

# Rui-Biao Lin

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

114  
papers

8,774  
citations

48  
h-index

93  
g-index

122  
ext. papers

11,366  
ext. citations

12  
avg, IF

6.66  
L-index

#	Paper	IF	Citations
114	Fine pore engineering in a series of isoreticular metal-organic frameworks for efficient CH <sub>4</sub> /CO <sub>2</sub> separation.. <i>Nature Communications</i> , <b>2022</b> , 13, 200	17.4	20
113	Maximizing acetylene packing density for highly efficient C <sub>2</sub> H <sub>2</sub> /CO <sub>2</sub> separation through immobilization of amine sites within a prototype MOF. <i>Chemical Engineering Journal</i> , <b>2022</b> , 431, 134184	14.7	7
112	Identifying the Gate-Opening Mechanism in the Flexible Metal-Organic Framework UTSA-300.. <i>Inorganic Chemistry</i> , <b>2022</b> ,	5.1	2
111	Microporous Zinc Formate for Efficient Separation of Acetylene over Carbon Dioxide. <i>Chemical Research in Chinese Universities</i> , <b>2022</b> , 38, 87-91	2.2	1
110	An ultramicroporous metal-organic framework with dual functionalities for high sieving separation of CO <sub>2</sub> from CH <sub>4</sub> and N <sub>2</sub> . <i>Chemical Engineering Journal</i> , <b>2022</b> , 446, 137101	14.7	2
109	A Molecular Compound for Highly Selective Purification of Ethylene. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> ,	16.4	4
108	Old Materials for New Functions: Recent Progress on Metal Cyanide Based Porous Materials. <i>Advanced Science</i> , <b>2021</b> , e2104234	13.6	4
107	A dynamic MOF for efficient purification of propylene. <i>Science China Chemistry</i> , <b>2021</b> , 64, 2053	7.9	0
106	Electrostatically Driven Selective Adsorption of Carbon Dioxide over Acetylene in an Ultramicroporous Material. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 9604-9609	16.4	26
105	Electrostatically Driven Selective Adsorption of Carbon Dioxide over Acetylene in an Ultramicroporous Material. <i>Angewandte Chemie</i> , <b>2021</b> , 133, 9690-9695	3.6	7
104	Realization of Ethylene Production from Its Quaternary Mixture through Metal-Organic Framework Materials. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 22514-22520	9.5	8
103	A Microporous Hydrogen-Bonded Organic Framework for the Efficient Capture and Purification of Propylene. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 20400-20406	16.4	26
102	Ethylene/ethane separation in a stable hydrogen-bonded organic framework through a gating mechanism. <i>Nature Chemistry</i> , <b>2021</b> , 13, 933-939	17.6	45
101	Achieving High Performance Metal-Organic Framework Materials through Pore Engineering. <i>Accounts of Chemical Research</i> , <b>2021</b> , 54, 3362-3376	24.3	37
100	Highly Selective Adsorption of Carbon Dioxide over Acetylene in an Ultramicroporous Metal-Organic Framework. <i>Advanced Materials</i> , <b>2021</b> , 33, e2105880	24	14
99	Optimizing Pore Space for Flexible-Robust Metal-Organic Framework to Boost Trace Acetylene Removal. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 9744-9751	16.4	66
98	Optimization of the Pore Structures of MOFs for Record High Hydrogen Volumetric Working Capacity. <i>Advanced Materials</i> , <b>2020</b> , 32, e1907995	24	48

