Guillaume Maurin

List of Publications by Year
in descending order

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355 papers	31,176 citations	4831 87 h-index	6024 165 g-index
375 all docs	375 docs citations	375 times ranked	23153 citing authors

#	Article	IF	Citations
1	Effective Separation of Hexane Isomers in the Zr-MIL-140B Metalâ€“Organic Framework Assisted by Applying Mechanical Pressure. Journal of Physical Chemistry C, 2022, 126, 2905-2911.	1.5	7
2	Effective Degradation of Novichok Nerve Agents by the Zirconium Metalâ€“Organic Framework MOF-808. ACS Applied Materials & Interfaces, 2022, 14, 9222-9230.	4.0	18
3	A robust eco-compatible microporous iron coordination polymer for CO₂ capture. Journal of Materials Chemistry A, 2022, 10, 8535-8545.	5.2	9
4	A zirconium metal-organic framework with SOC topological net for catalytic peptide bond hydrolysis. Nature Communications, 2022, 13, 1284.	5.8	32
5	Structural Insight of MOFs under Combined Mechanical and Adsorption Stimuli. Angewandte Chemie - International Edition, 2022, 61, .	7.2	4
6	Putting Forward NUS-8-CO₂H/PIM-1 as a Mixed Matrix Membrane for CO₂ Capture. ACS Applied Materials & Interfaces, 2022, 14, 16820-16829.	4.0	14
7	Structural Insight of MOFs under Combined Mechanical and Adsorption Stimuli. Angewandte Chemie, 2022, 134, .	1.6	2
8	MIL-101(Cr) MOF as an Effective Siloxane Sensor. ACS Applied Materials & Interfaces, 2022, 14, 17531-17538.	4.0	26
9	SO2 capture in a chemical stable Al(III) MOF: DUT-4 as an effective adsorbent to clean CH4. Fuel, 2022, 322, 124213.	3.4	17
10	Hydrothermal Green Synthesis of a Robust Al Metal-Organic-Framework Effective for Water Adsorption Heat Allocations. ACS Sustainable Chemistry and Engineering, 2022, 10, 7010-7019.	3.2	9
11	Adsorption of NO, NO₂ and H₂O in divalent cation faujasite type zeolites: a density functional theory screening approach. Physical Chemistry Chemical Physics, 2022, 24, 15565-15578.	1.3	6
12	Molecular insight into the simultaneous capture of sarin/soman by graphene incorporating dual metal sites. Materials Today Communications, 2022, 31, 103702.	0.9	0
13	Separation of Branched Alkanes Feeds by a Synergistic Action of Zeolite and Metalâ€Organic Framework. Advanced Science, 2022, 9, .	5.6	21
14	Rational design of mixed-matrix metal-organic framework membranes for molecular separations. Science, 2022, 376, 1080-1087.	6.0	160
15	Asymmetric pore windows in MOF membranes for natural gas valorization. Nature, 2022, 606, 706-712.	13.7	163
16	Washable and Reusable Zr-Metalâ€“Organic Framework Nanostructure/Polyacrylonitrile Fibrous Mats for Catalytic Degradation of Real Chemical Warfare Agents. ACS Applied Nano Materials, 2022, 5, 9657-9665.	2.4	4
17	Engineering MOF surface defects in mixed matrix membranes: An effective strategy to enhance MOF/polymer adhesion and control interfacial gas transport. , 2022, 2, 100029.		9
18	Computational exploration of Sarin and simulants adsorption on a series of transition metal embedded graphene. Applied Surface Science, 2021, 538, 148047.	3.1	10

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19	Breaking the upper bound of siloxane uptake: metalâ€“organic frameworks as an adsorbent platform. Journal of Materials Chemistry A, 2021, 9, 12711-12720.	5.2	10
20	A Mesoporous Zirconium-Isophthalate Multifunctional Platform. Matter, 2021, 4, 182-194.	5.0	20
21	Water adsorption fingerprinting of structural defects/capping functions in Zrâ€“fumarate MOFs: a hybrid computational-experimental approach. Dalton Transactions, 2021, 50, 1324-1333.	1.6	10
22	Defective Zr-Fumarate MOFs Enable High-Efficiency Adsorption Heat Allocations. ACS Applied Materials & Interfaces, 2021, 13, 1723-1734.	4.0	29
23	H2S Stability of Metalâ€“Organic Frameworks: A Computational Assessment. ACS Applied Materials & Interfaces, 2021, 13, 4813-4822.	4.0	6
24	Crystals springing into action: metalâ€“organic framework CUK-1 as a pressure-driven molecular spring. Chemical Science, 2021, 12, 5682-5687.	3.7	21
25	Tuning the hexane isomer separation performances of Zeolitic Imidazole Framework-8 using mechanical pressure. Journal of Chemical Physics, 2021, 154, 084702.	1.2	9
26	Is Porosity at the MOF/Polymer Interface Necessarily an Obstacle to Optimal Gas-Separation Performances in Mixed Matrix Membranes?. , 2021, 3, 344-350.		24
27	Metalâ€Dependent and Selective Crystallization of CAUâ€10 and MILâ€53 Frameworks through Linker Nitration. Chemistry - A European Journal, 2021, 27, 7696-7703.	1.7	0
28	Multivariate Sulfonic-Based Titanium Metalâ€“Organic Frameworks as Super-protonic Conductors. ACS Applied Materials & Interfaces, 2021, 13, 20194-20200.	4.0	11
29	Insights into the Enhancement of MOF/Polymer Adhesion in Mixed-Matrix Membranes via Polymer Functionalization. ACS Applied Materials & Interfaces, 2021, 13, 29041-29047.	4.0	32
30	Porous Covalent Organic Polymers for Efficient Fluorocarbonâ€Based Adsorption Cooling. Angewandte Chemie, 2021, 133, 18185-18191.	1.6	0
31	Innentitelbild: Porous Covalent Organic Polymers for Efficient Fluorocarbonâ€Based Adsorption Cooling (Angew. Chem. 33/2021). Angewandte Chemie, 2021, 133, 17894-17894.	1.6	0
32	Competitive adsorption of water and chemical warfare agents on transition metal embedded graphene. Applied Surface Science, 2021, 551, 149433.	3.1	8
33	Porous Covalent Organic Polymers for Efficient Fluorocarbonâ€Based Adsorption Cooling. Angewandte Chemie - International Edition, 2021, 60, 18037-18043.	7.2	16
34	Computer-Aided Discovery of MOFs with Calixarene-Analogous Microenvironment for Exceptional SF₆ Capture. Chemistry of Materials, 2021, 33, 5108-5114.	3.2	37
35	Ammonia Capture via an Unconventional Reversible Guest-Induced Metal-Linker Bond Dynamics in a Highly Stable Metalâ€“Organic Framework. Chemistry of Materials, 2021, 33, 6186-6192.	3.2	26
36	Disclosing the Role of Defectâ€Engineered Metalâ€“Organic Frameworks in Mixed Matrix Membranes for Efficient CO₂ Separation: A Joint Experimentalâ€Computational Exploration. Advanced Functional Materials, 2021, 31, 2103973.	7.8	47

