

Gongming Wang

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

112
papers

21,004
citations

64
h-index

116
g-index

116
ext. papers

23,211
ext. citations

13.5
avg, IF

6.91
L-index

#	Paper	IF	Citations
112	Reversing the Nucleophilicity of Active Sites in CoP Enables Exceptional Hydrogen Evolution Catalysis.. <i>Small</i> , 2022 , e2106870	11	5
111	Interfacial synergies between single-atomic Pt and CoS for enhancing hydrogen evolution reaction catalysis. <i>Applied Catalysis B: Environmental</i> , 2022 , 315, 121534	21.8	4
110	Applications of MoS ₂ in LiO ₂ Batteries: Development and Challenges. <i>Energy & Fuels</i> , 2021 , 35, 5613-5626	4.1	8
109	Amorphization-induced surface electronic states modulation of cobaltous oxide nanosheets for lithium-sulfur batteries. <i>Nature Communications</i> , 2021 , 12, 3102	17.4	24
108	Dual-Metal Sites Boosting Polarization of Nitrogen Molecules for Efficient Nitrogen Photofixation. <i>Advanced Science</i> , 2021 , 8, 2100302	13.6	11
107	Accelerating water dissociation kinetics of Ni ₃ N by tuning interfacial orbital coupling. <i>Nano Research</i> , 2021 , 14, 3458-3465	10	6
106	Oxygen vacancies enable the visible light photoactivity of chromium-implanted TiO ₂ nanowires. <i>Journal of Energy Chemistry</i> , 2021 , 55, 154-161	12	13
105	Two-dimensional MoS ₂ for hydrogen evolution reaction catalysis: The electronic structure regulation. <i>Nano Research</i> , 2021 , 14, 1985-2002	10	32
104	Ternary cobalt-iron sulfide as a robust electrocatalyst for water oxidation: A dual effect from surface evolution and metal doping. <i>Applied Surface Science</i> , 2021 , 542, 148681	6.7	9
103	Nitrogen doped FeS ₂ nanoparticles for efficient and stable hydrogen evolution reaction. <i>Journal of Energy Chemistry</i> , 2021 , 56, 283-289	12	12
102	Regulating the adsorption behavior of intermediates on Ir@Ir ₂ O ₃ boosts acidic water oxidation electrocatalysis. <i>Materials Chemistry Frontiers</i> , 2021 , 5, 6092-6100	7.8	6
101	Two-Dimensional Transition Metal Chalcogenides for Hydrogen Evolution Catalysis 2021 , 3075-3101		
100	Regulating the electron filling state of d orbitals in Ta-based compounds for tunable lithium-sulfur chemistry. <i>Sustainable Materials and Technologies</i> , 2021 , 28, e00271	5.3	3
99	Superior surface electron energy level endows WP ₂ nanowire arrays with N ₂ fixation functions. <i>Journal of Energy Chemistry</i> , 2021 , 59, 55-62	12	1
98	Electronic surface reconstruction of TiO ₂ nanocrystals revealed by resonant inelastic x-ray scattering. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2021 , 39, 063204	2.9	
97	Two-Dimensional Transition Metal Chalcogenides for Hydrogen Evolution Catalysis 2020 , 1-28		
96	Two-Dimensional MoS for Li-S Batteries: Structural Design and Electronic Modulation. <i>ChemSusChem</i> , 2020 , 13, 1392-1408	8.3	13

