

Hong-Xia Xi

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4690102/publications.pdf>

Version: 2024-02-01

106
papers

4,722
citations

81839

39
h-index

106281

65
g-index

106
all docs

106
docs citations

106
times ranked

4886
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Synthesis of hierarchical porous carbon with high surface area by chemical activation of (NH ₄) ₂ C ₂ O ₄ modified hydrochar for chlorobenzene adsorption. <i>Journal of Environmental Sciences</i> , 2023, 126, 123-137. | 3.2 | 10 |
| 2 | Recent advances in adsorptive separation of ethane and ethylene by C ₂ H ₆ -selective MOFs and other adsorbents. <i>Chemical Engineering Journal</i> , 2022, 431, 133208. | 6.6 | 58 |
| 3 | Recent advances in the synthesis of nanoscale hierarchically porous metal-organic frameworks. <i>Nano Materials Science</i> , 2022, 4, 351-365. | 3.9 | 29 |
| 4 | Highly selective separation of propylene/propane mixture on cost-effectively four-carbon linkers based metal-organic frameworks. <i>Chinese Journal of Chemical Engineering</i> , 2022, 51, 126-134. | 1.7 | 5 |
| 5 | Application of hierarchically porous metal-organic frameworks in heterogeneous catalysis: A review. <i>Science China Materials</i> , 2022, 65, 298-320. | 3.5 | 36 |
| 6 | Modification of Ti ₃ C ₂ MXene nanosheets with tunable properties using a post-processing method. <i>Rare Metals</i> , 2022, 41, 3100-3106. | 3.6 | 3 |
| 7 | Recent advancements in metal-organic frameworks for green applications. <i>Green Energy and Environment</i> , 2021, 6, 33-49. | 4.7 | 111 |
| 8 | Facile fabrication of nanoscale hierarchical porous zeolitic imidazolate frameworks for enhanced toluene adsorption capacity. <i>Rare Metals</i> , 2021, 40, 471-477. | 3.6 | 16 |
| 9 | A Ni-based metal-organic framework with super-high C ₃ H ₈ uptake for adsorptive separation of light alkanes. <i>Separation and Purification Technology</i> , 2021, 266, 118198. | 3.9 | 18 |
| 10 | Preferential adsorption of ethane over ethylene on a Zr-based metal-organic framework: impacts of C-H...N hydrogen bonding. <i>New Journal of Chemistry</i> , 2021, 45, 8045-8053. | 1.4 | 16 |
| 11 | Recent advances in the synthesis of monolithic metal-organic frameworks. <i>Science China Materials</i> , 2021, 64, 1305-1319. | 3.5 | 77 |
| 12 | Predicting adsorption and separation performance indicators of Xe/Kr in metal-organic frameworks via a precursor-based neural network model. <i>Chemical Engineering Science</i> , 2021, 243, 116772. | 1.9 | 6 |
| 13 | Engineering New Defects in MIL-100(Fe) via a Mixed-Ligand Approach To Effect Enhanced Volatile Organic Compound Adsorption Capacity. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 774-782. | 1.8 | 93 |
| 14 | Room-Temperature Rapid Synthesis of Two-Dimensional Metal-Organic Framework Nanosheets with Tunable Hierarchical Porosity for Enhanced Adsorption Desulfurization Performance. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 18857-18864. | 1.8 | 78 |
| 15 | Improving CH ₄ /N ₂ selectivity within isomeric Al-based MOFs for the highly selective capture of coal-mine methane. <i>AIChE Journal</i> , 2020, 66, e16287. | 1.8 | 42 |
| 16 | Ultrafast room-temperature synthesis of hierarchically porous metal-organic frameworks with high space-time yields. <i>CrystEngComm</i> , 2020, 22, 2675-2680. | 1.3 | 15 |
