Lan Zhou

List of Publications by Year
in descending order

50 papers	2,545 citations	393982 19 h-index	189595 50 g-index
50 all docs	50 docs citations	50 times ranked	3528 citing authors

#	Article	IF	Citations
1	Room-temperature saturated ferroelectric polarization in BiFeO3 ceramics synthesized by rapid liquid phase sintering. Applied Physics Letters, 2004, 84, 1731-1733.	1.5	992
2	MoS₂/TiO₂ heterostructures as nonmetal plasmonic photocatalysts for highly efficient hydrogen evolution. Energy and Environmental Science, 2018, 11, 106-114.	15.6	326
3	Electrochemical Stability of Metastable Materials. Chemistry of Materials, 2017, 29, 10159-10167.	3.2	168
4	Solar fuels photoanode materials discovery by integrating high-throughput theory and experiment. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 3040-3043.	3.3	157
5	Rutile Alloys in the Mnâ€“Sbâ€“O System Stabilize Mn³⁺ To Enable Oxygen Evolution in Strong Acid. ACS Catalysis, 2018, 8, 10938-10948.	5.5	97
6	High Throughput Discovery of Solar Fuels Photoanodes in the CuOâ€“V₂O₅ System. Advanced Energy Materials, 2015, 5, 1500968.	10.2	82
7	Automated Phase Mapping with AgileFD and its Application to Light Absorber Discovery in the Vâ€“Mnâ€“Nb Oxide System. ACS Combinatorial Science, 2017, 19, 37-46.	3.8	61
8	Stability and self-passivation of copper vanadate photoanodes under chemical, electrochemical, and photoelectrochemical operation. Physical Chemistry Chemical Physics, 2016, 18, 9349-9352.	1.3	56
9	Solar fuel photoanodes prepared by inkjet printing of copper vanadates. Journal of Materials Chemistry A, 2016, 4, 7483-7494.	5.2	56
10	Discovery of Manganese-Based Solar Fuel Photoanodes via Integration of Electronic Structure Calculations, Pourbaix Stability Modeling, and High-Throughput Experiments. ACS Energy Letters, 2017, 2, 2307-2312.	8.8	36
11	Enhanced dielectric properties of ZrO2thin films prepared in nitrogen ambient by pulsed laser deposition. Journal Physics D: Applied Physics, 2003, 36, 389-393.	1.3	30
12	Combinatorial thin film composition mapping using three dimensional deposition profiles. Review of Scientific Instruments, 2015, 86, 033904.	0.6	30
13	Successes and Opportunities for Discovery of Metal Oxide Photoanodes for Solar Fuels Generators. ACS Energy Letters, 2020, 5, 1413-1421.	8.8	30
14	Automating crystal-structure phase mapping by combining deep learning with constraint reasoning. Nature Machine Intelligence, 2021, 3, 812-822.	8.3	29
15	Breaking Scaling Relationships in CO₂ Reduction on Copper Alloys with Organic Additives. ACS Central Science, 2021, 7, 1756-1762.	5.3	26
16	Combinatorial alloying improves bismuth vanadate photoanodes via reduced monoclinic distortion. Energy and Environmental Science, 2018, 11, 2444-2457.	15.6	21
17	Discovery of complex oxides via automated experiments and data science. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	21
18	Stability and Activity of Cobalt Antimonate for Oxygen Reduction in Strong Acid. ACS Energy Letters, 2022, 7, 993-1000.	8.8	21

