Seyed Mohamad Moosavi

List of Publications by Year
in descending order

24 papers	2,442 citations	394286 19 h-index	642610 23 g-index
29 all docs	29 docs citations	29 times ranked	2982 citing authors

#	Article	IF	Citations
1	Data-driven design of metalâ€“organic frameworks for wet flue gas CO2 capture. Nature, 2019, 576, 253-256.	13.7	438
2	Rapid, Selective Heavy Metal Removal from Water by a Metalâ€“Organic Framework/Polydopamine Composite. ACS Central Science, 2018, 4, 349-356.	5.3	311
3	Big-Data Science in Porous Materials: Materials Genomics and Machine Learning. Chemical Reviews, 2020, 120, 8066-8129.	23.0	284
4	Understanding the diversity of the metal-organic framework ecosystem. Nature Communications, 2020, 11, 4068.	5.8	282
5	The Role of Machine Learning in the Understanding and Design of Materials. Journal of the American Chemical Society, 2020, 142, 20273-20287.	6.6	179
6	Force-Field Prediction of Materials Properties in Metal-Organic Frameworks. Journal of Physical Chemistry Letters, 2017, 8, 357-363.	2.1	172
7	Capturing chemical intuition in synthesis of metal-organic frameworks. Nature Communications, 2019, 10, 539.	5.8	153
8	Generating carbon schwarzites via zeolite-templating. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E8116-E8124.	3.3	88
9	Preserving Porosity of Mesoporous Metalâ€“Organic Frameworks through the Introduction of Polymer Guests. Journal of the American Chemical Society, 2019, 141, 12397-12405.	6.6	68
10	Improving the Mechanical Stability of Metalâ€“Organic Frameworks Using Chemical Caryatids. ACS Central Science, 2018, 4, 832-839.	5.3	67
11	Anomalous Effects of Velocity Rescaling Algorithms: The Flying Ice Cube Effect Revisited. Journal of Chemical Theory and Computation, 2018, 14, 5262-5272.	2.3	66
12	High-Throughput Screening Approach for Nanoporous Materials Genome Using Topological Data Analysis: Application to Zeolites. Journal of Chemical Theory and Computation, 2018, 14, 4427-4437.	2.3	53
13	Diversifying Databases of Metal Organic Frameworks for High-Throughput Computational Screening. ACS Applied Materials & Interfaces, 2021, 13, 61004-61014.	4.0	50
14	Toward smart carbon capture with machine learning. Cell Reports Physical Science, 2021, 2, 100396.	2.8	38
15	Using collective knowledge to assign oxidation states of metal cations in metalâ€“organic frameworks. Nature Chemistry, 2021, 13, 771-777.	6.6	35
16	Biporous Metalâ€“Organic Framework with Tunable CO₂/CH₄ Separation Performance Facilitated by Intrinsic Flexibility. ACS Applied Materials & Interfaces, 2018, 10, 36144-36156.	4.0	33
17	Translational and Rotational Motion of C8 Aromatics Adsorbed in Isotropic Porous Media (MOF-5): NMR Studies and MD Simulations. Journal of Physical Chemistry C, 2017, 121, 15456-15462.	1.5	25
18	Transport characteristics of saturated gas diffusion layers treated with hydrophobic coatings. Chemical Engineering Science, 2018, 176, 503-514.	1.9	25

#	Article	IF	Citations
19	Geometric landscapes for material discovery within energyâ€“structureâ€“function maps. Chemical Science, 2020, 11, 5423-5433.	3.7	23
20	A data-driven perspective on the colours of metalâ€“organic frameworks. Chemical Science, 2021, 12, 3587-3598.	3.7	16
21	Thermoelasticity of Flexible Organic Crystals from Quasi-harmonic Lattice Dynamics: The Case of Copper(II) Acetylacetonate. Journal of Physical Chemistry Letters, 2020, 11, 8543-8548.	2.1	15
22	Ab Initio Flexible Force Field for Metalâ€“Organic Frameworks Using Dummy Model Coordination Bonds. Journal of Chemical Theory and Computation, 2019, 15, 3666-3677.	2.3	9
23	Guest-dependent negative thermal expansion in a lanthanide-based metalâ€“organic framework. CrystEngComm, 2019, 21, 5292-5298.	1.3	4
24	Electrophoretic velocity of spherical particles in Quemada fluids. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2013, 436, 225-230.	2.3	0