97	Gas Separation via Hybrid Metal-Organic Framework/Polymer Membranes. <i>Trends in Chemistry</i> , <b>2020</b> , 2, 254-269	14.8	38
96	A microporous metal-organic framework with basic sites for efficient C <sub>2</sub> H <sub>2</sub> /CO <sub>2</sub> separation. <i>Journal of Solid State Chemistry</i> , <b>2020</b> , 284, 121209	3.3	10
95	Mixed Metal-Organic Framework with Multiple Binding Sites for Efficient C <sub>2</sub> H <sub>2</sub> /CO <sub>2</sub> Separation. <i>Angewandte Chemie</i> , <b>2020</b> , 132, 4426-4430	3.6	32
94	Mechanochemical synthesis of an ethylene sieve UTSA-280. <i>Journal of Solid State Chemistry</i> , <b>2020</b> , 287, 121321	3.3	3
93	An Ultramicroporous Metal-Organic Framework for High Sieving Separation of Propylene from Propane. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 17795-17801	16.4	67
92	Emerging 2D functional metal-organic framework materials. <i>National Science Review</i> , <b>2020</b> , 7, 3-5	10.8	3
91	Mixed Metal-Organic Framework with Multiple Binding Sites for Efficient C <sub>2</sub> H <sub>2</sub> /CO <sub>2</sub> Separation. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 4396-4400	16.4	169
90	Novel route to size-controlled synthesis of MnFeO@MOF core-shell nanoparticles. <i>Journal of Solid State Chemistry</i> , <b>2020</b> , 283, 121127-121127	3.3	3
89	Microporous Metal-Organic Framework Materials for Gas Separation. <i>CheM</i> , <b>2020</b> , 6, 337-363	16.2	234
88	Doubly Interpenetrated Metal-Organic Framework of pcu Topology for Selective Separation of Propylene from Propane. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 48712-48717	9.5	8
87	Isorecticular Microporous Metal-Organic Frameworks for Carbon Dioxide Capture. <i>Inorganic Chemistry</i> , <b>2020</b> , 59, 17143-17148	5.1	11
86	Hydrogen-Bonded Organic Frameworks as a Tunable Platform for Functional Materials. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 14399-14416	16.4	132
85	Tuning Gate-Opening of a Flexible Metal-Organic Framework for Ternary Gas Sieving Separation. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 22756-22762	16.4	73
84	Tuning Gate-Opening of a Flexible Metal-Organic Framework for Ternary Gas Sieving Separation. <i>Angewandte Chemie</i> , <b>2020</b> , 132, 22944-22950	3.6	21
83	An Ultramicroporous Metal-Organic Framework for Sieving Separation of Carbon Dioxide from Methane. <i>Small Structures</i> , <b>2020</b> , 1, 2000022	8.7	16
82	A microporous metal-organic framework with naphthalene diimide groups for high methane storage. <i>Dalton Transactions</i> , <b>2020</b> , 49, 3658-3661	4.3	21
81	A stable zirconium based metal-organic framework for specific recognition of representative polychlorinated dibenzo-p-dioxin molecules. <i>Nature Communications</i> , <b>2019</b> , 10, 3861	17.4	98
80	Microporous Copper Isophthalate Framework of mot Topology for C <sub>2</sub> H <sub>2</sub> /CO <sub>2</sub> Separation. <i>Crystal Growth and Design</i> , <b>2019</b> , 19, 5829-5835	3.5	27

79	Multifunctional porous hydrogen-bonded organic framework materials. <i>Chemical Society Reviews</i> , <b>2019</b> , 48, 1362-1389	58.5	358
78	Our journey of developing multifunctional metal-organic frameworks. <i>Coordination Chemistry Reviews</i> , <b>2019</b> , 384, 21-36	23.2	86
77	A microporous metal-organic framework of sql topology for C <sub>2</sub> H <sub>2</sub> /CO <sub>2</sub> separation. <i>Inorganica Chimica Acta</i> , <b>2019</b> , 495, 118938	2.7	24
76	Tunable titanium metal-organic frameworks with infinite 1D TiO rods for efficient visible-light-driven photocatalytic H <sub>2</sub> evolution. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 11928-11933	13	153
75	Pore Space Partition within a Metal-Organic Framework for Highly Efficient CH <sub>4</sub> /CO Separation. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 4130-4136	16.4	190
74	Porous metal-organic frameworks for gas storage and separation: Status and challenges. <i>EnergyChem</i> , <b>2019</b> , 1, 100006	36.9	235
73	Of HOF hosts. <i>Nature Chemistry</i> , <b>2019</b> , 11, 1078-1080	17.6	4
72	A novel mesoporous hydrogen-bonded organic framework with high porosity and stability. <i>Chemical Communications</i> , <b>2019</b> , 56, 66-69	5.8	33
71	Single-side and double-side swing behaviours of a flexible porous coordination polymer with a rhombic-lattice structure. <i>CrystEngComm</i> , <b>2019</b> , 21, 1872-1875	3.3	
70	Microporous Metal-Organic Framework with Dual Functionalities for Efficient Separation of Acetylene from Light Hydrocarbon Mixtures. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2019</b> , 7,	8.3	39
69	Construction of a thiourea-based metal-organic framework with open Ag <sup>+</sup> sites for the separation of propene/propane mixtures. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 25567-25572	13	17
68	Exploration of porous metal-organic frameworks for gas separation and purification. <i>Coordination Chemistry Reviews</i> , <b>2019</b> , 378, 87-103	23.2	368
67	A Metal-Organic Framework with Optimized Porosity and Functional Sites for High Gravimetric and Volumetric Methane Storage Working Capacities. <i>Advanced Materials</i> , <b>2018</b> , 30, e1704792	24	81
66	Fine-tuning of nano-traps in a stable metal-organic framework for highly efficient removal of propyne from propylene. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 6931-6937	13	57
65	Metal-Organic Framework with Trifluoromethyl Groups for Selective C <sub>2</sub> H <sub>2</sub> and CO <sub>2</sub> Adsorption. <i>Crystal Growth and Design</i> , <b>2018</b> , 18, 4522-4527	3.5	18
64	Nickel-4Q(3,5-dicarboxyphenyl)-2,2Q-terpyridine Framework: Efficient Separation of Ethylene from Acetylene/Ethylene Mixtures with a High Productivity. <i>Inorganic Chemistry</i> , <b>2018</b> , 57, 9489-9494	5.1	22
63	Kinetic separation of propylene over propane in a microporous metal-organic framework. <i>Chemical Engineering Journal</i> , <b>2018</b> , 354, 977-982	14.7	67
62	Mesoporous Metal-Organic Frameworks with Exceptionally High Working Capacities for Adsorption Heat Transformation. <i>Advanced Materials</i> , <b>2018</b> , 30, 1704350	24	29