| 17 | Water-based routes for synthesis of metal-organic frameworks: A review. <i>Science China Materials</i> , 2020, 63, 667-685. | 3.5 | 131 |
| 18 | Fe-Encapsulated ZSM-5 Zeolite with Nanosheet-Assembled Structure for the Selective Catalytic Reduction of NO _x with NH ₃ . <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 8592-8600. | 1.8 | 11 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Ultrahigh CO ₂ /CH ₄ and CO ₂ /N ₂ adsorption selectivities on a cost-effectively L-aspartic acid based metal-organic framework. <i>Chemical Engineering Journal</i> , 2019, 375, 122074. | 6.6 | 50 |
| 20 | Cationic surfactant-directed synthesis of hollow Beta zeolite with hierarchical structure. <i>Inorganic Chemistry Communication</i> , 2019, 107, 107468. | 1.8 | 22 |
| 21 | Green and rapid preparation of hierarchically porous metal-organic zeolites and simulation of their growth. <i>Journal of Materials Chemistry A</i> , 2019, 7, 1022-1029. | 5.2 | 13 |
| 22 | Templated fabrication of hierarchically porous metal-organic frameworks and simulation of crystal growth. <i>Nanoscale Advances</i> , 2019, 1, 1062-1069. | 2.2 | 20 |
| 23 | Nanoscale Hierarchically Porous Metal-Organic Frameworks: Facile Synthesis, Mechanism Research, and Application. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 11080-11087. | 3.2 | 20 |
| 24 | Moisture stability of ethane-selective Ni(II), Fe(III), Zr(IV)-based metal-organic frameworks. <i>AIChE Journal</i> , 2019, 65, e16616. | 1.8 | 28 |
| 25 | Dual Template Preparation of MFI Zeolites with Tuning Catalytic Properties in Alkylation of Mesitylene with Benzyl Alcohol. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 2924-2932. | 1.8 | 19 |
| 26 | Facile Synthesis of Hierarchical Micro-mesoporous HKUST-1 Using Organic Silane Surfactant as a Novel Template. <i>ChemistrySelect</i> , 2019, 4, 2079-2083. | 0.7 | 4 |
| 27 | Fabrication of meso- and microporous MFI zeolites by amphiphilic molecules with biphenol group. <i>Microporous and Mesoporous Materials</i> , 2019, 279, 278-285. | 2.2 | 6 |
| 28 | In Situ Fabrication of Hierarchical MTW Zeolite via Nanoparticle Assembly by a Tailored Simple Organic Molecule. <i>Chemistry - A European Journal</i> , 2018, 24, 8133-8140. | 1.7 | 7 |
| 29 | Selective Adsorption of Ethane over Ethylene in PCN-245: Impacts of Interpenetrated Adsorbent. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 8366-8373. | 4.0 | 112 |
| 30 | Effective enhancement on methanol adsorption in Cu-BTC by combination of lithium-doping and nitrogen-doping functionalization. <i>Journal of Materials Science</i> , 2018, 53, 6080-6093. | 1.7 | 9 |
| 31 | New functionalized IRMOF-10 with strong affinity for methanol: A simulation study. <i>Applied Surface Science</i> , 2018, 440, 351-358. | 3.1 | 20 |
| 32 | Hierarchically structured metal-organic frameworks assembled by hydroxy double salt-template synergy with high space-time yields. <i>CrystEngComm</i> , 2018, 20, 1057-1064. | 1.3 | 37 |
| 33 | Facile synthesis of hierarchical porous metal-organic frameworks with enhanced catalytic activity. <i>Chemical Engineering Journal</i> , 2018, 334, 1477-1483. | 6.6 | 91 |
| 34 | Hierarchically porous metal-organic frameworks: rapid synthesis and enhanced gas storage. <i>Soft Matter</i> , 2018, 14, 9589-9598. | 1.2 | 48 |
