Xiaopeng Hao

List of Publications by Year
in descending order

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87 papers	3,443 citations	101496 36 h-index	155592 55 g-index
87 all docs	87 docs citations	87 times ranked	3907 citing authors

#	Article	IF	Citations
1	Wasteâ€yeast biomass as nitrogen/phosphorus sources and carbon template: Environmentâ€friendly synthesis of N,Pâ€Mo2C nanoparticles on porous carbon matrix for efficient hydrogen evolution. Chinese Chemical Letters, 2022, 33, 3231-3235.	4.8	22
2	BCNâ€Assisted Builtâ€In Electric Field in Heterostructure: An Innovative Path for Broadening the Voltage Window of Aqueous Supercapacitor. Advanced Functional Materials, 2022, 32, 2108843.	7.8	41
3	Potential of MXene-Based Heterostructures for Energy Conversion and Storage. ACS Energy Letters, 2022, 7, 78-96.	8.8	69
4	Stabilizing Sn anodes nanostructure: Structure optimization and interfacial engineering to boost lithium storage. Electrochimica Acta, 2022, 405, 139789.	2.6	17
5	Cathode electrochemically reconstructed V-doped CoO nanosheets for enhanced alkaline hydrogen evolution reaction. Chemical Engineering Journal, 2022, 432, 134331.	6.6	31
6	Phosphorus doping induced the co-construction of sulfur vacancies and heterojunctions in tin disulfide as a durable anode for lithium/sodium-ion batteries. Inorganic Chemistry Frontiers, 2022, 9, 902-913.	3.0	17
7	Magnetron sputtering tuned â€œÏ€ back-donationâ€•sites over metal oxides for enhanced electrocatalytic nitrogen reduction. Journal of Materials Chemistry A, 2022, 10, 2800-2806.	5.2	22
8	Self-supporting NiSe2@BCNNTs electrode for High-Performance sodium ion batteries. Chemical Engineering Journal, 2022, 437, 135421.	6.6	48
9	Na0.76V6O15@Boron Carbonitride Nanotube Composites as Cathodes for High-Performance Lithium-Ion Capacitors. Crystals, 2022, 12, 597.	1.0	6
10	Phase engineering of CdS optimized by BP with p-n junction: Establishing spatial-gradient charges transmission mode toward efficient photocatalytic water reduction. Applied Catalysis B: Environmental, 2022, 315, 121577.	10.8	17
11	Improve the Photocatalytic Hydrogen Production Using ZnS@ZnO Twinâ€Junction Structure with Isoelectronic Traps. Advanced Materials Interfaces, 2022, 9, .	1.9	7
12	Design of Boron Carbonitrides-Polyaniline (BCN-PANI) assembled supercapacitor with high voltage window. Journal of Colloid and Interface Science, 2022, 626, 544-553.	5.0	12
13	Hollow submicrospheres of trimetallic selenides for high-capacity lithium and sodium ion batteries. Chemical Engineering Journal, 2021, 405, 126724.	6.6	38
14	Metal-free boron carbonitride with tunable boron Lewis acid sites for enhanced nitrogen electroreduction to ammonia. Applied Catalysis B: Environmental, 2021, 283, 119622.	10.8	108
15	Band Structureâ€“Controlled Zn_{1â^'x}Cd_xS Solid Solution for Photocatalytic Hydrogen Production Improvement via Appropriately Enhancing Oxidation Capacity. Solar Rrl, 2021, 5, 2000685.	3.1	11
16	Lithium-ion capacitor with improved energy density via perfect matching silicon@3D graphene aerogel anode and BCNNTs cathode. Journal of Materials Chemistry A, 2021, 9, 1134-1142.	5.2	21
17	Valence modulated nickel oxynitride network as integrated bifunctional electrodes for enhanced energy storage. Journal of Energy Chemistry, 2021, 56, 56-63.	7.1	12
18	Boron carbonitride with tunable B/N Lewis acid/base sites for enhanced electrocatalytic overall water splitting. Nanoscale, 2021, 13, 2849-2854.	2.8	24

