

Songcan Wang

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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.

66

papers

4,426

citations

32

h-index

66

g-index

69

ext. papers

5,620

ext. citations

11.3

avg, IF

6.22

L-index

#	Paper	IF	Citations
66	In Situ Growth of 2D Perovskite Capping Layer for Stable and Efficient Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2018 , 28, 1706923	15.6	361
65	Hollow Nanostructures for Photocatalysis: Advantages and Challenges. <i>Advanced Materials</i> , 2019 , 31, e1801369	24	305
64	Crystal Facet Engineering of Photoelectrodes for Photoelectrochemical Water Splitting. <i>Chemical Reviews</i> , 2019 , 119, 5192-5247	68.1	285
63	New BiVO Dual Photoanodes with Enriched Oxygen Vacancies for Efficient Solar-Driven Water Splitting. <i>Advanced Materials</i> , 2018 , 30, e1800486	24	282
62	An Electrochemically Treated BiVO Photoanode for Efficient Photoelectrochemical Water Splitting. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 8500-8504	16.4	278
61	A Binder-Free and Free-Standing Cobalt Sulfide@Carbon Nanotube Cathode Material for Aluminum-Ion Batteries. <i>Advanced Materials</i> , 2018 , 30, 1703824	24	199
60	Synergistic crystal facet engineering and structural control of WO ₃ films exhibiting unprecedented photoelectrochemical performance. <i>Nano Energy</i> , 2016 , 24, 94-102	17.1	193
59	Functionalized N-Doped Porous Carbon Nanofiber Webs for a Lithium Sulfur Battery with High Capacity and Rate Performance. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 1800-1807	3.8	164
58	Understanding the Roles of Oxygen Vacancies in Hematite-Based Photoelectrochemical Processes. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 1030-1034	16.4	159
57	New Iron-Cobalt Oxide Catalysts Promoting BiVO ₄ Films for Photoelectrochemical Water Splitting. <i>Advanced Functional Materials</i> , 2018 , 28, 1802685	15.6	150
56	Recent Progress on Visible Light Responsive Heterojunctions for Photocatalytic Applications. <i>Journal of Materials Science and Technology</i> , 2017 , 33, 1-22	9.1	146
55	Boron-doped graphitic carbon nitride nanosheets for enhanced visible light photocatalytic water splitting. <i>Dalton Transactions</i> , 2017 , 46, 10714-10720	4.3	122
54	In Situ Formation of Oxygen Vacancies Achieving Near-Complete Charge Separation in Planar BiVO Photoanodes. <i>Advanced Materials</i> , 2020 , 32, e2001385	24	103
53	Molten-Salt-Mediated Synthesis of an Atomic Nickel Co-catalyst on TiO for Improved Photocatalytic H Evolution. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 7230-7234	16.4	102
52	Solar energy conversion on g-C ₃ N ₄ photocatalyst: Light harvesting, charge separation, and surface kinetics. <i>Journal of Energy Chemistry</i> , 2018 , 27, 1111-1123	12	102
51	Improving the performance of lithium sulfur batteries by graphene coating. <i>Journal of Power Sources</i> , 2013 , 243, 993-1000	8.9	102
50	Bismuth-based photocatalysts for solar energy conversion. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 24307-24352	13	85

