Shuangming Chen

List of Publications by Year
in descending order

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119 papers	13,348 citations	30070 54 h-index	22832 112 g-index
120 all docs	120 docs citations	120 times ranked	13790 citing authors

#	Article	IF	Citations
1	Cu2â^'xS derived copper nanoparticles: A platform for unraveling the role of surface reconstruction in efficient electrocatalytic CO2-to-C2H4 conversion. Nano Research, 2023, 16, 4494-4498.	10.4	42
2	Support induced phase engineering toward superior electrocatalyst. Nano Research, 2022, 15, 1831-1837.	10.4	13
3	In Situ Architecting Endogenous Heterojunction of MoS₂ Coupling with Mo₂CT_x MXenes for Optimized Li⁺ Storage. Advanced Materials, 2022, 34, e2108809.	21.0	33
4	Synchrotron-radiation spectroscopic identification towards diverse local environments of single-atom catalysts. Journal of Materials Chemistry A, 2022, 10, 5771-5791.	10.3	19
5	Electrochemical Nitrate Production via Nitrogen Oxidation with Atomically Dispersed Fe on N-Doped Carbon Nanosheets. ACS Nano, 2022, 16, 655-663.	14.6	44
6	Synergic Reaction Kinetics over Adjacent Ruthenium Sites for Superb Hydrogen Generation in Alkaline Media. Advanced Materials, 2022, 34, e2110604.	21.0	108
7	Single-Atom Metal Anchored Zr₆-Cluster-Porphyrin Framework Hollow Nanocapsules with Ultrahigh Active-Center Density for Electrocatalytic CO₂ Reduction. Nano Letters, 2022, 22, 3340-3348.	9.1	29
8	Confining High-Valence Iridium Single Sites onto Nickel Oxyhydroxide for Robust Oxygen Evolution. Nano Letters, 2022, 22, 3832-3839.	9.1	33
9	Motivating Ru-bri site of RuO2 by boron doping toward high performance acidic and neutral oxygen evolution. Nano Research, 2022, 15, 7008-7015.	10.4	20
10	Approach to electrochemical modulating differential extended X-ray absorption fine structure. Journal of Synchrotron Radiation, 2022, 29, 1065-1073.	2.4	5
11	Cobalt nitride as a novel cocatalyst to boost photocatalytic CO2 reduction. Nano Energy, 2021, 79, 105429.	16.0	117
12	Anomalous self-optimization of sulfate ions for boosted oxygen evolution reaction. Science Bulletin, 2021, 66, 553-561.	9.0	30
13	Operando X-ray spectroscopy visualizing the chameleon-like structural reconstruction on an oxygen evolution electrocatalyst. Energy and Environmental Science, 2021, 14, 906-915.	30.8	93
14	Ultrathin Amorphous/Crystalline Heterophase Rh and Rh Alloy Nanosheets as Tandem Catalysts for Direct Indole Synthesis. Advanced Materials, 2021, 33, e2006711.	21.0	68
15	Facile modulation of different vacancies in ZnS nanoplates for efficient solar fuel production. Journal of Materials Chemistry A, 2021, 9, 7977-7990.	10.3	21
16	Manganese buffer induced high-performance disordered MnVO cathodes in zinc batteries. Energy and Environmental Science, 2021, 14, 3954-3964.	30.8	57
17	Evoking ordered vacancies in metallic nanostructures toward a vacated Barlow packing for high-performance hydrogen evolution. Science Advances, 2021, 7, .	10.3	64
18	Short-Range Ordered Iridium Single Atoms Integrated into Cobalt Oxide Spinel Structure for Highly Efficient Electrocatalytic Water Oxidation. Journal of the American Chemical Society, 2021, 143, 5201-5211.	13.7	287

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19	Initial nucleation process in the synthesis of Platinum Nanoparticle from chloroplatinic acid. Nano Today, 2021, 37, 101093.	11.9	8
