

Peyman Moghadam

List of Publications by Year in descending order

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Version: 2024-02-01

48
papers

5,024
citations

159585

30
h-index

214800

47
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53
all docs

53
docs citations

53
times ranked

6530
citing authors

#	ARTICLE	IF	CITATIONS
1	Active subsets as a tool for structural characterisation and selection of metal-organic frameworks. <i>Chemical Engineering Research and Design</i> , 2022, 179, 424-434.	5.6	0
2	How Reproducible are Surface Areas Calculated from the BET Equation?. <i>Advanced Materials</i> , 2022, 34, .	21.0	82
3	Computational techniques for characterisation of electrically conductive MOFs: quantum calculations and machine learning approaches. <i>Journal of Materials Chemistry C</i> , 2021, 9, 13584-13599.	5.5	14
4	Screening adsorbentâ€“water adsorption heat pumps based on an experimental water adsorption isotherm database. <i>Sustainable Energy and Fuels</i> , 2021, 5, 1075-1084.	4.9	12
5	The development of a comprehensive toolbox based on multi-level, high-throughput screening of MOFs for CO ₂ separations. <i>Chemical Science</i> , 2021, 12, 12068-12081.	7.4	8
6	Pt(II)-Decorated Covalent Organic Framework for Photocatalytic Difluoroalkylation and Oxidative Cyclization Reactions. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 6349-6358.	8.0	27
7	Catalyst-Enabled <i>In Situ</i> Linkage Reduction in Imine Covalent Organic Frameworks. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 21740-21747.	8.0	12
8	Data visualization for Industry 4.0: A stepping-stone toward a digital future, bridging the gap between academia and industry. <i>Patterns</i> , 2021, 2, 100266.	5.9	10
9	Hydrogen storage in MOFs: Machine learning for finding a needle in a haystack. <i>Patterns</i> , 2021, 2, 100305.	5.9	4
10	Wiz: A Web-Based Tool for Interactive Visualization of Big Data. <i>Patterns</i> , 2020, 1, 100107.	5.9	8
11	Targeted classification of metalâ€“organic frameworks in the Cambridge structural database (CSD). <i>Chemical Science</i> , 2020, 11, 8373-8387.	7.4	119
12	(Thio)urea-Based Covalent Organic Framework as a Hydrogen-Bond-Donating Catalyst. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 29212-29217.	8.0	19
13	A Highly Porous Metal-Organic Framework System to Deliver Payloads for Gene Knockdown. <i>CheM</i> , 2019, 5, 2926-2941.	11.7	66
14	Coreâ€“Shell Gold Nanorod@Zirconium-Based Metalâ€“Organic Framework Composites as <i>In Situ</i> Size-Selective Raman Probes. <i>Journal of the American Chemical Society</i> , 2019, 141, 3893-3900.	13.7	119
15	Tuning porosity in macroscopic monolithic metal-organic frameworks for exceptional natural gas storage. <i>Nature Communications</i> , 2019, 10, 2345.	12.8	180
16	Structure-Mechanical Stability Relations of Metal-Organic Frameworks via Machine Learning. <i>Matter</i> , 2019, 1, 219-234.	10.0	170
17	Reverse Hierarchy of Alkane Adsorption in Metalâ€“Organic Frameworks (MOFs) Revealed by Immersion Calorimetry. <i>Journal of Physical Chemistry C</i> , 2019, 123, 11699-11706.	3.1	12
18	Engineering new defective phases of UiO family metalâ€“organic frameworks with water. <i>Journal of Materials Chemistry A</i> , 2019, 7, 7459-7469.	10.3	58

