Huawei Huang

List of Publications by Year
in descending order

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54 papers	4,981 citations	109137 35 h-index	149479 56 g-index
57 all docs	57 docs citations	57 times ranked	6749 citing authors

#	Article	IF	Citations
1	Electroactive edge site-enriched nickelâ€“cobalt sulfide into graphene frameworks for high-performance asymmetric supercapacitors. Energy and Environmental Science, 2016, 9, 1299-1307.	15.6	623
2	Ultrafine MoO₂â€Carbon Microstructures Enable Ultralongâ€Life Powerâ€Type Sodium Ion Storage by Enhanced Pseudocapacitance. Advanced Energy Materials, 2017, 7, 1602880.	10.2	306
3	A superhydrophilic â€œnanoglueâ€•for stabilizing metal hydroxides onto carbon materials for high-energy and ultralong-life asymmetric supercapacitors. Energy and Environmental Science, 2017, 10, 1958-1965.	15.6	294
4	Iron-tuned super nickel phosphide microstructures with high activity for electrochemical overall water splitting. Nano Energy, 2017, 34, 472-480.	8.2	258
5	Strategies and insights towards the intrinsic capacitive properties of MnO2 for supercapacitors: Challenges and perspectives. Nano Energy, 2019, 57, 459-472.	8.2	232
6	3D Porous Nâ€Doped Graphene Frameworks Made of Interconnected Nanocages for Ultrahighâ€Rate and Longâ€Life Liâ€“O₂ Batteries. Advanced Functional Materials, 2015, 25, 6913-6920.	7.8	231
7	Ultrasensitive Ironâ€Triggered Nanosized Feâ€“CoOOH Integrated with Graphene for Highly Efficient Oxygen Evolution. Advanced Energy Materials, 2017, 7, 1602148.	10.2	216
8	Surfaceâ€Confined Fabrication of Ultrathin Nickel Cobaltâ€Layered Double Hydroxide Nanosheets for Highâ€Performance Supercapacitors. Advanced Functional Materials, 2018, 28, 1803272.	7.8	215
9	NiCo-layered double hydroxides vertically assembled on carbon fiber papers as binder-free high-active electrocatalysts for water oxidation. Carbon, 2016, 110, 1-7.	5.4	175
10	Restructuring of Cu₂O to Cu₂O@Cu-Metalâ€“Organic Frameworks for Selective Electrochemical Reduction of CO₂. ACS Applied Materials & Interfaces, 2019, 11, 9904-9910.	4.0	174
11	Rapid and energy-efficient microwave pyrolysis for high-yield production of highly-active bifunctional electrocatalysts for water splitting. Energy and Environmental Science, 2020, 13, 545-553.	15.6	169
12	Mass and Charge Transfer Coenhanced Oxygen Evolution Behaviors in CoFeâ€Layered Double Hydroxide Assembled on Graphene. Advanced Materials Interfaces, 2016, 3, 1500782.	1.9	165
13	Ultrahigh Rate and Longâ€Life Sodiumâ€Ion Batteries Enabled by Engineered Surface and Nearâ€Surface Reactions. Advanced Materials, 2018, 30, 1702486.	11.1	153
14	Structural Design of Amorphous CoMoP_x with Abundant Active Sites and Synergistic Catalysis Effect for Effective Water Splitting. Advanced Functional Materials, 2020, 30, 2003889.	7.8	128
15	Ni, Co hydroxide triggers electrocatalytic production of high-purity benzoic acid over 400 mA cm^{â^’2}. Energy and Environmental Science, 2020, 13, 4990-4999.	15.6	125
16	Bridging of Ultrathin NiCo₂O₄ Nanosheets and Graphene with Polyaniline: A Theoretical and Experimental Study. Chemistry of Materials, 2016, 28, 5855-5863.	3.2	116
17	Highâ€Stackingâ€Density, Superiorâ€Roughness LDH Bridged with Vertically Aligned Graphene for Highâ€Performance Asymmetric Supercapacitors. Small, 2017, 13, 1701288.	5.2	83
18	Strongly Coupled Architectures of Cobalt Phosphide Nanoparticles Assembled on Graphene as Bifunctional Electrocatalysts for Water Splitting. ChemElectroChem, 2016, 3, 719-725.	1.7	82

