Santosh K Suram

List of Publications by Year
in descending order

24
papers

1,172
citations

471509
17
h-index

610901
24
g-index

26
all docs

26
docs citations

26
times ranked

1658
citing authors

#	Article	IF	Citations
1	Electrochemical Stability of Metastable Materials. Chemistry of Materials, 2017, 29, 10159-10167.	6.7	168
2	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.	7.1	157
3	High Throughput Light Absorber Discovery, Part 1: An Algorithm for Automated Tauc Analysis. ACS Combinatorial Science, 2016, 18, 673-681.	3.8	118
4	Random forest machine learning models for interpretable X-ray absorption near-edge structure spectrum-property relationships. Npj Computational Materials, 2020, 6, .	8.7	94
5	Benchmarking the acceleration of materials discovery by sequential learning. Chemical Science, 2020, 11, 2696-2706.	7.4	83
6	Network analysis of synthesizable materials discovery. Nature Communications, 2019, 10, 2018.	12.8	72
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.	2.8	56
9	Machine learningâ€“accelerated design and synthesis of polyelemental heterostructures. Science Advances, 2021, 7, eabj5505.	10.3	53
10	Tracking materials science data lineage to manage millions of materials experiments and analyses. Npj Computational Materials, 2019, 5, .	8.7	40
11	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.	17.4	36
12	High-throughput on-the-fly scanning ultraviolet-visible dual-sphere spectrometer. Review of Scientific Instruments, 2015, 86, 013904.	1.3	31
13	BEEP: A Python library for Battery Evaluation and Early Prediction. SoftwareX, 2020, 11, 100506.	2.6	29
14	CRYSTAL: a multi-agent AI system for automated mapping of materialsâ€™ crystal structures. MRS Communications, 2019, 9, 600-608.	1.8	22
15	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.	17.4	20
16	High Throughput Light Absorber Discovery, Part 2: Establishing Structureâ€“Band Gap Energy Relationships. ACS Combinatorial Science, 2016, 18, 682-688.	3.8	19
17	The Materials Research Platform: Defining the Requirements from User Stories. Matter, 2019, 1, 1433-1438.	10.0	19
18	Discovery and Characterization of a Pourbaix-Stable, 1.8 eV Direct Gap Bismuth Manganate Photoanode. Chemistry of Materials, 2017, 29, 10027-10036.	6.7	17

#	Article	IF	Citations
19	Toward autonomous materials research: Recent progress and future challenges. Applied Physics Reviews, 2022, 9, .	11.3	17
20	Quaternary Oxide Photoanode Discovery Improves the Spectral Response and Photovoltage of Copper Vanadates. Matter, 2020, 3, 1614-1630.	10.0	16
21	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
22	Combining reactive sputtering and rapid thermal processing for synthesis and discovery of metal oxynitrides. Journal of Materials Research, 2015, 30, 2928-2933.	2.6	12
23	Agents for sequential learning using multiple-fidelity data. Scientific Reports, 2022, 12, 4694.	3.3	9
24	Alkaline-stable nickel manganese oxides with ideal band gap for solar fuel photoanodes. Chemical Communications, 2018, 54, 4625-4628.	4.1	2