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37	Molecular Insight into the Slow Dynamics of C₄ Hydrocarbons in the Zeoliticâ€“Imidazole Framework (ZIF-8). ACS Applied Materials & Interfaces, 2021, 13, 33685-33692.	4.0	7
38	SO₂ Capture by Two Aluminum-Based MOFs: Rigid-like MIL-53(Al)-TDC versus Breathing MIL-53(Al)-BDC. ACS Applied Materials & Interfaces, 2021, 13, 39363-39370.	4.0	39
39	Bilayer versus Polymeric Artificial Water Channel Membranes: Structural Determinants for Enhanced Filtration Performances. Journal of the American Chemical Society, 2021, 143, 14386-14393.	6.6	17
40	Highly efficient CO2 reduction under visible-light on non-covalent Ruâ‹¯Re assembled photocatalyst: Evidence on the electron transfer mechanism. Journal of Catalysis, 2021, 404, 46-55.	3.1	6
41	Robust ionic liquid@MOF composite as a versatile superprotonic conductor. Dalton Transactions, 2021, 50, 15914-15923.	1.6	4
42	ResponZIF Structures: Zeolitic Imidazolate Frameworks as Stimuli-Responsive Materials. ACS Applied Materials & Interfaces, 2021, 13, 50602-50642.	4.0	20
43	Calcium hydrazinidoborane: Synthesis, characterization, and promises for hydrogen storage. International Journal of Hydrogen Energy, 2020, 45, 2022-2033.	3.8	4
44	Modeling of Gas Transport through Polymer/MOF Interfaces: A Microsecond-Scale Concentration Gradient-Driven Molecular Dynamics Study. Chemistry of Materials, 2020, 32, 1288-1296.	3.2	64
45	Toward a Rational Design of Titanium Metal-Organic Frameworks. Matter, 2020, 2, 440-450.	5.0	58
46	Rational design of a robust aluminum metal-organic framework for multi-purpose water-sorption-driven heat allocations. Nature Communications, 2020, 11, 5112.	5.8	68
47	Self-supported PPy-encapsulated CoS₂ nanosheets anchored on the TiO_{2â‹†x} nanorod array support by Tiâ€“S bonds for ultra-long life hybrid Mg²⁺/Li⁺ batteries. Journal of Materials Chemistry A, 2020, 8, 22712-22719.	5.2	24
48	Unravelling the water adsorption in a robust iron carboxylate metalâ€“organic framework. Chemical Communications, 2020, 56, 9628-9631.	2.2	12
49	Hydration Structure and Dynamics of the Favipiravir Antiviral Drug: A Molecular Modelling Approach. Bulletin of the Chemical Society of Japan, 2020, 93, 1378-1385.	2.0	3
50	Hexane isomers separation on an isoreticular series of microporous Zr carboxylate metal organic frameworks. Journal of Materials Chemistry A, 2020, 8, 17780-17789.	5.2	15
51	Innentitelbild: Highly Selective Removal of Perfluorinated Contaminants by Adsorption on Allâ€Silica Zeolite Beta (Angew. Chem. 33/2020). Angewandte Chemie, 2020, 132, 13770-13770.	1.6	1
52	Mechanistic Insight into the Catalytic NO Oxidation by the MIL-100 MOF Platform: Toward the Prediction of More Efficient Catalysts. ACS Catalysis, 2020, 10, 9445-9450.	5.5	22
53	Superionic conduction in a zirconium-formate molecular solid. Journal of Materials Chemistry A, 2020, 8, 17951-17955.	5.2	2
54	Confinement Effects on the Properties of Polar Hydrogen-Bonded Fluids: A Showcase on Methanol Adsorbed in Three-Dimensional Pillared Graphene and Carbon Nanotube Networks. Journal of Physical Chemistry C, 2020, 124, 22959-22971.	1.5	4

