Xiaohui Ren

List of Publications by Year
in descending order

51	3,115	201674 27	182427 51
papers	citations	h-index	g-index

51	51	51	4014
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Engineering interfacial charge transfer channel for efficient photocatalytic H2 evolution: The interplay of CoPx and Ca2+ dopant. Applied Catalysis B: Environmental, 2022, 303, 120887.	20.2	25
2	Synergy between Confined Cobalt Centers and Oxygen Defects on Î±â€Fe₂O₃ Platelets for Efficient Photocatalytic CO₂ Reduction. Solar Rrl, 2022, 6, 2100833.	5.8	6
3	A synergetic strategy to construct anti-reflective and anti-corrosive Co-P/WSx/Si photocathode for durable hydrogen evolution in alkaline condition. Applied Catalysis B: Environmental, 2022, 304, 120954.	20.2	6
4	Au Nanoparticle Modification Induces Charge-Transfer Channels to Enhance the Electrocatalytic Hydrogen Evolution Reaction of InSe Nanosheets. ACS Applied Materials & Interfaces, 2022, 14, 2908-2917.	8.0	14
5	Tridecaboron diphosphide: a new infrared light active photocatalyst for efficient CO₂ photoreduction under mild reaction conditions. Journal of Materials Chemistry A, 2021, 9, 2421-2428.	10.3	19
6	Flexible self-powered photoelectrochemical-type photodetector based on 2D WS2-graphene heterojunction. FlatChem, 2021, 25, 100215.	5.6	35
7	Plasmonic photothermal catalysis for solar-to-fuel conversion: current status and prospects. Chemical Science, 2021, 12, 5701-5719.	7.4	129
8	Two-dimensional MOF and COF nanosheets for next-generation optoelectronic applications. Coordination Chemistry Reviews, 2021, 435, 213781.	18.8	88
9	Rational construction of dual cobalt active species encapsulated by ultrathin carbon matrix from MOF for boosting photocatalytic H2 generation. Applied Catalysis B: Environmental, 2021, 286, 119924.	20.2	49
10	Photoelectrochemical self-powered photodetector based on 2D liquid-exfoliated bismuth nanosheets: with novel structures for portability and flexibility. Materials Today Nano, 2021, 14, 100109.	4.6	23
11	Triggering Water and Methanol Activation for Solar-Driven H₂ Production: Interplay of Dual Active Sites over Plasmonic ZnCu Alloy. Journal of the American Chemical Society, 2021, 143, 12145-12153.	13.7	85
12	Non-stoichiometric Ag-In-S quantum dots for efficient photocatalytic CO2 reduction: Ag/In molar ratio dependent activity and selectivity. Journal of Catalysis, 2021, 401, 271-278.	6.2	9
13	A universal strategy boosting photoelectrochemical water oxidation by utilizing MXene nanosheets as hole transfer mediators. Applied Catalysis B: Environmental, 2021, 297, 120268.	20.2	35
14	Engineering Heterogeneous NiS₂/NiS Cocatalysts with Progressive Electron Transfer from Planar pâ€Si Photocathodes for Solar Hydrogen Evolution. Small Methods, 2021, 5, e2001018.	8.6	18
15	Selfâ€Powered Photodetectors Based on 2D Materials. Advanced Optical Materials, 2020, 8, 1900765.	7.3	245
16	Direct Vapor Deposition Growth of 1Tâ€² MoTe₂ on Carbon Cloth for Electrocatalytic Hydrogen Evolution. ACS Applied Energy Materials, 2020, 3, 3212-3219.	5.1	52
17	Efficient photocatalytic CO₂ reduction mediated by transitional metal borides: metal site-dependent activity and selectivity. Journal of Materials Chemistry A, 2020, 8, 21833-21841.	10.3	23
18	Recent advances of low-dimensional phosphorus-based nanomaterials for solar-driven photocatalytic reactions. Coordination Chemistry Reviews, 2020, 424, 213516.	18.8	64