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19	Bi-Containing n-FeWO4 Thin Films Provide the Largest Photovoltage and Highest Stability for a Sub-2 eV Band Gap Photoanode. ACS Energy Letters, 2018, 3, 2769-2774.	8.8	20
20	The role of the CeO₂/BiVO₄ interface in optimized Feâ€“Ce oxide coatings for solar fuels photoanodes. Journal of Materials Chemistry A, 2016, 4, 14356-14363.	5.2	19
21	High Throughput Light Absorber Discovery, Part 2: Establishing Structureâ€“Band Gap Energy Relationships. ACS Combinatorial Science, 2016, 18, 682-688.	3.8	19
22	Unveiling new stable manganese based photoanode materials via theoretical high-throughput screening and experiments. Chemical Communications, 2019, 55, 13418-13421.	2.2	18
23	Discovery and Characterization of a Pourbaix-Stable, 1.8 eV Direct Gap Bismuth Manganate Photoanode. Chemistry of Materials, 2017, 29, 10027-10036.	3.2	17
24	Overcoming Hurdles in Oxygen Evolution Catalyst Discovery via Codesign. Chemistry of Materials, 2022, 34, 899-910.	3.2	17
25	Quaternary Oxide Photoanode Discovery Improves the Spectral Response and Photovoltage of Copper Vanadates. Matter, 2020, 3, 1614-1630.	5.0	16
26	Properties of SBT films crystallized by pulsed excimer (KrF) laser annealing. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2002, 89, 390-393.	1.7	15
27	X-ray reflectivity measurement of interdiffusion inÂmetallic multilayers during rapid heating. Journal of Synchrotron Radiation, 2017, 24, 796-801.	1.0	15
28	Combinatorial Discovery of Lanthanumâ€“Tantalum Oxynitride Solar Light Absorbers with Dilute Nitrogen for Solar Fuel Applications. ACS Combinatorial Science, 2018, 20, 26-34.	3.8	15
29	Scanning Electrochemical Flow Cell with Online Mass Spectroscopy for Accelerated Screening of Carbon Dioxide Reduction Electrocatalysts. ACS Combinatorial Science, 2019, 21, 692-704.	3.8	15
30	Multi-modal optimization of bismuth vanadate photoanodes via combinatorial alloying and hydrogen processing. Chemical Communications, 2019, 55, 489-492.	2.2	15
31	Combinatorial screening yields discovery of 29 metal oxide photoanodes for solar fuel generation. Journal of Materials Chemistry A, 2020, 8, 4239-4243.	5.2	13
32	Combining reactive sputtering and rapid thermal processing for synthesis and discovery of metal oxynitrides. Journal of Materials Research, 2015, 30, 2928-2933.	1.2	12
33	The sensitivity of Cu for electrochemical carbon dioxide reduction to hydrocarbons as revealed by high throughput experiments. Journal of Materials Chemistry A, 2019, 7, 26785-26790.	5.2	10
34	Mechanisms of oxide growth during the combustion of Al:Zr nanolaminate foils. Combustion and Flame, 2018, 191, 442-452.	2.8	9
35	Enhanced Bulk Transport in Copper Vanadate Photoanodes Identified by Combinatorial Alloying. Matter, 2020, 3, 1601-1613.	5.0	8
36	Câ€“V characteristics of Pt/PbZr0.53Ti0.47O3/LaAlO3/Si and Pt/PbZr0.53Ti0.47O3/La0.85Sr0.15CoO3/LaAlO3/Si structures for ferroelectric gate FET memory. Applied Surface Science, 2003, 205, 176-181.	3.1	7

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37	Band Edge Energy Tuning through Electronic Character Hybridization in Ternary Metal Vanadates. Chemistry of Materials, 2021, 33, 7242-7253.	3.2	7
38	High Throughput Discovery of Complex Metal Oxide Electrocatalysts for the Oxygen Reduction Reaction. Electrocatalysis, 2022, 13, 1-10.	1.5	7
39	Molecular Coatings Improve the Selectivity and Durability of CO₂ Reduction Chalcogenide Photocathodes. ACS Energy Letters, 2022, 7, 1195-1201.	8.8	6
40	Addressing solar photochemistry durability with an amorphous nickel antimonate photoanode. Cell Reports Physical Science, 2022, 3, 100959.	2.8	6
41	Bi Alloying into Rare Earth Double Perovskites Enhances Synthesizability and Visible Light Absorption. ACS Combinatorial Science, 2020, 22, 895-901.	3.8	5
42	Film heterostructure with soft ferromagnetics to enhance low-field magnetoresistance. Applied Physics Letters, 2002, 81, 4073-4075.	1.5	3
43	Materials structureâ€“property factorization for identification of synergistic phase interactions in complex solar fuels photoanodes. Npj Computational Materials, 2022, 8, .	3.5	3
44	Alkaline-stable nickel manganese oxides with ideal band gap for solar fuel photoanodes. Chemical Communications, 2018, 54, 4625-4628.	2.2	2
45	Balancing Surface Passivation and Catalysis with Integrated BiVO4/(Feâ€“Ce)Ox Photoanodes in pH 9 Borate Electrolyte. ACS Applied Energy Materials, 2018, , .	2.5	2
46	Defects In 4H Silicon Carbide CVD Epilayers. Materials Research Society Symposia Proceedings, 1996, 442, 631.	0.1	1
47	Enhanced magnetoresistance of multilayered thin films prepared by pulsed laser deposition. Materials Letters, 2003, 57, 2693-2697.	1.3	1
48	Photoluminescence of pyrochlore phase in SrBi2Ta2O9 thin films. Applied Physics Letters, 2003, 83, 743-745.	1.5	1
49	Investigation of Microstructure and Dispersoids/Precipitates in Additively Manufactured Aluminum Alloys. Microscopy and Microanalysis, 2019, 25, 328-329.	0.2	1
50	Combinatorial Synthesis of Oxysulfides in the Lanthanumâ€“Bismuth-Copper System. ACS Combinatorial Science, 2020, 22, 319-326.	3.8	1