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55	Engineering micromechanics of soft porous crystals for negative gas adsorption. Chemical Science, 2020, 11, 9468-9479.	3.7	30
56	Multifaceted Study of the Interactions between CPO-27-Ni and Polyurethane and Their Impact on Nitric Oxide Release Performance. ACS Applied Materials & Interfaces, 2020, 12, 58263-58276.	4.0	23
57	Highly Selective Removal of Perfluorinated Contaminants by Adsorption on Allâ€Silica Zeolite Beta. Angewandte Chemie - International Edition, 2020, 59, 14086-14090.	7.2	60
58	Highly Selective Removal of Perfluorinated Contaminants by Adsorption on Allâ€Silica Zeolite Beta. Angewandte Chemie, 2020, 132, 14190-14194.	1.6	21
59	Design of MoS₂/Graphene van der Waals Heterostructure as Highly Efficient and Stable Electrocatalyst for Hydrogen Evolution in Acidic and Alkaline Media. ACS Applied Materials & Interfaces, 2020, 12, 24777-24785.	4.0	62
60	Controlled Transdermal Release of Antioxidant Ferulate by a Porous Sc(III) MOF. IScience, 2020, 23, 101156.	1.9	16
61	Microporous 3D Graphene-like Zeolite-Templated Carbons for Preferential Adsorption of Ethane. ACS Applied Materials & Interfaces, 2020, 12, 28484-28495.	4.0	25
62	Formation of a Singleâ€Crystal Aluminumâ€Based MOF Nanowire with Graphene Oxide Nanoscrolls as Structureâ€Directing Agents. Angewandte Chemie, 2020, 132, 10439-10444.	1.6	1
63	Formation of a Singleâ€Crystal Aluminumâ€Based MOF Nanowire with Graphene Oxide Nanoscrolls as Structureâ€Directing Agents. Angewandte Chemie - International Edition, 2020, 59, 10353-10358.	7.2	30
64	Charting the Metal-Dependent High-Pressure Stability of Bimetallic UiO-66 Materials. , 2020, 2, 438-445.		21
65	A Co(<scp>ii</scp>)-coordination polymer for ultrahigh superprotonic conduction: an atomistic insight through molecular simulations and QENS experiments. Journal of Materials Chemistry A, 2020, 8, 7847-7853.	5.2	29
66	Partially Reversible H₂S Adsorption by MFM-300(Sc): Formation of Polysulfides. ACS Applied Materials & Interfaces, 2020, 12, 18885-18892.	4.0	34
67	Tailoring the separation properties of flexible metal-organic frameworks using mechanical pressure. Nature Communications, 2020, 11, 1216.	5.8	88
68	Dynamic Coordination Chemistry of Fluorinated Zrâ€MOFs: Synthetic Control and Reassembly/Disassembly Beyond de Novo Synthesis to Tune the Structure and Property. Chemistry - A European Journal, 2020, 26, 8254-8261.	1.7	16
69	Thermoâ€Responsive MOF/Polymer Composites for Temperatureâ€Mediated Water Capture and Release. Angewandte Chemie, 2020, 132, 11096-11102.	1.6	11
70	Thermoâ€Responsive MOF/Polymer Composites for Temperatureâ€Mediated Water Capture and Release. Angewandte Chemie - International Edition, 2020, 59, 11003-11009.	7.2	101
71	Molecular Insight into Fluorocarbon Adsorption in Pore Expanded Metalâ€“Organic Framework Analogs. Journal of the American Chemical Society, 2020, 142, 3002-3012.	6.6	44
72	Tuning Cellular Biological Functions Through the Controlled Release of NO from a Porous Tiâ€MOF. Angewandte Chemie - International Edition, 2020, 59, 5135-5143.	7.2	62

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73	Tuning Cellular Biological Functions Through the Controlled Release of NO from a Porous Tiâ€MOF. Angewandte Chemie, 2020, 132, 5173-5181.	1.6	12
74	Low Temperature Calorimetry Coupled with Molecular Simulations for an In-Depth Characterization of the Guest-Dependent Compliant Behavior of MOFs. Chemistry of Materials, 2020, 32, 3489-3498.	3.2	8
75	Solvent Impact on the Properties of Benchmark Metalâ€“Organic Frameworks: Acetonitrileâ€Based Synthesis of CAUâ€10, Ceâ€UiOâ€66, and Alâ€MILâ€53. Chemistry - A European Journal, 2020, 26, 3877-3883.	1.7	35
76	Structure of the Polymer Backbones in polyMOF Materials. Journal of the American Chemical Society, 2020, 142, 10863-10868.	6.6	19
77	The force of MOFs: the potential of switchable metalâ€“organic frameworks as solvent stimulated actuators. Chemical Communications, 2020, 56, 7411-7414.	2.2	15
78	Hexahydroxytriphenylene for the synthesis of group 13 MOFs â€“ a new inorganic building unit in a Î²-cristobalite type structure. Dalton Transactions, 2020, 49, 3088-3092.	1.6	14
79	Computationally Assisted Assessment of the Metalâ€Organic Framework/Polymer Compatibility in Composites Integrating a Rigid Polymer. Advanced Theory and Simulations, 2019, 2, 1900116.	1.3	5
80	Towards general network architecture design criteria for negative gas adsorption transitions in ultraporous frameworks. Nature Communications, 2019, 10, 3632.	5.8	73
81	Mechanical Control of the Kinetic Propylene/Propane Separation by Zeolitic Imidazolate Frameworkâ€8. Angewandte Chemie, 2019, 131, 13872-13876.	1.6	17
82	Mechanical Control of the Kinetic Propylene/Propane Separation by Zeolitic Imidazolate Frameworkâ€8. Angewandte Chemie - International Edition, 2019, 58, 13734-13738.	7.2	39
83	A metalâ€“organic framework for efficient water-based ultra-low-temperature-driven cooling. Nature Communications, 2019, 10, 3025.	5.8	145
84	Computational Exploration of the Catalytic Degradation of Sarin and Its Simulants by a Titanium Metalâ€“Organic Framework. Journal of Physical Chemistry C, 2019, 123, 19077-19086.	1.5	22
85	Single-File Diffusion of Neo-Pentane Confined in the MIL-47(V) Metalâ€“Organic Framework. Journal of Physical Chemistry C, 2019, 123, 17360-17367.	1.5	12
86	Porous Metalâ€“Organic Framework CUK-1 for Adsorption Heat Allocation toward Green Applications of Natural Refrigerant Water. ACS Applied Materials & Interfaces, 2019, 11, 25778-25789.	4.0	45
87	Engineering Structural Dynamics of Zirconium Metalâ€“Organic Frameworks Based on Natural C4 Linkers. Journal of the American Chemical Society, 2019, 141, 17207-17216.	6.6	54
88	Highly Efficient Rare-Earth-Based Metalâ€“Organic Frameworks for Water Adsorption: A Molecular Modeling Approach. Journal of Physical Chemistry C, 2019, 123, 26989-26999.	1.5	15
89	Unraveling the Water Adsorption Mechanism in the Mesoporous MIL-100(Fe) Metalâ€“Organic Framework. Journal of Physical Chemistry C, 2019, 123, 23014-23025.	1.5	51
90	Rubidium hydrazinidoborane: Synthesis, characterization and hydrogen release properties. International Journal of Hydrogen Energy, 2019, 44, 28252-28261.	3.8	5

