Gong-Ming Wang

List of Publications by Year
in descending order

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114 papers	20,126 citations	22153 59 h-index	26613 107 g-index
116 all docs	116 docs citations	116 times ranked	22433 citing authors

#	Article	IF	Citations
1	Phosphorus incorporation activates the basal plane of tungsten disulfide for efficient hydrogen evolution catalysis. Nano Research, 2022, 15, 2855-2861.	10.4	21
2	Single-atom catalyst cathodes for lithiumâ€“oxygen batteries: a review. Nano Futures, 2022, 6, 012002.	2.2	4
3	Tuning the Interaction between Ruthenium Single Atoms and the Second Coordination Sphere for Efficient Nitrogen Photofixation. Advanced Functional Materials, 2022, 32, .	14.9	22
4	Optimizing Hydrogen Adsorption by dâ€“d Orbital Modulation for Efficient Hydrogen Evolution Catalysis. Advanced Energy Materials, 2022, 12, .	19.5	57
5	Hierarchical Ion/Electron Networks Enable Efficient Red Phosphorus Anode with High Mass Loading for Sodium Ion Batteries. Advanced Functional Materials, 2022, 32, .	14.9	21
6	Reversing the Nucleophilicity of Active Sites in CoP₂ Enables Exceptional Hydrogen Evolution Catalysis. Small, 2022, 18, e2106870.	10.0	27
7	Short-range order in amorphous nickel oxide nanosheets enables selective and efficient electrochemical hydrogen peroxide production. Cell Reports Physical Science, 2022, 3, 100788.	5.6	12
8	Tuning the Interaction between Ruthenium Single Atoms and the Second Coordination Sphere for Efficient Nitrogen Photofixation (Adv. Funct. Mater. 12/2022). Advanced Functional Materials, 2022, 32, .	14.9	0
9	Synergy between Palladium Single Atoms and Nanoparticles via Hydrogen Spillover for Enhancing CO₂ Photoreduction to CH₄. Advanced Materials, 2022, 34, e2200057.	21.0	162
10	Highâ€Polarity Fluoroalkyl Ether Electrolyte Enables Solvationâ€Free Li⁺ Transfer for Highâ€Rate Lithium Metal Batteries. Advanced Science, 2022, 9, e2104699.	11.2	54
11	Interfacial synergies between single-atomic Pt and CoS for enhancing hydrogen evolution reaction catalysis. Applied Catalysis B: Environmental, 2022, 315, 121534.	20.2	63
12	Constructing Reactive Microâ€Environment in Basal Plane of MoS₂ for pHâ€Universal Hydrogen Evolution Catalysis. Small, 2022, 18, .	10.0	21
13	Sulfur Doping Triggering Enhanced Ptâ€“N Coordination in Graphitic Carbon Nitride-Supported Pt Electrocatalysts toward Efficient Oxygen Reduction Reaction. ACS Catalysis, 2022, 12, 7406-7414.	11.2	40
14	Support Amorphization Engineering Regulates Single-Atom Ru as an Electron Pump for Nitrogen Photofixation. ACS Catalysis, 2022, 12, 8139-8146.	11.2	20
15	Mixedâ€Valence Copper Selenide as an Anode for Ultralong Lifespan Rockingâ€Chair Znâ€Ion Batteries: An Insight into its Intercalation/Extraction Kinetics and Charge Storage Mechanism. Advanced Functional Materials, 2021, 31, 2005092.	14.9	76
16	Two-dimensional MOS2 for hydrogen evolution reaction catalysis: The electronic structure regulation. Nano Research, 2021, 14, 1985-2002.	10.4	98
17	Ternary cobaltâ€“iron sulfide as a robust electrocatalyst for water oxidation: A dual effect from surface evolution and metal doping. Applied Surface Science, 2021, 542, 148681.	6.1	28
18	Nitrogen doped FeS2 nanoparticles for efficient and stable hydrogen evolution reaction. Journal of Energy Chemistry, 2021, 56, 283-289.	12.9	49

