Xiao-Qin Liu

List of Publications by Year
in descending order

88 papers	5,054 citations	94433 37 h-index	88630 70 g-index
89 all docs	89 docs citations	89 times ranked	5705 citing authors

#	Article	IF	Citations
1	Metalâ€“Organic Frameworks for Heterogeneous Basic Catalysis. Chemical Reviews, 2017, 117, 8129-8176.	47.7	1,230
2	Rational synthesis of an exceptionally stable Zn(<scp>ii</scp>) metalâ€“organic framework for the highly selective and sensitive detection of picric acid. Chemical Communications, 2016, 52, 5734-5737.	4.1	253
3	Highly Selective Capture of the Greenhouse Gas CO₂ in Polymers. ACS Sustainable Chemistry and Engineering, 2015, 3, 3077-3085.	6.7	168
4	Fabrication of magnetically responsive HKUST-1/Fe3O4 composites by dry gel conversion for deep desulfurization and denitrogenation. Journal of Hazardous Materials, 2017, 321, 344-352.	12.4	165
5	Metalâ€“Organic Frameworks with Targetâ€Specific Active Sites Switched by Photoresponsive Motifs: Efficient Adsorbents for Tailorable CO₂ Capture. Angewandte Chemie - International Edition, 2019, 58, 6600-6604.	13.8	161
6	Design and fabrication of nanoporous adsorbents for the removal of aromatic sulfur compounds. Journal of Materials Chemistry A, 2018, 6, 23978-24012.	10.3	147
7	Fabrication of Isolated Metalâ€“Organic Polyhedra in Confined Cavities: Adsorbents/Catalysts with Unusual Dispersity and Activity. Journal of the American Chemical Society, 2016, 138, 6099-6102.	13.7	113
8	Enhancing oxidation resistance of Cu(I) by tailoring microenvironment in zeolites for efficient adsorptive desulfurization. Nature Communications, 2020, 11, 3206.	12.8	105
9	Fabrication of Supported Cuprous Sites at Low Temperatures: An Efficient, Controllable Strategy Using Vapor-Induced Reduction. Journal of the American Chemical Society, 2013, 135, 8137-8140.	13.7	104
10	Generation of Hierarchical Porosity in Metalâ€“Organic Frameworks by the Modulation of Cation Valence. Angewandte Chemie - International Edition, 2019, 58, 10104-10109.	13.8	104
11	Improving Hydrothermal Stability and Catalytic Activity of Metalâ€“Organic Frameworks by Graphite Oxide Incorporation. Journal of Physical Chemistry C, 2014, 118, 19910-19917.	3.1	100
12	Facile fabrication of cost-effective porous polymer networks for highly selective CO₂capture. Journal of Materials Chemistry A, 2015, 3, 3252-3256.	10.3	96
13	Fabrication of microporous polymers for selective CO₂ capture: the significant role of crosslinking and crosslinker length. Journal of Materials Chemistry A, 2017, 5, 23310-23318.	10.3	93
14	Constructing a confined space in silica nanopores: an ideal platform for the formation and dispersion of cuprous sites. Journal of Materials Chemistry A, 2014, 2, 3399.	10.3	91
15	Metalâ€“Organic Frameworkâ€Templated Catalyst: Synergy in Multiple Sites for Catalytic CO₂ Fixation. ChemSusChem, 2017, 10, 1898-1903.	6.8	91
16	Dispersion of copper species in a confined space and their application in thiophene capture. Journal of Materials Chemistry, 2012, 22, 18514.	6.7	90
17	Enhanced Hydrothermal Stability and Catalytic Performance of HKUST-1 by Incorporating Carboxyl-Functionalized Attapulgite. ACS Applied Materials & Interfaces, 2016, 8, 16457-16464.	8.0	89