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91	Investigation of Methane Adsorption in Strained IRMOF-1. Journal of Physical Chemistry C, 2019, 123, 24592-24597.	1.5	8
92	Computational evaluation of the chemical warfare agents capture performances of robust MOFs. Microporous and Mesoporous Materials, 2019, 280, 97-104.	2.2	19
93	A Microporous Zirconium Metalâ€Organic Framework Based on transâ€Aconitic Acid for Selective Carbon Dioxide Adsorption. European Journal of Inorganic Chemistry, 2019, 2019, 2674-2679.	1.0	12
94	A High Proton Conductive Hydrogen-Sulfate Decorated Titanium Carboxylate Metalâ˜Organic Framework. ACS Sustainable Chemistry and Engineering, 2019, 7, 5776-5783.	3.2	40
95	Outstanding reversible H₂S capture by an Al(<scp>iii</scp>)-based MOF. Chemical Communications, 2019, 55, 3049-3052.	2.2	63
96	Unraveling the Enhancement of the Interfacial Compatibility between Metalâ€“Organic Framework and Functionalized Graphene Oxide. Journal of Physical Chemistry C, 2019, 123, 4984-4993.	1.5	4
97	Modulation of the mechanical energy storage performance of the MIL-47(VIV) metal organic framework by ligand functionalization. Dalton Transactions, 2019, 48, 1656-1661.	1.6	16
98	Guestâ€Assisted Proton Conduction in the Sulfonic Mesoporous MILâ€101 MOF. Chemistry - an Asian Journal, 2019, 14, 3561-3565.	1.7	30
99	High and energy-efficient reversible SO₂ uptake by a robust Sc(<scp>iii</scp>)-based MOF. Journal of Materials Chemistry A, 2019, 7, 15580-15584.	5.2	70
100	Multivariable Sieving and Hierarchical Recognition for Organic Toxics in Nonhomogeneous Channel of MOFs. CheM, 2019, 5, 1337-1350.	5.8	59
101	Fluorinated MOF platform for selective removal and sensing of SO2 from flue gas and air. Nature Communications, 2019, 10, 1328.	5.8	292
102	Highly tunable sulfur hexafluoride separation by interpenetration control in metal organic frameworks. Microporous and Mesoporous Materials, 2019, 281, 44-49.	2.2	18
103	Covalent and Selective Grafting of Polyethylene Glycol Brushes at the Surface of ZIF-8 for the Processing of Membranes for Pervaporation. ACS Sustainable Chemistry and Engineering, 2019, 7, 6629-6639.	3.2	60
104	Solventâ€Induced Control over Breathing Behavior in Flexible Metalâ€“Organic Frameworks for Naturalâ€Gas Delivery. Angewandte Chemie, 2019, 131, 8157-8161.	1.6	27
105	Solventâ€Induced Control over Breathing Behavior in Flexible Metalâ€“Organic Frameworks for Naturalâ€Gas Delivery. Angewandte Chemie - International Edition, 2019, 58, 8073-8077.	7.2	132
106	Combinatorial Drug Therapy: Compartmentalized Encapsulation of Two Antibiotics in Porous Nanoparticles: an Efficient Strategy to Treat Intracellular Infections (Part. Part. Syst. Charact. 3/2019). Particle and Particle Systems Characterization, 2019, 36, 1970009.	1.2	2
107	Polymer Infiltration into Metalâ€“Organic Frameworks in Mixed-Matrix Membranes Detected in Situ by NMR. Journal of the American Chemical Society, 2019, 141, 7589-7595.	6.6	102
108	Compartmentalized Encapsulation of Two Antibiotics in Porous Nanoparticles: an Efficient Strategy to Treat Intracellular Infections. Particle and Particle Systems Characterization, 2019, 36, 1800360.	1.2	24

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109	Thermodynamic Modeling of the Selective Adsorption of Carbon Dioxide over Methane in the Mechanically Constrained Breathing MILâ€53(Cr). Advanced Theory and Simulations, 2019, 2, 1900124.	1.3	3
110	Revisiting the water sorption isotherm of MOF using electrical measurements. Chemical Communications, 2019, 55, 13251-13254.	2.2	14
111	Pillared-layered metalâ€“organic frameworks for mechanical energy storage applications. Journal of Materials Chemistry A, 2019, 7, 22663-22674.	5.2	34
112	Adsorption of 1-Propanol in the Channel-Like InOF-1 Metalâ€“Organic Framework and Its Influence on the CO₂ Capture Performances. Journal of Physical Chemistry C, 2018, 122, 5566-5577.	1.5	16
113	Revealing the Transient Concentration of CO₂ in a Mixedâ€Matrix Membrane by IR Microimaging and Molecular Modeling. Angewandte Chemie - International Edition, 2018, 57, 5156-5160.	7.2	35
114	The effect of crystallite size on pressure amplification in switchable porous solids. Nature Communications, 2018, 9, 1573.	5.8	92
115	A phase transformable ultrastable titanium-carboxylate framework for photoconduction. Nature Communications, 2018, 9, 1660.	5.8	128
116	Metal-Organic Frameworks for Cultural Heritage Preservation: The Case of Acetic Acid Removal. ACS Applied Materials & Interfaces, 2018, 10, 13886-13894.	4.0	32
117	Einblicke in die Verteilung von CO₂â€MolekÃ¼len und deren zeitliche Entwicklung durch Mikroâ€Bildgebung mittels IRâ€Spektroskopie und molekulardynamische Modellierung. Angewandte Chemie, 2018, 130, 5250-5255.	1.6	0
118	Modeling of Diffusion in MOFs. , 2018, , 63-97.		2
119	A promising metalâ€“organic framework (MOF), MIL-96(Al), for CO₂ separation under humid conditions. Journal of Materials Chemistry A, 2018, 6, 2081-2090.	5.2	78
120	Thermodynamic insight into stimuli-responsive behaviour of soft porous crystals. Nature Communications, 2018, 9, 204.	5.8	104
121	Unraveling the mechanical behaviour of hydrazine borane (NH₂â€“NH₂â€“BH₃). Physical Chemistry Chemical Physics, 2018, 20, 2845-2850.	1.3	4
122	Enhanced gas separation performance of 6FDA-DAM based mixed matrix membranes by incorporating MOF UiO-66 and its derivatives. Journal of Membrane Science, 2018, 558, 64-77.	4.1	126
123	Understanding the origins of metalâ€“organic framework/polymer compatibility. Chemical Science, 2018, 9, 315-324.	3.7	153
124	Humidity-induced CO₂ capture enhancement in Mg-CUK-1. Dalton Transactions, 2018, 47, 15827-15834.	1.6	29
125	A robust zirconium amino acid metal-organic framework for proton conduction. Nature Communications, 2018, 9, 4937.	5.8	218
126	Enhanced Polymer Crystallinity in Mixed-Matrix Membranes Induced by Metalâ€“Organic Framework Nanosheets for Efficient CO₂ Capture. ACS Applied Materials & Interfaces, 2018, 10, 43095-43103.	4.0	55

