Hongliang Huang

List of Publications by Year in Descending Order

119 papers	5,329 citations	45 h-index	70 g-index
128 ext. papers	6,785 ext. citations	8 avg, IF	6.13 L-index

#	Paper	IF	Citations
119	Co-assembly of soluble metal-organic polyhedrons for high-flux thin-film nanocomposite membranes.. *Journal of Colloid and Interface Science*, **2022**, 615, 10-18	9.3	1
118	Superhydrophobic conjugated porous organic polymer coated polyurethane sponge for efficient oil/water separation. *Journal of Porous Materials*, **2022**, 29, 433	2.4	0
117	Synergistic disulfide sites of tetrathiafulvalene-based metal□organic framework for highly efficient and selective mercury capture. *Separation and Purification Technology*, **2022**, 287, 120577	8.3	0
116	Design and synthesis of novel pyridine-rich cationic covalent triazine framework for CO2 capture and conversion. *Microporous and Mesoporous Materials*, **2022**, 329, 111526	5.3	7
115	Robust carbazole-based covalent triazine frameworks with defective ultramicropore structure for efficient ethane-selective ethane-ethylene separation. *Chemical Engineering Journal*, **2022**, 427, 131726	14.7	4
114	Nanochannel Engineering in Metal□Organic Frameworks by Grafting Sulfonic Groups for Boosting Proton Conductivity. *ACS Applied Energy Materials*, **2022**, 5, 3235-3241	6.1	1
113	Confined Ionic Liquid-Built Gas Transfer Pathways for Efficient Propylene/Propane Separation. *ACS Applied Materials & Interfaces*, **2021**, 13, 49050-49057	9.5	1
112	A Hydrolytically Stable Cu(II)-Based Metal-Organic Framework with Easily Accessible Ligands for Water Harvesting. *ACS Applied Materials & Interfaces*, **2021**, 13, 49509-49518	9.5	1
111	Synergistic effect of carboxyl and sulfate groups for effective removal of radioactive strontium ion in a Zr-metal-organic framework. *Water Science and Technology*, **2021**, 83, 2001-2011	2.2	3
110	Structural and Hydrolytic Stability of Coordinatively Unsaturated Metal□Organic Frameworks M3(BTC)2 (M = Cu, Co, Mn, Ni, and Zn): A Combined DFT and Experimental Study. *Journal of Physical Chemistry C*, **2021**, 125, 5832-5847	3.8	2
109	Synergistic dual-pyrazol sites of metal-organic framework for efficient separation and recovery of transition metals from wastewater. *Chemical Engineering Journal*, **2021**, 410, 128431	14.7	8
108	Air-Steam Etched Construction of Hierarchically Porous Metal-Organic Frameworks. *Chinese Journal of Chemistry*, **2021**, 39, 1538-1544	4.9	2
107	Bioinspired Construction of Uranium Ion Trap with Abundant Phosphate Functional Groups. *ACS Applied Materials & Interfaces*, **2021**, 13, 27049-27056	9.5	7
106	Highly selective gas transport channels in mixed matrix membranes fabricated by using water-stable Cu-BTC. *Separation and Purification Technology*, **2021**, 257, 117979	8.3	9
105	Pore engineering of ZIF-8 with ionic liquids for membrane-based CO2 separation: bearing functional group effect. *Green Chemical Engineering*, **2021**, 2, 104-110	3	5
104	Monodentate AIEgen Anchored on Metal-Organic Framework for Fast Fluorescence Sensing of Phosphate. *Chinese Journal of Chemistry*, **2021**, 39, 99-105	4.9	5
103	Unexpected effect of stacking manner of covalent triazine polymer on photocatalytic hydrogen production. *Journal of Materials Science*, **2021**, 56, 5772-5785	4.3	2

102	Integrated High Water Affinity and Size Exclusion Effect on Robust Cu-Based Metal Organic Framework for Efficient Ethanol Water Separation. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 3195-3202	8.3	4
101	Self-adaptive dual-metal-site pairs in metal-organic frameworks for selective CO2 photoreduction to CH4. *Nature Catalysis*, **2021**, 4, 719-729	36.5	80