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19	Activation of transition metal oxides by in-situ electro-regulated structure-reconstruction for ultra-efficient oxygen evolution. Nano Energy, 2019, 58, 778-785.	8.2	81
20	A Universal Converse Voltage Process for Triggering Transition Metal Hybrids In Situ Phase Restruction toward Ultrahighâ€Rate Supercapacitors. Advanced Materials, 2019, 31, e1901241.	11.1	81
21	CoMn Layered Double Hydroxides/Carbon Nanotubes Architectures as Highâ€Performance Electrocatalysts for the Oxygen Evolution Reaction. ChemElectroChem, 2016, 3, 906-912.	1.7	78
22	Phase controllable synthesis of Ni2+ post-modified CoP nanowire for enhanced oxygen evolution. Nano Energy, 2019, 62, 136-143.	8.2	66
23	Decoupling atomic-layer-deposition ultrafine RuO 2 for high-efficiency and ultralong-life Li-O 2 batteries. Nano Energy, 2017, 34, 399-407.	8.2	63
24	Ultrafast construction of interfacial sites by wet chemical etching to enhance electrocatalytic oxygen evolution. Nano Energy, 2020, 69, 104367.	8.2	58
25	Is It Appropriate to Use the Nafion Membrane in Electrocatalytic N₂ Reduction?. Small Methods, 2019, 3, 1900474.	4.6	56
26	Design of grain boundary enriched bimetallic borides for enhanced hydrogen evolution reaction. Chemical Engineering Journal, 2021, 405, 126977.	6.6	56
27	Carbon-enabled microwave chemistry: From interaction mechanisms to nanomaterial manufacturing. Nano Energy, 2021, 85, 106027.	8.2	50
28	Structure engineering defective and mass transfer-enhanced RuO2 nanosheets for proton exchange membrane water electrolyzer. Nano Energy, 2021, 88, 106276.	8.2	49
29	Towards efficient electrocatalysts for oxygen reduction by doping cobalt into graphene-supported graphitic carbon nitride. Journal of Materials Chemistry A, 2015, 3, 19657-19661.	5.2	47
30	Microwaveâ€Assisted Ultrafast Synthesis of Molybdenum Carbide Nanoparticles Grown on Carbon Matrix for Efficient Hydrogen Evolution Reaction. Small Methods, 2019, 3, 1900259.	4.6	46
31	Electrochemically Driven Coordination Tuning of FeOOH Integrated on Carbon Fiber Paper for Enhanced Oxygen Evolution. Small, 2019, 15, e1901015.	5.2	46
32	Ultrasmall diiron phosphide nanodots anchored on graphene sheets with enhanced electrocatalytic activity for hydrogen production via high-efficiency water splitting. Journal of Materials Chemistry A, 2016, 4, 16028-16035.	5.2	44
33	Recent advances in non-precious group metal-based catalysts for water electrolysis and beyond. Journal of Materials Chemistry A, 2021, 10, 50-88.	5.2	44
34	Activation of inert copper for significantly enhanced hydrogen evolution behaviors by trace ruthenium doping. Nano Energy, 2022, 92, 106763.	8.2	38
35	An effective graphene confined strategy to construct active edge sites-enriched nanosheets with enhanced oxygen evolution. Carbon, 2018, 126, 437-442.	5.4	37
36	Interface Engineering of Ni₃N@Fe₃N Heterostructure Supported on Carbon Fiber for Enhanced Water Oxidation. Industrial & Engineering Chemistry Research, 2017, 56, 14245-14251.	1.8	35