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127	The starburst galaxy NGC 253 revisited by H.E.S.S. and Fermi-LAT. Astronomy and Astrophysics, 2018, 617, A73.	2.1	41
128	Natural gas upgrading using a fluorinated MOF with tuned H2S and CO2 adsorption selectivity. Nature Energy, 2018, 3, 1059-1066.	19.8	214
129	Selective Capture of Phenol from Biofuel Using Protonated Faujasite Zeolites with Different Si/Al Ratios. Journal of Physical Chemistry C, 2018, 122, 26419-26429.	1.5	41
130	A robust large-pore zirconium carboxylate metalâ€“organic framework for energy-efficient water-sorption-driven refrigeration. Nature Energy, 2018, 3, 985-993.	19.8	217
131	Understanding of the Graphene Oxide/Metal-Organic Framework Interface at the Atomistic Scale. ACS Applied Materials & Interfaces, 2018, 10, 33619-33629.	4.0	40
132	Achieving Superprotonic Conduction with a 2D Fluorinated Metalâ€“Organic Framework. Journal of the American Chemical Society, 2018, 140, 13156-13160.	6.6	103
133	Mechanical-pressure induced response of the MOF Al-MIL-53-TDC. Polyhedron, 2018, 155, 144-148.	1.0	17
134	Peculiar Molecular Shape and Size Dependence of the Dynamics of Fluids Confined in a Small-Pore Metalâ€“Organic Framework. Journal of Physical Chemistry Letters, 2018, 9, 3014-3020.	2.1	8
135	Computational structure determination of novel metalâ€“organic frameworks. Chemical Communications, 2018, 54, 10812-10815.	2.2	27
136	In Silico Screening of MOFs with open copper sites for C₂H₂/CO₂ separation. AICHE Journal, 2018, 64, 4089-4096.	1.8	30
137	Adsorption Contraction Mechanics: Understanding Breathing Energetics in Isoreticular Metalâ€“Organic Frameworks. Journal of Physical Chemistry C, 2018, 122, 19171-19179.	1.5	52
138	Rietveld Refinement of MILâ€160 and Its Structural Flexibility Upon H₂O and N₂ Adsorption. European Journal of Inorganic Chemistry, 2018, 2018, 3626-3632.	1.0	58
139	Highly reversible sorption of H2S and CO2 by an environmentally friendly Mg-based MOF. Journal of Materials Chemistry A, 2018, 6, 16900-16909.	5.2	81
140	Porous zinc and cobalt 2-nitroimidazolate frameworks with six-membered ring windows and a layered cobalt 2-nitroimidazolate polymorph. CrystEngComm, 2017, 19, 1377-1388.	1.3	6
141	Metalâ€“organic frameworks to satisfy gas upgrading demands: fine-tuning thesoc-MOF platform for the operative removal of H₂S. Journal of Materials Chemistry A, 2017, 5, 3293-3303.	5.2	94
142	Role of MOF surface defects on the microscopic structure of MOF/polymer interfaces: A computational study of the ZIF-8/PIMs systems. Microporous and Mesoporous Materials, 2017, 254, 184-191.	2.2	30
143	Computational Exploration of the Water Concentration Dependence of the Proton Transport in the Porous UiOâ€“66(Zr)â€“(CO₂H)₂ Metalâ€“Organic Framework. Chemistry of Materials, 2017, 29, 1569-1576.	3.2	40
144	Mechanical properties of a gallium fumarate metalâ€“organic framework: a joint experimental-modelling exploration. Journal of Materials Chemistry A, 2017, 5, 11047-11054.	5.2	27

