Hao Wang

List of Publications by Year
in descending order

100 papers	6,022 citations	94269 37 h-index	74018 75 g-index
102 all docs	102 docs citations	102 times ranked	6315 citing authors

#	Article	IF	Citations
1	Ultrafast, scalable and green synthesis of amorphous iron-nickel based durable water oxidation electrode with very high intrinsic activity via potential pulses. Chemical Engineering Journal, 2022, 428, 130688.	6.6	2
2	Large scale synthesis and propylene purification by a high-performance MOF sorbent Y-abtc. Separation and Purification Technology, 2022, 282, 120010.	3.9	12
3	A Microporous Metalâ€“Organic Framework Incorporating Both Primary and Secondary Building Units for Splitting Alkane Isomers. Journal of the American Chemical Society, 2022, 144, 3766-3770.	6.6	36
4	Metalâ€“organic frameworks with ftw-type connectivity: design, pore structure engineering, and potential applications. CrystEngComm, 2022, 24, 2189-2200.	1.3	5
5	Balancing uptake and selectivity in a copper-based metalâ€“organic framework for xenon and krypton separation. Separation and Purification Technology, 2022, 291, 120932.	3.9	9
6	Selective, Stable Production of Ethylene Using a Pulsed Cu-Based Electrode. ACS Applied Materials & Interfaces, 2022, 14, 19388-19396.	4.0	14
7	Adsorption and Release of 1-Methylcyclopropene by Metalâ€“Organic Frameworks for Fruit Preservation. , 2022, 4, 1053-1057.		8
8	Customized Synthesis: Solvent- and Acid-Assisted Topology Evolution in Zirconium-Tetracarboxylate Frameworks. Inorganic Chemistry, 2022, 61, 7980-7988.	1.9	13
9	Separation of naphtha on a series of ultramicroporous MOFs: A comparative study with zeolites. Separation and Purification Technology, 2022, 294, 121219.	3.9	12
10	A Water-Resistant Hydrogen-Bonded Organic Framework for Ethane/Ethylene Separation in Humid Environments. , 2022, 4, 1227-1232.		33
11	A microporous Zr₆@Zr-MOF for the separation of Xe and Kr. Dalton Transactions, 2022, 51, 10856-10859.	1.6	3
12	Enhanced acetone sensing from Zn(II)-MOFs comprising tetranuclear metal clusters built with EDC and BDC ligands. Inorganic Chemistry Communication, 2021, 123, 108339.	1.8	4
13	Calciumâ€Based Metalâ€“Organic Frameworks and Their Potential Applications. Small, 2021, 17, e2005165.	5.2	30
14	Separation of alkane and alkene mixtures by metalâ€“organic frameworks. Journal of Materials Chemistry A, 2021, 9, 20874-20896.	5.2	54
15	An antimony based organicâ€“inorganic hybrid coating material with high quantum efficiency and thermal quenching effect. Chemical Communications, 2021, 57, 1754-1757.	2.2	18
16	Highâ€Efficiency Separation ofnâ€Hexane by a Dynamic Metalâ€Organic Framework with Reduced Energy Consumption. Angewandte Chemie - International Edition, 2021, 60, 10593-10597.	7.2	42
17	Highâ€Efficiency Separation ofnâ€Hexane by a Dynamic Metalâ€Organic Framework with Reduced Energy Consumption. Angewandte Chemie, 2021, 133, 10687-10691.	1.6	10
18	Defect Termination in the UiO-66 Family of Metalâ€“Organic Frameworks: The Role of Water and Modulator. Journal of the American Chemical Society, 2021, 143, 6328-6332.	6.6	74

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19	Metalâ€“Organic Frameworks and Metalâ€“Organic Gels for Oxygen Electrocatalysis: Structural and Compositional Considerations. Advanced Materials, 2021, 33, e2008023.	11.1	60
20	Cucurbiturilâ€verkapselnde metallorganische GerÃ¼stverbindung Ã¼ber Mechanochemie: Adsorbentien mit verbesserter Leistung. Angewandte Chemie, 2021, 133, 15493-15498.	1.6	2