95	High-Spin Sulfur-Mediated Phosphorous Activation Enables Safe and Fast Phosphorus Anodes for Sodium-Ion Batteries. <i>CheM</i> , 2020 , 6, 221-233	16.2	23
94	N-induced lattice contraction generally boosts the hydrogen evolution catalysis of P-rich metal phosphides. <i>Science Advances</i> , 2020 , 6, eaaw8113	14.3	116
93	Orbital-regulated interfacial electronic coupling endows Ni ₃ N with superior catalytic surface for hydrogen evolution reaction. <i>Science China Chemistry</i> , 2020 , 63, 1563-1569	7.9	10
92	Phosphorene: a Potential 2D Material for Highly Efficient Polysulfide Trapping and Conversion. <i>Chemical Research in Chinese Universities</i> , 2020 , 36, 631-639	2.2	5
91	Hexagonal Boron Nitride as a Multifunctional Support for Engineering Efficient Electrocatalysts toward the Oxygen Reduction Reaction. <i>Nano Letters</i> , 2020 , 20, 6807-6814	11.5	50
90	Regulating the Interfacial Electronic Coupling of Fe N via Orbital Steering for Hydrogen Evolution Catalysis. <i>Advanced Materials</i> , 2020 , 32, e1904346	24	48
89	Tuning orbital orientation endows molybdenum disulfide with exceptional alkaline hydrogen evolution capability. <i>Nature Communications</i> , 2019 , 10, 1217	17.4	218
88	Manipulating the water dissociation kinetics of Ni ₃ N nanosheets via in situ interfacial engineering. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 10924-10929	13	60
87	Boosting Water Dissociation Kinetics on Pt-Ni Nanowires by N-Induced Orbital Tuning. <i>Advanced Materials</i> , 2019 , 31, e1807780	24	113
86	Fully integrated hierarchical double-shelled CoS@CNT nanostructures with unprecedented performance for Li-S batteries. <i>Nanoscale Horizons</i> , 2019 , 4, 182-189	10.8	46
85	Tailoring the d-Band Centers Enables Co N Nanosheets To Be Highly Active for Hydrogen Evolution Catalysis. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 5076-5080	16.4	449
84	Tailoring the d-Band Centers Enables Co ₄ N Nanosheets To Be Highly Active for Hydrogen Evolution Catalysis. <i>Angewandte Chemie</i> , 2018 , 130, 5170-5174	3.6	102
83	The Midas Touch Transformation of TiO ₂ Nanowire Arrays during Visible Light Photoelectrochemical Performance by Carbon/Nitrogen Coimplantation. <i>Advanced Energy Materials</i> , 2018 , 8, 1800165	21.8	60
82	Self-Standing Hierarchical P/CNTs@rGO with Unprecedented Capacity and Stability for Lithium and Sodium Storage. <i>CheM</i> , 2018 , 4, 372-385	16.2	103
81	Manipulating the Redox Kinetics of LiS Chemistry by Tellurium Doping for Improved LiS Batteries. <i>ACS Energy Letters</i> , 2018 , 3, 420-427	20.1	94
80	Achieving Insertion-Like Capacity at Ultrahigh Rate via Tunable Surface Pseudocapacitance. <i>Advanced Materials</i> , 2018 , 30, e1706640	24	154
79	Electron density modulation of NiCoS nanowires by nitrogen incorporation for highly efficient hydrogen evolution catalysis. <i>Nature Communications</i> , 2018 , 9, 1425	17.4	266
78	SURFACE ENGINEERING OF SEMICONDUCTORS FOR PHOTOELECTROCHEMICAL WATER SPLITTING 2018 , 223-249		

