

Peng Li

List of Publications by Year in descending order

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106
papers

12,842
citations

28274

55
h-index

27406

106
g-index

114
all docs

114
docs citations

114
times ranked

11727
citing authors

#	ARTICLE	IF	CITATIONS
1	Chemical, thermal and mechanical stabilities of metal-organic frameworks. Nature Reviews Materials, 2016, 1, .	48.7	1,490
2	Multifunctional porous hydrogen-bonded organic framework materials. Chemical Society Reviews, 2019, 48, 1362-1389.	38.1	751
3	Identifying the Recognition Site for Selective Trapping of ⁹⁹ TcO ₄ ⁻ in a Hydrolytically Stable and Radiation Resistant Cationic Metal-Organic Framework. Journal of the American Chemical Society, 2017, 139, 14873-14876.	13.7	386
4	A historical overview of the activation and porosity of metal-organic frameworks. Chemical Society Reviews, 2020, 49, 7406-7427.	38.1	367
5	Acid-Resistant Mesoporous Metal-Organic Framework toward Oral Insulin Delivery: Protein Encapsulation, Protection, and Release. Journal of the American Chemical Society, 2018, 140, 5678-5681.	13.7	334
6	Encapsulation of a Nerve Agent Detoxifying Enzyme by a Mesoporous Zirconium Metal-Organic Framework Engenders Thermal and Long-Term Stability. Journal of the American Chemical Society, 2016, 138, 8052-8055.	13.7	302
7	A Homochiral Microporous Hydrogen-Bonded Organic Framework for Highly Enantioselective Separation of Secondary Alcohols. Journal of the American Chemical Society, 2014, 136, 547-549.	13.7	292
8	A Rod-Packing Microporous Hydrogen-Bonded Organic Framework for Highly Selective Separation of C ₂ H ₂ /CO ₂ at Room Temperature. Angewandte Chemie - International Edition, 2015, 54, 574-577.	13.8	289
9	Catalytic Zirconium/Hafnium-Based Metal-Organic Frameworks. ACS Catalysis, 2017, 7, 997-1014.	11.2	288
10	Toward Design Rules for Enzyme Immobilization in Hierarchical Mesoporous Metal-Organic Frameworks. Chem, 2016, 1, 154-169.	11.7	286
11	Bottom-up construction of a superstructure in a porous uranium-organic crystal. Science, 2017, 356, 624-627.	12.6	286
12	Copper Metal-Organic Framework Nanoparticles Stabilized with Folic Acid Improve Wound Healing in Diabetes. ACS Nano, 2018, 12, 1023-1032.	14.6	282
13	Hierarchically Engineered Mesoporous Metal-Organic Frameworks toward Cell-free Immobilized Enzyme Systems. Chem, 2018, 4, 1022-1034.	11.7	281
14	Temperature Treatment of Highly Porous Zirconium-Containing Metal-Organic Frameworks Extends Drug Delivery Release. Journal of the American Chemical Society, 2017, 139, 7522-7532.	13.7	269
15	Melt-Quenched Glasses of Metal-Organic Frameworks. Journal of the American Chemical Society, 2016, 138, 3484-3492.	13.7	252
16	Enzyme encapsulation in metal-organic frameworks for applications in catalysis. CrystEngComm, 2017, 19, 4082-4091.	2.6	235
17	⁹⁹ TcO ₄ ⁻ remediation by a cationic polymeric network. Nature Communications, 2018, 9, 3007.	12.8	234
18	In silico discovery of metal-organic frameworks for precombustion CO ₂ capture using a genetic algorithm. Science Advances, 2016, 2, e1600909.	10.3	231