18	Fabrication of magnetically responsive coreâ€“shell adsorbents for thiophene capture: AgNO3-functionalized Fe3O4@mesoporous SiO2 microspheres. Journal of Materials Chemistry A, 2014, 2, 4698.	10.3	86

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19	Functionalization of metalâ€“organic frameworks with cuprous sites using vapor-induced selective reduction: efficient adsorbents for deep desulfurization. Green Chemistry, 2016, 18, 3210-3215.	9.0	82
20	Cuâˆ’Ce Bimetal Ion-Exchanged Y Zeolites for Selective Adsorption of Thiophenic Sulfur. Energy & Fuels, 2008, 22, 3955-3959.	5.1	81
21	Enhancing the hydrostability and catalytic performance of metalâ€“organic frameworks by hybridizing with attapulgite, a natural clay. Journal of Materials Chemistry A, 2015, 3, 6998-7005.	10.3	75
22	Maximizing Photoresponsive Efficiency by Isolating Metalâ€“Organic Polyhedra into Confined Nanoscaled Spaces. Journal of the American Chemical Society, 2019, 141, 8221-8227.	13.7	71
23	Molecular Template-Directed Synthesis of Microporous Polymer Networks for Highly Selective CO₂ Capture. ACS Applied Materials & Interfaces, 2014, 6, 20340-20349.	8.0	66
24	Hierarchical Nâ€doped carbons from designed Nâ€rich polymer: Adsorbents with a recordâ€high capacity for desulfurization. AICHE Journal, 2018, 64, 3786-3793.	3.6	64
25	Underlying mechanism of CO₂ adsorption onto conjugated azacyclo-copolymers: N-doped adsorbents capture CO₂ chiefly through acidâ€“base interaction?. Journal of Materials Chemistry A, 2019, 7, 17842-17853.	10.3	63
26	Nâ€doped porous carbons for CO₂ capture: Rational choice of Nâ€containing polymer with high phenyl density as precursor. AICHE Journal, 2017, 63, 1648-1658.	3.6	56
27	Direct Synthesis of Zeolites from a Natural Clay, Attapulgite. ACS Sustainable Chemistry and Engineering, 2017, 5, 6124-6130.	6.7	55
28	Magnetically Responsive Coreâ€“Shell Fe₃O₄@C Adsorbents for Efficient Capture of Aromatic Sulfur and Nitrogen Compounds. ACS Sustainable Chemistry and Engineering, 2016, 4, 2223-2231.	6.7	51
29	Controlled Construction of Cu(I) Sites within Confined Spaces via Hostâ€“Guest Redox: Highly Efficient Adsorbents for Selective CO Adsorption. ACS Applied Materials & Interfaces, 2018, 10, 40044-40053.	8.0	51
30	Controllable Adsorption of CO₂ on Smart Adsorbents: An Interplay between Amines and Photoresponsive Molecules. Chemistry of Materials, 2018, 30, 3429-3437.	6.7	49
31	Smart Adsorbents with Photoregulated Molecular Gates for Both Selective Adsorption and Efficient Regeneration. ACS Applied Materials & Interfaces, 2016, 8, 23404-23411.	8.0	47
32	Constructing mesoporous solid superbases by a dualcoating strategy. Journal of Materials Chemistry A, 2013, 1, 1623-1631.	10.3	44
33	Incorporation of Cu(<scp>ii</scp>) and its selective reduction to Cu(<scp>i</scp>) within confined spaces: efficient active sites for CO adsorption. Journal of Materials Chemistry A, 2018, 6, 8930-8939.	10.3	42
34	Fabrication of Microporous Metalâ€“Organic Frameworks in Uninterrupted Mesoporous Tunnels: Hierarchical Structure for Efficient Trypsin Immobilization and Stabilization. Angewandte Chemie - International Edition, 2020, 59, 6428-6434.	13.8	41
35	Low-temperature fabrication of Cu(<scp>i</scp>) sites in zeolites by using a vapor-induced reduction strategy. Journal of Materials Chemistry A, 2015, 3, 12247-12251.	10.3	40