| 35 | Soft-templating Synthesis of Mesoporous Metal-Organic Frameworks with Enhanced Toluene Adsorption Capacity. <i>ChemistrySelect</i> , 2018, 3, 12888-12893. | 0.7 | 19 |
| 36 | Rapid Synthesis of Hierarchical Porous Metal-Organic Frameworks and the Simulation of Growth. <i>Crystal Growth and Design</i> , 2018, 18, 6661-6669. | 1.4 | 12 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Unusual Moisture-Enhanced CO ₂ Capture within Microporous PCN-250 Frameworks. ACS Applied Materials & Interfaces, 2018, 10, 38638-38647. | 4.0 | 57 |
| 38 | Ultrafast room-temperature synthesis of hierarchically porous metal-organic frameworks by a versatile cooperative template strategy. Journal of Materials Science, 2018, 53, 16276-16287. | 1.7 | 74 |
| 39 | Hierarchically porous metal-organic frameworks with single-crystal structures and their enhanced catalytic properties. CrystEngComm, 2018, 20, 5754-5759. | 1.3 | 27 |
| 40 | Synthesis of Hierarchically Structured Metal-Organic Frameworks by a Dual-Functional Surfactant. ChemistrySelect, 2018, 3, 5313-5320. | 0.7 | 23 |
| 41 | Green and rapid synthesis of hierarchical porous zeolitic imidazolate frameworks for enhanced CO ₂ capture. Inorganica Chimica Acta, 2018, 482, 358-363. | 1.2 | 20 |
| 42 | Hierarchically Porous Metal-Organic Frameworks: Green Synthesis and High Space-Time Yield. Industrial & Engineering Chemistry Research, 2018, 57, 9136-9143. | 1.8 | 24 |
| 43 | Rapid room-temperature synthesis of hierarchical porous metal organic frameworks. AIP Conference Proceedings, 2018, , . | 0.3 | 2 |
| 44 | Selective Adsorptive Separation of CO ₂ /CH ₄ and CO ₂ /N ₂ by a Water Resistant Zirconium-Porphyrin Metal-Organic Framework. Industrial & Engineering Chemistry Research, 2018, 57, 12215-12224. | 1.8 | 48 |
| 45 | In Situ FT-IR and DFT Study of the Synergistic Effects of Cerium Presence in the Framework and the Surface in NH ₃ -SCR. Aerosol and Air Quality Research, 2018, 18, 655-670. | 0.9 | 10 |
| 46 | Synthesis and catalytic performance of hierarchically structured beta zeolites by a dual-functional templating approach. New Journal of Chemistry, 2017, 41, 3950-3956. | 1.4 | 16 |
| 47 | Efficient Mechanochemical Synthesis of MOF-5 for Linear Alkanes Adsorption. Journal of Chemical & Engineering Data, 2017, 62, 2030-2036. | 1.0 | 101 |
| 48 | The synergistic effects of cerium presence in the framework and the surface resistance to SO ₂ and H ₂ O in NH ₃ -SCR. Journal of Industrial and Engineering Chemistry, 2017, 56, 108-119. | 2.9 | 53 |
| 49 | Tailoring Hierarchical Zeolites with Designed Cationic Surfactants and Their High Catalytic Performance. Chemistry - an Asian Journal, 2017, 12, 2711-2719. | 1.7 | 14 |
| 50 | In Situ Assembly of Nanoparticles into Hierarchical Beta Zeolite with Tailored Simple Organic Molecule. Langmuir, 2017, 33, 14396-14404. | 1.6 | 22 |
| 51 | Template synthesis of hierarchical porous metal-organic frameworks with tunable porosity. RSC Advances, 2017, 7, 52245-52251. | 1.7 | 65 |
| 52 | Impacts of Gas Impurities from Pipeline Natural Gas on Methane Storage in Metal-Organic Frameworks during Long-Term Cycling. Journal of Physical Chemistry C, 2017, 121, 15735-15745. | 1.5 | 24 |
| 53 | Highly efficient mechanochemical synthesis of an indium based metal-organic framework with excellent water stability. Chemical Engineering Science, 2017, 158, 539-544. | 1.9 | 55 |