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19	DNA-Functionalized Metal-Organic Framework Nanoparticles for Intracellular Delivery of Proteins. <i>Journal of the American Chemical Society</i> , 2019, 141, 2215-2219.	13.7	231
20	Nanosizing a Metal-Organic Framework Enzyme Carrier for Accelerating Nerve Agent Hydrolysis. <i>ACS Nano</i> , 2016, 10, 9174-9182.	14.6	202
21	Synthesis of nanocrystals of Zr-based metal-organic frameworks with csq-net: significant enhancement in the degradation of a nerve agent simulant. <i>Chemical Communications</i> , 2015, 51, 10925-10928.	4.1	194
22	Role of Modulators in Controlling the Colloidal Stability and Polydispersity of the UiO-66 Metal-Organic Framework. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 33413-33418.	8.0	183
23	Successful Decontamination of $^{99}\text{TcO}_4^-$ in Groundwater at Legacy Nuclear Sites by a Cationic Metal-Organic Framework with Hydrophobic Pockets. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 4968-4972.	13.8	177
24	Design and Synthesis of a Water-Stable Anionic Uranium-Based Metal-Organic Framework (MOF) with Ultra Large Pores. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 10358-10362.	13.8	175
25	Design Rules of Hydrogen-Bonded Organic Frameworks with High Chemical and Thermal Stabilities. <i>Journal of the American Chemical Society</i> , 2022, 144, 10663-10687.	13.7	174
26	Integration of Enzymes and Photosensitizers in a Hierarchical Mesoporous Metal-Organic Framework for Light-Driven CO_2 Reduction. <i>Journal of the American Chemical Society</i> , 2020, 142, 1768-1773.	13.7	163
27	Catalytic chemoselective functionalization of methane in a metal-organic framework. <i>Nature Catalysis</i> , 2018, 1, 356-362.	34.4	153
28	Reticular Access to Highly Porous $\mu\text{-}3\text{-f}$ -MOFs with Rigid Trigonal Prismatic Linkers for Water Sorption. <i>Journal of the American Chemical Society</i> , 2019, 141, 2900-2905.	13.7	150
29	Scalable and Template-Free Aqueous Synthesis of Zirconium-Based Metal-Organic Framework Coating on Textile Fiber. <i>Journal of the American Chemical Society</i> , 2019, 141, 15626-15633.	13.7	148
30	A microporous six-fold interpenetrated hydrogen-bonded organic framework for highly selective separation of $\text{C}_2\text{H}_4/\text{C}_2\text{H}_6$. <i>Chemical Communications</i> , 2014, 50, 13081-13084.	4.1	147
31	Reticular Chemistry for Highly Porous Metal-Organic Frameworks: The Chemistry and Applications. <i>Accounts of Chemical Research</i> , 2022, 55, 579-591.	15.6	145
32	Adsorption of a Catalytically Accessible Polyoxometalate in a Mesoporous Channel-type Metal-Organic Framework. <i>Chemistry of Materials</i> , 2017, 29, 5174-5181.	6.7	143
33	Revisiting the structural homogeneity of NU-1000, a Zr-based metal-organic framework. <i>CrystEngComm</i> , 2018, 20, 5913-5918.	2.6	136
34	Topology and porosity control of metal-organic frameworks through linker functionalization. <i>Chemical Science</i> , 2019, 10, 1186-1192.	7.4	129
35	Three-Dimensional Pillar-Layered Copper(II) Metal-Organic Framework with Immobilized Functional OH Groups on Pore Surfaces for Highly Selective CO_2/CH_4 and $\text{C}_2\text{H}_2/\text{CH}_4$ Gas Sorption at Room Temperature. <i>Inorganic Chemistry</i> , 2011, 50, 3442-3446.	4.0	115
36	A Microporous Porphyrin-Based Hydrogen-Bonded Organic Framework for Gas Separation. <i>Crystal Growth and Design</i> , 2015, 15, 2000-2004.	3.0	115