21	Cucurbiturilâ€Encapsulating Metalâ€“Organic Framework via Mechanochemistry: Adsorbents with Enhanced Performance. Angewandte Chemie - International Edition, 2021, 60, 15365-15370.	7.2	19
22	Platinum single-atom catalyst coupled with transition metal/metal oxide heterostructure for accelerating alkaline hydrogen evolution reaction. Nature Communications, 2021, 12, 3783.	5.8	355
23	Upgrading Octane Number of Naphtha by a Robust and Easily Attainable Metalâ€Organic Framework through Selective Molecular Sieving of Alkane Isomers. Chemistry - A European Journal, 2021, 27, 11795-11798.	1.7	20
24	Flexible Zn-MOF with Rare Underlying scu Topology for Effective Separation of C6 Alkane Isomers. ACS Applied Materials & Interfaces, 2021, 13, 51997-52005.	4.0	22
25	Tuning the Adsorption Properties of Metalâ€“Organic Frameworks through Coadsorbed Ammonia. ACS Applied Materials & Interfaces, 2021, 13, 43661-43667.	4.0	6
26	Customized H-bonding acceptor and aperture chemistry within a metal-organic framework for efficient C3H6/C3H8 separation. Chemical Engineering Journal, 2021, 426, 131302.	6.6	18
27	Efficient separation of xylene isomers by using a robust calcium-based metalâ€“organic framework through a synergetic thermodynamically and kinetically controlled mechanism. Journal of Materials Chemistry A, 2021, 9, 26202-26207.	5.2	7
28	Pore Distortion in a Metalâ€“Organic Framework for Regulated Separation of Propane and Propylene. Journal of the American Chemical Society, 2021, 143, 19300-19305.	6.6	72
29	Probing the Node Chemistry of a Metalâ€“Organic Framework to Achieve Ultrahigh Hydrophobicity and Highly Efficient CO₂/CH₄ Separation. ACS Sustainable Chemistry and Engineering, 2021, 9, 15897-15907.	3.2	17
30	Strongly emissive white-light-emitting silver iodide based inorganicâ€“organic hybrid structures with comparable quantum efficiency to commercial phosphors. Chemical Communications, 2020, 56, 1481-1484.	2.2	20
31	Crystalline Al₂O₃ modified porous poly(aryl ether ketone) (PAEK) composite separators for high performance lithium-ion batteries via an electrospinning technique. CrystEngComm, 2020, 22, 1577-1585.	1.3	7
32	A Boric Acid-Functionalized Lanthanide Metalâ€“Organic Framework as a Fluorescence â€œTurn-onâ€•Probe for Selective Monitoring of Hg²⁺ and CH₃Hg⁺. Analytical Chemistry, 2020, 92, 3366-3372.	3.2	135
33	Crystallizing Atomic Xenon in a Flexible MOF to Probe and Understand Its Temperature-Dependent Breathing Behavior and Unusual Gas Adsorption Phenomenon. Journal of the American Chemical Society, 2020, 142, 20088-20097.	6.6	62
34	A Facile Route to Efficient Water Oxidation Electrodes via Electrochemical Activation of Iron in Nickel Sulfate Solution. ACS Sustainable Chemistry and Engineering, 2020, 8, 15550-15559.	3.2	5
35	Polypyrrole assisted synthesis of nanosized iridium oxide for oxygen evolution reaction in acidic medium. International Journal of Hydrogen Energy, 2020, 45, 33491-33499.	3.8	11
36	Enhanced fluorescence by increasing dimensionality: a novel three-dimensional luminescent metalâ€“organic framework with rigidified ligands. CrystEngComm, 2020, 22, 5946-5948.	1.3	6

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37	A robust and multifunctional calcium coordination polymer as a selective fluorescent sensor for acetone and iron (+3) and as a tunable proton conductor. Journal of Materials Chemistry C, 2020, 8, 16784-16789.	2.7	18
38	Zero-dimensional ionic antimony halide inorganicâ€“organic hybrid with strong greenish yellow emission. Journal of Materials Chemistry C, 2020, 8, 7300-7303.	2.7	35