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19	Regulating the adsorption behavior of intermediates on Irâ€“W@Irâ€“WO_{3â^'x} boosts acidic water oxidation electrocatalysis. Materials Chemistry Frontiers, 2021, 5, 6092-6100.	5.9	17
20	Pb Single Atoms Enable Unprecedented Catalytic Behavior for the Combustion of Energetic Materials. Advanced Science, 2021, 8, 2002889.	11.2	27
21	Two-Dimensional Transition Metal Chalcogenides for Hydrogen Evolution Catalysis. , 2021, , 3075-3101.		0
22	Promoted alkaline hydrogen evolution by an N-doped Ptâ€“Ru single atom alloy. Journal of Materials Chemistry A, 2021, 9, 14941-14947.	10.3	39
23	Applications of MoS₂ in Liâ€“O₂ Batteries: Development and Challenges. Energy & Fuels, 2021, 35, 5613-5626.	5.1	20
24	Cu2O-Ag Tandem Catalysts for Selective Electrochemical Reduction of CO2 to C2 Products. Molecules, 2021, 26, 2175.	3.8	19
25	Amorphization-induced surface electronic states modulation of cobaltous oxide nanosheets for lithium-sulfur batteries. Nature Communications, 2021, 12, 3102.	12.8	103
26	Accelerating water dissociation kinetics of Ni3N by tuning interfacial orbital coupling. Nano Research, 2021, 14, 3458-3465.	10.4	16
27	Regulating the electron filling state of d orbitals in Ta-based compounds for tunable lithiumâ€‘sulfur chemistry. Sustainable Materials and Technologies, 2021, 28, e00271.	3.3	8
28	Superior surface electron energy level endows WP2 nanowire arrays with N2 fixation functions. Journal of Energy Chemistry, 2021, 59, 55-62.	12.9	14
29	Review of the Iâ^'/I3â^' redox chemistry in Zn-iodine redox flow batteries. Materials Research Bulletin, 2021, 141, 111347.	5.2	24
30	Electronic surface reconstruction of TiO2 nanocrystals revealed by resonant inelastic x-ray scattering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2021, 39, .	2.1	1
31	Porous Ultrathin W-Doped VO₂ Nanosheets Enable Boosted Zn²⁺ (De)Intercalation Kinetics in VO₂ for High-Performance Aqueous Zn-Ion Batteries. ACS Sustainable Chemistry and Engineering, 2021, 9, 14193-14201.	6.7	38
32	Supramolecular Modulation of Molecular Conformation of Metal Porphyrins toward Remarkably Enhanced Multipurpose Electrocatalysis and Ultrahighâ€Performance Zincâ€“Air Batteries. Advanced Energy Materials, 2021, 11, 2102062.	19.5	27
33	Porous TiNb₂O₇@N-C as Anode Materials for Lithium-Ion Batteries with Ultrahigh-Rate Performance. Journal of Physical Chemistry C, 2021, 125, 23960-23967.	3.1	11
34	Atomic Disorder Enables Superior Catalytic Surface of Pt-Based Catalysts for Alkaline Hydrogen Evolution. , 2021, 3, 1738-1745.		13
35	Tailoring the Electrochemical Protonation Behavior of CO₂ by Tuning Surface Noncovalent Interactions. ACS Catalysis, 2021, 11, 14986-14994.	11.2	13
36	Supramolecular Modulation of Molecular Conformation of Metal Porphyrins toward Remarkably Enhanced Multipurpose Electrocatalysis and Ultrahighâ€Performance Zincâ€“Air Batteries (Adv. Energy) Tj ETQq0 0 0 rgBT /Overlock 10	19.5	1