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37	A Redox-Active Bistable Molecular Switch Mounted inside a Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2016, 138, 14242-14245.	13.7	114
38	Vanadium Catalyst on Isostructural Transition Metal, Lanthanide, and Actinide Based Metal-Organic Frameworks for Alcohol Oxidation. <i>Journal of the American Chemical Society</i> , 2019, 141, 8306-8314.	13.7	112
39	Ultrastable Mesoporous Hydrogen-Bonded Organic Framework-Based Fiber Composites toward Mustard Gas Detoxification. <i>Cell Reports Physical Science</i> , 2020, 1, 100024.	5.6	107
40	Stabilization of Formate Dehydrogenase in a Metal-Organic Framework for Bioelectrocatalytic Reduction of CO ₂ . <i>Angewandte Chemie - International Edition</i> , 2019, 58, 7682-7686.	13.8	103
41	A Microporous Metal-Organic Framework with Immobilized -OH Functional Groups within the Pore Surfaces for Selective Gas Sorption. <i>European Journal of Inorganic Chemistry</i> , 2010, 2010, 3745-3749.	2.0	97
42	Selective Metal-Organic Framework Catalysis of Glucose to 5-Hydroxymethylfurfural Using Phosphate-Modified NU-1000. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 7141-7148.	3.7	95
43	Structural Diversity of Zirconium Metal-Organic Frameworks and Effect on Adsorption of Toxic Chemicals. <i>Journal of the American Chemical Society</i> , 2020, 142, 21428-21438.	13.7	95
44	Interpenetration Isomerism in Triptycene-Based Hydrogen-Bonded Organic Frameworks. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 1664-1669.	13.8	93
45	Versatile and Switchable Responsive Properties of a Lanthanide-Viologen Metal-Organic Framework. <i>Small</i> , 2019, 15, e1803468.	10.0	88
46	Room Temperature Synthesis of an 8-Connected Zr-Based Metal-Organic Framework for Top-Down Nanoparticle Encapsulation. <i>Chemistry of Materials</i> , 2018, 30, 2193-2197.	6.7	80
47	From Transition Metals to Lanthanides to Actinides: Metal-Mediated Tuning of Electronic Properties of Isostructural Metal-Organic Frameworks. <i>Inorganic Chemistry</i> , 2018, 57, 13246-13251.	4.0	80
48	Exploring the Role of Hexanuclear Clusters as Lewis Acidic Sites in Isostructural Metal-Organic Frameworks. <i>Chemistry of Materials</i> , 2019, 31, 4166-4172.	6.7	80
49	Hydrogen-bonding 2D metal-organic solids as highly robust and efficient heterogeneous green catalysts for Biginelli reaction. <i>Tetrahedron Letters</i> , 2011, 52, 6220-6222.	1.4	68
50	A Bismuth Metal-Organic Framework as a Contrast Agent for X-ray Computed Tomography. <i>ACS Applied Bio Materials</i> , 2019, 2, 1197-1203.	4.6	68
51	A Highly Porous Metal-Organic Framework System to Deliver Payloads for Gene Knockdown. <i>CheM</i> , 2019, 5, 2926-2941.	11.7	66
52	Computational Screening of Nanoporous Materials for Hexane and Heptane Isomer Separation. <i>Chemistry of Materials</i> , 2017, 29, 6315-6328.	6.7	65
53	Enantioselective ring-opening of meso-epoxides by aromatic amines catalyzed by a homochiral metal-organic framework. <i>Chemical Communications</i> , 2013, 49, 9836.	4.1	60
54	Adding to the Arsenal of Zirconium-Based Metal-Organic Frameworks: the Topology as a Platform for Solvent-Assisted Metal Incorporation. <i>European Journal of Inorganic Chemistry</i> , 2016, 2016, 4349-4352.	2.0	59

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55	Significantly Enhanced CO ₂ /CH ₄ Separation Selectivity within a 3D Prototype Metal-Organic Framework Functionalized with OH Groups on Pore Surfaces at Room Temperature. European Journal of Inorganic Chemistry, 2011, 2011, 2227-2231.	2.0	56
56	Single-Crystal Polycationic Polymers Obtained by Single-Crystal-to-Single-Crystal Photopolymerization. Journal of the American Chemical Society, 2020, 142, 6180-6187.	13.7	50
57	A sulfonate-based Cu(I) metal-organic framework as a highly efficient and reusable catalyst for the synthesis of propargylamines under solvent-free conditions. Chinese Chemical Letters, 2015, 26, 6-10.	9.0	49
58	Unprecedented selectivity in molecular recognition of carbohydrates by a metal-organic framework. Chemical Communications, 2016, 52, 7094-7097.	4.1	49
59	Multi-component synthesis of 2-amino-6-(alkylthio)pyridine-3,5-dicarbonitriles using Zn(II) and Cd(II) metal-organic frameworks (MOFs) under solvent-free conditions. Tetrahedron Letters, 2012, 53, 4870-4872.	1.4	48
60	Chemically Engineered Porous Molecular Coatings as Reactive Oxygen Species Generators and Reservoirs for Long-Lasting Self-Cleaning Textiles. Angewandte Chemie - International Edition, 2022, 61, e202115956.	13.8	45
61	Design and Synthesis of a Water-Stable Anionic Uranium-Based Metal-Organic Framework (MOF) with Ultra Large Pores. Angewandte Chemie, 2016, 128, 10514-10518.	2.0	44
62	Epitaxial Growth of β -Cyclodextrin-Containing Metal-Organic Frameworks Based on a Host-Guest Strategy. Journal of the American Chemical Society, 2018, 140, 11402-11407.	13.7	44
63	Interplay of Lewis and Brønsted Acid Sites in Zr-Based Metal-Organic Frameworks for Efficient Esterification of Biomass-Derived Levulinic Acid. ACS Applied Materials & Interfaces, 2019, 11, 32090-32096.	8.0	44
64	Intramolecular Energy and Electron Transfer within a Diazaperopyrenium-Based Cyclophane. Journal of the American Chemical Society, 2017, 139, 4107-4116.	13.7	42
65	N-Heterocyclic carbenes and their precursors in functionalised porous materials. Chemical Society Reviews, 2021, 50, 13559-13586.	38.1	42
66	Bioinspired Metalation of the Metal-Organic Framework MIL-125-NH ₂ for Photocatalytic NADH Regeneration and Gas-Liquid-Solid Three-Phase Enzymatic CO ₂ Reduction. Angewandte Chemie - International Edition, 2022, 61, .	13.8	41
67	Stabilization of an Unprecedented Hexanuclear Secondary Building Unit in a Thorium-Based Metal-Organic Framework. Inorganic Chemistry, 2019, 58, 3586-3590.	4.0	38
68	Reactive Porous Polymers for Detoxification of a Chemical Warfare Agent Simulant. Chemistry of Materials, 2020, 32, 9299-9306.	6.7	38
69	Successful Decontamination of ⁹⁹ TcO ₄ ⁻ in Groundwater at Legacy Nuclear Sites by a Cationic Metal-Organic Framework with Hydrophobic Pockets. Angewandte Chemie, 2019, 131, 5022-5026.	2.0	37
70	Ultrafine Silver Nanoparticle Encapsulated Porous Molecular Traps for Discriminative Photoelectrochemical Detection of Mustard Gas Simulants by Synergistic Size-Exclusion and Site-Specific Recognition. Advanced Materials, 2022, 34, .	21.0	37
71	Solvent Dependent Structures of Melamine: Porous or Nonporous?. Crystal Growth and Design, 2015, 15, 1871-1875.	3.0	36
72	In Situ Formation of Unprecedented Neptunium-Oxide Wheel Clusters Stabilized in a Metal-Organic Framework. Journal of the American Chemical Society, 2019, 141, 11842-11846.	13.7	36