39	Highly selective C2H2 and CO2 capture and photoluminescence properties of two Tb(III)-based MOFs. Journal of Solid State Chemistry, 2020, 285, 121257.	1.4	4
40	Thermally Activated Adsorption in Metalâ€“Organic Frameworks with a Temperatureâ€Tunable Diffusion Barrier Layer. Angewandte Chemie - International Edition, 2020, 59, 18468-18472.	7.2	8
41	Separation of ethane and ethylene by a robust ethane-selective calcium-based metalâ€“organic framework. New Journal of Chemistry, 2020, 44, 11933-11936.	1.4	11
42	Thermally Activated Adsorption in Metalâ€“Organic Frameworks with a Temperatureâ€Tunable Diffusion Barrier Layer. Angewandte Chemie, 2020, 132, 18626-18630.	1.6	0
43	Adsorption of Fluorocarbons and Chlorocarbons by Highly Porous and Robust Fluorinated Zirconium Metalâ€“Organic Frameworks. Inorganic Chemistry, 2020, 59, 4167-4171.	1.9	23
44	Splitting Mono- and Dibranched Alkane Isomers by a Robust Aluminum-Based Metalâ€“Organic Framework Material with Optimal Pore Dimensions. Journal of the American Chemical Society, 2020, 142, 6925-6929.	6.6	60
45	Designer Metalâ€“Organic Frameworks for Sizeâ€Exclusionâ€Based Hydrocarbon Separations: Progress and Challenges. Advanced Materials, 2020, 32, e2002603.	11.1	182
46	Enhanced thermal stability and wettability of an electrospun fluorinated poly(aryl ether ketone) fibrous separator for lithium-ion batteries. New Journal of Chemistry, 2020, 44, 3838-3846.	1.4	8
47	High stability of ultra-small and isolated gold nanoparticles in metalâ€“organic framework materials. Journal of Materials Chemistry A, 2019, 7, 17536-17546.	5.2	41
48	Tuning the Channel Size and Structure Flexibility of Metalâ€“Organic Frameworks for the Selective Adsorption of Noble Gases. Inorganic Chemistry, 2019, 58, 15025-15028.	1.9	22
49	Blue-Light-Excitable, Quantum Yield Enhanced, Yellow-Emitting, Zirconium-Based Metalâ€“Organic Framework Phosphors Formed by Immobilizing Organic Chromophores. Crystal Growth and Design, 2019, 19, 6850-6854.	1.4	13
50	Magnesium based coordination polymers: Syntheses, structures, properties and applications. Coordination Chemistry Reviews, 2019, 399, 213025.	9.5	17
51	[Ba₁₃Sb₃₆Cl₃₄O₅₄]^{8â^'}: high-nuclearity cluster for the assembly of nanocluster-based compounds. Chemical Communications, 2019, 55, 7442-7445.	2.2	7
52	Microporous Metalâ€“Organic Frameworks for Adsorptive Separation of C5â€“C6 Alkane Isomers. Accounts of Chemical Research, 2019, 52, 1968-1978.	7.6	160
53	Reactivity of Atomic Layer Deposition Precursors with OH/H2O-Containing Metal Organic Framework Materials. Chemistry of Materials, 2019, 31, 2286-2295.	3.2	16
54	Fluorescent In based MOFs showing â€œturn onâ€luminescence towards thiols and acting as a ratiometric fluorescence thermometer. Journal of Materials Chemistry C, 2019, 7, 3049-3055.	2.7	39

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55	General strategies for effective capture and separation of noble gases by metalâ€“organic frameworks. Dalton Transactions, 2018, 47, 4027-4031.	1.6	33
56	Climbing the Volcano of Electrocatalytic Activity while Avoiding Catalyst Corrosion: Ni₃P, a Hydrogen Evolution Electrocatalyst Stable in Both Acid and Alkali. ACS Catalysis, 2018, 8, 4408-4419.	5.5	178
57	Iron-Based Metalâ€“Organic Framework with Hydrophobic Quadrilateral Channels for Highly Selective Separation of Hexane Isomers. ACS Applied Materials & Interfaces, 2018, 10, 6031-6038.	4.0	43
58	Role of Hydrogen Bonding on Transport of Coadsorbed Gases in Metalâ€“Organic Frameworks Materials. Journal of the American Chemical Society, 2018, 140, 856-859.	6.6	26