20	HClâ€Based Hydrothermal Etching Strategy toward Fluorideâ€Free MXenes. Advanced Materials, 2021, 33, e2101015.	21.0	79
21	Probing self-optimization of carbon support in oxygen evolution reaction. Nano Research, 2021, 14, 4534-4540.	10.4	20
22	Single-Crystal Inorganic Helical Architectures Induced by Asymmetrical Defects in Sub-Nanometric Wires. Journal of the American Chemical Society, 2021, 143, 9858-9865.	13.7	26
23	Hydrogen-Intercalation-Induced Lattice Expansion of Pd@Pt Coreâ€“Shell Nanoparticles for Highly Efficient Electrocatalytic Alcohol Oxidation. Journal of the American Chemical Society, 2021, 143, 11262-11270.	13.7	121
24	Manipulating and probing the structural self-optimization in oxygen evolution reaction catalysts. Current Opinion in Electrochemistry, 2021, 30, 100788.	4.8	11
25	Self-optimizing iron phosphorus oxide for stable hydrogen evolution at high current. Applied Catalysis B: Environmental, 2021, 298, 120559.	20.2	14
26	Pd-Modified ZnOâ€“Au Enabling Alkoxy Intermediates Formation and Dehydrogenation for Photocatalytic Conversion of Methane to Ethylene. Journal of the American Chemical Society, 2021, 143, 269-278.	13.7	151
27	Defect engineering on V2O3 cathode for long-cycling aqueous zinc metal batteries. Nature Communications, 2021, 12, 6878.	12.8	118
28	Support Effects in Electrocatalysis and Their Synchrotron Radiation-Based Characterizations. Journal of Physical Chemistry Letters, 2021, 12, 11543-11554.	4.6	12
29	3D V₂CT_xâ€“rGO Architectures with Optimized Ion Transport Channels toward Fast Lithium-Ion Storage. ACS Applied Materials & Interfaces, 2021, 13, 61258-61266.	8.0	9
30	Cation-intercalated engineering and X-ray absorption spectroscopic characterizations of two dimensional MXenes. Chinese Chemical Letters, 2020, 31, 969-979.	9.0	12
31	Hierarchical hollow-structured anode for high-rate sodium-ion battery. Journal of Solid State Chemistry, 2020, 283, 121159.	2.9	7
32	Transition from Semimetal to Semiconductor in ZrTe₂ Induced by Se Substitution. ACS Nano, 2020, 14, 835-841.	14.6	29
33	Atomic-Level Insights into the Edge Active ReS₂ Ultrathin Nanosheets for High-Efficiency Light-to-Hydrogen Conversion. , 2020, 2, 1484-1494.		65
34	Strain-Engineering of Bi₁₂O₁₇Br₂ Nanotubes for Boosting Photocatalytic CO₂ Reduction. , 2020, 2, 1025-1032.		82
35	Hydrogenâ€Dopingâ€Induced Metalâ€Like Ultrahigh Freeâ€Carrier Concentration in Metalâ€Oxide Material for Giant and Tunable Plasmon Resonance. Advanced Materials, 2020, 32, e2004059.	21.0	57
36	CdPS ₃ nanosheets-based membrane with high proton conductivity enabled by Cd vacancies. Science, 2020, 370, 596-600.	12.6	120

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37	Ternary MoSe2xTe2â^'2x alloy with tunable band gap for electronic and optoelectronic transistors. Nanotechnology, 2020, 31, 345704.	2.6	6
38	Sulfur Atomically Doped Bismuth Nanobelt Driven by Electrochemical Self-Reconstruction for Boosted Electrocatalysis. Journal of Physical Chemistry Letters, 2020, 11, 1746-1752.	4.6	23
39	A non-rigid shift of band dispersions induced by Cu intercalation in 2H-TaSe2. Nano Research, 2020, 13, 353-357.	10.4	8
40	Tuning 2D MXenes by Surface Controlling and Interlayer Engineering: Methods, Properties, and Synchrotron Radiation Characterizations. Advanced Functional Materials, 2020, 30, 2000869.	14.9	98