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19	Water Invoking Interface Corrosion: An Energy Density Booster for Ni//Zn Battery. Advanced Energy Materials, 2021, 11, 2003268.	10.2	46
20	Insight into Nickelâ€Cobalt Oxysulfide Nanowires as Advanced Anode for Sodiumâ€Ion Capacitors. Advanced Energy Materials, 2021, 11, 2100408.	10.2	25
21	Type II cuprous oxide/graphitic carbon nitride p-n heterojunctions for enhanced photocatalytic nitrogen fixation. Journal of Catalysis, 2021, 395, 273-281.	3.1	36
22	MXene decorated by phosphorus-doped TiO2 for photo-enhanced electrocatalytic hydrogen evolution reaction. Renewable Energy, 2021, 170, 858-865.	4.3	37
23	Rational design of Schottky heterojunction with modulating surface electron density for high-performance overall water splitting. Applied Catalysis B: Environmental, 2021, 299, 120660.	10.8	58
24	NiMnO_x/TiN/CC electrode with a branchâ€“leaf structure: a novel approach to improve the performance of supercapacitors with high mass loading of amorphous metal oxides. Journal of Materials Chemistry A, 2021, 9, 21948-21957.	5.2	12
25	Crystallographic orientation and strain distribution in AlN seeds grown on 6Hâ€“SiC substrates by the PVT method. CrystEngComm, 2021, 23, 4946-4953.	1.3	5
26	In Situ Growing BCN Nanotubes on Carbon Fibers for Novel Highâ€Temperature Supercapacitor with Excellent Cycling Performance. Small, 2021, 17, e2102899.	5.2	21
27	Band structure-controlled P-C3N4 for photocatalytic water splitting via appropriately decreasing oxidation capacity. Journal of Alloys and Compounds, 2021, 895, 162513.	2.8	5
28	Selfâ€Supported Fluorineâ€Doped Boron Carbonitride Porous Aerogels for Highâ€Performance Supercapacitors. Energy Technology, 2021, 9, 2100824.	1.8	11
29	Sn_xP_y Nanoplate/Reduced Graphene Oxide Composites as Anode Materials for Lithium-/Sodium-Ion Batteries. ACS Applied Nano Materials, 2021, 4, 12335-12345.	2.4	15
30	Construction of CdS@Ti3C2@CoO hierarchical tandem p-n heterojunction for boosting photocatalytic hydrogen production in pure water. Chemical Engineering Journal, 2020, 383, 123130.	6.6	67
31	A vanadiumâ€“nickel oxynitride layer for enhanced electrocatalytic nitrogen fixation in neutral media. Journal of Materials Chemistry A, 2020, 8, 91-96.	5.2	42
32	Shuttle confinement of lithium polysulfides in borocarbonitride nanotubes with enhanced performance for lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2020, 8, 296-304.	5.2	40
33	Band-matching transformation between CdS and BCNNTs with tunable p-n homojunction for enhanced photocatalytic pure water splitting. Nano Energy, 2020, 69, 104408.	8.2	52
34	Boron Carbonitride Lithium-Ion Capacitors with an Electrostatically Expanded Operating Voltage Window. ACS Applied Materials & Interfaces, 2020, 12, 47425-47434.	4.0	20
35	Growth and Stress Analysis of Spontaneous Nucleation câ€Plane Bulk AlN Crystals by a PVT Method. Crystal Research and Technology, 2020, 55, 2000118.	0.6	8
36	Highâ€Quality GaN Crystal Grown on Laser Decomposed GaNâ€“Sapphire Substrate and Its Application in Photodetector. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 2000380.	0.8	2