59	Topologically guided tuning of Zr-MOF pore structures for highly selective separation of C6 alkane isomers. Nature Communications, 2018, 9, 1745.	5.8	251
60	One-of-a-kind: a microporous metalâ€“organic framework capable of adsorptive separation of linear, mono- and di-branched alkane isomers via temperature- and adsorbate-dependent molecular sieving. Energy and Environmental Science, 2018, 11, 1226-1231.	15.6	103
61	Sensing and capture of toxic and hazardous gases and vapors by metalâ€“organic frameworks. Chemical Society Reviews, 2018, 47, 4729-4756.	18.7	530
62	A CuI modified Mg-coordination polymer as a ratiometric fluorescent probe for toxic thiol molecules. Journal of Materials Chemistry C, 2018, 6, 13367-13374.	2.7	12
63	Tailorâ€Made Microporous Metalâ€“Organic Frameworks for the Full Separation of Propane from Propylene Through Selective Size Exclusion. Advanced Materials, 2018, 30, e1805088.	11.1	241
64	Effects of an electrospun fluorinated poly(ether ether ketone) separator on the enhanced safety and electrochemical properties of lithium ion batteries. Electrochimica Acta, 2018, 290, 150-164.	2.6	48
65	Controlling Chemical Reactions in Confined Environments: Water Dissociation in MOF-74. Applied Sciences (Switzerland), 2018, 8, 270.	1.3	10
66	A dual linker metal-organic framework demonstrating ligand-based emission for the selective detection of carbon tetrachloride. Inorganica Chimica Acta, 2018, 470, 312-317.	1.2	7
67	Innovative application of metal-organic frameworks for encapsulation and controlled release of allyl isothiocyanate. Food Chemistry, 2017, 221, 926-935.	4.2	64
68	Synthesis, Structure, and Selective Gas Adsorption of a Single-Crystalline Zirconium Based Microporous Metalâ€“Organic Framework. Crystal Growth and Design, 2017, 17, 2034-2040.	1.4	24
69	Interaction of Acid Gases SO₂ and NO₂ with Coordinatively Unsaturated Metal Organic Frameworks: M-MOF-74 (M = Zn, Mg, Ni, Co). Chemistry of Materials, 2017, 29, 4227-4235.	3.2	99
70	Oxygen-selective adsorption in RPM3-Zn metal organic framework. Chemical Engineering Science, 2017, 165, 122-130.	1.9	7
71	Capture of organic iodides from nuclear waste by metal-organic framework-based molecular traps. Nature Communications, 2017, 8, 485.	5.8	171
72	Efficient kinetic separation of propene and propane using two microporous metal organic frameworks. Chemical Communications, 2017, 53, 9332-9335.	2.2	91

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73	Influence of Metalâ€“Organic Framework Porosity on Hydrogen Generation from Nanoconfined Ammonia Borane. Journal of Physical Chemistry C, 2017, 121, 27369-27378.	1.5	40
74	Functionalized metal organic frameworks for effective capture of radioactive organic iodides. Faraday Discussions, 2017, 201, 47-61.	1.6	38
75	Separation of Light Hydrocarbons through Selective Molecular Exclusion by a Microporous Metalâ€“Organic Framework. ChemPlusChem, 2016, 81, 872-876.	1.3	8
76	Ligand Functionalization in Metal-Organic Frameworks for Enhanced Carbon Dioxide Adsorption. Chemical Record, 2016, 16, 1298-1310.	2.9	26
77	Trapping gases in metal-organic frameworks with a selective surface molecular barrier layer. Nature Communications, 2016, 7, 13871.	5.8	60
78	Direct Structural Identification of Gas Induced Gateâ€Opening Coupled with Commensurate Adsorption in a Microporous Metalâ€“Organic Framework. Chemistry - A European Journal, 2016, 22, 11816-11825.	1.7	27
79	Selective Carbon Dioxide Adsorption by Two Robust Microporous Coordination Polymers. Inorganic Chemistry, 2016, 55, 12923-12929.	1.9	25