41	Dial the Mechanism Switch of VN from Conversion to Intercalation toward Long Cycling Sodiumâ€Ion Battery. Advanced Energy Materials, 2020, 10, 1903712.	19.5	92
42	A Unique Ru-N ₄ -P Coordinated Structure Synergistically Waking Up the Nonmetal P Active Site for Hydrogen Production. Research, 2020, 2020, 5860712.	5.7	12
43	Isolated single atom cobalt in Bi3O4Br atomic layers to trigger efficient CO2 photoreduction. Nature Communications, 2019, 10, 2840.	12.8	327
44	Heteroatomâ€Mediated Interactions between Ruthenium Single Atoms and an MXene Support for Efficient Hydrogen Evolution. Advanced Materials, 2019, 31, e1903841.	21.0	363
45	Atomic Ru Immobilized on Porous h-BN through Simple Vacuum Filtration for Highly Active and Selective CO₂ Methanation. ACS Catalysis, 2019, 9, 10077-10086.	11.2	93
46	Modulating Electronic Structure of Cobalt Phosphide Precatalysts via Dual-Metal Incorporation for Highly Efficient Overall Water Splitting. ACS Applied Energy Materials, 2019, 2, 8022-8030.	5.1	19
47	Delaminating Vanadium Carbides for Zincâ€Ion Storage: Hydrate Precipitation and H⁺/Zn²⁺ Coâ€Action Mechanism. Small Methods, 2019, 3, 1900495.	8.6	97
48	Recent Advances of Ternary Layered Cu₂MX₄ (Mâ€‰=â€‰Mo, W; Xâ€‰=â€‰S, Se) Nanomaterials for Photocatalysis. Solar Rrl, 2019, 3, 1800320.	5.8	23
49	Selective Selenium-Substituted Metallic MoTe₂ toward Ternary Atomic Layers with Tunable Semiconducting Character. Journal of Physical Chemistry C, 2019, 123, 24927-24933.	3.1	9
50	Monoatomic Platinum-Anchored Metallic MoS₂: Correlation between Surface Dopant and Hydrogen Evolution. Journal of Physical Chemistry Letters, 2019, 10, 6081-6087.	4.6	53
51	Engineering the In-Plane Structure of Metallic Phase Molybdenum Disulfide via Co and O Dopants toward Efficient Alkaline Hydrogen Evolution. ACS Nano, 2019, 13, 11733-11740.	14.6	75
52	Precisely Tuning the Number of Fe Atoms in Clusters on N-Doped Carbon toward Acidic Oxygen Reduction Reaction. CheM, 2019, 5, 2865-2878.	11.7	346
53	Two-dimensional Cobalt Oxy-hydrate Sulfide Nanosheets with Modified t2g Orbital State of CoO6â€“x Octahedron for Efficient Overall Water Splitting. ACS Sustainable Chemistry and Engineering, 2019, 7, 17325-17334.	6.7	15
54	Nonâ€metal Singleâ€Iodineâ€Atom Electrocatalysts for the Hydrogen Evolution Reaction. Angewandte Chemie, 2019, 131, 12380-12385.	2.0	23

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55	Nonâ€metal Singleâ€Iodineâ€Atom Electrocatalysts for the Hydrogen Evolution Reaction. Angewandte Chemie - International Edition, 2019, 58, 12252-12257.	13.8	175
56	Atomically dispersed platinum supported on curved carbon supports for efficient electrocatalytic hydrogen evolution. Nature Energy, 2019, 4, 512-518.	39.5	756
57	Atomically Dispersed Single Co Sites in Zeolitic Imidazole Frameworks Promoting Highâ€Efficiency Visibleâ€Lightâ€Driven Hydrogen Production. Chemistry - A European Journal, 2019, 25, 9670-9677.	3.3	10
58	Surface Plasmon Enabling Nitrogen Fixation in Pure Water through a Dissociative Mechanism under Mild Conditions. Journal of the American Chemical Society, 2019, 141, 7807-7814.	13.7	235
59	Frameworkâ€Porphyrinâ€Derived Singleâ€Atom Bifunctional Oxygen Electrocatalysts and their Applications in Znâ€“Air Batteries. Advanced Materials, 2019, 31, e1900592.	21.0	256
60	Heteroatom-Doped Transition Metal Electrocatalysts for Hydrogen Evolution Reaction. ACS Energy Letters, 2019, 4, 805-810.	17.4	323