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37	Implanting CNT Forest onto Carbon Nanosheets as Multifunctional Hosts for Highâ€Performance Lithium Metal Batteries. Small Methods, 2019, 3, 1800546.	4.6	34
38	Ultrathin Nitrogenâ€Enriched Hybrid Carbon Nanosheets for Supercapacitors with Ultrahigh Rate Performance and High Energy Density. ChemElectroChem, 2017, 4, 369-375.	1.7	32
39	Phosphate Species up to 70% Mass Ratio for Enhanced Pseudocapacitive Properties. Small, 2018, 14, e1803811.	5.2	29
40	Surface conversion derived core-shell nanostructures of Co particles@RuCo alloy for superior hydrogen evolution in alkali and seawater. Applied Catalysis B: Environmental, 2022, 315, 121554.	10.8	29
41	Graphite-graphene architecture stabilizing ultrafine Co3O4 nanoparticles for superior oxygen evolution. Carbon, 2018, 140, 17-23.	5.4	20
42	Ultrafast Construction of Oxygen-Containing Scaffold over Graphite for Trapping Ni²⁺ into Single Atom Catalysts. ACS Nano, 2020, 14, 11662-11669.	7.3	20
43	A Phase Transformationâ€Resistant Electrode Enabled by a MnO₂â€Confined Effect for Enhanced Energy Storage. Advanced Functional Materials, 2019, 29, 1901342.	7.8	18
44	An electrocatalyst with anti-oxidized capability for overall water splitting. Nano Research, 2018, 11, 3411-3418.	5.8	16
45	Co ion-intercalation amorphous and ultrathin microstructure for high-rate oxygen evolution. Energy Storage Materials, 2018, 10, 291-296.	9.5	14
46	Achieving Multiple and Tunable Ratios of Syngas to Meet Various Downstream Industrial Processes. ACS Sustainable Chemistry and Engineering, 2020, 8, 3328-3335.	3.2	11
47	Theoretical and Experimental Insights into the Effects of Oxygen-Containing Species within CNTs toward Triiodide Reduction. ACS Sustainable Chemistry and Engineering, 2019, 7, 7527-7534.	3.2	10
48	Energy Accumulation Enabling Fast Synthesis of Intercalated Graphite and Operando Decoupling for Lithium Storage. Advanced Functional Materials, 2021, 31, 2009801.	7.8	9
49	CoMn Layered Double Hydroxides/Carbon Nanotubes Architectures as High-Performance Electrocatalysts for the Oxygen Evolution Reaction. ChemElectroChem, 2016, 3, 850-850.	1.7	4
50	Electrocatalysts: Mass and Charge Transfer Coenhanced Oxygen Evolution Behaviors in CoFe-Layered Double Hydroxide Assembled on Graphene (Adv. Mater. Interfaces 7/2016). Advanced Materials Interfaces, 2016, 3, .	1.9	3
51	Lowâ€Temperature Fast Production of Carbon and Acetic Acid Dualâ€Promoted Pd/C Catalysts. Chemistry - A European Journal, 2019, 25, 13683-13687.	1.7	3
52	Sodiumâ€Ion Batteries: Ultrafine MoO₂â€Carbon Microstructures Enable Ultralongâ€Life Powerâ€Type Sodium Ion Storage by Enhanced Pseudocapacitance (Adv. Energy Mater. 15/2017). Advanced Energy Materials, 2017, 7, .	10.2	2
53	Supercapacitors: Highâ€Stackingâ€Density, Superiorâ€Roughness LDH Bridged with Vertically Aligned Graphene for Highâ€Performance Asymmetric Supercapacitors (Small 37/2017). Small, 2017, 13, .	5.2	1
54	Strongly Coupled Architectures of Cobalt Phosphide Nanoparticles Assembled on Graphene as Bifunctional Electrocatalysts for Water Splitting. ChemElectroChem, 2016, 3, 681-681.	1.7	0