| 54 | A new MOF-505@GO composite with high selectivity for CO ₂ /CH ₄ and CO ₂ /N ₂ separation. Chemical Engineering Journal, 2017, 308, 1065-1072. | 6.6 | 230 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 55 | Facile synthesis of mesostructured ZSM-5 zeolite with enhanced mass transport and catalytic performances. <i>Applied Surface Science</i> , 2017, 392, 785-794. | 3.1 | 33 |
| 56 | Rapid room-temperature synthesis of hierarchical porous zeolitic imidazolate frameworks with high space-time yield. <i>Science China Materials</i> , 2017, 60, 1205-1214. | 3.5 | 56 |
| 57 | Effects of the Framework and Mesoporosity on the Catalytic Activity of Hierarchical Zeolite Catalysts in Benzyl Alcohol Conversion. <i>ChemCatChem</i> , 2016, 8, 2406-2414. | 1.8 | 15 |
| 58 | New activated carbon with high thermal conductivity and its microwave regeneration performance. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2016, 31, 328-333. | 0.4 | 8 |
| 59 | Tuning the adsorption and separation properties of noble gases and N ₂ in CuBTC by ligand functionalization. <i>RSC Advances</i> , 2016, 6, 91093-91101. | 1.7 | 11 |
| 60 | Direct synthesis of hierarchical USY zeolite for retardation of catalyst deactivation. <i>Chemical Engineering Science</i> , 2016, 153, 374-381. | 1.9 | 34 |
| 61 | Fabrication of a hierarchically structured HKUST-1 by a mixed-ligand approach. <i>RSC Advances</i> , 2016, 6, 61006-61012. | 1.7 | 39 |
| 62 | Adsorptive Separation of Methanol/Acetone on Isostructural Series of Metal-Organic Frameworks M-BTC (M = Ti, Fe, Cu, Co, Ru, Mo): A Computational Study of Adsorption Mechanisms and Metal-Substitution Impacts. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 26930-26940. | 4.0 | 49 |
| 63 | Investigation of structure formation mechanism of a mesoporous ZSM-5 zeolite by mesoscopic simulation. <i>Chemical Physics</i> , 2015, 448, 9-14. | 0.9 | 9 |
| 64 | Effective Ligand Functionalization of Zirconium-Based Metal-Organic Frameworks for the Adsorption and Separation of Benzene and Toluene: A Multiscale Computational Study. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 5775-5787. | 4.0 | 63 |
| 65 | Adsorption and separation of ethane/ethylene on ZIFs with various topologies: Combining GCMC simulation with the ideal adsorbed solution theory (IAST). <i>Chemical Engineering Science</i> , 2015, 124, 144-153. | 1.9 | 83 |
| 66 | Enhancement effect of lithium-doping functionalization on methanol adsorption in copper-based metal-organic framework. <i>Chemical Engineering Science</i> , 2015, 123, 1-10. | 1.9 | 28 |
| 67 | Effect of synthesis conditions on the structural and catalytic properties of hierarchically structured ZSM-5 zeolites. <i>RSC Advances</i> , 2014, 4, 13831. | 1.7 | 14 |
| 68 | Effect of gasoline composition on oxidative desulfurization using a phosphotungstic acid/activated carbon catalyst with hydrogen peroxide. <i>Applied Energy</i> , 2014, 113, 78-85. | 5.1 | 217 |
| 69 | Gas transport properties and propylene/propane separation characteristics of ZIF-8 membranes. <i>Journal of Membrane Science</i> , 2014, 451, 85-93. | 4.1 | 251 |
| 70 | Hierarchically structured Beta zeolites with intercrystal mesopores and the improved catalytic properties. <i>Applied Catalysis A: General</i> , 2014, 470, 412-419. | 2.2 | 26 |
