

Guoping Gao

List of Publications by Year in descending order

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53
papers

10,065
citations

101543

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168389

53
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53
all docs

53
docs citations

53
times ranked

13039
citing authors

#	ARTICLE	IF	CITATIONS
1	Revealing the working mechanism of a multi-functional block copolymer binder for lithium-sulfur batteries. <i>Journal of Energy Chemistry</i> , 2021, 59, 1-8.	12.9	8
2	Recent advances in single-atom electrocatalysts supported on two-dimensional materials for the oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2021, 9, 9979-9999.	10.3	50
3	Transition-metal single atoms embedded into defective BC ₃ as efficient electrocatalysts for oxygen evolution and reduction reactions. <i>Nanoscale</i> , 2021, 13, 1331-1339.	5.6	27
4	Ion Irradiation Inducing Oxygen Vacancy-Rich NiO/NiFe ₂ O ₄ Heterostructure for Enhanced Electrocatalytic Water Splitting. <i>Small</i> , 2021, 17, e2103501.	10.0	76
5	A potential and pH inclusive microkinetic model for hydrogen reactions on Pt surface. <i>Chem Catalysis</i> , 2021, 1, 1331-1345.	6.1	16
6	Computational screening of transition metal-doped phthalocyanine monolayers for oxygen evolution and reduction. <i>Nanoscale Advances</i> , 2020, 2, 710-716.	4.6	30
7	Substantial potential effects on single-atom catalysts for the oxygen evolution reaction simulated via a fixed-potential method. <i>Journal of Catalysis</i> , 2020, 391, 530-538.	6.2	45
8	An inverse vulcanized conductive polymer for Li-S battery cathodes. <i>Journal of Materials Chemistry A</i> , 2020, 8, 21711-21720.	10.3	23
9	Thermodynamic Full Landscape Searching Scheme for Identifying the Mechanism of Electrochemical Reaction: A Case Study of Oxygen Evolution on Fe- and Co-Doped Graphene-Nitrogen Sites. <i>Journal of Physical Chemistry A</i> , 2020, 124, 5444-5455.	2.5	1
10	Distribution of alkali cations near the Cu (111) surface in aqueous solution. <i>Journal of Materials Chemistry A</i> , 2020, 8, 24428-24437.	10.3	6
11	Electrotunable liquid sulfur microdroplets. <i>Nature Communications</i> , 2020, 11, 606.	12.8	22
12	Solid 3D Li-S Battery Design via Stacking 2D Conductive Microporous Coordination Polymers and Amorphous Li-S Layers. <i>Chemistry of Materials</i> , 2020, 32, 1974-1982.	6.7	11
13	Supercooled liquid sulfur maintained in three-dimensional current collector for high-performance Li-S batteries. <i>Science Advances</i> , 2020, 6, eaay5098.	10.3	95
14	Computational screening of transition-metal single atom doped C ₉ N ₄ monolayers as efficient electrocatalysts for water splitting. <i>Nanoscale</i> , 2019, 11, 18169-18175.	5.6	56
15	Transition-metal single atoms in nitrogen-doped graphenes as efficient active centers for water splitting: a theoretical study. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 3024-3032.	2.8	122
16	Transition metal-embedded two-dimensional C ₃ N as a highly active electrocatalyst for oxygen evolution and reduction reactions. <i>Journal of Materials Chemistry A</i> , 2019, 7, 12050-12059.	10.3	123
17	Designing a Quinone-Based Redox Mediator to Facilitate Li ₂ S Oxidation in Li-S Batteries. <i>Joule</i> , 2019, 3, 872-884.	24.0	188
18	Anomalous Shape Evolution of Ag ₂ O ₂ Nanocrystals Modulated by Surface Adsorbates during Electron Beam Etching. <i>Nano Letters</i> , 2019, 19, 591-597.	9.1	2