100	Morphology controlled synthesis of Fe2O3-x with benzimidazole-modified Fe-MOFs for enhanced photo-Fenton-like catalysis. *Applied Catalysis B: Environmental*, **2021**, 291, 120129	21.8	29
99	Metal-organic polyhedron membranes for molecular separation. *Journal of Membrane Science*, **2021**, 632, 119354	9.6	9
98	Synergistic effect of MOF-Directed acid-base pairs for enhanced proton conduction. *Microporous and Mesoporous Materials*, **2021**, 323, 111199	5.3	0
97	Simultaneous introduction of oxygen vacancies and hierarchical pores into titanium-based metal-organic framework for enhanced photocatalytic performance. *Journal of Colloid and Interface Science*, **2021**, 599, 785-794	9.3	4
96	Postsynthetic Oxidation of the Coordination Site in a Heterometallic Metal Organic Framework: Tuning Catalytic Behaviors. *Chemistry of Materials*, **2020**, 32, 5192-5199	9.6	11
95	Microporous Hydrogen-Bonded Organic Framework for Highly Efficient Turn-Up Fluorescent Sensing of Aniline. *Journal of the American Chemical Society*, **2020**, 142, 12478-12485	16.4	73
94	Metal-Free 2D/2D Black Phosphorus and Covalent Triazine Framework Heterostructure for CO2 Photoreduction. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 5175-5183	8.3	42
93	Synergistic dual-Li+ sites for CO2 separation in metal-organic framework composites. *Chemical Engineering Journal*, **2020**, 402, 126201	14.7	7
92	Superhydrophobic Ether-Based Porous Organic Polymer-Coated Polyurethane Sponge for Highly Efficient Oil Water Separation. *Industrial & Engineering Chemistry Research*, **2020**, 59, 13228-13238	3.9	11
91	Methyl-Shield Cu-BTC with High Water Stability through One-Step Synthesis and In Situ Functionalization. *Industrial & Engineering Chemistry Research*, **2020**, 59, 12451-12457	3.9	11
90	Porous ZIF-8 Thin Layer Coating on ZnO Hollow Nanofibers for Enhanced Acetone Sensing. *ChemistrySelect*, **2020**, 5, 2401-2407	1.8	5
89	Quantum sieving of H2/D2 in MOFs: a study on the correlation between the separation performance, pore size and temperature. *Journal of Materials Chemistry A*, **2020**, 8, 6319-6327	13	8
88	Single-Atom Pt N3 Sites on the Stable Covalent Triazine Framework Nanosheets for Photocatalytic N2 Fixation. *ACS Catalysis*, **2020**, 10, 2431-2442	13.1	82
87	A Highly Water-Stable -Carborane-Based Copper Metal-Organic Framework for Efficient High-Temperature Butanol Separation. *Journal of the American Chemical Society*, **2020**, 142, 8299-8311	16.4	27
86	Rigidifying induced fluorescence enhancement in 2D porous covalent triazine framework nanosheets for the simultaneously luminous detection and adsorption removal of antibiotics. *Chemical Engineering Journal*, **2020**, 384, 123382	14.7	51
85	Solvent-free mechanochemical route for the construction of ionic liquid and mixed-metal MOF composites for synergistic CO2 fixation. *Journal of Materials Chemistry A*, **2020**, 8, 3180-3185	13	38

84	Theoretical Insights into the Initial Hydrolytic Breakdown of HKUST-1. *Journal of Physical Chemistry C*, **2020**, 124, 1991-2001	3.8	12
83	A thiadiazole-based covalent triazine framework nanosheet for highly selective and sensitive primary aromatic amine detection among various amines. *Journal of Materials Chemistry A*, **2020**, 8, 16542-16550	13	24
82	Construction of an anionic porous framework via a post-synthesis strategy to regulate the adsorption behavior of organic pollutants. *Journal of Materials Science*, **2020**, 55, 14751-14760	4.3	4
81	Direct Observation of Li Ions Trapped in a Mg-Templated Metal-Organic Framework. *Inorganic Chemistry*, **2019**, 58, 8922-8926	5.1	9