36	Controlled Construction of Supported Cu⁺ Sites and Their Stabilization in MIL-100(Fe): Efficient Adsorbents for Benzothiophene Capture. ACS Applied Materials & Interfaces, 2017, 9, 29445-29450.	8.0	40

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37	A tandem demetalizationâ€“desilication strategy to enhance the porosity of attapulgite for adsorption and catalysis. Chemical Engineering Science, 2016, 141, 184-194.	3.8	39
38	Endowing Cu-BTC with Improved Hydrothermal Stability and Catalytic Activity: Hybridization with Natural Clay Attapulgite via Vapor-Induced Crystallization. ACS Sustainable Chemistry and Engineering, 2018, 6, 13217-13225.	6.7	35
39	Modification of as Synthesized SBA-15 with Pt nanoparticles: Nanoconfinement Effects Give a Boost for Hydrogen Storage at Room Temperature. Scientific Reports, 2017, 7, 4509.	3.3	34
40	Adsorption Behavior of Carbon Dioxide and Methane on AlPO₄-14: A Neutral Molecular Sieve. Energy & Fuels, 2009, 23, 1534-1538.	5.1	33
41	Direct Fabrication of Strong Basic Sites on Ordered Nanoporous Materials: Exploring the Possibility of Metalâ€“Organic Frameworks. Chemistry of Materials, 2018, 30, 1686-1694.	6.7	30
42	Facile Synthesis of Ti₃C₂T_{<i>x</i>}â€“Poly(vinylpyrrolidone) Nanocomposites for Nonvolatile Memory Devices with Low Switching Voltage. ACS Applied Materials & Interfaces, 2019, 11, 38061-38067.	8.0	28
43	Breathing Metalâ€“Organic Polyhedra Controlled by Light for Carbon Dioxide Capture and Liberation. CCS Chemistry, 2021, 3, 1659-1668.	7.8	28
44	The cascade catalysis of the porphyrinic zirconium metalâ€“organic framework PCN-224-Cu for CO₂ conversion to alcohols. Journal of Materials Chemistry A, 2021, 9, 24510-24516.	10.3	25
45	Process-Oriented Smart Adsorbents: Tailoring the Properties Dynamically as Demanded by Adsorption/Desorption. Accounts of Chemical Research, 2022, 55, 75-86.	15.6	25
46	Smart adsorbents with reversible photo-regulated molecular switches for selective adsorption and efficient regeneration. Chemical Communications, 2016, 52, 11531-11534.	4.1	24
47	Ordered Mesoporous Carbon CMK-3 Modified with Cu(I) for Selective Ethylene/Ethane Adsorption. Separation Science and Technology, 2013, 48, 968-976.	2.5	23
48	Fabrication of Adsorbents with Thermocontrolled Molecular Gates for Both Selective Adsorption and Efficient Regeneration. Advanced Materials Interfaces, 2016, 3, 1500829.	3.7	21
49	Petal cell-derived MnO nanoparticle-incorporated biocarbon composite and its enhanced lithium storage performance. Journal of Materials Science, 2020, 55, 2139-2154.	3.7	21
50	Realizing both selective adsorption and efficient regeneration using adsorbents with photo-regulated molecular gates. Chemical Communications, 2016, 52, 4006-4009.	4.1	19
51	Foaming Effect of a Polymer Precursor with a Low N Content on Fabrication of N-Doped Porous Carbons for CO₂ Capture. Industrial & Engineering Chemistry Research, 2019, 58, 11013-11021.	3.7	19
52	Controllable construction of metalâ€“organic polyhedra in confined cavities via in situ site-induced assembly. Journal of Materials Chemistry A, 2017, 5, 5278-5282.	10.3	18