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37	Twoâ€Ðimensional MoS₂ for Liâ^'S Batteries: Structural Design and Electronic Modulation. ChemSusChem, 2020, 13, 1392-1408.	6.8	31
38	High-Spin Sulfur-Mediated Phosphorous Activation Enables Safe and Fast Phosphorus Anodes for Sodium-Ion Batteries. CheM, 2020, 6, 221-233.	11.7	43
39	N-induced lattice contraction generally boosts the hydrogen evolution catalysis of P-rich metal phosphides. Science Advances, 2020, 6, eaaw8113.	10.3	211
40	Orbital-regulated interfacial electronic coupling endows Ni3N with superior catalytic surface for hydrogen evolution reaction. Science China Chemistry, 2020, 63, 1563-1569.	8.2	22
41	Phosphorene: a Potential 2D Material for Highly Efficient Polysulfide Trapping and Conversion. Chemical Research in Chinese Universities, 2020, 36, 631-639.	2.6	6
42	Fluorine Triggered Surface and Lattice Regulation in Anatase TiO_{2â^'}_xF_x Nanocrystals for Ultrafast Pseudocapacitive Sodium Storage. Small, 2020, 16, e2006366.	10.0	31
43	Hexagonal Boron Nitride as a Multifunctional Support for Engineering Efficient Electrocatalysts toward the Oxygen Reduction Reaction. Nano Letters, 2020, 20, 6807-6814.	9.1	82
44	High power generation in mixed-culture microbial fuel cells with corncob-derived three-dimensional N-doped bioanodes and the impact of N dopant states. Chemical Engineering Journal, 2020, 399, 125848.	12.7	51
45	Three-Dimensional Carbon-Supported MoS2 With Sulfur Defects as Oxygen Electrodes for Li-O2 Batteries. Frontiers in Energy Research, 2020, 8, .	2.3	9
46	Carbon doping switching on the hydrogen adsorption activity of NiO for hydrogen evolution reaction. Nature Communications, 2020, 11, 590.	12.8	170
47	Regulating the Interfacial Electronic Coupling of Fe₂N via Orbital Steering for Hydrogen Evolution Catalysis. Advanced Materials, 2020, 32, e1904346.	21.0	86
48	Two-Dimensional Transition Metal Chalcogenides for Hydrogen Evolution Catalysis. , 2020, , 1-28.		0
49	Cathode-Introduced Atomic H* for Fe(II)-Complex Regeneration to Effective Electro-Fenton Process at a Natural pH. Environmental Science & Technology, 2019, 53, 6927-6936.	10.0	54
50	Water Splitting: Boosting Water Dissociation Kinetics on Ptâ€"Ni Nanowires by Nâ€Induced Orbital Tuning (Adv. Mater. 16/2019). Advanced Materials, 2019, 31, 1970116.	21.0	1
51	Tuning orbital orientation endows molybdenum disulfide with exceptional alkaline hydrogen evolution capability. Nature Communications, 2019, 10, 1217.	12.8	322
52	Manipulating the water dissociation kinetics of Ni₃N nanosheets via in situ interfacial engineering. Journal of Materials Chemistry A, 2019, 7, 10924-10929.	10.3	79
53	Interfacial competition between a borophene-based cathode and electrolyte for the multiple-sulfide immobilization of a lithium sulfur battery. Journal of Materials Chemistry A, 2019, 7, 7092-7098.	10.3	30
54	Boosting Water Dissociation Kinetics on Ptâ€"Ni Nanowires by Nâ€Induced Orbital Tuning. Advanced Materials, 2019, 31, e1807780.	21.0	167

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55	Fully integrated hierarchical double-shelled Co₉S₈@CNT nanostructures with unprecedented performance for Liâ€“S batteries. Nanoscale Horizons, 2019, 4, 182-189.	8.0	62
56	Tailoring the dâ€Band Centers Enables Co₄N Nanosheets To Be Highly Active for Hydrogen Evolution Catalysis. Angewandte Chemie - International Edition, 2018, 57, 5076-5080.	13.8	728
57	Tailoring the dâ€Band Centers Enables Co₄N Nanosheets To Be Highly Active for Hydrogen Evolution Catalysis. Angewandte Chemie, 2018, 130, 5170-5174.	2.0	160
58	Self-Standing Hierarchical P/CNTs@rGO with Unprecedented Capacity and Stability for Lithium and Sodium Storage. CheM, 2018, 4, 372-385.	11.7	128
59	Manipulating the Redox Kinetics of Liâ€“S Chemistry by Tellurium Doping for Improved Liâ€“S Batteries. ACS Energy Letters, 2018, 3, 420-427.	17.4	146
60	Achieving Insertionâ€Like Capacity at Ultrahigh Rate via Tunable Surface Pseudocapacitance. Advanced Materials, 2018, 30, e1706640.	21.0	202
61	SURFACE ENGINEERING OF SEMICONDUCTORS FOR PHOTOELECTROCHEMICAL WATER SPLITTING. , 2018, , 223-249.		0
62	Deciphering the Modulation Essence of p Bands in Co-Based Compounds on Li-S Chemistry. Joule, 2018, 2, 2681-2693.	24.0	406
63	In Situ Li₃PS₄ Solidâ€State Electrolyte Protection Layers for Superior Longâ€Life and Highâ€Rate Lithiumâ€Metal Anodes. Advanced Materials, 2018, 30, e1804684.	21.0	140
64	Electron density modulation of NiCo2S4 nanowires by nitrogen incorporation for highly efficient hydrogen evolution catalysis. Nature Communications, 2018, 9, 1425.	12.8	356
65	Hydrogen-Treated TiO₂ Nanowires for Charge Storage and Photoelectrochemical Water Splitting. , 2017, , 189-213.		0
66	Ultrathin SnS 2 nanosheets as robust polysulfides immobilizers for high performance lithium-sulfur batteries. Materials Research Bulletin, 2017, 96, 509-515.	5.2	42
67	Wetâ€Chemical Synthesis of Hollow Redâ€Phosphorus Nanospheres with Porous Shells as Anodes for Highâ€Performance Lithiumâ€Ion and Sodiumâ€Ion Batteries. Advanced Materials, 2017, 29, 1700214.	21.0	213
68	Progress in Developing Metal Oxide Nanomaterials for Photoelectrochemical Water Splitting. Advanced Energy Materials, 2017, 7, 1700555.	19.5	455
69	Oxygen defective metal oxides for energy conversion and storage. Nano Today, 2017, 13, 23-39.	11.9	266
70	Gate-Induced Insulator to Band-Like Transport Transition in Organolead Halide Perovskite. Journal of Physical Chemistry Letters, 2017, 8, 429-434.	4.6	20
71	The Effect of Thermal Annealing on Charge Transport in Organolead Halide Perovskite Microplate Fieldâ€Effect Transistors. Advanced Materials, 2017, 29, 1601959.	21.0	91
72	Acid Treatment Enables Suppression of Electronâ€“Hole Recombination in Hematite for Photoelectrochemical Water Splitting. Angewandte Chemie - International Edition, 2016, 55, 3403-3407.	13.8	132