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145	Computational exploration of the structure, stability and adsorption properties of the ZIF-9 metal-organic framework. Microporous and Mesoporous Materials, 2017, 254, 170-177.	2.2	8
146	Polymorphous Al-MOFs Based on V-Shaped Linker Molecules: Synthesis, Properties, and in Situ Investigation of Their Crystallization. Inorganic Chemistry, 2017, 56, 5851-5862.	1.9	25
147	Hydrolytically stable fluorinated metal-organic frameworks for energy-efficient dehydration. Science, 2017, 356, 731-735.	6.0	275
148	Gas/vapour separation using ultra-microporous metalâ€“organic frameworks: insights into the structure/separation relationship. Chemical Society Reviews, 2017, 46, 3402-3430.	18.7	1,033
149	The new age of MOFs and of their porous-related solids. Chemical Society Reviews, 2017, 46, 3104-3107.	18.7	623
150	Design of Porous Metal-Organic Frameworks for Adsorption Driven Thermal Batteries. MRS Advances, 2017, 2, 519-524.	0.5	28
151	Electrically Induced Breathing of the MIL-53(Cr) Metalâ€“Organic Framework. ACS Central Science, 2017, 3, 394-398.	5.3	102
152	Selective nitrogen capture by porous hybrid materials containing accessible transition metal ion sites. Nature Materials, 2017, 16, 526-531.	13.3	201
153	CO₂ Capture Using the SIFSIX-2-Cu-i Metalâ€“Organic Framework: A Computational Approach. Journal of Physical Chemistry C, 2017, 121, 27462-27472.	1.5	14
154	A Fine-Tuned MOF for Gas and Vapor Separation: A Multipurpose Adsorbent for Acid Gas Removal, Dehydration, and BTX Sieving. CheM, 2017, 3, 822-833.	5.8	83
155	Highly Efficient Proton Conduction in a Three-Dimensional Titanium Hydrogen Phosphate. Chemistry of Materials, 2017, 29, 7263-7271.	3.2	35
156	N₂ Capture Performances of the Hybrid Porous MIL-101(Cr): From Prediction toward Experimental Testing. Journal of Physical Chemistry C, 2017, 121, 22130-22138.	1.5	21
157	Multiscale Modeling of the HKUST-1/Poly(vinyl alcohol) Interface: From an Atomistic to a Coarse Graining Approach. Journal of Physical Chemistry C, 2017, 121, 21491-21496.	1.5	36
158	Diffusion of Carbon Dioxide and Nitrogen in the Smallâ€Pore Titanium Bis(phosphonate) Metalâ€“Organic Framework MILâ€91 (Ti): A Combination of Quasielastic Neutron Scattering Measurements and Molecular Dynamics Simulations. ChemPhysChem, 2017, 18, 2739-2746.	1.0	11
159	Confined methanol within InOF-1: CO₂ capture enhancement. Dalton Transactions, 2017, 46, 15208-15215.	1.6	25
160	Gas Adsorption and Separation by the Al-Based Metalâ€“Organic Framework MIL-160. Journal of Physical Chemistry C, 2017, 121, 26822-26832.	1.5	51
161	Revisiting the Aluminum Trimesate-Based MOF (MIL-96): From Structure Determination to the Processing of Mixed Matrix Membranes for CO₂ Capture. Chemistry of Materials, 2017, 29, 10326-10338.	3.2	78
162	Modeling of Adsorption Thermodynamics of Linear and Branched Alkanes in the Aluminum Fumarate Metal Organic Framework. Journal of Physical Chemistry C, 2017, 121, 20287-20295.	1.5	4

#	Article	IF	Citations
163	Role of Molecular Simulations in the Field of MOFs. , 2016, , 765-794.		1
164	A pressure-amplifying framework material with negative gas adsorption transitions. Nature, 2016, 532, 348-352.	13.7	490
165	Toward an Understanding of the Microstructure and Interfacial Properties of PIMs/ZIF-8 Mixed Matrix Membranes. ACS Applied Materials & Interfaces, 2016, 8, 27311-27321.	4.0	93
166	Ligand and Metal Effects on the Stability and Adsorption Properties of an Isoreticular Series of MOFs Based on Tâ€Shaped Ligands and Paddleâ€Wheel Secondary Building Units. Chemistry - A European Journal, 2016, 22, 16147-16156.	1.7	43
167	Thermodynamic Insight in the High-Pressure Behavior of UiO-66: Effect of Linker Defects and Linker Expansion. Chemistry of Materials, 2016, 28, 5721-5732.	3.2	97
168	Proton-Conducting Phenolate-Based Zr Metalâ€“Organic Framework: A Joint Experimentalâ€“Modeling Investigation. Journal of Physical Chemistry C, 2016, 120, 24503-24510.	1.5	28
169	Impact of the Metal Centre and Functionalization on the Mechanical Behaviour of MILâ€53 Metalâ€“Organic Frameworks. European Journal of Inorganic Chemistry, 2016, 2016, 4424-4429.	1.0	60
170	Proton Transport in a Highly Conductive Porous Zirconiumâ€Based Metalâ€“Organic Framework: Molecular Insight. Angewandte Chemie, 2016, 128, 3987-3992.	1.6	37
171	Proton Transport in a Highly Conductive Porous Zirconiumâ€Based Metalâ€“Organic Framework: Molecular Insight. Angewandte Chemie - International Edition, 2016, 55, 3919-3924.	7.2	152
172	Microscopic Model of the Metalâ€“Organic Framework/Polymer Interface: A First Step toward Understanding the Compatibility in Mixed Matrix Membranes. ACS Applied Materials & Interfaces, 2016, 8, 809-819.	4.0	129
173	Exploration of the mechanical behavior of metal organic frameworks UiO-66(Zr) and MIL-125(Ti) and their NH₂functionalized versions. Dalton Transactions, 2016, 45, 4283-4288.	1.6	53
174	Adsorption of Small Molecules in the Porous Zirconium-Based Metal Organic Framework MIL-140A (Zr): A Joint Computational-Experimental Approach. Journal of Physical Chemistry C, 2016, 120, 7192-7200.	1.5	12
175	Role of molecular simulations in the structure exploration of Metal-Organic Frameworks: Illustrations through recent advances in the field. Comptes Rendus Chimie, 2016, 19, 207-215.	0.2	12
176	MIL-91(Ti), a small pore metalâ€“organic framework which fulfils several criteria: an upscaled green synthesis, excellent water stability, high CO₂ selectivity and fast CO₂ transport. Journal of Materials Chemistry A, 2016, 4, 1383-1389.	5.2	82
177	Mechanical energy storage performance of an aluminum fumarate metalâ€“organic framework. Chemical Science, 2016, 7, 446-450.	3.7	103
178	Structure and properties of Al-MIL-53-ADP, a breathing MOF based on the aliphatic linker molecule adipic acid. Dalton Transactions, 2016, 45, 4179-4186.	1.6	54
179	The flexibility of modified-linker MIL-53 materials. Dalton Transactions, 2016, 45, 4162-4168.	1.6	37
180	Design of Hydrophilic Metal Organic Framework Water Adsorbents for Heat Reallocation. Advanced Materials, 2015, 27, 4775-4780.	11.1	253