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73	A Flexible Interpenetrated Zirconium-Based Metal-Organic Framework with High Affinity toward Ammonia. <i>ChemSusChem</i> , 2020, 13, 1710-1714.	6.8	36
74	Complete furanics-sugar separations with metal-organic framework NU-1000. <i>Chemical Communications</i> , 2016, 52, 11791-11794.	4.1	34
75	Synthetic Control of Thorium Polyoxo-Clusters in Metal-Organic Frameworks toward New Thorium-Based Materials. <i>ACS Applied Nano Materials</i> , 2019, 2, 2260-2265.	5.0	34
76	An Electrically Conductive Tetrathiafulvalene-Based Hydrogen-Bonded Organic Framework. , 2022, 4, 128-135.		34
77	A metal-organic framework as a highly efficient and reusable catalyst for the solvent-free 1,3-dipolar cycloaddition of organic azides to alkynes. <i>Inorganic Chemistry Frontiers</i> , 2015, 2, 42-46.	6.0	33
78	Are you using the right probe molecules for assessing the textural properties of metal-organic frameworks?. <i>Journal of Materials Chemistry A</i> , 2021, 10, 157-173.	10.3	33
79	Supramolecular Isomerism of Metal-Organic Frameworks Derived from a Bicarboxylate Linker with Two Distinct Binding Motifs. <i>Crystal Growth and Design</i> , 2009, 9, 1505-1510.	3.0	32
80	Stabilization of Formate Dehydrogenase in a Metal-Organic Framework for Bioelectrocatalytic Reduction of CO ₂ . <i>Angewandte Chemie</i> , 2019, 131, 7764-7768.	2.0	31
81	Guest-Dependent Single-Crystal-to-Single-Crystal Phase Transitions in a Two-Dimensional Uranyl-Based Metal-Organic Framework. <i>Crystal Growth and Design</i> , 2019, 19, 506-512.	3.0	29
82	Interpenetration Isomerism in Triptycene-Based Hydrogen-Bonded Organic Frameworks. <i>Angewandte Chemie</i> , 2019, 131, 1678-1683.	2.0	29
83	MOFs and their grafted analogues: regioselective epoxide ring-opening with Zr ₆ nodes. <i>Catalysis Science and Technology</i> , 2016, 6, 6480-6484.	4.1	27
84	Toward Design Rules of Metal-Organic Frameworks for Adsorption Cooling: Effect of Topology on the Ethanol Working Capacity. <i>Chemistry of Materials</i> , 2019, 31, 2702-2706.	6.7	27
85	Solvent Dependent Structures of Hydrogen-Bonded Organic Frameworks of 2,6-Diaminopurine. <i>Crystal Growth and Design</i> , 2014, 14, 3634-3638.	3.0	26
86	Stabilization of Photocatalytically Active Uranyl Species in a Uranyl-Organic Framework for Heterogeneous Alkane Fluorination Driven by Visible Light. <i>Inorganic Chemistry</i> , 2020, 59, 16795-16798.	4.0	26
87	Organic Counteranion Co-assembly Strategy for the Formation of β -Cyclodextrin-Containing Hybrid Frameworks. <i>Journal of the American Chemical Society</i> , 2020, 142, 2042-2050.	13.7	26
88	Reticular exploration of uranium-based metal-organic frameworks with hexacarboxylate building units. <i>Nano Research</i> , 2021, 14, 376-380.	10.4	25
89	A Hierarchical Nanoporous Diamondoid Superstructure. <i>CheM</i> , 2019, 5, 2353-2364.	11.7	23
90	Direct Observation of Modulated Radical Spin States in Metal-Organic Frameworks by Controlled Flexibility. <i>Journal of the American Chemical Society</i> , 2022, 144, 2685-2693.	13.7	23

