

Nicholas C Burtch

List of Publications by Year in descending order

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Version: 2024-02-01

20
papers

3,998
citations

567281

15
h-index

794594

19
g-index

20
all docs

20
docs citations

20
times ranked

6129
citing authors

#	ARTICLE	IF	CITATIONS
1	Water Stability and Adsorption in Metal-Organic Frameworks. <i>Chemical Reviews</i> , 2014, 114, 10575-10612.	47.7	1,951
2	An updated roadmap for the integration of metal-organic frameworks with electronic devices and chemical sensors. <i>Chemical Society Reviews</i> , 2017, 46, 3185-3241.	38.1	987
3	Mechanical Properties in Metal-Organic Frameworks: Emerging Opportunities and Challenges for Device Functionality and Technological Applications. <i>Advanced Materials</i> , 2018, 30, e1704124.	21.0	165
4	Kinetic Water Stability of an Isostructural Family of Zinc-Based Pillared Metal-Organic Frameworks. <i>Langmuir</i> , 2013, 29, 633-642.	3.5	161
5	Tuning the Kinetic Water Stability and Adsorption Interactions of Mg-MOF-74 by Partial Substitution with Co or Ni. <i>Industrial & Engineering Chemistry Research</i> , 2015, 54, 12408-12414.	3.7	152
6	Molecular-level Insight into Unusual Low Pressure CO ₂ Affinity in Pillared Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2013, 135, 7172-7180.	13.7	100
7	Modulating Adsorption and Stability Properties in Pillared Metal-Organic Frameworks: A Model System for Understanding Ligand Effects. <i>Accounts of Chemical Research</i> , 2015, 48, 2850-2857.	15.6	89
8	Synthesis of Cobalt-, Nickel-, Copper-, and Zinc-Based, Water-Stable, Pillared Metal-Organic Frameworks. <i>Langmuir</i> , 2014, 30, 14300-14307.	3.5	71
9	In situ visualization of loading-dependent water effects in a stable metal-organic framework. <i>Nature Chemistry</i> , 2020, 12, 186-192.	13.6	53
10	Negative Thermal Expansion Design Strategies in a Diverse Series of Metal-Organic Frameworks. <i>Advanced Functional Materials</i> , 2019, 29, 1904669.	14.9	48
11	Discovery of Polyoxo-Noble-Metalate-Based Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2019, 141, 3385-3389.	13.7	43
12	Tuning Thermal Expansion in Metal-Organic Frameworks Using a Mixed Linker Solid Solution Approach. <i>Journal of the American Chemical Society</i> , 2019, 141, 12849-12854.	13.7	41
13	Understanding DABCO Nanorotor Dynamics in Isostructural Metal-Organic Frameworks. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 812-816.	4.6	37
14	Elucidating the Variable-Temperature Mechanical Properties of a Negative Thermal Expansion Metal-Organic Framework. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 21079-21083.	8.0	27
15	Optimization of Particle Transfers in the Gibbs Ensemble for Systems with Strong and Directional Interactions Using CBMC, CFCMC, and CB/CFCMC. <i>Journal of Physical Chemistry C</i> , 2016, 120, 9148-9159.	3.1	18
16	Alkyl decorated metal-organic frameworks for selective trapping of ethane from ethylene above ambient pressures. <i>Dalton Transactions</i> , 2021, 50, 10423-10435.	3.3	15
17	Flexible Force Field Parameterization through Fitting on the Ab Initio-Derived Elastic Tensor. <i>Journal of Chemical Theory and Computation</i> , 2017, 13, 3722-3730.	5.3	13
18	Predicting Multicomponent Adsorption Isotherms in Open-Metal Site Materials Using Force Field Calculations Based on Energy Decomposed Density Functional Theory. <i>Chemistry - A European Journal</i> , 2016, 22, 18045-18050.	3.3	11

#	ARTICLE	IF	CITATIONS
19	Investigating water and framework dynamics in pillared MOFs. <i>Molecular Simulation</i> , 2015, 41, 1379-1387.	2.0	10
20	Recovery of MOF-5 from Extreme High-Pressure Conditions Facilitated by a Modern Pressure Transmitting Medium. <i>Chemistry of Materials</i> , 0, , .	6.7	6