80	Exploration of functional MOFs for efficient removal of fluoroquinolone antibiotics from water. *Microporous and Mesoporous Materials*, **2019**, 286, 84-91	5.3	43
79	Synergy Effect of Pore Structure and Amount of Carboxyl Site for Effective Removal of Pb2+ in Metal□Organic Frameworks. *Journal of Chemical & Engineering Data*, **2019**, 64, 2728-2735	2.8	20
78	Highly Chemically Stable MOFs with Trifluoromethyl Groups: Effect of Position of Trifluoromethyl Groups on Chemical Stability. *Inorganic Chemistry*, **2019**, 58, 5725-5732	5.1	23
77	Specific K Binding Sites as CO Traps in a Porous MOF for Enhanced CO Selective Sorption. *Small*, **2019**, 15, e1900426	11	45
76	In Vitro Toxicity Study of a Porous Iron(III) Metal-Organic Framework. *Molecules*, **2019**, 24,	4.8	30
75	Effective Removal of Antibacterial Drugs from Aqueous Solutions Using Porous Metal□Organic Frameworks. *Journal of Inorganic and Organometallic Polymers and Materials*, **2019**, 29, 1305-1313	3.2	6
74	Efficient separation of vitamins mixture in aqueous solution using a stable zirconium-based metal-organic framework. *Journal of Colloid and Interface Science*, **2019**, 555, 714-721	9.3	10
73	Stable and size-controllable ultrafine Pt nanoparticles derived from a MOF-based single metal ion trap for efficient electrocatalytic hydrogen evolution. *Journal of Materials Chemistry A*, **2019**, 7, 20239-20246	13	17
72	Ultramicroporous Metal□Organic Framework with Polar Groups for Efficiently Recovering Propylene from Polypropylene Off-Gas. *Industrial & Engineering Chemistry Research*, **2019**, 58, 14333-14339	3.9	6
71	Controlling Metal Ion Counter Diffusion in Confined Spaces for In Situ Growth of Mixed Metal MOF Membranes for Gas Separation. *ChemNanoMat*, **2019**, 5, 1244-1250	3.5	7
70	IL-induced formation of dynamic complex iodide anions in IL@MOF composites for efficient iodine capture. *Journal of Materials Chemistry A*, **2019**, 7, 18324-18329	13	37
69	Fluorescence sensing of H2O in alcohols solvents based on instability of the by-product from synthesis of metal-organic framework. *Microporous and Mesoporous Materials*, **2019**, 290, 109624	5.3	3
68	Metal-organic framework encapsulated single-atom Pt catalysts for efficient photocatalytic hydrogen evolution. *Journal of Catalysis*, **2019**, 375, 351-360	7.3	53
67	A temperature-responsive smart molecular gate in a metal□organic framework for task-specific gas separation. *Journal of Materials Chemistry A*, **2019**, 7, 26574-26579	13	10

66	A highly fluorescent Al3+-based metal–organic framework (CYCU-3) for selective and sensitive sensing of 2,4,6-trinitrophenol. *Journal of Porous Materials*, **2018**, 25, 1597-1602	2.4	2
65	Fabrication of mixed-matrix membranes with MOF-derived porous carbon for CO2 separation. *AICHE Journal*, **2018**, 64, 3400-3409	3.6	20
64	Synthesis of hierarchical-pore metal-organic framework on liter scale for large organic pollutants capture in wastewater. *Journal of Colloid and Interface Science*, **2018**, 525, 39-47	9.3	38
63	Design of "turn-on" fluorescence sensor for L-Cysteine based on the instability of metal-organic frameworks. *Microporous and Mesoporous Materials*, **2018**, 268, 88-92	5.3	33
62	A versatile MOF-based trap for heavy metal ion capture and dispersion. *Nature Communications*, **2018**, 9, 187	17.4	349
61	A metal-organic framework with large 1-D channels and rich OH sites for high-efficiency chloramphenicol removal from water. *Journal of Colloid and Interface Science*, **2018**, 526, 28-34	9.3	51
60	Aqueous phase sensing of bismuth ion using fluorescent metal-organic framework. *Sensors and Actuators B: Chemical*, **2018**, 266, 323-328	8.5	26
