Nicholas C Burtch

List of Publications by Year
in descending order

20 papers	3,998 citations	567144 15 h-index	794469 19 g-index
20 all docs	20 docs citations	20 times ranked	6129 citing authors

#	Article	IF	Citations
1	Water Stability and Adsorption in Metalâ€“Organic Frameworks. Chemical Reviews, 2014, 114, 10575-10612.	23.0	1,951
2	An updated roadmap for the integration of metalâ€“organic frameworks with electronic devices and chemical sensors. Chemical Society Reviews, 2017, 46, 3185-3241.	18.7	987
3	Mechanical Properties in Metalâ€“Organic Frameworks: Emerging Opportunities and Challenges for Device Functionality and Technological Applications. Advanced Materials, 2018, 30, e1704124.	11.1	165
4	Kinetic Water Stability of an Isostructural Family of Zinc-Based Pillared Metalâ€“Organic Frameworks. Langmuir, 2013, 29, 633-642.	1.6	161
5	Tuning the Kinetic Water Stability and Adsorption Interactions of Mg-MOF-74 by Partial Substitution with Co or Ni. Industrial & Engineering Chemistry Research, 2015, 54, 12408-12414.	1.8	152
6	Molecular-level Insight into Unusual Low Pressure CO₂ Affinity in Pillared Metalâ€“Organic Frameworks. Journal of the American Chemical Society, 2013, 135, 7172-7180.	6.6	100
7	Modulating Adsorption and Stability Properties in Pillared Metalâ€“Organic Frameworks: A Model System for Understanding Ligand Effects. Accounts of Chemical Research, 2015, 48, 2850-2857.	7.6	89
8	Synthesis of Cobalt-, Nickel-, Copper-, and Zinc-Based, Water-Stable, Pillared Metalâ€“Organic Frameworks. Langmuir, 2014, 30, 14300-14307.	1.6	71
9	In situ visualization of loading-dependent water effects in a stable metalâ€“organic framework. Nature Chemistry, 2020, 12, 186-192.	6.6	53
10	Negative Thermal Expansion Design Strategies in a Diverse Series of Metalâ€“Organic Frameworks. Advanced Functional Materials, 2019, 29, 1904669.	7.8	48
11	Discovery of Polyoxo-Noble-Metalate-Based Metalâ€“Organic Frameworks. Journal of the American Chemical Society, 2019, 141, 3385-3389.	6.6	43
12	Tuning Thermal Expansion in Metalâ€“Organic Frameworks Using a Mixed Linker Solid Solution Approach. Journal of the American Chemical Society, 2019, 141, 12849-12854.	6.6	41
13	Understanding DABCO Nanorotor Dynamics in Isostructural Metalâ€“Organic Frameworks. Journal of Physical Chemistry Letters, 2015, 6, 812-816.	2.1	37
14	Elucidating the Variable-Temperature Mechanical Properties of a Negative Thermal Expansion Metalâ€“Organic Framework. ACS Applied Materials & Interfaces, 2018, 10, 21079-21083.	4.0	27
15	Optimization of Particle Transfers in the Gibbs Ensemble for Systems with Strong and Directional Interactions Using CBMC, CFCMC, and CB/CFCMC. Journal of Physical Chemistry C, 2016, 120, 9148-9159.	1.5	18
16	Alkyl decorated metalâ€“organic frameworks for selective trapping of ethane from ethylene above ambient pressures. Dalton Transactions, 2021, 50, 10423-10435.	1.6	15
17	Flexible Force Field Parameterization through Fitting on the Ab Initio-Derived Elastic Tensor. Journal of Chemical Theory and Computation, 2017, 13, 3722-3730.	2.3	13
18	Predicting Multicomponent Adsorption Isotherms in Openâ€Metal Site Materials Using Force Field Calculations Based on Energy Decomposed Density Functional Theory. Chemistry - A European Journal, 2016, 22, 18045-18050.	1.7	11

#	Article	IF	Citations
19	Investigating water and framework dynamics in pillared MOFs. Molecular Simulation, 2015, 41, 1379-1387.	0.9	10
20	Recovery of MOF-5 from Extreme High-Pressure Conditions Facilitated by a Modern Pressure Transmitting Medium. Chemistry of Materials, 0, , .	3.2	6