#	Article	IF	Citations
181	Isolation of Renewable Phenolics by Adsorption on Ultrastable Hydrophobic MILâ€140 Metalâ€“Organic Frameworks. ChemSusChem, 2015, 8, 3159-3166.	3.6	36
182	Computational exploration of the gas adsorption on the iron tetracarboxylate metal-organic framework MIL-102. Molecular Simulation, 2015, 41, 1357-1370.	0.9	14
183	A biocompatible porous Mg-gallate metalâ€“organic framework as an antioxidant carrier. Chemical Communications, 2015, 51, 5848-5851.	2.2	98
184	Structural Origin of Unusual CO₂ Adsorption Behavior of a Small-Pore Aluminum Bisphosphonate MOF. Journal of Physical Chemistry C, 2015, 119, 4208-4216.	1.5	63
185	The Structure of the Aluminum Fumarate Metalâ€“Organic Framework A520. Angewandte Chemie - International Edition, 2015, 54, 3664-3668.	7.2	206
186	Superpermittivity of nanoconfined water. Journal of Chemical Physics, 2015, 142, 184706.	1.2	32
187	Understanding the Host/Guest Interactions in Iodine/Hofmann-Type Clathrate Ni(pz)[Ni(CN)4] System. Journal of Physical Chemistry C, 2015, 119, 9395-9401.	1.5	21
188	Diffusion of Benzene in the Breathing Metalâ€“Organic Framework MIL-53(Cr): A Joint Experimentalâ€“Computational Investigation. Journal of Physical Chemistry C, 2015, 119, 8217-8225.	1.5	38
189	Diffusion of H₂, CO₂, and Their Mixtures in the Porous Zirconium Based Metalâ€“Organic Framework MIL-140A(Zr): Combination of Quasi-Elastic Neutron Scattering Measurements and Molecular Dynamics Simulations. Journal of Physical Chemistry C, 2015, 119, 23978-23989.	1.5	29
190	A Comparison of Barostats for the Mechanical Characterization of Metalâ€“Organic Frameworks. Journal of Chemical Theory and Computation, 2015, 11, 5583-5597.	2.3	83
191	Metal Organic Framework: Design of Hydrophilic Metal Organic Framework Water Adsorbents for Heat Reallocation (Adv. Mater. 32/2015). Advanced Materials, 2015, 27, 4803-4803.	11.1	10
192	Molecular iodine adsorption within Hofmann-type structures M(L)[Mâ€²(CN)₄] (M = Ni, Co; Mâ€²) Tj ETQq0 0 0 rgBT /Ove	1.6	27
193	Highly Selective CO₂ Capture by Small Pore Scandium-Based Metalâ€“Organic Frameworks. Journal of Physical Chemistry C, 2015, 119, 23592-23598.	1.5	38
194	Acid-functionalized UiO-66(Zr) MOFs and their evolution after intra-framework cross-linking: structural features and sorption properties. Journal of Materials Chemistry A, 2015, 3, 3294-3309.	5.2	174
195	Dielectric anisotropy of water confined into the MIL-53(Cr) metalâ€“organic framework. Molecular Simulation, 2015, 41, 483-489.	0.9	8
196	Modelling of Physisorption in Porous Solids. , 2014, , 191-235.		2
197	Adsorption by Metal-Organic Frameworks. , 2014, , 565-610.		13
198	Effect of the ligand functionalization on the acidâ€“base properties of flexible MOFs. Microporous and Mesoporous Materials, 2014, 195, 197-204.	2.2	16

#	Article	IF	Citations
199	Ligand Dynamics of Drug-Loaded Microporous Zirconium Terephthalates-Based Metalâ€“Organic Frameworks: Impact of the Nature and Concentration of the Guest. Journal of Physical Chemistry C, 2014, 118, 1983-1989.	1.5	26
200	A Complete Separation of Hexane Isomers by a Functionalized Flexible Metal Organic Framework. Advanced Functional Materials, 2014, 24, 7666-7673.	7.8	81
201	Computational exploration of a Zr-carboxylate based metalâ€“organic framework as a membrane material for CO₂capture. Journal of Materials Chemistry A, 2014, 2, 1657-1661.	5.2	68
202	Conformation-Controlled Sorption Properties and Breathing of the Aliphatic Al-MOF [Al(OH)(CDC)]. Inorganic Chemistry, 2014, 53, 4610-4620.	1.9	74
203	Iodine Capture by Hofmann-Type Clathrate Ni^{II}(pz)[Ni^{II}(CN)₄]. Inorganic Chemistry, 2014, 53, 4269-4271.	1.9	36
204	Adsorption and Diffusion of Light Hydrocarbons in UiO-66(Zr): A Combination of Experimental and Modeling Tools. Journal of Physical Chemistry C, 2014, 118, 27470-27482.	1.5	84
205	A Joint Experimental/Computational Exploration of the Dynamics of Confined Water/Zr-Based MOFs Systems. Journal of Physical Chemistry C, 2014, 118, 14441-14448.	1.5	29
206	Diffusion of Light Hydrocarbons in the Flexible MIL-53(Cr) Metalâ€“Organic Framework: A Combination of Quasi-Elastic Neutron Scattering Experiments and Molecular Dynamics Simulations. Journal of Physical Chemistry C, 2014, 118, 14471-14477.	1.5	37
207	Extended and functionalized porous iron(iii) tri- or dicarboxylates with MIL-100/101 topologies. Chemical Communications, 2014, 50, 6872.	2.2	93
208	Guest-modulation of the mechanical properties of flexible porous metalâ€“organic frameworks. Journal of Materials Chemistry A, 2014, 2, 9691-9698.	5.2	18
209	Metalâ€“organic frameworks as potential shock absorbers: the case of the highly flexible MIL-53(Al). Chemical Communications, 2014, 50, 9462-9464.	2.2	122
210	Impact of phosphorylation on the encapsulation of nucleoside analogues within porous iron(iii) metalâ€“organic framework MIL-100(Fe) nanoparticles. Journal of Materials Chemistry B, 2013, 1, 4231.	2.9	69
211	Rationale of Drug Encapsulation and Release from Biocompatible Porous Metalâ€“Organic Frameworks. Chemistry of Materials, 2013, 25, 2767-2776.	3.2	412
212	A robust amino-functionalized titanium(iv) based MOF for improved separation of acid gases. Chemical Communications, 2013, 49, 10082.	2.2	135
213	Reply to â€œComment on â€˜A Computational Exploration of the CO Adsorption in Cation-Exchanged Faujasitesâ€™â€•. Journal of Physical Chemistry C, 2013, 117, 22165-22168.	1.5	0
214	Towards an Improved antiâ€HIV Activity of NRTI via Metalâ€“Organic Frameworks Nanoparticles. Advanced Healthcare Materials, 2013, 2, 1630-1637.	3.9	130
215	A Water Stable Metalâ€“Organic Framework with Optimal Features for CO₂ Capture. Angewandte Chemie, 2013, 125, 10506-10510.	1.6	66
216	Evaluation of MIL-47(V) for CO₂-Related Applications. Journal of Physical Chemistry C, 2013, 117, 962-970.	1.5	42

