Santosh K Suram

List of Publications by Year
in descending order

24	1,172	471509 17	610901 24
papers	citations	h-index	g-index

26	26	26	1658
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Toward autonomous materials research: Recent progress and future challenges. Applied Physics Reviews, 2022, 9, .	11.3	17
2	Agents for sequential learning using multiple-fidelity data. Scientific Reports, 2022, 12, 4694.	3.3	9
3	Machine learningâ€“accelerated design and synthesis of polyelemental heterostructures. Science Advances, 2021, 7, eabj5505.	10.3	53
4	Quaternary Oxide Photoanode Discovery Improves the Spectral Response and Photovoltage of Copper Vanadates. Matter, 2020, 3, 1614-1630.	10.0	16
5	Random forest machine learning models for interpretable X-ray absorption near-edge structure spectrum-property relationships. Npj Computational Materials, 2020, 6, .	8.7	94
6	BEEP: A Python library for Battery Evaluation and Early Prediction. SoftwareX, 2020, 11, 100506.	2.6	29
7	Benchmarking the acceleration of materials discovery by sequential learning. Chemical Science, 2020, 11, 2696-2706.	7.4	83
8	Tracking materials science data lineage to manage millions of materials experiments and analyses. Npj Computational Materials, 2019, 5, .	8.7	40
9	Network analysis of synthesizable materials discovery. Nature Communications, 2019, 10, 2018.	12.8	72
10	CRYSTAL: a multi-agent AI system for automated mapping of materialsâ€™ crystal structures. MRS Communications, 2019, 9, 600-608.	1.8	22
11	The Materials Research Platform: Defining the Requirements from User Stories. Matter, 2019, 1, 1433-1438.	10.0	19
12	Alkaline-stable nickel manganese oxides with ideal band gap for solar fuel photoanodes. Chemical Communications, 2018, 54, 4625-4628.	4.1	2
13	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
14	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
15	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
16	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
17	Electrochemical Stability of Metastable Materials. Chemistry of Materials, 2017, 29, 10159-10167.	6.7	168
18	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

#	Article	IF	Citations
19	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
20	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
21	High Throughput Light Absorber Discovery, Part 1: An Algorithm for Automated Tauc Analysis. ACS Combinatorial Science, 2016, 18, 673-681.	3.8	118
22	High Throughput Light Absorber Discovery, Part 2: Establishing Structureâ€“Band Gap Energy Relationships. ACS Combinatorial Science, 2016, 18, 682-688.	3.8	19
23	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
24	High-throughput on-the-fly scanning ultraviolet-visible dual-sphere spectrometer. Review of Scientific Instruments, 2015, 86, 013904.	1.3	31