| 71 | Adsorption performance of a MIL-101(Cr)/graphite oxide composite for a series of n-alkanes. <i>RSC Advances</i> , 2014, 4, 56216-56223. | 1.7 | 47 |
| 72 | Template synthesis of the hierarchically structured MFI zeolite with nanosheet frameworks and tailored structure. <i>New Journal of Chemistry</i> , 2014, 38, 4380. | 1.4 | 33 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 73 | Effect of electrostatic properties of IRMOFs on VOCs adsorption: a density functional theory study. <i>Adsorption</i> , 2014, 20, 777-788. | 1.4 | 9 |
| 74 | Adsorptive Denitrogenation of Fuel over Metal Organic Frameworks: Effect of N-Types and Adsorption Mechanisms. <i>Journal of Physical Chemistry C</i> , 2014, 118, 22533-22543. | 1.5 | 34 |
| 75 | Experimental and molecular simulation studies of CO ₂ adsorption on zeolitic imidazolate frameworks: ZIF-8 and amine-modified ZIF-8. <i>Adsorption</i> , 2013, 19, 25-37. | 1.4 | 115 |
| 76 | Synthesis and structural properties of hierarchically structured aluminosilicates with zeolite Y (FAU) frameworks. <i>RSC Advances</i> , 2013, 3, 15075. | 1.7 | 42 |
| 77 | Adsorption and separation of CH ₄ /H ₂ in MIL-101s by molecular simulation study. <i>Chemical Engineering Science</i> , 2013, 98, 246-254. | 1.9 | 20 |
| 78 | Molecular simulation and experimental studies of a mesoporous ZSM-5 type molecular sieve. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 2741. | 1.3 | 7 |
| 79 | Facile synthesis of mesoporous aluminosilicates constructed with crystalline microporous frameworks. <i>Applied Surface Science</i> , 2013, 279, 55-61. | 3.1 | 7 |
| 80 | Direct synthesis of mesoporous ZSM-5 zeolite by a dual-functional surfactant approach. <i>Chemical Engineering Journal</i> , 2012, 210, 96-102. | 6.6 | 55 |
| 81 | Mesoscopic simulation of surfactant/silicate self-assembly in the mesophase formation of SBA-15 under charge matching interactions. <i>European Polymer Journal</i> , 2012, 48, 1892-1900. | 2.6 | 9 |
| 82 | Fabrication of a hierarchically structured beta zeolite by a dual-porogenic surfactant. <i>Journal of Materials Chemistry</i> , 2012, 22, 18631. | 6.7 | 46 |
| 83 | Adsorption and corrosion-inhibiting effect of 2-(2-{[2-(4-Pyridylcarbonyl)hydrazono]methyl}phenoxy)acetic acid on mild steel surface in seawater. <i>Applied Surface Science</i> , 2012, 258, 6679-6687. | 3.1 | 50 |
| 84 | Adsorption Equilibrium and Kinetics of CO ₂ on Chromium Terephthalate MIL-101. <i>Energy & Fuels</i> , 2011, 25, 835-842. | 2.5 | 149 |
| 85 | Improvement of CO ₂ adsorption on ZIF-8 crystals modified by enhancing basicity of surface. <i>Chemical Engineering Science</i> , 2011, 66, 4878-4888. | 1.9 | 175 |
| 86 | Adsorption breakthrough of benzene in the fixed bed of modified activated carbon under different humidity conditions. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2010, 25, 499-503. | 0.4 | 1 |
| 87 | Effects of loading different metal ions on an activated carbon on the desorption activation energy of dichloromethane/trichloromethane. <i>Journal of Hazardous Materials</i> , 2010, 179, 790-794. | 6.5 | 34 |
| 88 | SWELLING BEHAVIOR OF CHEMICAL MODIFIED SOY PROTEIN GELS. <i>Acta Polymerica Sinica</i> , 2010, 010, 1116-1121. | 0.0 | 0 |
