

Bin Zheng

List of Publications by Year in descending order

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53
papers

1,769
citations

393982

19
h-index

276539

41
g-index

55
all docs

55
docs citations

55
times ranked

2819
citing authors

#	ARTICLE	IF	CITATIONS
1	Unravelling surface and interfacial structures of a metal-organic framework by transmission electron microscopy. <i>Nature Materials</i> , 2017, 16, 532-536.	13.3	306
2	Strain Effect in Bimetallic Electrocatalysts in the Hydrogen Evolution Reaction. <i>ACS Energy Letters</i> , 2018, 3, 1198-1204.	8.8	183
3	Force Field for Molecular Dynamics Computations in Flexible ZIF-8 Framework. <i>Journal of Physical Chemistry C</i> , 2012, 116, 933-938.	1.5	146
4	Fast potassium migration in mesoporous carbon with ultrathin framework boosting superior rate performance for high-power potassium storage. <i>Energy Storage Materials</i> , 2021, 40, 490-498.	9.5	96
5	Selective Hydrogen Generation from Formic Acid with Well-Defined Complexes of Ruthenium and Phosphorus-Nitrogen Pincer Ligand. <i>Chemistry - an Asian Journal</i> , 2016, 11, 1357-1360.	1.7	94
6	Hydrogenation of Esters Catalyzed by Ruthenium Pincer Complexes Containing an Aminophosphine Arm. <i>Organometallics</i> , 2014, 33, 4152-4155.	1.1	74
7	Molecular Dynamics Simulations on Gate Opening in ZIF-8: Identification of Factors for Ethane and Propane Separation. <i>Langmuir</i> , 2013, 29, 8865-8872.	1.6	73
8	Antiaromatic bisindeno-[n]thienoacenes with small singlet biradical characters: syntheses, structures and chain length dependent physical properties. <i>Chemical Science</i> , 2014, 5, 4490-4503.	3.7	62
9	Z-shaped Pentalenoacene Dimers with High Stability and Small Band Gap. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 2693-2696.	7.2	59
10	Towards meso-Ester BODIPYs with Aggregation-Induced Emission Properties: The Effect of Substitution Positions. <i>Chemistry - an Asian Journal</i> , 2015, 10, 1631-1634.	1.7	41
11	Indolo[2,3-b]carbazoles with tunable ground states: how Clar's aromatic sextet determines the singlet biradical character. <i>Chemical Science</i> , 2014, 5, 4944-4952.	3.7	39
12	Mechanical Control of the Kinetic Propylene/Propane Separation by Zeolitic Imidazolate Frameworks. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 13734-13738.	7.2	39
13	Dipolar Quinoidal Acene Analogues as Stable Isoelectronic Structures of Pentacene and Nonacene. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 14412-14416.	7.2	36
14	LiFSI as a functional additive of the fluorinated electrolyte for rechargeable Li-S batteries. <i>Journal of Materials Science: Materials in Electronics</i> , 2021, 32, 5898-5906.	1.1	35
15	A hybrid ionic liquid-based electrolyte for high-performance lithium-sulfur batteries. <i>New Journal of Chemistry</i> , 2020, 44, 361-368.	1.4	34
16	Synthesis of highly reactive polyisobutylene with FeCl ₃ /ether complexes in hexane; kinetic and mechanistic studies. <i>Polymer Chemistry</i> , 2015, 6, 322-329.	1.9	30
17	Engineering micromechanics of soft porous crystals for negative gas adsorption. <i>Chemical Science</i> , 2020, 11, 9468-9479.	3.7	30
18	Ligand-Conformer-Induced Formation of Zirconium-Organic Framework for Methane Storage and MTO Product Separation. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 16521-16528.	7.2	29