61	Charge-Redistribution-Enhanced Nanocrystalline Ru@IrOx Electrocatalysts for Oxygen Evolution in Acidic Media. CheM, 2019, 5, 445-459.	11.7	354
62	Tracking Structural Selfâ€Reconstruction and Identifying True Active Sites toward Cobalt Oxychloride Precatalyst of Oxygen Evolution Reaction. Advanced Materials, 2019, 31, e1805127.	21.0	211
63	Atomic Sn⁴⁺ Decorated into Vanadium Carbide MXene Interlayers for Superior Lithium Storage. Advanced Energy Materials, 2019, 9, 1802977.	19.5	103
64	Atomic Iridium Incorporated in Cobalt Hydroxide for Efficient Oxygen Evolution Catalysis in Neutral Electrolyte. Advanced Materials, 2018, 30, e1707522.	21.0	247
65	1Tâ€²â€Mo_{1â^'x}W_xS₂/CdS Heterostructure Enabling Robust Photocatalytic Water Splitting: Unveiling the Interfacial Charge Polarization. Solar Rrl, 2018, 2, 1800032.	5.8	27
66	Zirconiumâ€“Porphyrinâ€Based Metalâ€“Organic Framework Hollow Nanotubes for Immobilization of Nobleâ€Metal Single Atoms. Angewandte Chemie, 2018, 130, 3551-3556.	2.0	102
67	Atomically Intercalating Tin Ions into the Interlayer of Molybdenum Oxide Nanobelt toward Long-Cycling Lithium Battery. Journal of Physical Chemistry Letters, 2018, 9, 817-824.	4.6	39
68	Heterogeneous Singleâ€Atom Catalyst for Visibleâ€Lightâ€Driven Highâ€Turnover CO₂ Reduction: The Role of Electron Transfer. Advanced Materials, 2018, 30, e1704624.	21.0	383
69	In situ trapped high-density single metal atoms within graphene: Iron-containing hybrids as representatives for efficient oxygen reduction. Nano Research, 2018, 11, 2217-2228.	10.4	108
70	High-metallic-phase-concentration Mo1â€“xWxS2 nanosheets with expanded interlayers as efficient electrocatalysts. Nano Research, 2018, 11, 1687-1698.	10.4	37
71	Engineering multi-dimensional nanocarbons with enhanced electrochemical activity as high-performance bifunctional electrocatalyst. Journal of Porous Materials, 2018, 25, 1115-1122.	2.6	4
72	Wellâ€Defined Cobalt Catalyst with Nâ€Doped Carbon Layers Enwrapping: The Correlation between Surface Atomic Structure and Electrocatalytic Property. Small, 2018, 14, 1702074.	10.0	56

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73	Scalable Fabrication of Highly Active and Durable Membrane Electrodes toward Water Oxidation. Small, 2018, 14, 1702109.	10.0	20
74	Atomic Vacancies Control of Pdâ€Based Catalysts for Enhanced Electrochemical Performance. Advanced Materials, 2018, 30, 1704171.	21.0	102
75	2D heterostructure comprised of metallic 1T-MoS2/Monolayer O-g-C3N4 towards efficient photocatalytic hydrogen evolution. Applied Catalysis B: Environmental, 2018, 220, 379-385.	20.2	231
76	Lithiation-induced amorphization of Pd3P2S8 for highly efficient hydrogen evolution. Nature Catalysis, 2018, 1, 460-468.	34.4	247
77	Refining Defect States in W₁₈O₄₉ by Mo Doping: A Strategy for Tuning N₂ Activation towards Solar-Driven Nitrogen Fixation. Journal of the American Chemical Society, 2018, 140, 9434-9443.	13.7	722
78	Atomic Cobalt Covalently Engineered Interlayers for Superior Lithiumâ€ion Storage. Advanced Materials, 2018, 30, e1802525.	21.0	187
79	Systematic design of superaerophobic nanotube-array electrode comprised of transition-metal sulfides for overall water splitting. Nature Communications, 2018, 9, 2452.	12.8	431