53	Fabrication of Rhodium Nanoparticles with Reduced Sizes: An Exploration of Confined Spaces. Industrial & Engineering Chemistry Research, 2018, 57, 3561-3566.	3.7	18
54	Making Porous Materials Respond to Visible Light. ACS Energy Letters, 2019, 4, 2656-2667.	17.4	18

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55	Controllable CO₂ Capture in Metalâ€“Organic Frameworks: Making Targeted Active Sites Respond to Light. Industrial & Engineering Chemistry Research, 2020, 59, 21894-21900.	3.7	18
56	Calcium oxide-modified mesoporous silica loaded onto ferriferrous oxide core: Magnetically responsive mesoporous solid strong base. Journal of Colloid and Interface Science, 2018, 526, 366-373.	9.4	17
57	Metalâ€“Organic Frameworks with Targetâ€Specific Active Sites Switched by Photoresponsive Motifs: Efficient Adsorbents for Tailorable CO₂ Capture. Angewandte Chemie, 2019, 131, 6672-6676.	2.0	17
58	Hybridization with Ti₃C₂T<i>_x</i> MXene: An Effective Approach to Boost the Hydrothermal Stability and Catalytic Performance of Metalâ€“Organic Frameworks. Inorganic Chemistry, 2021, 60, 1380-1387.	4.0	17
59	Adjusting accommodation microenvironment for Cu⁺ to enhance oxidation inhibition for thiophene capture. AIChE Journal, 2021, 67, e17368.	3.6	17
60	Simultaneous fabrication of bifunctional Cu(<scp>i</scp>)/Ce(<scp>iv</scp>) sites in silica nanopores using a guests-redox strategy. RSC Advances, 2016, 6, 70446-70451.	3.6	16
61	Fabrication of Photothermal Silver Nanocube/ZIF-8 Composites for Visible-Light-Regulated Release of Propylene. ACS Applied Materials & Interfaces, 2019, 11, 29298-29304.	8.0	16
62	Tailoring microenvironment of adsorbents to achieve excellent <scp>CO₂</scp> uptakes from wet gases. AIChE Journal, 2020, 66, e16645.	3.6	16
63	Potassium-incorporated mesoporous carbons: strong solid bases with enhanced catalytic activity and stability. Catalysis Science and Technology, 2018, 8, 2794-2801.	4.1	14
64	Smart adsorbents for CO2 capture: Making strong adsorption sites respond to visible light. Science China Materials, 2021, 64, 383-392.	6.3	14
65	Modification of metal organic framework HKUST-1 with CuCl for selective separation of CO/H2 and CO/N2. Journal of Porous Materials, 2018, 25, 1513-1519.	2.6	11
66	Fabrication of Cu(I)-Functionalized MIL-101(Cr) for Adsorptive Desulfurization: Low-Temperature Controllable Conversion of Cu(II) via Vapor-Induced Reduction. Inorganic Chemistry, 2019, 58, 11085-11090.	4.0	9
67	Significant Decrease in Activation Temperature for the Generation of Strong Basicity: A Strategy of Endowing Supports with Reducibility. Inorganic Chemistry, 2019, 58, 8003-8011.	4.0	9
68	Generalized syntheses of mesoporous Î³-Al2O3 functionalized with metal oxides by a one-pot, two-step strategy. Journal of Porous Materials, 2012, 19, 969-977.	2.6	8
69	Facile Synthesis of Co3O4 Nanoparticle-Functionalized Mesoporous SiO2 for Catalytic Degradation of Methylene Blue from Aqueous Solutions. Catalysts, 2019, 9, 809.	3.5	8
70	Facile Fabrication of Small-Sized Palladium Nanoparticles in Nanoconfined Spaces for Low-Temperature CO Oxidation. Industrial & Engineering Chemistry Research, 2020, 59, 19145-19152.	3.7	8
71	Fabrication of multifunctional integrated catalysts by decorating confined Ag nanoparticles on magnetic nanostirring bars. Journal of Colloid and Interface Science, 2019, 555, 315-322.	9.4	7