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19	Computer-aided discovery of a metal-organic framework with superior oxygen uptake. <i>Nature Communications</i> , 2018, 9, 1378.	12.8	136
20	A sol-gel monolithic metal-organic framework with enhanced methane uptake. <i>Nature Materials</i> , 2018, 17, 174-179.	27.5	386
21	Probing the Mechanochemistry of Metal-Organic Frameworks with Low-Frequency Vibrational Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2018, 122, 27442-27450.	3.1	37
22	From synthesis to applications: Metal-organic frameworks for an environmentally sustainable future. <i>Current Opinion in Green and Sustainable Chemistry</i> , 2018, 12, 47-56.	5.9	33
23	Nitro-Functionalized Bis(pyrazolate) Metal-Organic Frameworks as Carbon Dioxide Capture Materials under Ambient Conditions. <i>Chemistry - A European Journal</i> , 2018, 24, 13170-13180.	3.3	29
24	Modulation of pore shape and adsorption selectivity by ligand functionalization in a series of α -robust-like flexible metal-organic frameworks. <i>Journal of Materials Chemistry A</i> , 2018, 6, 17409-17416.	10.3	13
25	Discovery of an Optimal Porous Crystalline Material for the Capture of Chemical Warfare Agents. <i>Chemistry of Materials</i> , 2018, 30, 4571-4579.	6.7	62
26	Adsorption and molecular siting of CO ₂ , water, and other gases in the superhydrophobic, flexible pores of FMOF-1 from experiment and simulation. <i>Chemical Science</i> , 2017, 8, 3989-4000.	7.4	60
27	Temperature Treatment of Highly Porous Zirconium-Containing Metal-Organic Frameworks Extends Drug Delivery Release. <i>Journal of the American Chemical Society</i> , 2017, 139, 7522-7532.	13.7	269
28	Metal-Organic Nanosheets Formed via Defect-Mediated Transformation of a Hafnium Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2017, 139, 5397-5404.	13.7	224
29	Development of a Cambridge Structural Database Subset: A Collection of Metal-Organic Frameworks for Past, Present, and Future. <i>Chemistry of Materials</i> , 2017, 29, 2618-2625.	6.7	718
30	α -Explosive-synthesis of metal-formate frameworks for methane capture: an experimental and computational study. <i>Chemical Communications</i> , 2017, 53, 11437-11440.	4.1	25
31	Metal-organic frameworks as biosensors for luminescence-based detection and imaging. <i>Interface Focus</i> , 2016, 6, 20160027.	3.0	142
32	Toward Design Rules for Enzyme Immobilization in Hierarchical Mesoporous Metal-Organic Frameworks. <i>CheM</i> , 2016, 1, 154-169.	11.7	286
33	A Redox-Active Bistable Molecular Switch Mounted inside a Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2016, 138, 14242-14245.	13.7	114
34	CD-MOF: A Versatile Separation Medium. <i>Journal of the American Chemical Society</i> , 2016, 138, 2292-2301.	13.7	269
35	Efficient identification of hydrophobic MOFs: application in the capture of toxic industrial chemicals. <i>Journal of Materials Chemistry A</i> , 2016, 4, 529-536.	10.3	93
36	Application of Consistency Criteria To Calculate BET Areas of Micro- And Mesoporous Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2016, 138, 215-224.	13.7	201

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37	High volumetric uptake of ammonia using Cu-MOF-74/Cu-CPO-27. Dalton Transactions, 2016, 45, 4150-4153.	3.3	102
38	Understanding the Effects of Preadsorbed Perfluoroalkanes on the Adsorption of Water and Ammonia in MOFs. Journal of Physical Chemistry C, 2015, 119, 3163-3170.	3.1	20
39	Functionalized Defects through Solvent-Assisted Linker Exchange: Synthesis, Characterization, and Partial Postsynthesis Elaboration of a Metal-Organic Framework Containing Free Carboxylic Acid Moieties. Inorganic Chemistry, 2015, 54, 1785-1790.	4.0	58
40	Ultrahigh Surface Area Zirconium MOFs and Insights into the Applicability of the BET Theory. Journal of the American Chemical Society, 2015, 137, 3585-3591.	13.7	329
41	Pore Size Dependence of Adsorption and Separation of Thiophene/Benzene Mixtures in Zeolites. Journal of Physical Chemistry C, 2015, 119, 15263-15273.	3.1	39
42	Carbohydrate-Mediated Purification of Petrochemicals. Journal of the American Chemical Society, 2015, 137, 5706-5719.	13.7	112
43	Computational Screening of Metal Catecholates for Ammonia Capture in Metal-Organic Frameworks. Industrial & Engineering Chemistry Research, 2015, 54, 3257-3267.	3.7	27
44	Electrochemically addressable trisradical rotaxanes organized within a metal-organic framework. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 11161-11168.	7.1	83
45	Monte Carlo simulations of phase behavior and microscopic structure for supercritical CO ₂ and thiophene mixtures. Journal of Supercritical Fluids, 2014, 95, 214-221.	3.2	5
46	Origin of Enantioselectivity in a Chiral Metal-Organic Framework: A Molecular Simulation Study. Journal of Physical Chemistry C, 2012, 116, 20874-20881.	3.1	27
47	Calix[4]arene-based metal-organic frameworks: towards hierarchically porous materials. Chemical Communications, 2012, 48, 4824.	4.1	40
48	p-Xylene-Selective Metal-Organic Frameworks: A Case of Topology-Directed Selectivity. Journal of the American Chemical Society, 2011, 133, 18526-18529.	13.7	159