77	Deciphering the Modulation Essence of p Bands in Co-Based Compounds on Li-S Chemistry. <i>Joule</i> , 2018 , 2, 2681-2693	27.8	241
76	Molecular ligand modulation of palladium nanocatalysts for highly efficient and robust heterogeneous oxidation of cyclohexenone to phenol. <i>Science Advances</i> , 2017 , 3, e1600615	14.3	18
75	Wet-Chemical Synthesis of Hollow Red-Phosphorus Nanospheres with Porous Shells as Anodes for High-Performance Lithium-Ion and Sodium-Ion Batteries. <i>Advanced Materials</i> , 2017 , 29, 1700214	24	175
74	Progress in Developing Metal Oxide Nanomaterials for Photoelectrochemical Water Splitting. <i>Advanced Energy Materials</i> , 2017 , 7, 1700555	21.8	291
73	Oxygen defective metal oxides for energy conversion and storage. <i>Nano Today</i> , 2017 , 13, 23-39	17.9	204
72	Gate-Induced Insulator to Band-Like Transport Transition in Organolead Halide Perovskite. <i>Journal of Physical Chemistry Letters</i> , 2017 , 8, 429-434	6.4	20
71	Layer-by-Layer Degradation of Methylammonium Lead Tri-iodide Perovskite Microplates. <i>Joule</i> , 2017 , 1, 548-562	27.8	142
70	Highly Sensitive Chemical Detection with Tunable Sensitivity and Selectivity from Ultrathin Platinum Nanowires. <i>Small</i> , 2017 , 13, 1602969	11	14
69	The Effect of Thermal Annealing on Charge Transport in Organolead Halide Perovskite Microplate Field-Effect Transistors. <i>Advanced Materials</i> , 2017 , 29, 1601959	24	81
68	Phase and Interface Engineering of Platinum-Nickel Nanowires for Efficient Electrochemical Hydrogen Evolution. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 12859-63	16.4	247
67	Nanoelectronic Investigation Reveals the Electrochemical Basis of Electrical Conductivity in <i>Shewanella</i> and <i>Geobacter</i> . <i>ACS Nano</i> , 2016 , 10, 9919-9926	16.7	34
66	Size-dependent phase transition in methylammonium lead iodide perovskite microplate crystals. <i>Nature Communications</i> , 2016 , 7, 11330	17.4	173
65	Electronic and Ionic Transport Dynamics in Organolead Halide Perovskites. <i>ACS Nano</i> , 2016 , 10, 6933-41	16.7	91
64	An electrochemical method to enhance the performance of metal oxides for photoelectrochemical water oxidation. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 2849-2855	13	88
63	Three-dimensional graphene framework with ultra-high sulfur content for a robust lithium-sulfur battery. <i>Nano Research</i> , 2016 , 9, 240-248	10	147
62	van der Waals Heterojunction Devices Based on Organohalide Perovskites and Two-Dimensional Materials. <i>Nano Letters</i> , 2016 , 16, 367-73	11.5	163
61	Omnidirectional enhancement of photocatalytic hydrogen evolution over hierarchical <i>Bauline leaf</i> nanoarchitectures. <i>Applied Catalysis B: Environmental</i> , 2016 , 186, 88-96	21.8	104
60	Acid Treatment Enables Suppression of Electron-Hole Recombination in Hematite for Photoelectrochemical Water Splitting. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 3403-7	16.4	107

59	Acid Treatment Enables Suppression of Electron-Hole Recombination in Hematite for Photoelectrochemical Water Splitting. <i>Angewandte Chemie</i> , 2016 , 128, 3464-3468	3.6	24
58	Reduced graphene oxide/silicon nanowire heterostructures with enhanced photoactivity and superior photoelectrochemical stability. <i>Nano Research</i> , 2015 , 8, 2850-2858	10	29
57	An Electrochemical Capacitor with Applicable Energy Density of 7.4 Wh/kg at Average Power Density of 3000 W/kg. <i>Nano Letters</i> , 2015 , 15, 3189-94	11.5	100
56	Photohole Induced Corrosion of Titanium Dioxide: Mechanism and Solutions. <i>Nano Letters</i> , 2015 , 15, 7051-7	11.5	46
55	Wafer-scale growth of large arrays of perovskite microplate crystals for functional electronics and optoelectronics. <i>Science Advances</i> , 2015 , 1, e1500613	14.3	226
54	An on-chip electrical transport spectroscopy approach for in situ monitoring electrochemical interfaces. <i>Nature Communications</i> , 2015 , 6, 7867	17.4	44
53	Significantly Enhanced Visible Light Photoelectrochemical Activity in TiO ₂ Nanowire Arrays by Nitrogen Implantation. <i>Nano Letters</i> , 2015 , 15, 4692-8	11.5	138
52	Synthesis of Stable Shape-Controlled Catalytically Active Palladium Hydride. <i>Journal of the American Chemical Society</i> , 2015 , 137, 15672-5	16.4	75
51	Flexible solid-state supercapacitors: design, fabrication and applications. <i>Energy and Environmental Science</i> , 2014 , 7, 2160	35.4	985
50	Chemically modified nanostructures for photoelectrochemical water splitting. <i>Journal of Photochemistry and Photobiology C: Photochemistry Reviews</i> , 2014 , 19, 35-51	16.4	130
49	The Effect of the Hydrogenation Temperature on TiO ₂ Nanostructures for Photoelectrochemical Water Oxidation. <i>European Journal of Inorganic Chemistry</i> , 2014 , 2014, 760-766	2.3	20
48	A new benchmark capacitance for supercapacitor anodes by mixed-valence sulfur-doped V ₆ O(13-x). <i>Advanced Materials</i> , 2014 , 26, 5869-75	24	276
47	Low-temperature activation of hematite nanowires for photoelectrochemical water oxidation. <i>ChemSusChem</i> , 2014 , 7, 848-53	8.3	61
46	Photoenhanced electrochemical interaction between <i>Shewanella</i> and a hematite nanowire photoanode. <i>Nano Letters</i> , 2014 , 14, 3688-93	11.5	94
45	Obviously Angular, Cuboid-Shaped TiO ₂ Nanowire Arrays Decorated with Ag Nanoparticle as Ultrasensitive 3D Surface-Enhanced Raman Scattering Substrates. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 22711-22718	3.8	28
44	Low-Cost Nanomaterials for Photoelectrochemical Water Splitting. <i>Green Energy and Technology</i> , 2014 , 267-295	0.6	4
43	Light-directed electrophoretic deposition: a new additive manufacturing technique for arbitrarily patterned 3D composites. <i>Advanced Materials</i> , 2014 , 26, 2252-6	24	44
42	Improving the Cycling Stability of Metal-Nitride Supercapacitor Electrodes with a Thin Carbon Shell. <i>Advanced Energy Materials</i> , 2014 , 4, 1300994	21.8	188