59	Flexibility induced high-performance MOF-based adsorbent for nitroimidazole antibiotics capture. *Chemical Engineering Journal*, **2018**, 333, 678-685	14.7	101
58	Integrated adsorption and catalytic degradation of safranine T by a porous covalent triazine-based framework. *Journal of Colloid and Interface Science*, **2018**, 532, 1-11	9.3	29
57	Facile Approach to Graft Ionic Liquid into MOF for Improving the Efficiency of CO Chemical Fixation. *ACS Applied Materials & Interfaces*, **2018**, 10, 27124-27130	9.5	94
56	Improving particle dispersity and CO2 separation performance of amine-functionalized CAU-1 based mixed matrix membranes with polyethyleneimine-grafting modification. *Chemical Engineering Science*, **2018**, 189, 277-285	4.4	27
55	Functionalized metal-organic frameworks for effective removal of rocephin in aqueous solutions. *Journal of Colloid and Interface Science*, **2018**, 514, 234-239	9.3	46
54	Zirconium-Porphyrin PCN-222: pH-responsive Controlled Anticancer Drug Oridonin. *Evidence-based Complementary and Alternative Medicine*, **2018**, 2018, 3249023	2.3	6
53	Biocompatible Fe-Based Micropore Metal-Organic Frameworks as Sustained-Release Anticancer Drug Carriers. *Molecules*, **2018**, 23,	4.8	30
52	Ultrahigh effective H2/D2 separation in an ultramicroporous metal–organic framework material through quantum sieving. *Journal of Materials Chemistry A*, **2018**, 6, 19954-19959	13	21
51	Highly Porous Covalent Triazine Frameworks for Reversible Iodine Capture and Efficient Removal of Dye. *Industrial & Engineering Chemistry Research*, **2018**, 57, 15114-15121	3.9	45
50	Screening of Metal-Organic Frameworks for Highly Effective Hydrogen Isotope Separation by Quantum Sieving. *ACS Applied Materials & Interfaces*, **2018**, 10, 32128-32132	9.5	11
49	ZIF-67 as Continuous Self-Sacrifice Template Derived NiCo2O4/Co,N-CNTs Nanocages as Efficient Bifunctional Electrocatalysts for Rechargeable Zn–Air Batteries. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 10021-10029	8.3	60

48	A Fluorescent Zirconium-Based Metal-Organic Framework for Selective Detection of Nitro Explosives and Metal Ions. *Chinese Journal of Chemistry*, **2017**, 35, 1091-1097	4.9	9
47	Reversing the Dye Adsorption and Separation Performance of Metal□Organic Frameworks via Introduction of ▯SO3H Groups. *Industrial & Engineering Chemistry Research*, **2017**, 56, 4496-4501	3.9	88
46	High-Flux Graphene Oxide Membranes Intercalated by Metal-Organic Framework with Highly Selective Separation of Aqueous Organic Solution. *ACS Applied Materials & Interfaces*, **2017**, 9, 1710-1718	9.5	78
45	Mixed matrix membranes incorporated with polydopamine-coated metal-organic framework for dehydration of ethylene glycol by pervaporation. *Journal of Membrane Science*, **2017**, 527, 8-17	9.6	51
44	Sulfate-Rich Metal□Organic Framework for High Efficiency and Selective Removal of Barium from Nuclear Wastewater. *Industrial & Engineering Chemistry Research*, **2017**, 56, 13866-13873	3.9	17
43	A thiophene-containing covalent triazine-based framework with ultramicropore for CO2 capture. *Journal of Energy Chemistry*, **2017**, 26, 902-908	12	24
42	A molecular-level superhydrophobic external surface to improve the stability of metal□organic frameworks. *Journal of Materials Chemistry A*, **2017**, 5, 18770-18776	13	96
41	Enhancing Higher Hydrocarbons Capture for Natural Gas Upgrading by Tuning van der Waals Interactions in fcu-Type Zr-MOFs. *Industrial & Engineering Chemistry Research*, **2017**, 56, 14633-14641	3.9	26