61	Separation of C2 hydrocarbons from methane in a microporous metal-organic framework. <i>Journal of Solid State Chemistry</i> , <b>2018</b> , 258, 346-350	3.3	25
60	Reticular Chemistry of Multifunctional Metal-Organic Framework Materials. <i>Israel Journal of Chemistry</i> , <b>2018</b> , 58, 949-961	3.4	16
59	A Metal-Organic Framework with Suitable Pore Size and Specific Functional Sites for the Removal of Trace Propyne from Propylene. <i>Angewandte Chemie - International Edition</i> , <b>2018</b> , 57, 15183-15188	16.4	83
58	A Metal-Organic Framework with Suitable Pore Size and Specific Functional Sites for the Removal of Trace Propyne from Propylene. <i>Angewandte Chemie</i> , <b>2018</b> , 130, 15403-15408	3.6	30
57	Molecular sieving of ethylene from ethane using a rigid metal-organic framework. <i>Nature Materials</i> , <b>2018</b> , 17, 1128-1133	27	326
56	Ethane/ethylene separation in a metal-organic framework with iron-peroxo sites. <i>Science</i> , <b>2018</b> , 362, 443-446	33.3	478
55	Conjugated Microporous Polymers with Rigid Backbones for Organic Solvent Nanofiltration. <i>Chem</i> , <b>2018</b> , 4, 2269-2271	16.2	11
54	Boosting Ethane/Ethylene Separation within Isoreticular Ultramicroporous Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 12940-12946	16.4	186
53	Reducing CO2 with Stable Covalent Organic Frameworks. <i>Joule</i> , <b>2018</b> , 2, 1030-1032	27.8	15
52	Two-dimensional metal-organic frameworks for selective separation of CO2/CH4 and CO2/N2. <i>Materials Chemistry Frontiers</i> , <b>2017</b> , 1, 1514-1519	7.8	23
51	Collaborative interactions to enhance gas binding energy in porous metal-organic frameworks. <i>IUCrJ</i> , <b>2017</b> , 4, 106-107	4.7	1
50	Highly Enhanced Gas Uptake and Selectivity via Incorporating Methoxy Groups into a Microporous Metal-Organic Framework. <i>Crystal Growth and Design</i> , <b>2017</b> , 17, 2172-2177	3.5	21
49	A two-dimensional microporous metal-organic framework for highly selective adsorption of carbon dioxide and acetylene. <i>Chinese Chemical Letters</i> , <b>2017</b> , 28, 1653-1658	8.1	21
48	A microporous metal-organic framework for selective C2H2 and CO2 separation. <i>Journal of Solid State Chemistry</i> , <b>2017</b> , 252, 138-141	3.3	24
47	Optimized Separation of Acetylene from Carbon Dioxide and Ethylene in a Microporous Material. <i>Journal of the American Chemical Society</i> , <b>2017</b> , 139, 8022-8028	16.4	263
46	Flexible-Robust Metal-Organic Framework for Efficient Removal of Propyne from Propylene. <i>Journal of the American Chemical Society</i> , <b>2017</b> , 139, 7733-7736	16.4	177
45	Separation of C2/C1 hydrocarbons through a gate-opening effect in a microporous metal-organic framework. <i>CrystEngComm</i> , <b>2017</b> , 19, 6896-6901	3.3	21
44	Two solvent-induced porous hydrogen-bonded organic frameworks: solvent effects on structures and functionalities. <i>Chemical Communications</i> , <b>2017</b> , 53, 11150-11153	5.8	58

