoarrays as high-performance anode for lithium storage. Nano Energy, 2019, 57, 711-717.	8.2	78
157	Ferromagneticâ€“Antiferromagnetic Coupling Coreâ€“Shell Nanoparticles with Spin Conservation for Water Oxidation. Advanced Materials, 2021, 33, e2101091.	11.1	77
158	Achieving high performance electromagnetic wave attenuation: a rational design of silica coated mesoporous iron microcubes. Journal of Materials Chemistry C, 2014, 2, 7583.	2.7	75
159	Spontaneously Splitting Copper Nanowires into Quantum Dots on Graphdiyne for Suppressing Lithium Dendrites. Advanced Materials, 2020, 32, e2004379.	11.1	74
160	Orientation-Controlled Synthesis and Ferromagnetism of Single Crystalline Co Nanowire Arrays. Journal of Physical Chemistry C, 2008, 112, 1468-1472.	1.5	73
161	From Two-Phase to Three-Phase: The New Electrochemical Interface by Oxide Electrocatalysts. Nano-Micro Letters, 2018, 10, 8.	14.4	73
162	Efficient removal of Pb(<scp>ii</scp>) from water using magnetic Fe₃S₄/reduced graphene oxide composites. Journal of Materials Chemistry A, 2017, 5, 19333-19342.	5.2	72

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163	Nonlayered Two-Dimensional Defective Semiconductor Î³-Ga₂S₃ toward Broadband Photodetection. ACS Nano, 2019, 13, 6297-6307.	7.3	72
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