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37	Oxygen Vacancy Modulation of Bimetallic Oxynitride Anodes toward Advanced Liâ€Ion Capacitors. Advanced Functional Materials, 2020, 30, 2000350.	7.8	48
38	Growth of Freestanding Gallium Nitride (GaN) Through Polyporous Interlayer Formed Directly During Successive Hydride Vapor Phase Epitaxy (HVPE) Process. Crystals, 2020, 10, 141.	1.0	8
39	Ultrasonicâ€Ball Milling: A Novel Strategy to Prepare Largeâ€Size Ultrathin 2D Materials. Small, 2020, 16, e1906734.	5.2	45
40	High performance lithium-ion capacitors based on LiNbO3-arched 3D graphene aerogel anode and BCNNT cathode with enhanced kinetics match. Chemical Engineering Journal, 2020, 396, 125207.	6.6	29
41	Enhanced performance of supercapacitors by constructing a â€œmini parallel-plate capacitorâ€•in an electrode with high dielectric constant materials. Journal of Materials Chemistry A, 2020, 8, 16661-16668.	5.2	14
42	Rational modulation of p-n homojunction in P-doped g-C3N4 decorated with Ti3C2 for photocatalytic overall water splitting. Applied Catalysis B: Environmental, 2019, 259, 118077.	10.8	94
43	pâ€“n tungsten oxide homojunctions for Vis-NIR light-enhanced electrocatalytic hydrogen evolution. Journal of Materials Chemistry A, 2019, 7, 19573-19580.	5.2	31
44	A universal and controllable strategy of constructing transition-metal nitride heterostructures for highly enhanced bifunctional electrocatalysis. New Journal of Chemistry, 2019, 43, 14701-14707.	1.4	14
45	Effect of Temperature Gradient on AlN Crystal Growth by Physical Vapor Transport Method. Crystal Growth and Design, 2019, 19, 6736-6742.	1.4	16
46	Growth of high-quality GaN crystals on a BCN nanosheet-coated substrate by hydride vapor phase epitaxy. CrystEngComm, 2019, 21, 1302-1308.	1.3	7
47	Intrinsic Properties of Macroscopically Tuned Gallium Nitride Singleâ€Crystalline Facets for Electrocatalytic Hydrogen Evolution. Chemistry - A European Journal, 2019, 25, 10420-10426.	1.7	8
48	A CoP/CdS/WS₂ pâ€“nâ€“n tandem heterostructure: a novel photocatalyst for hydrogen evolution without using sacrificial agents. Journal of Materials Chemistry A, 2019, 7, 14638-14645.	5.2	49
49	Interface engineering in the BNNS@Ti₃C₂ intercalation structure for enhanced electrocatalytic hydrogen evolution. New Journal of Chemistry, 2019, 43, 8613-8619.	1.4	17
50	High-aspect-ratio single-crystalline AlN nanowires: Free-catalytic PVT growth and field-emission studies. Journal of Alloys and Compounds, 2019, 794, 171-177.	2.8	18
51	From bulk to porous GaN crystal: precise structural control and its application in ultraviolet photodetectors. Journal of Materials Chemistry C, 2019, 7, 14116-14122.	2.7	33
52	Hollow Triple-Layer Puff-like HCs@Si@C Composites with High Structural Stability for High-Performance Lithium-Ion Battery. ACS Applied Energy Materials, 2019, 2, 896-904.	2.5	23
53	Transitionâ€Metal Oxynitride: A Facile Strategy for Improving Electrochemical Capacitor Storage. Advanced Materials, 2019, 31, e1806088.	11.1	91
54	Regulating Phase Conversion from Ni₃Se₂ into NiSe in a Bifunctional Electrocatalyst for Overall Waterâ€Splitting Enhancement. ChemSusChem, 2019, 12, 2008-2014.	3.6	46

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55	Effective orientation control of photogenerated carrier separation via rational design of a Ti3C2(TiO2)@CdS/MoS2 photocatalytic system. Applied Catalysis B: Environmental, 2019, 242, 202-208.	10.8	99
56	High quality self-separated GaN crystal grown on a novel nanoporous template by HVPE. Scientific Reports, 2018, 8, 3166.	1.6	10
57	Stable and Reversible Lithium Storage with High Pseudocapacitance in GaN Nanowires. ACS Applied Materials & Interfaces, 2018, 10, 2574-2580.	4.0	52
58	Phase junction CdS: High efficient and stable photocatalyst for hydrogen generation. Applied Catalysis B: Environmental, 2018, 221, 179-186.	10.8	111
59	A photo-responsive electrocatalyst: CdSe quantum dot sensitized WS₂ nanosheets for hydrogen evolution in neutral solution. New Journal of Chemistry, 2018, 42, 18021-18027.	1.4	6
60	Band gap-Tunable Porous Borocarbonitride Nanosheets for High Energy-Density Supercapacitors. ACS Applied Materials & Interfaces, 2018, 10, 19588-19597.	4.0	86
61	Bimetallic NiMoN Nanowires with a Preferential Reactive Facet: An Ultraefficient Bifunctional Electrocatalyst for Overall Water Splitting. ChemSusChem, 2018, 11, 3198-3207.	3.6	91
62	Effect of defects on adsorption characteristics of AlN monolayer towards SO2 and NO2: Ab initio exposure. Applied Surface Science, 2018, 462, 615-622.	3.1	42
63	Graphene-Oxide-Assisted Synthesis of Ga₂O₃ Nanosheets/Reduced Graphene Oxide Nanocomposites Anodes for Advanced Alkali-Ion Batteries. ACS Applied Energy Materials, 2018, 1, 4708-4715.	2.5	61
64	Elastic sandwich-type GaN/MnO₂/MnON composites for flexible supercapacitors with high energy density. Journal of Materials Chemistry A, 2018, 6, 13215-13224.	5.2	45
65	Threeâ€Dimensional MoS₂@CNT/RGO Network Composites for Highâ€Performance Flexible Supercapacitors. Chemistry - A European Journal, 2017, 23, 3438-3446.	1.7	166
66	Grapheneâ€Assisted Exfoliation of Molybdenum Disulfide to Fabricate 2D Heterostructure for Enhancing Lithium Storage. Advanced Materials Interfaces, 2017, 4, 1601187.	1.9	38
67	Phase-transformation engineering in MoS 2 on carbon cloth as flexible binder-free anode for enhancing lithium storage. Journal of Alloys and Compounds, 2017, 716, 112-118.	2.8	66
68	One-step fabrication of porous GaN crystal membrane and its application in energy storage. Scientific Reports, 2017, 7, 44063.	1.6	38
69	Selfâ€Supporting GaN Nanowires/Graphite Paper: Novel Highâ€Performance Flexible Supercapacitor Electrodes. Small, 2017, 13, 1603330.	5.2	70
70	Graphene-Oxide-Assisted Synthesis of GaN Nanosheets as a New Anode Material for Lithium-Ion Battery. ACS Applied Materials & Interfaces, 2017, 9, 26631-26636.	4.0	81
71	Photo-enhanced electrocatalysis of sea-urchin shaped Ni₃(VO₄)₂ for the hydrogen evolution reaction. Journal of Materials Chemistry A, 2017, 5, 18038-18043.	5.2	37
72	Quinone-Mediated Trifluoromethylation of Arenes and Heteroarenes with Visible Light. ACS Sustainable Chemistry and Engineering, 2017, 5, 334-341.	3.2	33