41	Solid-state supercapacitor based on activated carbon cloths exhibits excellent rate capability. <i>Advanced Materials</i> , 2014 , 26, 2676-82, 2615	24	555
40	High energy density asymmetric supercapacitors with a nickel oxide nanoflake cathode and a 3D reduced graphene oxide anode. <i>Nanoscale</i> , 2013 , 5, 7984-90	7.7	223
39	Au nanostructure-decorated TiO ₂ nanowires exhibiting photoactivity across entire UV-visible region for photoelectrochemical water splitting. <i>Nano Letters</i> , 2013 , 13, 3817-23	11.5	725
38	Growth of gallium nitride and indium nitride nanowires on conductive and flexible carbon cloth substrates. <i>Nanoscale</i> , 2013 , 5, 1820-4	7.7	21
37	Chemically modified titanium oxide nanostructures for dye-sensitized solar cells. <i>Nano Energy</i> , 2013 , 2, 1373-1382	17.1	19
36	A mechanistic study into the catalytic effect of Ni(OH) ₂ on hematite for photoelectrochemical water oxidation. <i>Nanoscale</i> , 2013 , 5, 4129-33	7.7	145
35	Self-biased solar-microbial device for sustainable hydrogen generation. <i>ACS Nano</i> , 2013 , 7, 8728-35	16.7	74
34	High energy density asymmetric quasi-solid-state supercapacitor based on porous vanadium nitride nanowire anode. <i>Nano Letters</i> , 2013 , 13, 2628-33	11.5	622
33	Computational and Photoelectrochemical Study of Hydrogenated Bismuth Vanadate. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 10957-10964	3.8	185
32	Nickel Catalyst Boosts Solar Hydrogen Generation of CdSe Nanocrystals. <i>ChemCatChem</i> , 2013 , 5, 1294-1305	3.95	9
31	H-TiO(2) @MnO(2) //H-TiO(2) @C core-shell nanowires for high performance and flexible asymmetric supercapacitors. <i>Advanced Materials</i> , 2013 , 25, 267-72	24	828
30	Efficient Suppression of Electron-Hole Recombination in Oxygen-Deficient Hydrogen-Treated TiO Nanowires for Photoelectrochemical Water Splitting. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 25837-25844	3.8	181
29	Free-standing nickel oxide nanoflake arrays: synthesis and application for highly sensitive non-enzymatic glucose sensors. <i>Nanoscale</i> , 2012 , 4, 3123-7	7.7	213
28	LiCl/PVA gel electrolyte stabilizes vanadium oxide nanowire electrodes for pseudocapacitors. <i>ACS Nano</i> , 2012 , 6, 10296-302	16.7	271
27	Stabilized TiN nanowire arrays for high-performance and flexible supercapacitors. <i>Nano Letters</i> , 2012 , 12, 5376-81	11.5	563
26	Hydrogenated TiO ₂ nanotube arrays for supercapacitors. <i>Nano Letters</i> , 2012 , 12, 1690-6	11.5	1113
25	Photoelectrochemical study of oxygen deficient TiO ₂ nanowire arrays with CdS quantum dot sensitization. <i>Nanoscale</i> , 2012 , 4, 1463-6	7.7	101
24	Oxygen-deficient metal oxide nanostructures for photoelectrochemical water oxidation and other applications. <i>Nanoscale</i> , 2012 , 4, 6682-91	7.7	306