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73	Acid Treatment Enables Suppression of Electronâ€“Hole Recombination in Hematite for Photoelectrochemical Water Splitting. Angewandte Chemie, 2016, 128, 3464-3468.	2.0	27
74	Phase and Interface Engineering of Platinumâ€“Nickel Nanowires for Efficient Electrochemical Hydrogen Evolution. Angewandte Chemie - International Edition, 2016, 55, 12859-12863.	13.8	311
75	Phase and Interface Engineering of Platinumâ€“Nickel Nanowires for Efficient Electrochemical Hydrogen Evolution. Angewandte Chemie, 2016, 128, 13051-13055.	2.0	73
76	Size-dependent phase transition in methylammonium lead iodide perovskite microplate crystals. Nature Communications, 2016, 7, 11330.	12.8	206
77	Electronic and Ionic Transport Dynamics in Organolead Halide Perovskites. ACS Nano, 2016, 10, 6933-6941.	14.6	115
78	An electrochemical method to enhance the performance of metal oxides for photoelectrochemical water oxidation. Journal of Materials Chemistry A, 2016, 4, 2849-2855.	10.3	114
79	Three-dimensional graphene framework with ultra-high sulfur content for a robust lithiumâ€“sulfur battery. Nano Research, 2016, 9, 240-248.	10.4	165
80	van der Waals Heterojunction Devices Based on Organohalide Perovskites and Two-Dimensional Materials. Nano Letters, 2016, 16, 367-373.	9.1	185
81	Significantly Enhanced Visible Light Photoelectrochemical Activity in TiO₂ Nanowire Arrays by Nitrogen Implantation. Nano Letters, 2015, 15, 4692-4698.	9.1	159
82	Synthesis of Stable Shape-Controlled Catalytically Active Î²-Palladium Hydride. Journal of the American Chemical Society, 2015, 137, 15672-15675.	13.7	117
83	Reduced graphene oxide/silicon nanowire heterostructures with enhanced photoactivity and superior photoelectrochemical stability. Nano Research, 2015, 8, 2850-2858.	10.4	34
84	An Electrochemical Capacitor with Applicable Energy Density of 7.4 Wh/kg at Average Power Density of 3000 W/kg. Nano Letters, 2015, 15, 3189-3194.	9.1	118
85	Photohole Induced Corrosion of Titanium Dioxide: Mechanism and Solutions. Nano Letters, 2015, 15, 7051-7057.	9.1	57
86	Wafer-scale growth of large arrays of perovskite microplate crystals for functional electronics and optoelectronics. Science Advances, 2015, 1, e1500613.	10.3	265
87	An on-chip electrical transport spectroscopy approach for in situ monitoring electrochemical interfaces. Nature Communications, 2015, 6, 7867.	12.8	64
88	Solidâ€State Supercapacitor Based on Activated Carbon Cloths Exhibits Excellent Rate Capability. Advanced Materials, 2014, 26, 2676-2682.	21.0	660
89	Flexible solid-state supercapacitors: design, fabrication and applications. Energy and Environmental Science, 2014, 7, 2160.	30.8	1,156
90	Chemically modified nanostructures for photoelectrochemical water splitting. Journal of Photochemistry and Photobiology C: Photochemistry Reviews, 2014, 19, 35-51.	11.6	156