#	ARTICLE	IF	CITATIONS
19	Size-Controllable Synthesis of Zeolitic Imidazolate Framework/Carbon Nanotube Composites. Crystals, 2018, 8, 367.	1.0	23
20	Diffusion as a function of guest molecule length and functionalization in flexible metal-organic frameworks. Materials Horizons, 2016, 3, 355-361.	6.4	19
21	Investigation of the Linker Swing Motion in the Zeolitic Imidazolate Framework ZIF-90. Journal of Physical Chemistry C, 2018, 122, 7203-7209.	1.5	19
22	Theoretical prediction of the mechanical properties of zeolitic imidazolate frameworks (ZIFs). RSC Advances, 2017, 7, 41499-41503.	1.7	18
23	Exploring the redox decomposition of ethylene carbonate-propylene carbonate in Li-ion batteries. Materials Advances, 2021, 2, 1747-1751.	2.6	18
24	Mechanical Control of the Kinetic Propylene/Propane Separation by Zeolitic Imidazolate Frameworks. Angewandte Chemie, 2019, 131, 13872-13876.	1.6	17
25	Investigation of interface compatibility in stiff polymer/metal-organic frameworks. Materials Today Chemistry, 2021, 20, 100458.	1.7	17
26	Zn-Shaped Pentaleno-Acene Dimers with High Stability and Small Band Gap. Angewandte Chemie, 2016, 128, 2743-2746.	1.6	15
27	Adsorptive Separation of Furfural/5-Hydroxymethylfurfural in MAF-5 with Ellipsoidal Pores. Industrial & Engineering Chemistry Research, 2020, 59, 11734-11742.	1.8	15
28	The force of MOFs: the potential of switchable metal-organic frameworks as solvent stimulated actuators. Chemical Communications, 2020, 56, 7411-7414.	2.2	15
29	Quinoidal Oligo(9,10-anthryl)s with Chain-Length-Dependent Ground States: A Balance between Aromatic Stabilization and Steric Strain Release. Chemistry - A European Journal, 2015, 21, 18724-18729.	1.7	13
30	Effect of Defects on the Mechanical Deformation Mechanisms of Metal-Organic Framework-5: A Molecular Dynamics Investigation. Journal of Physical Chemistry C, 2018, 122, 4300-4306.	1.5	13
31	Phase boundary effects on the mechanical deformation of core/shell Cu/Ag nanoparticles. Journal of Materials Research, 2009, 24, 2210-2214.	1.2	12
32	Facile Exfoliation of Two-Dimensional Crystalline Monolayer Nanosheets from an Amorphous Metal-Organic Framework. CCS Chemistry, 2022, 4, 1879-1888.	4.6	12
33	Impact of mechanical deformation on guest diffusion in zeolitic imidazolate frameworks. Dalton Transactions, 2016, 45, 4346-4351.	1.6	11
34	Adsorptive separation of butanol, acetone and ethanol in zeolite imidazolate frameworks with desirable pore apertures. Chemical Engineering Science, 2022, 248, 117251.	1.9	11
35	Interaction Mechanisms between Lithium Polysulfides/Sulfide and Small Organic Molecules. ACS Omega, 2021, 6, 4995-5000.	1.6	10
36	ZIF-8 gate tuning via terminal group modification: A computational study. Chemical Physics Letters, 2016, 658, 270-275.	1.2	9

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37	Tribological Properties of Typical Zeolitic Imidazolate Frameworks as Grease-Based Lubricant Additives. <i>Journal of Materials Engineering and Performance</i> , 2019, 28, 1668-1677.	1.2	9
38	Synergistic Effect of Fluorinated Solvents for Improving High Voltage Performance of $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$ Cathode. <i>Journal of the Electrochemical Society</i> , 2020, 167, 120534.	1.3	9
39	Investigation of Methane Adsorption in Strained IRMOF-1. <i>Journal of Physical Chemistry C</i> , 2019, 123, 24592-24597.	1.5	8
40	Low Temperature Calorimetry Coupled with Molecular Simulations for an In-Depth Characterization of the Guest-Dependent Compliant Behavior of MOFs. <i>Chemistry of Materials</i> , 2020, 32, 3489-3498.	3.2	8
41	High-temperature vanadium-free catalyst for selective catalytic reduction of NO with NH_3 and theoretical study of La_2O_3 over $\text{CeO}_2/\text{TiO}_2$. <i>Catalysis Science and Technology</i> , 2021, 11, 6112-6125.	2.1	8
42	Confined Water Vapor in ZIF-8 Nanopores. <i>ACS Omega</i> , 2022, 7, 64-69.	1.6	8
43	Controllable Synthesis of Metal-Organic Framework/Polyethersulfone Composites. <i>Crystals</i> , 2020, 10, 39.	1.0	6
44	Monolayer Nanosheets Exfoliated from Cage-Based Cationic Metal-Organic Frameworks. <i>Inorganic Chemistry</i> , 2022, 61, 1521-1529.	1.9	6
45	Theoretical model estimation of guest diffusion in metal-organic frameworks (MOFs). <i>RSC Advances</i> , 2015, 5, 70433-70438.	1.7	5
46	Residual Guest-Assisted MOF-5 Powder Densification. <i>Inorganic Chemistry</i> , 2021, 60, 13419-13424.	1.9	5
47	Surfactant Crystals as Stimulable Foam Stabilizers: Tuning Stability with Counterions. <i>Journal of Surfactants and Detergents</i> , 2019, 22, 1237-1245.	1.0	4
48	Elevated electrochemical performances enabled by a core-shell titanium hydride coated separator in lithium-sulphur batteries. <i>RSC Advances</i> , 2021, 11, 30755-30762.	1.7	3
49	Neodymium complex obtained from reductive-coupling of carbodiimide: Synthesis and structure of $[(\text{Cp}^*)_2\text{Nd}(\text{NR})_2\text{C}(\text{NR})_2\text{Nd}(\text{Cp}^*)_2]$. <i>Chemical Research in Chinese Universities</i> , 2015, 31, 704-707.	1.3	2
50	Extended Dislocations in Plastically Deformed Metallic Nanoparticles. <i>Nanomaterials and Nanotechnology</i> , 2016, 6, 34.	1.2	2
51	Designing highly incompressible transition metal nitrides: A new class of $\text{W}_0.5\text{Al}_0.5\text{N}$ phases. <i>Journal of Applied Physics</i> , 2021, 130, 065105.	1.1	1
52	Coupling external and internal pressure for the structural transition of MIL-53(Cr). <i>Dalton Transactions</i> , 2021, 50, 16371-16376.	1.6	1
53	Improved electrochemical performance of a $\text{LiCoO}_2/\text{MCMB}$ cell by regulating fluorinated electrolytes. <i>RSC Advances</i> , 2021, 11, 30763-30770.	1.7	0