80	Chromophore-immobilized luminescent metalâ€“organic frameworks as potential lighting phosphors and chemical sensors. Chemical Communications, 2016, 52, 10249-10252.	2.2	70
81	Highly Efficient Luminescent Metalâ€“Organic Framework for the Simultaneous Detection and Removal of Heavy Metals from Water. ACS Applied Materials & Interfaces, 2016, 8, 30294-30303.	4.0	320
82	A generalized adsorption-phase transition model to describe adsorption rates in flexible metal organic framework RPM3-Zn. Dalton Transactions, 2016, 45, 4242-4257.	1.6	12
83	The moisture-triggered controlled release of a natural food preservative from a microporous metalâ€“organic framework. Chemical Communications, 2016, 52, 2129-2132.	2.2	37
84	Coordination Geometry and Oxidation State Requirements of Corner-Sharing MnO₆ Octahedra for Water Oxidation Catalysis: An Investigation of Manganite (Î³-MnOOH). ACS Catalysis, 2016, 6, 2089-2099.	5.5	156
85	Light Hydrocarbon Adsorption Mechanisms in Two Calcium-Based Microporous Metal Organic Frameworks. Chemistry of Materials, 2016, 28, 1636-1646.	3.2	87
86	Direct structural evidence of commensurate-to-incommensurate transition of hydrocarbon adsorption in a microporous metal organic framework. Chemical Science, 2016, 7, 759-765.	3.7	24
87	Effect of temperature on hydrogen and carbon dioxide adsorption hysteresis in an ultramicroporous MOF. Microporous and Mesoporous Materials, 2016, 219, 186-189.	2.2	35
88	Surface and Structural Investigation of a MnO_x Birnessiteâ€Type Water Oxidation Catalyst Formed under Photocatalytic Conditions. Chemistry - A European Journal, 2015, 21, 14218-14228.	1.7	29
89	Effective Detection of Mycotoxins by a Highly Luminescent Metalâ€“Organic Framework. Journal of the American Chemical Society, 2015, 137, 16209-16215.	6.6	350
90	Achieving exceptionally high luminescence quantum efficiency by immobilizing an AIE molecular chromophore into a metalâ€“organic framework. Chemical Communications, 2015, 51, 3045-3048.	2.2	148

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91	In situ spectroscopy studies of CO₂ adsorption in a dually functionalized microporous metalâ€“organic framework. Journal of Materials Chemistry A, 2015, 3, 4945-4953.	5.2	41
92	New hybrid lead iodides: From one-dimensional chain to two-dimensional layered perovskite structure. Journal of Solid State Chemistry, 2015, 230, 143-148.	1.4	25
93	Evidence of Amineâ€“CO₂ Interactions in Two Pillaredâ€Layer MOFs Probed by Xâ€ray Crystallography. Chemistry - A European Journal, 2015, 21, 7238-7244.	1.7	36
94	Synthesis, structure and enhanced photoluminescence properties of two robust, water stable calcium and magnesium coordination networks. Dalton Transactions, 2015, 44, 20459-20463.	1.6	14
95	Water Reaction Mechanism in Metal Organic Frameworks with Coordinatively Unsaturated Metal Ions: MOF-74. Chemistry of Materials, 2014, 26, 6886-6895.	3.2	149
96	The first example of commensurate adsorption of atomic gas in a MOF and effective separation of xenon from other noble gases. Chemical Science, 2014, 5, 620-624.	3.7	203
97	Effective sensing of RDX via instant and selective detection of ketone vapors. Chemical Science, 2014, 5, 4873-4877.	3.7	112
98	Vapor phase detection of nitroaromatic and nitroaliphatic explosives by fluorescence active metalâ€“organic frameworks. CrystEngComm, 2013, 15, 9745.	1.3	95
99	Supramolecular vesicle: triggered by formation of pseudorotaxane between cucurbit[6]uril and surfactant. Chemical Communications, 2011, 47, 11315.	2.2	25
100	Metalâ€Organic Frameworks and their Applications in Hydrogen and Oxygen Evolution Reactions. , 0, , .		5