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91	The Effect of the Hydrogenation Temperature on TiO2Nanostructures for Photoelectrochemical Water Oxidation. European Journal of Inorganic Chemistry, 2014, 2014, 760-766.	2.0	21
92	A New Benchmark Capacitance for Supercapacitor Anodes by Mixedâ€Valence Sulfurâ€Doped V₆O_{13â^'x}. Advanced Materials, 2014, 26, 5869-5875.	21.0	305
93	Improving the Cycling Stability of Metalâ€“Nitride Supercapacitor Electrodes with a Thin Carbon Shell. Advanced Energy Materials, 2014, 4, 1300994.	19.5	217
94	A mechanistic study into the catalytic effect of Ni(OH)2 on hematite for photoelectrochemical water oxidation. Nanoscale, 2013, 5, 4129.	5.6	169
95	High Energy Density Asymmetric Quasi-Solid-State Supercapacitor Based on Porous Vanadium Nitride Nanowire Anode. Nano Letters, 2013, 13, 2628-2633.	9.1	691
96	Nickel Catalyst Boosts Solar Hydrogen Generation of CdSe Nanocrystals. ChemCatChem, 2013, 5, 1294-1295.	3.7	9
97	Efficient Suppression of Electronâ€“Hole Recombination in Oxygen-Deficient Hydrogen-Treated TiO₂ Nanowires for Photoelectrochemical Water Splitting. Journal of Physical Chemistry C, 2013, 117, 25837-25844.	3.1	222
98	Ultrafast Charge Carrier Dynamics and Photoelectrochemical Properties of Hydrogen-treated TiO2 Nanowire Arrays. Materials Research Society Symposia Proceedings, 2012, 1387, 1.	0.1	5
99	Free-standing nickel oxide nanoflake arrays: synthesis and application for highly sensitive non-enzymatic glucose sensors. Nanoscale, 2012, 4, 3123.	5.6	228
100	LiCl/PVA Gel Electrolyte Stabilizes Vanadium Oxide Nanowire Electrodes for Pseudocapacitors. ACS Nano, 2012, 6, 10296-10302.	14.6	310
101	Oxygen-deficient metal oxide nanostructures for photoelectrochemical water oxidation and other applications. Nanoscale, 2012, 4, 6682.	5.6	345
102	Hydrogen-treated WO3 nanoflakes show enhanced photostability. Energy and Environmental Science, 2012, 5, 6180.	30.8	666
103	Solar driven hydrogen releasing from urea and human urine. Energy and Environmental Science, 2012, 5, 8215.	30.8	160
104	Nanostructured hematite: synthesis, characterization, charge carrier dynamics, and photoelectrochemical properties. Energy and Environmental Science, 2012, 5, 6682.	30.8	492
105	Sn-Doped Hematite Nanostructures for Photoelectrochemical Water Splitting. Nano Letters, 2011, 11, 2119-2125.	9.1	994
106	Hydrogen-Treated TiO₂ Nanowire Arrays for Photoelectrochemical Water Splitting. Nano Letters, 2011, 11, 3026-3033.	9.1	2,344
107	Facile Synthesis of Highly Photoactive Î±-Fe₂O₃-Based Films for Water Oxidation. Nano Letters, 2011, 11, 3503-3509.	9.1	623
108	CdSe quantum dot-sensitized Au/TiO2 hybrid mesoporous films and their enhanced photoelectrochemical performance. Nano Research, 2011, 4, 249-258.	10.4	87

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109	Microbial reduction of graphene oxide by Shewanella. Nano Research, 2011, 4, 563-570.	10.4	327
110	Double-Sided CdS and CdSe Quantum Dot Co-Sensitized ZnO Nanowire Arrays for Photoelectrochemical Hydrogen Generation. Nano Letters, 2010, 10, 1088-1092.	9.1	587
111	Ultrasmall Single-Crystal Indium Antimonide Nanowires. Crystal Growth and Design, 2010, 10, 2479-2482.	3.0	45
112	Nitrogen-Doped ZnO Nanowire Arrays for Photoelectrochemical Water Splitting. Nano Letters, 2009, 9, 2331-2336.	9.1	1,071
113	Constructing Complementary Catalytic Components on Co ₄ N Nanowires to Achieve Efficient Hydrogen Evolution Catalysis. Advanced Energy and Sustainability Research, 0, , 2100219.	5.8	5
114	Polydimethylsiloxane functionalized separator for a stable and fast lithium metal anode. CrystEngComm, 0, , .	2.6	0