23	Efficient photocatalytic hydrogen evolution over hydrogenated ZnO nanorod arrays. <i>Chemical Communications</i> , 2012 , 48, 7717-9	5.8	221
22	Hydrogen-treated WO ₃ nanoflakes show enhanced photostability. <i>Energy and Environmental Science</i> , 2012 , 5, 6180	35.4	559
21	Solar driven hydrogen releasing from urea and human urine. <i>Energy and Environmental Science</i> , 2012 , 5, 8215	35.4	112
20	Nanostructured hematite: synthesis, characterization, charge carrier dynamics, and photoelectrochemical properties. <i>Energy and Environmental Science</i> , 2012 , 5, 6682	35.4	434
19	The Influence of Oxygen Content on the Thermal Activation of Hematite Nanowires. <i>Angewandte Chemie</i> , 2012 , 124, 4150-4155	3.6	87
18	The influence of oxygen content on the thermal activation of hematite nanowires. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 4074-9	16.4	274
17	Ultrafast Charge Carrier Dynamics and Photoelectrochemical Properties of Hydrogen-treated TiO ₂ Nanowire Arrays. <i>Materials Research Society Symposia Proceedings</i> , 2012 , 1387, 1		4
16	Deciphering the electron transport pathway for graphene oxide reduction by <i>Shewanella oneidensis</i> MR-1. <i>Journal of Bacteriology</i> , 2011 , 193, 3662-5	3.5	65
15	Sn-doped hematite nanostructures for photoelectrochemical water splitting. <i>Nano Letters</i> , 2011 , 11, 2119-25	11.5	882
14	Hydrogen-treated TiO ₂ nanowire arrays for photoelectrochemical water splitting. <i>Nano Letters</i> , 2011 , 11, 3026-33	11.5	2101
13	Facile synthesis of highly photoactive Fe ₃ O ₄ -based films for water oxidation. <i>Nano Letters</i> , 2011 , 11, 3503-9	11.5	556
12	Enhanced capacitance in partially exfoliated multi-walled carbon nanotubes. <i>Journal of Power Sources</i> , 2011 , 196, 5209-5214	8.9	94
11	CdSe quantum dot-sensitized Au/TiO ₂ hybrid mesoporous films and their enhanced photoelectrochemical performance. <i>Nano Research</i> , 2011 , 4, 249-258	10	78
10	Microbial reduction of graphene oxide by <i>Shewanella</i> . <i>Nano Research</i> , 2011 , 4, 563-570	10	274
9	Solar-driven microbial photoelectrochemical cells with a nanowire photocathode. <i>Nano Letters</i> , 2010 , 10, 4686-91	11.5	180
8	Ultrasmall Single-Crystal Indium Antimonide Nanowires. <i>Crystal Growth and Design</i> , 2010 , 10, 2479-2482	3.5	43
7	Synergistic effect of CdSe quantum dot sensitization and nitrogen doping of TiO ₂ nanostructures for photoelectrochemical solar hydrogen generation. <i>Nano Letters</i> , 2010 , 10, 478-83	11.5	435
6	Double-sided CdS and CdSe quantum dot co-sensitized ZnO nanowire arrays for photoelectrochemical hydrogen generation. <i>Nano Letters</i> , 2010 , 10, 1088-92	11.5	549

5	Nitrogen-doped ZnO nanowire arrays for photoelectrochemical water splitting. <i>Nano Letters</i> , 2009 , 9, 2331-6	11.5	967
4	Tuning the Interaction between Ruthenium Single Atoms and the Second Coordination Sphere for Efficient Nitrogen Photofixation. <i>Advanced Functional Materials</i> , 2112452	15.6	3
3	Hierarchical Ion/Electron Networks Enable Efficient Red Phosphorus Anode with High Mass Loading for Sodium Ion Batteries. <i>Advanced Functional Materials</i> , 2110444	15.6	4
2	Phosphorus incorporation activates the basal plane of tungsten disulfide for efficient hydrogen evolution catalysis. <i>Nano Research</i> , 1	10	4
1	Constructing Reactive Micro-Environment in Basal Plane of MoS ₂ for pH-Universal Hydrogen Evolution Catalysis. <i>Small</i> , 2107974	11	2