40	N,N?-Bicarbazole: A Versatile Building Block toward the Construction of Conjugated Porous Polymers for CO2 Capture and Dyes Adsorption. *Macromolecules*, **2017**, 50, 4993-5003	5.5	82
39	Preparation of thin film nanocomposite membranes with surface modified MOF for high flux organic solvent nanofiltration. *AICHE Journal*, **2017**, 63, 1303-1312	3.6	84
38	In-situ synthesis of SiO2@MOF composites for high-efficiency removal of aniline from aqueous solution. *Applied Surface Science*, **2016**, 390, 506-512	6.7	30
37	In-Situ Ligand Formation-Driven Preparation of a Heterometallic Metal-Organic Framework for Highly Selective Separation of Light Hydrocarbons and Efficient Mercury Adsorption. *ACS Applied Materials & Interfaces*, **2016**, 8, 23331-7	9.5	61
36	A series of europium-based metal organic frameworks with tuned intrinsic luminescence properties and detection capacities. *RSC Advances*, **2016**, 6, 111934-111941	3.7	24
35	Enhancing CO 2 adsorption and separation ability of Zr(IV)-based metal□organic frameworks through ligand functionalization under the guidance of the quantitative structure□property relationship model. *Chemical Engineering Journal*, **2016**, 289, 247-253	14.7	53
34	Rational construction of defects in a metal□organic framework for highly efficient adsorption and separation of dyes. *Chemical Engineering Journal*, **2016**, 289, 486-493	14.7	149
33	Highly selective and sensitive metal-organic framework fluorescent probe for Cu2+ through rational design of binding sites. *Microporous and Mesoporous Materials*, **2016**, 224, 149-154	5.3	38
32	Radioactive Barium Ion Trap Based on Metal-Organic Framework for Efficient and Irreversible Removal of Barium from Nuclear Wastewater. *ACS Applied Materials & Interfaces*, **2016**, 8, 8527-35	9.5	90
31	Effects of ionic liquid dispersion in metal-organic frameworks and covalent organic frameworks on CO2 capture: A computational study. *Chemical Engineering Science*, **2016**, 140, 1-9	4.4	39

30	Metal-organic frameworks for highly efficient adsorption of dibenzothiophene from liquid fuels. *AICHE Journal*, **2016**, 62, 4491-4496	3.6	32
29	Covalent Triazine-Based Frameworks with Ultramicropores and High Nitrogen Contents for Highly Selective CO2 Capture. *Environmental Science & Technology*, **2016**, 50, 4869-76	10.3	149
28	Fabrication of mixed-matrix membrane containing metal–organic framework composite with task-specific ionic liquid for efficient CO2 separation. *Journal of Materials Chemistry A*, **2016**, 4, 7281-7288	13	109
27	A GO-assisted method for the preparation of ultrathin covalent organic framework membranes for gas separation. *Journal of Materials Chemistry A*, **2016**, 4, 13444-13449	13	96
26	Mixed matrix membranes incorporated with amine-functionalized titanium-based metal-organic framework for CO2/CH4 separation. *Journal of Membrane Science*, **2015**, 478, 130-139	9.6	104
25	Synthesis of MIL-88B(Fe)/Matrimid mixed-matrix membranes with high hydrogen permselectivity. *RSC Advances*, **2015**, 5, 7253-7259	3.7	30
24	Computational exploration of H2S/CH4 mixture separation using acid-functionalized UiO-66(Zr) membrane and composites. *Chinese Journal of Chemical Engineering*, **2015**, 23, 1291-1299	3.2	30
23	Enhanced removal of iodide from water induced by a metal-incorporated porous metal–organic framework. *Applied Surface Science*, **2015**, 351, 760-764	6.7	52
22	Recovery of acetone from aqueous solution by ZIF-7/PDMS mixed matrix membranes. *RSC Advances* , **2015**, 5, 28394-28400	3.7	29
21	An ultrastable Zr metal–organic framework with a thiophene-type ligand containing methyl groups. *CrystEngComm*, **2015**, 17, 3586-3590	3.3	47