43	Efficient separation of ethylene from acetylene/ethylene mixtures by a flexible-robust metal-organic framework. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 18984-18988	13	68
42	An Ideal Molecular Sieve for Acetylene Removal from Ethylene with Record Selectivity and Productivity. <i>Advanced Materials</i> , <b>2017</b> , 29, 1704210	24	213
41	Doubly Interpenetrated Metal-Organic Framework for Highly Selective C <sub>2</sub> H <sub>2</sub> /CH <sub>4</sub> and C <sub>2</sub> H <sub>2</sub> /CO <sub>2</sub> Separation at Room Temperature. <i>Crystal Growth and Design</i> , <b>2016</b> , 16, 7194-7197	3-5	65
40	Molecular Dynamics of Flexible Polar Cations in a Variable Confined Space: Toward Exceptional Two-Step Nonlinear Optical Switches. <i>Advanced Materials</i> , <b>2016</b> , 28, 5886-90	24	137
39	Unique (3,9)-connected porous coordination polymers constructed by tripodal ligands with bent arms. <i>CrystEngComm</i> , <b>2016</b> , 18, 4115-4120	3-3	14
38	High-symmetry hydrogen-bonded organic frameworks: air separation and crystal-to-crystal structural transformation. <i>Chemical Communications</i> , <b>2016</b> , 52, 4991-4	5-8	39
37	The cation-dependent structural phase transition and dielectric response in a family of cyano-bridged perovskite-like coordination polymers. <i>Dalton Transactions</i> , <b>2016</b> , 45, 4224-9	4-3	72
36	UTSA-74: A MOF-74 Isomer with Two Accessible Binding Sites per Metal Center for Highly Selective Gas Separation. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 5678-84	16.4	351
35	Photoluminescent Metal-Organic Frameworks for Gas Sensing. <i>Advanced Science</i> , <b>2016</b> , 3, 1500434	13.6	228
34	Tuning fluorocarbon adsorption in new isoreticular porous coordination frameworks for heat transformation applications. <i>Chemical Science</i> , <b>2015</b> , 6, 2516-2521	9-4	44
33	Copper(I) 2-Isopropylimidazolate: Supramolecular Isomerism, Isomerization, and Luminescent Properties. <i>Crystal Growth and Design</i> , <b>2015</b> , 15, 1735-1739	3-5	22
32	Controlling the flexibility and single-crystal to single-crystal interpenetration reconstitution of metal-organic frameworks. <i>Chemical Communications</i> , <b>2015</b> , 51, 12665-8	5-8	29
31	Coordination templated [2+2+2] cyclotrimerization in a porous coordination framework. <i>Nature Communications</i> , <b>2015</b> , 6, 8348	17.4	84
30	Tuning oxygen-sensing behaviour of a porous coordination framework by a guest fluorophore. <i>Inorganic Chemistry Frontiers</i> , <b>2015</b> , 2, 1085-1090	6.8	11
29	Encapsulating Pyrene in a Metal-Organic Zeolite for Optical Sensing of Molecular Oxygen. <i>Chemistry of Materials</i> , <b>2015</b> , 27, 8255-8260	9.6	81
28	Syntheses, structures and gas sorption properties of two coordination polymers with a unique type of supramolecular isomerism. <i>Inorganic Chemistry Frontiers</i> , <b>2015</b> , 2, 136-140	6.8	8
27	Structural, energetic, and dynamic insights into the abnormal xylene separation behavior of hierarchical porous crystal. <i>Scientific Reports</i> , <b>2015</b> , 5, 11537	4-9	24
26	Guest-containing supramolecular isomers of silver(I) 3,5-dialkyl-1,2,4-triazolates: syntheses, structures, and structural transformation behaviours. <i>CrystEngComm</i> , <b>2015</b> , 17, 8843-8849	3-3	8