49	Preparation of three-dimensional hybrid nanostructure-encapsulated sulfur cathode for high-rate lithium sulfur batteries. <i>Journal of Power Sources</i> , 2014 , 253, 55-63	8.9	68
48	An Electrochemically Treated BiVO ₄ Photoanode for Efficient Photoelectrochemical Water Splitting. <i>Angewandte Chemie</i> , 2017 , 129, 8620-8624	3.6	67
47	Strategies for Efficient Solar Water Splitting Using Carbon Nitride. <i>Chemistry - an Asian Journal</i> , 2017 , 12, 1421-1434	4.5	63
46	Enhanced CH ₄ selectivity in CO ₂ photocatalytic reduction over carbon quantum dots decorated and oxygen doping g-C ₃ N ₄ . <i>Nano Research</i> , 2019 , 12, 2749-2759	10	63
45	Single-Crystalline Nanomesh Tantalum Nitride Photocatalyst with Improved Hydrogen-Evolving Performance. <i>Advanced Energy Materials</i> , 2018 , 8, 1701605	21.8	63
44	An Unusual Red Carbon Nitride to Boost the Photoelectrochemical Performance of Wide Bandgap Photoanodes. <i>Advanced Functional Materials</i> , 2018 , 28, 1805698	15.6	63
43	Recent Progress on Photo-Electrocatalytic Reduction of Carbon Dioxide. <i>Particle and Particle Systems Characterization</i> , 2018 , 35, 1700371	3.1	59
42	Review of recent progress in unassisted photoelectrochemical water splitting: from material modification to configuration design. <i>Journal of Photonics for Energy</i> , 2016 , 7, 012006	1.2	57
41	Understanding the Roles of Oxygen Vacancies in Hematite-Based Photoelectrochemical Processes. <i>Angewandte Chemie</i> , 2019 , 131, 1042-1046	3.6	54
40	Enriching CO ₂ Activation Sites on Graphitic Carbon Nitride with Simultaneous Introduction of Electron-Transfer Promoters for Superior Photocatalytic CO ₂ -to-Fuel Conversion. <i>Advanced Sustainable Systems</i> , 2017 , 1, 1700003	5.9	50
39	Effect of polypyrrole on improving electrochemical performance of silicon based anode materials. <i>Electrochimica Acta</i> , 2012 , 70, 296-303	6.7	50
38	Design and synthesis of porous ZnTiO ₃ /TiO ₂ nanocages with heterojunctions for enhanced photocatalytic H ₂ production. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 11615-11622	13	47
37	Efficient sequential harvesting of solar light by heterogeneous hollow shells with hierarchical pores. <i>National Science Review</i> , 2020 , 7, 1638-1646	10.8	36
36	A Portable and Efficient Solar-Rechargeable Battery with Ultrafast Photo-Charge/Discharge Rate. <i>Advanced Energy Materials</i> , 2019 , 9, 1900872	21.8	35
35	Design of twin junction with solid solution interface for efficient photocatalytic H ₂ production. <i>Nano Energy</i> , 2020 , 69, 104410	17.1	34
34	Tantalum (Oxy)Nitride: Narrow Bandgap Photocatalysts for Solar Hydrogen Generation. <i>Engineering</i> , 2017 , 3, 365-378	9.7	32
33	Enhancing photocatalytic activity of tantalum nitride by rational suppression of bulk, interface and surface charge recombination. <i>Applied Catalysis B: Environmental</i> , 2019 , 246, 195-201	21.8	31
32	Luminescent europium-doped titania for efficiency and UV-stability enhancement of planar perovskite solar cells. <i>Nano Energy</i> , 2020 , 69, 104392	17.1	31

31	Molten-Salt-Mediated Synthesis of an Atomic Nickel Co-catalyst on TiO ₂ for Improved Photocatalytic H ₂ Evolution. <i>Angewandte Chemie</i> , 2020 , 132, 7297-7301	3.6	27
30	Identifying dual functions of rGO in a BiVO ₄ /rGO/NiFe-layered double hydroxide photoanode for efficient photoelectrochemical water splitting. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 13231-13240	13	26
29	Unlocking the potential of commercial carbon nanofibers as free-standing positive electrodes for flexible aluminum ion batteries. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 15123-15130	13	23
28	Etching treatment of vertical WO ₃ nanoplates as a photoanode for enhanced photoelectrochemical performance. <i>RSC Advances</i> , 2016 , 6, 68204-68210	3.7	23
27	Polyethylenimine Expanded Graphite Oxide Enables High Sulfur Loading and Long-Term Stability of Lithium-Sulfur Batteries. <i>Small</i> , 2019 , 15, e1804578	11	22
26	Carbon Quantum Dots sensitized Vertical WO ₃ Nanoplates with Enhanced Photoelectrochemical Properties. <i>ChemistrySelect</i> , 2016 , 1, 2772-2777	1.8	21
25	Recent progress of tungsten- and molybdenum-based semiconductor materials for solar-hydrogen production. <i>Tungsten</i> , 2019 , 1, 19-45	4.6	19
24	Mesoporous ZnFe O Photoanodes with Template-Tailored Mesopores and Temperature-Dependent Photocurrents. <i>ChemPhysChem</i> , 2018 , 19, 2313-2320	3.2	19
23	Recent Advances of Metal-Oxide Photoanodes: Engineering of Charge Separation and Transportation toward Efficient Solar Water Splitting. <i>Solar Rrl</i> , 2020 , 4, 1900509	7.1	19
22	Molecular-level anchoring of polymer cathodes on carbon nanotubes towards rapid-rate and long-cycle sodium-ion storage. <i>Materials Chemistry Frontiers</i> , 2018 , 2, 1805-1810	7.8	18
21	Processable graphene oxide-embedded titanate nanofiber membranes with improved filtration performance. <i>Journal of Hazardous Materials</i> , 2017 , 325, 214-222	12.8	16
20	Electrochemical properties of carbon nanotube/graphene oxide hybrid electrodes fabricated via layer-by-layer self-assembly. <i>Journal of Electroanalytical Chemistry</i> , 2014 , 722-723, 141-147	4.1	15
19	Properties of graphitized boron-doped coal-based coke powders as anode for lithium-ion batteries. <i>Journal of Electroanalytical Chemistry</i> , 2013 , 698, 39-44	4.1	15
18	Visible Light Responsive Metal Oxide Photoanodes for Photoelectrochemical Water Splitting: a Comprehensive Review on Rational Materials Design. <i>Wuji Cailiao Xuebao/Journal of Inorganic Materials</i> , 2018 , 33, 173	1	14
17	Bifunctional photoelectrochemical process for humic acid degradation and hydrogen production using multi-layered p-type CuO photoelectrodes with plasmonic Au@TiO. <i>Journal of Hazardous Materials</i> , 2021 , 402, 123533	12.8	14
16	Vacancy defect engineering of BiVO photoanodes for photoelectrochemical water splitting. <i>Nanoscale</i> , 2021 , 13, 17989-18009	7.7	12
15	An Integrated Strategy towards Enhanced Performance of the Lithium-Sulfur Battery and its Fading Mechanism. <i>Chemistry - A European Journal</i> , 2018 , 24, 18544-18550	4.8	11
14	Energy loss analysis in photoelectrochemical water splitting: a case study of hematite photoanodes. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 22629-22635	3.6	10