72	Construction of a superhydrophobic microenvironment<i>via</i>polystyrene coating: an unexpected way to stabilize Cu^Iagainst oxidation. Inorganic Chemistry Frontiers, 2021, 8, 5169-5177.	6.0	7

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73	Rational fabrication of ordered porous solid strong bases by utilizing the inherent reducibility of metal-organic frameworks. Nano Research, 2022, 15, 2905-2912.	10.4	7
74	Modulating the Activity of Enzyme in Metalâ€“Organic Frameworks Using the Photothermal Effect of Ti₃C₂ Nanosheets. ACS Applied Materials & Interfaces, 2022, 14, 30090-30098.	8.0	7
75	Generation of Strong Basicity in Metalâ€“Organic Frameworks: How Do Coordination Solvents Matter?. ACS Applied Materials & Interfaces, 2022, 14, 8058-8065.	8.0	6
76	Solitary Medium of a Multifunctional Ionic Liquid for Crystallizing Hierarchically Porous Metalâ€“Organic Frameworks. Inorganic Chemistry, 2022, 61, 10393-10401.	4.0	6
77	Fabrication of Microporous Metalâ€“Organic Frameworks in Uninterrupted Mesoporous Tunnels: Hierarchical Structure for Efficient Trypsin Immobilization and Stabilization. Angewandte Chemie, 2020, 132, 6490-6496.	2.0	5
78	Controllable Microporous Framework Isomerism within Continuous Mesoporous Channels: Hierarchically Porous Structure for Capture of Bulky Molecules. Inorganic Chemistry, 2021, 60, 6633-6640.	4.0	5
79	Ultradeep Removal of Moisture in Gases to Parts-per-Billion Levels: The Exploration of Adsorbents. Journal of Physical Chemistry C, 2018, 122, 2840-2847.	3.1	4
80	Development of High Yielded Sn-Doped Porous Carbons for Selective CO2 Capture. ACS Sustainable Chemistry and Engineering, 2019, 7, 10383-10392.	6.7	4
81	Magnetic Catalyst KF/CaOâ€“CoFe2O4 for the Preparation of Polycarbonate Diol (PCDL). Journal of Inorganic and Organometallic Polymers and Materials, 2019, 29, 2003-2011.	3.7	4
82	Investigation of a Novel Catalyst KOH/K2CO3@Î³-Al2O3 Toward Polycarbonate Diol Synthesis. Catalysis Letters, 2020, 150, 3174-3183.	2.6	4
83	Generating strongly basic sites on magnetic nano-stirring bars: Multifunctional integrated catalysts for transesterification reaction. Science China Materials, 2022, 65, 2721-2728.	6.3	3
84	Syntheses, Crystal Structures, and Spectral Characterization of Two Novel Quinolyl Substituted Triazoles. Journal of Heterocyclic Chemistry, 2013, 50, 1152-1156.	2.6	2
85	Unusual Copper Oxide Dispersion Achieved by Combining the Confinement Effect and Guestâ€“Host Interaction Modulation. Industrial & Engineering Chemistry Research, 2020, 59, 16296-16304.	3.7	2
86	Synthesis of mesoporous manganese dioxide/expanded graphite composite and its lithium-storage performance. Bulletin of Materials Science, 2020, 43, 1.	1.7	1
87	Molecular Gates: Fabrication of Adsorbents with Thermocontrolled Molecular Gates for Both Selective Adsorption and Efficient Regeneration (Adv. Mater. Interfaces 11/2016). Advanced Materials Interfaces, 2016, 3, .	3.7	0
88	Titelbild: Metalâ€“Organic Frameworks with Targetâ€Specific Active Sites Switched by Photoresponsive Motifs: Efficient Adsorbents for Tailorable CO₂ Capture (Angew. Chem. 20/2019). Angewandte Chemie, 2019, 131, 6525-6525.	2.0	0