25	Metal cluster-based functional porous coordination polymers. <i>Coordination Chemistry Reviews</i> , <b>2015</b> , 293-294, 263-278	23.2	215
24	Metal-ion controlled solid-state reactivity and photoluminescence in two isomorphous coordination polymers. <i>Inorganic Chemistry Frontiers</i> , <b>2014</b> , 1, 172	6.8	15
23	Restraining the motion of a ligand for modulating the structural phase transition in two isomorphous polar coordination polymers. <i>Dalton Transactions</i> , <b>2014</b> , 43, 9008-11	4.3	12
22	New porous coordination polymers based on expanded pyridyl-dicarboxylate ligands and a paddle-wheel cluster. <i>CrystEngComm</i> , <b>2014</b> , 16, 6325-6330	3.3	24
21	Porous Cu(I) Triazolate Framework and Derived Hybrid Membrane with Exceptionally High Sensing Efficiency for Gaseous Oxygen. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 5866-5872	15.6	72
20	Single-crystal X-ray diffraction studies on structural transformations of porous coordination polymers. <i>Chemical Society Reviews</i> , <b>2014</b> , 43, 5789-814	58.5	353
19	Photoluminescence: Porous Cu(I) Triazolate Framework and Derived Hybrid Membrane with Exceptionally High Sensing Efficiency for Gaseous Oxygen (Adv. Funct. Mater. 37/2014). <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 5928-5928	15.6	2
18	Direct visualization of a guest-triggered crystal deformation based on a flexible ultramicroporous framework. <i>Nature Communications</i> , <b>2013</b> , 4, 2534	17.4	106
17	New Zn-Aminotriazolate-Dicarboxylate Frameworks: Synthesis, Structures, and Adsorption Properties. <i>Crystal Growth and Design</i> , <b>2013</b> , 13, 2118-2123	3.5	64
16	Turning on the flexibility of isorecticular porous coordination frameworks for drastically tunable framework breathing and thermal expansion. <i>Chemical Science</i> , <b>2013</b> , 4, 1539	9.4	144
15	Phosphorescence doping in a flexible ultramicroporous framework for high and tunable oxygen sensing efficiency. <i>Chemical Communications</i> , <b>2013</b> , 49, 6864-6	5.8	58
14	A noble-metal-free porous coordination framework with exceptional sensing efficiency for oxygen. <i>Angewandte Chemie - International Edition</i> , <b>2013</b> , 52, 13429-33	16.4	152
13	A Noble-Metal-Free Porous Coordination Framework with Exceptional Sensing Efficiency for Oxygen. <i>Angewandte Chemie</i> , <b>2013</b> , 125, 13671-13675	3.6	20
12	Zeolitic metal azolate frameworks (MAFs) from ZnO/Zn(OH) <sub>2</sub> and monoalkyl-substituted imidazoles and 1,2,4-triazoles: Efficient syntheses and properties. <i>Microporous and Mesoporous Materials</i> , <b>2012</b> , 157, 42-49	5.3	69
11	Highly-connected, porous coordination polymers based on [M <sub>4</sub> (B-OH) <sub>2</sub> ] (M = Co(II) and Ni(II)) clusters: different networks, adsorption and magnetic properties. <i>Dalton Transactions</i> , <b>2012</b> , 41, 4199-206	4.3	64
10	A zeolite-like zinc triazolate framework with high gas adsorption and separation performance. <i>Inorganic Chemistry</i> , <b>2012</b> , 51, 9950-5	5.1	124
9	Strong and dynamic CO <sub>2</sub> sorption in a flexible porous framework possessing guest chelating claws. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 17380-3	16.4	239
8	Geometry analysis and systematic synthesis of highly porous isorecticular frameworks with a unique topology. <i>Nature Communications</i> , <b>2012</b> , 3, 642	17.4	139

7	Low-dimensional porous coordination polymers based on 1,2-bis(4-pyridyl)hydrazine: from structure diversity to ultrahigh CO <sub>2</sub> /CH <sub>4</sub> selectivity. <i>Inorganic Chemistry</i> , <b>2012</b> , 51, 5686-92	5.1	35
6	Flexible porous coordination polymers constructed from 1,2-bis(4-pyridyl)hydrazine via solvothermal in situ reduction of 4,4'-azopyridine. <i>Dalton Transactions</i> , <b>2011</b> , 40, 8549-54	4.3	33
5	Solvent/additive-free synthesis of porous/zeolitic metal azolate frameworks from metal oxide/hydroxide. <i>Chemical Communications</i> , <b>2011</b> , 47, 9185-7	5.8	131
4	A flexible metal azolate framework with drastic luminescence response toward solvent vapors and carbon dioxide. <i>Chemical Science</i> , <b>2011</b> , 2, 2214	9.4	109
3	Pore surface tailored SOD-type metal-organic zeolites. <i>Advanced Materials</i> , <b>2011</b> , 23, 1268-71	24	228
2	Efficient Separation of Propylene from Propane in an Ultramicroporous Cyanide-Based Compound with Open Metal Sites. <i>Small Structures</i> , 2100125	8.7	6
1	How Reproducible are Surface Areas Calculated from the BET Equation?. <i>Advanced Materials</i> , 2201502	24	12