13	One-step supramolecular preorganization constructed crinkly graphitic carbon nitride nanosheets with enhanced photocatalytic activity. <i>Journal of Materials Science and Technology</i> , 2022 , 104, 155-162	9.1	10
12	The contribution of functional groups in carbon nanotube electrodes to the electrochemical performance. <i>Electronic Materials Letters</i> , 2014 , 10, 241-245	2.9	9
11	Nanoporous MoO ₃ /BiVO ₄ photoanodes promoting charge separation for efficient photoelectrochemical water splitting. <i>Nano Research</i> , 2014 , 1	10	7
10	Boron dopant simultaneously achieving nanostructure control and electronic structure tuning of graphitic carbon nitride with enhanced photocatalytic activity. <i>Journal of Materials Chemistry C</i> , 2021 , 9, 14876-14884	7.1	6
9	Two-dimensional heterojunction SnS ₂ /SnO ₂ photoanode with excellent photoresponse up to near infrared region. <i>Solar Energy Materials and Solar Cells</i> , 2020 , 207, 110342	6.4	6
8	Perovskite Solar Cells: In Situ Growth of 2D Perovskite Capping Layer for Stable and Efficient Perovskite Solar Cells (Adv. Funct. Mater. 17/2018). <i>Advanced Functional Materials</i> , 2018 , 28, 1870113	15.6	5
7	Nanostructured Semiconductors for Bifunctional Photocatalytic and Photoelectrochemical Energy Conversion. <i>Semiconductors and Semimetals</i> , 2017 , 97, 315-347	0.6	3
6	Layer by layer synthesis of Sn-Co-C microcomposites and their application in lithium ion batteries. <i>Journal of Central South University</i> , 2013 , 20, 326-331	2.1	3
5	Boosting the photocatalytic hydrogen production performance of graphitic carbon nitride nanosheets by tailoring the cyano groups. <i>Journal of Colloid and Interface Science</i> , 2021 , 610, 495-495	9.3	3
4	Water Splitting: In Situ Formation of Oxygen Vacancies Achieving Near-Complete Charge Separation in Planar BiVO ₄ Photoanodes (Adv. Mater. 26/2020). <i>Advanced Materials</i> , 2020 , 32, 2070198	2.4	2
3	Photocatalysis: Single-Crystalline Nanomesh Tantalum Nitride Photocatalyst with Improved Hydrogen-Evolving Performance (Adv. Energy Mater. 1/2018). <i>Advanced Energy Materials</i> , 2018 , 8, 1770138	21.8	2
2	An odyssey of lithium metal anode in liquid lithium-sulfur batteries. <i>Chinese Chemical Letters</i> , 2021 ,	8.1	2
1	Understanding the roles of carbon in carbon/g-C ₃ N ₄ based photocatalysts for H ₂ evolution. <i>Nano Research</i> , 2014 , 1	10	1