80	Surface Modification on Pdâ€TiO 2 Hybrid Nanostructures towards Highly Efficient H 2 Production from Catalytic Formic Acid Decomposition. Chemistry - A European Journal, 2018, 24, 18398-18402.	3.3	14
81	Crystallographic-plane tuned Prussian-blue wrapped with RGO: a high-capacity, long-life cathode for sodium-ion batteries. Journal of Materials Chemistry A, 2017, 5, 3569-3577.	10.3	75
82	A Ternary Alloy Substrate to Synthesize Monolayer Graphene with Liquid Carbon Precursor. ACS Nano, 2017, 11, 1371-1379.	14.6	21
83	Isolation of Cu Atoms in Pd Lattice: Forming Highly Selective Sites for Photocatalytic Conversion of CO₂ to CH₄. Journal of the American Chemical Society, 2017, 139, 4486-4492.	13.7	455
84	Nanoscale TiO2 membrane coating spinel LiNi0.5Mn1.5O4 cathode material for advanced lithium-ion batteries. Journal of Alloys and Compounds, 2017, 705, 413-419.	5.5	79
85	Engineering interfacial charge-transfer by phase transition realizing enhanced photocatalytic hydrogen evolution activity. Inorganic Chemistry Frontiers, 2017, 4, 663-667.	6.0	25
86	Near-surface dilution of trace Pd atoms to facilitate Pd-H bond cleavage for giant enhancement of electrocatalytic hydrogen evolution. Nano Energy, 2017, 34, 306-312.	16.0	48
87	Amorphous nickel-cobalt complexes hybridized with 1T-phase molybdenum disulfide via hydrazine-induced phase transformation for water splitting. Nature Communications, 2017, 8, 15377.	12.8	284
88	Vertical 1T-MoS₂ nanosheets with expanded interlayer spacing edged on a graphene frame for high rate lithium-ion batteries. Nanoscale, 2017, 9, 6975-6983.	5.6	158
89	Designing hierarchical hollow nanostructures of Cu₂MoS₄ for improved hydrogen evolution reaction. Physical Chemistry Chemical Physics, 2017, 19, 557-561.	2.8	26
90	Hydriding Pd cocatalysts: An approach to giant enhancement on photocatalytic CO2 reduction into CH4. Nano Research, 2017, 10, 3396-3406.	10.4	95

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91	Amorphous Metallic NiFeP: A Conductive Bulk Material Achieving High Activity for Oxygen Evolution Reaction in Both Alkaline and Acidic Media. Advanced Materials, 2017, 29, 1606570.	21.0	441
92	Defective Tungsten Oxide Hydrate Nanosheets for Boosting Aerobic Coupling of Amines: Synergistic Catalysis by Oxygen Vacancies and BrÃ¸nsted Acid Sites. Small, 2017, 13, 1701354.	10.0	62
93	In situ synthesis of noble metal nanoparticles on onion-like carbon with enhanced electrochemical and supercapacitor performance. RSC Advances, 2017, 7, 4667-4670.	3.6	12
94	Membrane-assisted assembly strategy of flexible electrodes for multifunctional supercapacitors. Carbon, 2017, 125, 419-428.	10.3	15
95	Co Nanoparticles Encapsulated in N-Doped Carbon Nanosheets: Enhancing Oxygen Reduction Catalysis without Metalâ€“Nitrogen Bonding. ACS Applied Materials & Interfaces, 2017, 9, 38499-38506.	8.0	42
96	Hierarchical 1T-MoS₂ nanotubular structures for enhanced supercapacitive performance. Journal of Materials Chemistry A, 2017, 5, 23704-23711.	10.3	61
97	Pt4PdCu0.4 alloy nanoframes as highly efficient and robust bifunctional electrocatalysts for oxygen reduction reaction and formic acid oxidation. Nano Energy, 2017, 39, 532-538.	16.0	97
98	Nickel Diselenide Ultrathin Nanowires Decorated with Amorphous Nickel Oxide Nanoparticles for Enhanced Water Splitting Electrocatalysis. Small, 2017, 13, 1701487.	10.0	99