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73	Utilizing photocorrosion-recrystallization to prepare a highly stable and efficient CdS/WS 2 nanocomposite photocatalyst for hydrogen evolution. Applied Catalysis B: Environmental, 2016, 199, 466-472.	10.8	129
74	Gallium Nitride Crystals: Novel Supercapacitor Electrode Materials. Advanced Materials, 2016, 28, 3768-3776.	11.1	136
75	0D/2D nanocomposite visible light photocatalyst for highly stable and efficient hydrogen generation via recrystallization of CdS on MoS2 nanosheets. Nano Energy, 2016, 27, 466-474.	8.2	124
76	Potassium Hydroxide/Dimethyl Sulfoxide Superbaseâ€Promoted Transition Metalâ€Free Synthesis of 2â€Substituted Benzothiophenes under Visible Light. Advanced Synthesis and Catalysis, 2016, 358, 1202-1207.	2.1	36
77	Large-quantity and continuous preparation of two-dimensional nanosheets. Nanoscale, 2016, 8, 5407-5411.	2.8	52
78	Direct growth of freestanding GaN on C-face SiC by HVPE. Scientific Reports, 2015, 5, 10748.	1.6	44
79	Improving the Quality of GaN Crystals by Using Graphene or Hexagonal Boron Nitride Nanosheets Substrate. ACS Applied Materials & Interfaces, 2015, 7, 4504-4510.	4.0	67
80	A novel porous substrate for the growth of high quality GaN crystals by HVPE. RSC Advances, 2014, 4, 35106-35111.	1.7	10
81	Characterization of dislocations in MOCVD-grown GaN using a high temperature annealing method. CrystEngComm, 2014, 16, 2317.	1.3	17
82	Epitaxial growth of a self-separated GaN crystal by using a novel high temperature annealing porous template. CrystEngComm, 2014, 16, 9063-9068.	1.3	15
83	Influence of V/III ratio on stress control in GaN grown on different templates by hydride vapour phase epitaxy. RSC Advances, 2014, 4, 21504.	1.7	12
84	Large Area Stress Distribution in Crystalline Materials Calculated from Lattice Deformation Identified by Electron Backscatter Diffraction. Scientific Reports, 2014, 4, 5934.	1.6	11
85	EBSD crystallographic orientation research on strain distribution in hydride vapor phase epitaxy GaN grown on patterned substrate. CrystEngComm, 2013, 15, 7965.	1.3	17
86	Growth of high quality GaN on a novel designed bonding-thinned template by HVPE. CrystEngComm, 2012, 14, 4777.	1.3	21
87	Influence of GaCl carrier gas flow rate on properties of GaN films grown by hydride vapor-phase epitaxy. Journal of Alloys and Compounds, 2011, 509, 6212-6216.	2.8	4