| 89 | Effect of Relative Humidity on Catalytic Combustion of Toluene over Copper Based Catalysts with Different Supports. <i>Chinese Journal of Chemical Engineering</i> , 2009, 17, 767-772. | 1.7 | 22 |
| 90 | Catalytic activity of copper based catalysts pretreated with H ₂ reduction for catalytic combustion of styrene. <i>Catalysis Communications</i> , 2009, 10, 1166-1169. | 1.6 | 7 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 91 | Effect of textural property of coconut shell-based activated carbon on desorption activation energy of benzothiophene. <i>Frontiers of Chemical Engineering in China</i> , 2008, 2, 269-275. | 0.6 | 2 |
| 92 | Fast synthesis of temperature-sensitive PNIPAAm hydrogels by microwave irradiation. <i>European Polymer Journal</i> , 2008, 44, 1217-1224. | 2.6 | 63 |
| 93 | Effect of Relative Humidity on Adsorption of Formaldehyde on Modified Activated Carbons. <i>Chinese Journal of Chemical Engineering</i> , 2008, 16, 871-875. | 1.7 | 65 |
| 94 | Desorption activation energy of dibenzothiophene on the activated carbons modified by different metal salt solutions. <i>Chemical Engineering Journal</i> , 2007, 132, 233-239. | 6.6 | 51 |
| 95 | Effects of pore sizes of porous silica gels on desorption activation energy of water vapour. <i>Applied Thermal Engineering</i> , 2007, 27, 869-876. | 3.0 | 99 |
| 96 | Development and applications of solar-based thermoelectric technologies. <i>Renewable and Sustainable Energy Reviews</i> , 2007, 11, 923-936. | 8.2 | 243 |
| 97 | Effects of Ionic Strength on the Uptake of Taurine and Glycine onto a Strongly Basic Anion-Exchange Resin. <i>Adsorption Science and Technology</i> , 2006, 24, 737-748. | 1.5 | 2 |
| 98 | Effects of Textural Properties and Surface Oxygen Content of Activated Carbons on the Desorption Activation Energy of Water. <i>Adsorption Science and Technology</i> , 2006, 24, 363-374. | 1.5 | 25 |
| 99 | Effect of ultrasound on desorption kinetics of phenol from polymeric resin. <i>Ultrasonics Sonochemistry</i> , 2006, 13, 225-231. | 3.8 | 19 |
| 100 | Activation Energy for Dibenzofuran Desorption from Fe ³⁺ /TiO ₂ and Ce ³⁺ /TiO ₂ Photocatalysts Coated onto Glass Fibres. <i>Adsorption Science and Technology</i> , 2005, 23, 357-366. | 1.5 | 15 |
| 101 | Influence of the microporosity and surface chemistry of polymeric resins on adsorptive properties toward phenol. <i>Journal of Hazardous Materials</i> , 2004, 113, 131-135. | 6.5 | 27 |
| 102 | Effects of inverse gas chromatography measurement conditions on elution peaks on activated carbon. <i>Carbon</i> , 2004, 42, 3012-3015. | 5.4 | 2 |
| 103 | Estimation of activation energy for desorption of low-volatility dioxins on zeolites by TPD technique. <i>Separation and Purification Technology</i> , 2003, 31, 41-45. | 3.9 | 41 |
| 104 | Estimation of Activation Energy of Desorption of n-Hexanol from Activated Carbons by the TPD Technique. <i>Adsorption Science and Technology</i> , 2003, 21, 125-133. | 1.5 | 25 |
| 105 | Effects of ultrasound on adsorption equilibrium of phenol on polymeric adsorption resin. <i>Chemical Engineering Journal</i> , 2002, 86, 375-379. | 6.6 | 69 |
| 106 | Rapid Synthesis of Hierarchically Structured Multifunctional Metal-Organic Zeolites with Enhanced Volatile Organic Compounds Adsorption Capacity. <i>Industrial & Engineering Chemistry Research</i> , 0, , , | 1.8 | 19 |