99	Atomic-level molybdenum oxide nanorings with full-spectrum absorption and photoresponsive properties. Nature Communications, 2017, 8, 1559.	12.8	81
100	Electronic Structure Reconfiguration toward Pyrite NiS₂ via Engineered Heteroatom Defect Boosting Overall Water Splitting. ACS Nano, 2017, 11, 11574-11583.	14.6	310
101	Enhanced electrochemical performance of MoO3-coated LiMn2O4 cathode for rechargeable lithium-ion batteries. Materials Chemistry and Physics, 2017, 199, 203-208.	4.0	17
102	Probing Lithium Storage Mechanism of MoO₂ Nanoflowers with Rich Oxygen-Vacancy Grown on Graphene Sheets. Journal of Physical Chemistry C, 2017, 121, 15589-15596.	3.1	41
103	Active {010} facet-exposed Cu2MoS4 nanotube as high-efficiency photocatalyst. Nano Research, 2017, 10, 3817-3825.	10.4	22
104	Amorphous nickel-iron oxides/carbon nanohybrids for an efficient and durable oxygen evolution reaction. Nano Research, 2017, 10, 3629-3637.	10.4	42
105	Growing and Etching MoS2 on Carbon Nanotube Film for Enhanced Electrochemical Performance. Molecules, 2016, 21, 1318.	3.8	8
106	Oxide Defect Engineering Enables to Couple Solar Energy into Oxygen Activation. Journal of the American Chemical Society, 2016, 138, 8928-8935.	13.7	840
107	Polyoxometalate Clusterâ€Incorporated Metalâ€Organic Framework Hierarchical Nanotubes. Small, 2016, 12, 2982-2990.	10.0	60
108	In situ growth of metallic 1T-WS2 nanoislands on single-walled carbon nanotube films for improved electrochemical performance. RSC Advances, 2016, 6, 87919-87925.	3.6	29

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109	Inâ€...situ Integration of a Metallic 1Tâ€MoS₂/CdS Heterostructure as a Means to Promote Visibleâ€Lightâ€Driven Photocatalytic Hydrogen Evolution. ChemCatChem, 2016, 8, 2614-2619.	3.7	98
110	All-Carbon Ultrafast Supercapacitor by Integrating Multidimensional Nanocarbons. Small, 2016, 12, 5684-5691.	10.0	39
111	Facile Synthesis of Hierarchical Cu₂MoS₄ Hollow Sphere/Reduced Graphene Oxide Composites with Enhanced Photocatalytic Performance. Journal of Physical Chemistry C, 2016, 120, 13120-13125.	3.1	43
112	Role of Ru Oxidation Degree for Catalytic Activity in Bimetallic Pt/Ru Nanoparticles. Journal of Physical Chemistry C, 2016, 120, 6569-6576.	3.1	25
113	Pyrazolate-Based Porphyrinic Metalâ€“Organic Framework with Extraordinary Base-Resistance. Journal of the American Chemical Society, 2016, 138, 914-919.	13.7	303
114	X-ray absorption study of the geometry structure of Co2+/Co3+ inÂammonia solution. Journal of Molecular Structure, 2015, 1098, 306-310.	3.6	4
115	Initial Reaction Mechanism of Platinum Nanoparticle in Methanolâ€“Water System and the Anomalous Catalytic Effect of Water. Nano Letters, 2015, 15, 5961-5968.	9.1	52
116	A novel route to realize controllable phases in an aluminum (Al3+)-doped VO2 system and the metalâ€“insulator transition modulation. Materials Letters, 2014, 127, 44-47.	2.6	30
117	Depressed transition temperature of W_xV_{1â^'x}O₂: mechanistic insights from the X-ray absorption fine structure (XAFS) spectroscopy. Physical Chemistry Chemical Physics, 2014, 16, 17705.	2.8	66
118	Cation Distribution in ZnCr₂O₄ Nanocrystals Investigated by X-ray Absorption Fine Structure Spectroscopy. Journal of Physical Chemistry C, 2013, 117, 25019-25025.	3.1	48
119	An X-ray absorption spectroscopic investigation of the geometry of Pt(IV) in H2PtCl6 ammonia solution. Journal of Molecular Structure, 2013, 1041, 39-43.	3.6	8