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19	Graphene Defects Trap Atomic Ni Species for Hydrogen and Oxygen Evolution Reactions. <i>CheM</i> , 2018, 4, 285-297.	11.7	624
20	Understanding the activity and selectivity of single atom catalysts for hydrogen and oxygen evolution <i>via</i> ab initial study. <i>Catalysis Science and Technology</i> , 2018, 8, 996-1001.	4.1	94
21	Visible light-driven selective hydrogenation of unsaturated aromatics in an aqueous solution by direct photocatalysis of Au nanoparticles. <i>Catalysis Science and Technology</i> , 2018, 8, 726-734.	4.1	23
22	Theoretical Investigation of 2D Conductive Microporous Coordination Polymers as Liâ€S Battery Cathode with Ultrahigh Energy Density. <i>Advanced Energy Materials</i> , 2018, 8, 1801823.	19.5	63
23	Phase-transitionâ€induced p-n junction in single halide perovskite nanowire. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 8889-8894.	7.1	48
24	A Heterostructure Coupling of Exfoliated Niâ€Fe Hydroxide Nanosheet and Defective Graphene as a Bifunctional Electrocatalyst for Overall Water Splitting. <i>Advanced Materials</i> , 2017, 29, 1700017.	21.0	845
25	2D MXenes: A New Family of Promising Catalysts for the Hydrogen Evolution Reaction. <i>ACS Catalysis</i> , 2017, 7, 494-500.	11.2	825
26	Stable Copper Nanoparticle Photocatalysts for Selective Epoxidation of Alkenes with Visible Light. <i>ACS Catalysis</i> , 2017, 7, 4975-4985.	11.2	96
27	Ti3C2 MXene co-catalyst on metal sulfide photo-absorbers for enhanced visible-light photocatalytic hydrogen production. <i>Nature Communications</i> , 2017, 8, 13907.	12.8	1,496
28	Endohedral metallofullerenes (M@C60) as efficient catalysts for highly active hydrogen evolution reaction. <i>Journal of Catalysis</i> , 2017, 354, 231-235.	6.2	84
29	Computational screening of two-dimensional coordination polymers as efficient catalysts for oxygen evolution and reduction reaction. <i>Journal of Catalysis</i> , 2017, 352, 579-585.	6.2	130
30	Versatile two-dimensional stanene-based membrane for hydrogen purification. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 5577-5583.	7.1	13
31	Ultrathin Cobaltic Oxide Nanosheets as an Effective Sulfur Encapsulation Matrix with Strong Affinity Toward Polysulfides. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 4320-4325.	8.0	59
32	Activating Catalytic Inert Basal Plane of Molybdenum Disulfide to Optimize Hydrogen Evolution Activity via Defect Doping and Strain Engineering. <i>Journal of Physical Chemistry C</i> , 2016, 120, 16761-16766.	3.1	138
33	2D Nanomaterials: Moleculeâ€induced Conformational Change in Boron Nitride Nanosheets with Enhanced Surface Adsorption (<i>Adv. Funct. Mater.</i> 45/2016). <i>Advanced Functional Materials</i> , 2016, 26, 8356-8356.	14.9	1
34	Graphene-like Two-Dimensional Ionic Boron with Double Dirac Cones at Ambient Condition. <i>Nano Letters</i> , 2016, 16, 3022-3028.	9.1	222
35	Synergistic crystal facet engineering and structural control of WO3 films exhibiting unprecedented photoelectrochemical performance. <i>Nano Energy</i> , 2016, 24, 94-102.	16.0	243
36	Single Atom (Pd/Pt) Supported on Graphitic Carbon Nitride as an Efficient Photocatalyst for Visible-Light Reduction of Carbon Dioxide. <i>Journal of the American Chemical Society</i> , 2016, 138, 6292-6297.	13.7	985

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37	Substantial Band-Gap Tuning and a Strain-Controlled Semiconductor to Gapless/Band-Inverted Semimetal Transition in Rutile Lead/Stannic Dioxide. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 25667-25673.	8.0	18
38	Molecule-Induced Conformational Change in Boron Nitride Nanosheets with Enhanced Surface Adsorption. <i>Advanced Functional Materials</i> , 2016, 26, 8202-8210.	14.9	47
39	Defect Graphene as a Trifunctional Catalyst for Electrochemical Reactions. <i>Advanced Materials</i> , 2016, 28, 9532-9538.	21.0	961
40	Boosting oxygen reduction and hydrogen evolution at the edge sites of a web-like carbon nanotube-graphene hybrid. <i>Carbon</i> , 2016, 107, 739-746.	10.3	25
41	Strong affinity of polysulfide intermediates to multi-functional binder for practical application in lithium-sulfur batteries. <i>Nano Energy</i> , 2016, 26, 722-728.	16.0	72
42	Predicting Single-Layer Technetium Dichalcogenides (TcX_2 , X = S, Se) with Promising Applications in Photovoltaics and Photocatalysis. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 5385-5392.	8.0	100
43	Predicting a new phase (T^2) of two-dimensional transition metal di-chalcogenides and strain-controlled topological phase transition. <i>Nanoscale</i> , 2016, 8, 4969-4975.	5.6	50
44	Single Layer Bismuth Iodide: Computational Exploration of Structural, Electrical, Mechanical and Optical Properties. <i>Scientific Reports</i> , 2015, 5, 17558.	3.3	67
45	Calculations of helium separation via uniform pores of stanene-based membranes. <i>Beilstein Journal of Nanotechnology</i> , 2015, 6, 2470-2476.	2.8	9
46	Charge Mediated Semiconducting-to-Metallic Phase Transition in Molybdenum Disulfide Monolayer and Hydrogen Evolution Reaction in New $1T^2$ Phase. <i>Journal of Physical Chemistry C</i> , 2015, 119, 13124-13128.	3.1	295
47	Modelling CO ₂ adsorption and separation on experimentally-realized B ₄₀ fullerene. <i>Computational Materials Science</i> , 2015, 108, 38-41.	3.0	40
48	Versatile Single-Layer Sodium Phosphidostannate(II): Strain-Tunable Electronic Structure, Excellent Mechanical Flexibility, and an Ideal Gap for Photovoltaics. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 2682-2687.	4.6	60
49	Influence of charge state on catalytic properties of PtAu(CO) in reduction of SO ₂ by CO. <i>Chemical Physics Letters</i> , 2015, 625, 128-131.	2.6	10
50	Graphene-covered perovskites: an effective strategy to enhance light absorption and resist moisture degradation. <i>RSC Advances</i> , 2015, 5, 82346-82350.	3.6	43
51	Metal-free graphitic carbon nitride as mechano-catalyst for hydrogen evolution reaction. <i>Journal of Catalysis</i> , 2015, 332, 149-155.	6.2	127
52	Porous P-doped graphitic carbon nitride nanosheets for synergistically enhanced visible-light photocatalytic H ₂ production. <i>Energy and Environmental Science</i> , 2015, 8, 3708-3717.	30.8	1,146
53	Carbon nanodot decorated graphitic carbon nitride: new insights into the enhanced photocatalytic water splitting from ab initio studies. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 31140-31144.	2.8	105