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91	Reticular chemistry approach to explore the catalytic CO ₂ -epoxide cycloaddition reaction over tetrahedral coordination Lewis acidic sites in a Rutile-type Zinc-phosphonocarboxylate framework. Chemical Engineering Journal, 2022, 427, 131759.	12.7	20
92	Understanding Diffusional Charge Transport within a Pyrene-Based Hydrogen-Bonded Organic Framework. Langmuir, 2022, 38, 1533-1539.	3.5	17
93	Toward a Charged Homo[2]catenane Employing Diazaperopyrenium Homophilic Recognition. Journal of the American Chemical Society, 2018, 140, 6540-6544.	13.7	15
94	Unprecedented trinodal four-connected FRL MOF based on mixed ligands. Dalton Transactions, 2009, , 4847.	3.3	14
95	Insights into Supramolecular Sites Responsible for Complete Separation of Biomass-Derived Phenolics and Glucose in Metal-Organic Framework NU-1000. Langmuir, 2017, 33, 4129-4137.	3.5	14
96	Bottom-Up Design and Generation of Complex Structures: A New Twist in Reticular Chemistry. Crystal Growth and Design, 2018, 18, 449-455.	3.0	14
97	Bottom-up construction of mesoporous supramolecular isomers based on a Pd ₃ L ₆ triangular prism as templates for shape specific aggregation of polyiodide. Nano Research, 2022, 15, 2655-2660.	10.4	13
98	Organic Compounds of Actinyls: Systematic Computational Assessment of Structural and Topological Properties in [AnO ₂ (C ₂ O ₄) _n] ²ⁿ (An = U, Np, Pu, and Am; n = 1, 2, 3, 4; 2n + m = 6): Electronic Structures, Interaction Features, and the Potential to Adsorb toward Cs Ion. ACS Omega, 2020, 5, 31974-31983.	4.0	11
99	Discovery of spontaneous de-interpenetration through charged point-point repulsions. Chem, 2022, 8, 225-242.	11.7	11
100	Micropore environment regulation of zirconium MOFs for instantaneous hydrolysis of an organophosphorus chemical. Cell Reports Physical Science, 2021, 2, 100612.	5.6	10
101	Post-synthetic anchoring Fe(III) into a fcu-type Zr-MOF for the catalyzed hydrolysis of 5-hydroxymethoxyfurfural. Microporous and Mesoporous Materials, 2021, 328, 111449.	4.4	5
102	Effect of ionic liquid on sugar-aromatic separation selectivity by metal-organic framework NU-1000 in aqueous solution. Fuel Processing Technology, 2020, 197, 106189.	7.2	4
103	Chemically Engineered Porous Molecular Coatings as Reactive Oxygen Species Generators and Reservoirs for Long-Lasting Self-Cleaning Textiles. Angewandte Chemie, 2022, 134, .	2.0	3
104	Bioinspired Metalation of the Metal-Organic Framework MIL-125-NH ₂ for Photocatalytic NADH Regeneration and Gas-Liquid-Solid Three-Phase Enzymatic CO ₂ Reduction. Angewandte Chemie, 2022, 134, .	2.0	3
105	Actinyl-Carboxylate Complexes [AnO ₂ (COOH) _n (H ₂ O) _m] ²ⁿ (An = U, Np, Pu, and Am; n = 1, 2, 3; m = 0, 2, 4; 2n + m = 6): Electronic Structures, Interaction Features, and the Potential to Adsorb toward Cs Ion. ACS Omega, 2020, 5, 31974-31983.	3.5	2
106	Adding to the Arsenal of Zirconium-Based Metal-Organic Frameworks: the Topology as a Platform for Solvent-Assisted Metal Incorporation. European Journal of Inorganic Chemistry, 2016, 2016, 4266-4266.	2.0	1