Kang Zhang

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3749944/publications.pdf

Version: 2024-02-01

31 papers	2,167 citations	304602 22 h-index	434063 31 g-index
32 all docs	32 docs citations	32 times ranked	3397 citing authors

#	Article	IF	Citations
1	Reversed thermo-switchable molecular sieving membranes composed of two-dimensional metal-organic nanosheets for gas separation. Nature Communications, 2017, 8, 14460.	5.8	382
2	Engineering chiral porous metal-organic frameworks for enantioselective adsorption and separation. Nature Communications, 2014, 5, 4406.	5.8	221
3	Ultrathin two-dimensional porous organic nanosheets with molecular rotors for chemical sensing. Nature Communications, 2017, 8, 1142.	5.8	152
4	Chiral NH-Controlled Supramolecular Metallacycles. Journal of the American Chemical Society, 2017, 139, 1554-1564.	6.6	122
5	Confinement of Aggregation-Induced Emission Molecular Rotors in Ultrathin Two-Dimensional Porous Organic Nanosheets for Enhanced Molecular Recognition. Journal of the American Chemical Society, 2018, 140, 4035-4046.	6.6	119
6	In silico screening of 4764 computation-ready, experimental metalâ€“organic frameworks for CO₂ separation. Journal of Materials Chemistry A, 2016, 4, 2105-2114.	5.2	109
7	Water Desalination through Zeolitic Imidazolate Framework Membranes: Significant Role of Functional Groups. Langmuir, 2015, 31, 13230-13237.	1.6	108
8	Submicrometerâ€Sized ZIFâ€71 Filled Organophilic Membranes for Improved Bioethanol Recovery: Mechanistic Insights by Monte Carlo Simulation and FTIR Spectroscopy. Advanced Functional Materials, 2015, 25, 516-525.	7.8	94
9	A Combinatorial Approach towards Waterâ€Stable Metalâ€“Organic Frameworks for Highly Efficient Carbon Dioxide Separation. ChemSusChem, 2014, 7, 2791-2795.	3.6	82
10	Seawater Pervaporation through Zeolitic Imidazolate Framework Membranes: Atomistic Simulation Study. ACS Applied Materials & Interfaces, 2016, 8, 13392-13399.	4.0	72
11	Adsorption of C₁â€“C₄ Alcohols in Zeolitic Imidazolate Framework-8: Effects of Force Fields, Atomic Charges, and Framework Flexibility. Journal of Physical Chemistry C, 2013, 117, 25628-25635.	1.5	70
12	Computational design of 2D functional covalentâ€“organic framework membranes for water desalination. Environmental Science: Water Research and Technology, 2017, 3, 735-743.	1.2	69
13	1D-2D-3D Transformation Synthesis of Hierarchical Metalâ€“Organic Framework Adsorbent for Multicomponent Alkane Separation. Journal of the American Chemical Society, 2017, 139, 819-828.	6.6	62
14	Ag nanoprisms with Ag2S attachment. Scientific Reports, 2013, 3, 2177.	1.6	61
15	â€œClickâ€•extended nitrogen-rich metalâ€“organic frameworks and their high performance in CO2-selective capture. Chemical Communications, 2014, 50, 4683.	2.2	61
16	Biofuel purification in zeolitic imidazolate frameworks: the significant role of functional groups. Physical Chemistry Chemical Physics, 2014, 16, 9643-9655.	1.3	57
17	Water desalination and biofuel dehydration through a thin membrane of polymer of intrinsic microporosity: Atomistic simulation study. Journal of Membrane Science, 2018, 545, 49-56.	4.1	55
18	Functionalized metalâ€“organic framework MIL-101 for CO2 capture: multi-scale modeling from ab initio calculation and molecular simulation to breakthrough prediction. CrystEngComm, 2013, 15, 10358.	1.3	36

#	Article	IF	Citations
19	Molecular Design of Zirconium Tetrazolate Metalâ€“Organic Frameworks for CO₂ Capture. Crystal Growth and Design, 2017, 17, 543-549.	1.4	36
20	Formation of CH₄ Hydrate in a Mesoporous Metalâ€“Organic Framework MIL-101: Mechanistic Insights from Microsecond Molecular Dynamics Simulations. Journal of Physical Chemistry Letters, 2019, 10, 7002-7008.	2.1	35
21	Efficient Removal of Pb²⁺ from Aqueous Solution by an Ionic Covalentâ€“Organic Framework: Molecular Simulation Study. Industrial & Engineering Chemistry Research, 2018, 57, 6477-6482.	1.8	33
22	Molecular Dynamics Phenomena of Water in the Metalorganic Framework MIL-100(Al), as Revealed by Pulsed Field Gradient NMR and Atomistic Simulation. Journal of Physical Chemistry C, 2017, 121, 18065-18074.	1.5	25
23	Biofuel purification in GME zeoliticâ€“imidazolate frameworks: From ab initio calculations to molecular simulations. AIChE Journal, 2015, 61, 2763-2775.	1.8	22
24	CO₂ capture in rht metalâ€“organic frameworks: multiscale modeling from molecular simulation to breakthrough prediction. Journal of Materials Chemistry A, 2015, 3, 16327-16336.	5.2	20
25	Crucial role of blocking inaccessible cages in the simulation of gas adsorption in a paddle-wheel metalâ€“organic framework. RSC Advances, 2013, 3, 16152.	1.7	15
26	Functional UiO-66 for the removal of sulfur-containing compounds in gas and liquid mixtures: A molecular simulation study. Chemical Engineering Journal, 2019, 356, 737-745.	6.6	15
27	Diameter Effect on the Sidewall Functionalization of Singleâ€Walled Carbon Nanotubes by Addition of Dichlorocarbene. Advanced Functional Materials, 2012, 22, 5216-5223.	7.8	13
28	Glucose recovery from aqueous solutions by adsorption in metalâ€“organic framework MIL-101: a molecular simulation study. Scientific Reports, 2015, 5, 12821.	1.6	11
29	Molecular Simulation and Analysis of Sorption Process toward Theoretical Prediction for Liquid Permeation through Membranes. Journal of Physical Chemistry B, 2018, 122, 12211-12218.	1.2	7
30	Hydrogen Adsorption in Metalâ€“Organic Framework MIL-101(Cr)â€”Adsorbate Densities and Enthalpies from Sorption, Neutron Scattering, In Situ X-ray Diffraction, Calorimetry, and Molecular Simulations. ACS Applied Energy Materials, 2021, 4, 7839-7847.	2.5	2
31	Porous Materials: Submicrometer-Sized ZIF-71 Filled Organophilic Membranes for Improved Bioethanol Recovery: Mechanistic Insights by Monte Carlo Simulation and FTIR Spectroscopy (Adv. Funct. Mater.) Tj ETQq1 1 0.784314 rgBT /Ov	7.8	