20	Synthesis of CNT@MIL-68(Al) composites with improved adsorption capacity for phenol in aqueous solution. *Chemical Engineering Journal*, **2015**, 275, 134-141	14.7	84
19	Ionic liquid functionalized multi-walled carbon nanotubes/zeolitic imidazolate framework hybrid membranes for efficient H2/CO2 separation. *Chemical Communications*, **2015**, 51, 17281-4	5.8	32
18	Selective removal of transition metal ions from aqueous solution by metal–organic frameworks. *RSC Advances*, **2015**, 5, 72107-72112	3.7	25
17	An in situ self-assembly template strategy for the preparation of hierarchical-pore metal-organic frameworks. *Nature Communications*, **2015**, 6, 8847	17.4	225
16	A high surface area Zr(IV)-based metal–organic framework showing stepwise gas adsorption and selective dye uptake. *Journal of Solid State Chemistry*, **2015**, 223, 104-108	3.3	37
15	Proton Conductivities in Functionalized UiO-66: Tuned Properties, Thermogravimetry Mass, and Molecular Simulation Analyses. *Crystal Growth and Design*, **2015**, 15, 5827-5833	3.5	135
14	Mixed-matrix membranes containing functionalized porous metal-organic polyhedrons for the effective separation of CO2-CH4 mixture. *Chemical Communications*, **2015**, 51, 4249-51	5.8	60
13	Efficient capture of nitrobenzene from waste water using metal–organic frameworks. *Chemical Engineering Journal*, **2014**, 246, 142-149	14.7	141

12	The stability and defluoridation performance of MOFs in fluoride solutions. *Microporous and Mesoporous Materials*, **2014**, 185, 72-78	5.3	129
11	Separations of substituted benzenes and polycyclic aromatic hydrocarbons using normal- and reverse-phase high performance liquid chromatography with UiO-66 as the stationary phase. *Journal of Chromatography A*, **2014**, 1370, 121-8	4.5	52
10	Highly selective adsorption and separation of aniline/phenol from aqueous solutions by microporous MIL-53(Al): a combined experimental and computational study. *Langmuir*, **2014**, 30, 12229-35	4	35
9	Tuning CO2 selective adsorption over N2 and CH4 in UiO-67 analogues through ligand functionalization. *Inorganic Chemistry*, **2014**, 53, 9254-9	5.1	179
8	Hybrid membranes of metal-organic molecule nanocages for aromatic/aliphatic hydrocarbon separation by pervaporation. *Chemical Communications*, **2014**, 50, 13921-3	5.8	46
7	A new metal–organic framework with high stability based on zirconium for sensing small molecules. *Microporous and Mesoporous Materials*, **2013**, 171, 118-124	5.3	58
6	Understanding the Effect of Trace Amount of Water on CO2 Capture in Natural Gas Upgrading in Metal–Organic Frameworks: A Molecular Simulation Study. *Industrial & Engineering Chemistry Research*, **2012**, 51, 10031-10038	3.9	60
5	Adsorption Behavior of Metal–Organic Frameworks for Thiophenic Sulfur from Diesel Oil. *Industrial & Engineering Chemistry Research*, **2012**, 51, 12449-12455	3.9	64
4	Cooperative effect of temperature and linker functionality on CO2 capture from industrial gas mixtures in metal-organic frameworks: a combined experimental and molecular simulation study. *Physical Chemistry Chemical Physics*, **2012**, 14, 2317-25	3.6	68
3	Helium Recovery by a Cu-BTC Metal–Organic-Framework Membrane. *Industrial & Engineering Chemistry Research*, **2012**, 51, 11274-11278	3.9	51
2	Revealing the structure-property relationships of metal-organic frameworks for CO2 capture from flue gas. *Langmuir*, **2012**, 28, 12094-9	4	103
1	Effect of temperature on gas adsorption and separation in ZIF-8: A combined experimental and molecular simulation study. *Chemical Engineering Science*, **2011**, 66, 6297-6305	4.4	122