#	Article	IF	Citations
19	Self-powered photodetectors based on 0D/2D mixed dimensional heterojunction with black phosphorus quantum dots as hole accepters. Applied Materials Today, 2020, 20, 100765.	4.3	44
20	Stabilizing Atomically Dispersed Catalytic Sites on Tellurium Nanosheets with Strong Metalâ€“Support Interaction Boosts Photocatalysis. Small, 2020, 16, e2002356.	10.0	45
21	Constructing Chemical Interaction between Hematite and Carbon Nanosheets with Single Active Sites for Efficient Photoâ€Electrochemical Water Oxidation. Small Methods, 2020, 4, 2000577.	8.6	23
22	Single Cobalt Atom Anchored Black Phosphorous Nanosheets as an Effective Cocatalyst Promotes Photocatalysis. ChemCatChem, 2020, 12, 3870-3879.	3.7	34
23	Recent insights into the robustness of two-dimensional black phosphorous in optoelectronic applications. Journal of Photochemistry and Photobiology C: Photochemistry Reviews, 2020, 43, 100354.	11.6	25
24	Enhanced photoresponse behavior of Au@Bi2Te3 based photoelectrochemical-type photodetector at solid-solid-liquid joint interface. Materials Today Energy, 2020, 16, 100401.	4.7	17
25	Facile sonochemical-assisted synthesis of orthorhombic phase black phosphorus/rGO hybrids for effective photothermal therapy. Nanophotonics, 2020, 9, 3023-3034.	6.0	7
26	Few-Layer Antimonene Nanosheet: A Metal-Free Bifunctional Electrocatalyst for Effective Water Splitting. ACS Applied Energy Materials, 2019, 2, 4774-4781.	5.1	46
27	Photodetectors Based on SnS₂/Graphene Heterostructure on Rigid and Flexible Substrates. ChemNanoMat, 2018, 4, 373-378.	2.8	34
28	Photoresponse improvement in liquid-exfoliated SnSe nanosheets by reduced graphene oxide hybridization. Journal of Materials Science, 2018, 53, 4371-4377.	3.7	19
29	Highâ€Performance Photoâ€Electrochemical Photodetector Based on Liquidâ€Exfoliated Fewâ€Layered InSe Nanosheets with Enhanced Stability. Advanced Functional Materials, 2018, 28, 1705237.	14.9	258
30	P25/Black phosphorus/Graphene hybrid for enhanced photocatalytic activity. Journal of Materials Science: Materials in Electronics, 2018, 29, 4441-4448.	2.2	2
31	Two-dimensional bismuth nanosheets as prospective photo-detector with tunable optoelectronic performance. Nanotechnology, 2018, 29, 235201.	2.6	98
32	Investigating the photocurrent generation and optoelectronic responsivity of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" id="mml31" display="inline" overflow="scroll" altimg="si31.gif"><mml:msub><mml:mrow><mml:mi mathvariant="normal">WS</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub><mml:mtext>-</mml:mtext><mml:msub><mml:mrow><mml:mi mathvariant="normal">TiO</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:math>hetero Optics Communications, 2018, 406, 118-123.	2.1	16
33	Hydrothermally synthesized FeCo2O4 nanostructures: Structural manipulation for high-performance all solid-state supercapacitors. Ceramics International, 2018, 44, 120-127.	4.8	48
34	Electronic and Magnetic Properties of Monolayer and Bilayer Phosphorene Doped with Transitionâ€Metal Atoms. Physica Status Solidi (B): Basic Research, 2018, 255, 1700370.	1.5	9
35	Facile hydrothermally synthesis of hexagon tin disulfide nanosheets for high-performance photocatalytic hydrogen generation. Journal of Materials Science: Materials in Electronics, 2018, 29, 19614-19619.	2.2	3
36	Anomalous Temperature-Dependent Raman Scattering of Vapor-Deposited Two-Dimensional Bi Thin Films. Journal of Physical Chemistry C, 2018, 122, 24459-24466.	3.1	22

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37	Hierarchical NiSe2 sheet-like nano-architectures as an efficient and stable bifunctional electrocatalyst for overall water splitting: Phase and morphology engineering. Electrochimica Acta, 2018, 279, 195-203.	5.2	49
38	Temperature-Dependent Raman Responses of the Vapor-Deposited Tin Selenide Ultrathin Flakes. Journal of Physical Chemistry C, 2017, 121, 4674-4679.	3.1	94
39	A black/red phosphorus hybrid as an electrode material for high-performance Li-ion batteries and supercapacitors. Journal of Materials Chemistry A, 2017, 5, 6581-6588.	10.3	160
40	Photodetectors: Environmentally Robust Black Phosphorus Nanosheets in Solution: Application for Selfâ€Powered Photodetector (Adv. Funct. Mater. 18/2017). Advanced Functional Materials, 2017, 27, .	14.9	4
41	Present Perspectives of Advanced Characterization Techniques in TiO₂-Based Photocatalysts. ACS Applied Materials & Interfaces, 2017, 9, 23265-23286.	8.0	112
42	Fewâ€Layer Black Phosphorus Nanosheets as Electrocatalysts for Highly Efficient Oxygen Evolution Reaction. Advanced Energy Materials, 2017, 7, 1700396.	19.5	301
43	Environmentally Robust Black Phosphorus Nanosheets in Solution: Application for Selfâ€Powered Photodetector. Advanced Functional Materials, 2017, 27, 1606834.	14.9	342
44	Exploring co-catalytic graphene frameworks for improving photocatalytic activity of Tin disulfide nanoplates. Solar Energy, 2017, 157, 905-910.	6.1	16
45	Mixed-dimensional TiO2 nanoparticles with MoSe2 nanosheets for photochemical hydrogen generation. Journal of Materials Science: Materials in Electronics, 2017, 28, 2023-2028.	2.2	9
46	Flexible Bismuth Selenide /Graphene composite paper for lithium-ion batteries. Ceramics International, 2017, 43, 1437-1442.	4.8	41
47	Hydrothermal synthesis of NiSe2 nanosheets on carbon cloths for photoelectrochemical hydrogen generation. Journal of Materials Science: Materials in Electronics, 2017, 28, 768-772.	2.2	23
48	MoS₂Nanosheet Loaded with TiO₂Nanoparticles: An Efficient Electrocatalyst for Hydrogen Evolution Reaction. Journal of the Electrochemical Society, 2016, 163, H1087-H1090.	2.9	23
49	2D co-catalytic MoS₂nanosheets embedded with 1D TiO₂nanoparticles for enhancing photocatalytic activity. Journal Physics D: Applied Physics, 2016, 49, 315304.	2.8	80
50	Synthesis of SnSe nanosheets by hydrothermal intercalation and exfoliation route and their photoresponse properties. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2016, 214, 46-50.	3.5	42
51	Wall-like hierarchical metal oxide nanosheet arrays grown on carbon cloth for excellent supercapacitor electrodes. Nanoscale, 2016, 8, 13273-13279.	5.6	144