#	Article	IF	Citations
217	Rationalization of the entrapping of bioactive molecules into a series of functionalized porous zirconium terephthalate MOFs. Journal of Materials Chemistry B, 2013, 1, 1101.	2.9	118
218	Diffusion of Xylene Isomers in the MIL-47(V) MOF Material: A Synergic Combination of Computational and Experimental Tools. Journal of Physical Chemistry C, 2013, 117, 6293-6302.	1.5	44
219	Mixedâ€Linker Hybrid Superpolyhedra for the Production of a Series of Largeâ€Pore Iron(III) Carboxylate Metalâ€“Organic Frameworks. Angewandte Chemie - International Edition, 2013, 52, 5056-5060.	7.2	97
220	Diffusion of Binary CO₂/CH₄ Mixtures in the MIL-47(V) and MIL-53(Cr) Metalâ€“Organic Framework Type Solids: A Combination of Neutron Scattering Measurements and Molecular Dynamics Simulations. Journal of Physical Chemistry C, 2013, 117, 11275-11284.	1.5	51
221	Caffeine Confinement into a Series of Functionalized Porous Zirconium MOFs: A Joint Experimental/Modeling Exploration. Journal of Physical Chemistry C, 2013, 117, 11694-11704.	1.5	70
222	A Water Stable Metalâ€“Organic Framework with Optimal Features for CO₂ Capture. Angewandte Chemie - International Edition, 2013, 52, 10316-10320.	7.2	303
223	Diffusion of CH₄, CO₂, and Their Mixtures in AlPO₄-5 Investigated by QENS Experiments and MD Simulations. Journal of Physical Chemistry C, 2013, 117, 13530-13539.	1.5	16
224	Influence of framework metal ions on the dye capture behavior of MIL-100 (Fe, Cr) MOF type solids. Journal of Materials Chemistry A, 2013, 1, 8534.	5.2	291
225	Diffusion of Branched and Linear C6-Alkanes in the MIL-47(V) Metalâ€“Organic Framework.. Journal of the Physical Society of Japan, 2013, 82, SA005.	0.7	10
226	SPECTRAL ANALYSIS AND INTERPRETATION OF THE Î³-RAY EMISSION FROM THE STARBURST GALAXY NGC 253. Astrophysical Journal, 2012, 757, 158.	1.6	61
227	Guest dependent pressure behavior of the flexible MIL-53(Cr): A computational exploration. Dalton Transactions, 2012, 41, 3915-3919.	1.6	38
228	Experimental and Simulation Evidence of a Corkscrew Motion for Benzene in the Metalâ€“Organic Framework MIL-47. Journal of Physical Chemistry C, 2012, 116, 15093-15098.	1.5	40
229	Comparative Guest, Thermal, and Mechanical Breathing of the Porous Metal Organic Framework MIL-53(Cr): A Computational Exploration Supported by Experiments. Journal of Physical Chemistry C, 2012, 116, 13289-13295.	1.5	90
230	Theoretical Hydrogen Cryostorage in Doped MIL-101(Cr) Metalâ€“Organic Frameworks. Journal of Physical Chemistry C, 2012, 116, 10504-10509.	1.5	30
231	CH4 storage and CO2 capture in highly porous zirconium oxide based metalâ€“organic frameworks. Chemical Communications, 2012, 48, 9831.	2.2	180
232	Probing the adsorption performance of the hybrid porous MIL-68(Al): a synergic combination of experimental and modelling tools. Journal of Materials Chemistry, 2012, 22, 10210.	6.7	124
233	Separation of CO2â€“CH4 mixtures in the mesoporous MIL-100(Cr) MOF: experimental and modelling approaches. Dalton Transactions, 2012, 41, 4052.	1.6	78
234	A Series of Isoreticular, Highly Stable, Porous Zirconium Oxide Based Metalâ€“Organic Frameworks. Angewandte Chemie - International Edition, 2012, 51, 9267-9271.	7.2	407

#	Article	IF	Citations
235	Diffusion of long chain n-alkanes in the metalâ€“organic framework MIL-47(V): A combination of neutron scattering experiments and molecular dynamics simulations. Microporous and Mesoporous Materials, 2012, 164, 259-265.	2.2	33
236	A Computational Exploration of the CO Adsorption in Cation-Exchanged Faujasites. Journal of Physical Chemistry C, 2012, 116, 24512-24521.	1.5	11
237	Large breathing of the MOF MIL-47(VIV) under mechanical pressure: a joint experimentalâ€“modelling exploration. Chemical Science, 2012, 3, 1100.	3.7	176
238	Metalâ€“Organic Frameworks in Biomedicine. Chemical Reviews, 2012, 112, 1232-1268.	23.0	3,593
239	Revealing the Structureâ€“Property Relationships of Metalâ€“Organic Frameworks for CO₂ Capture from Flue Gas. Langmuir, 2012, 28, 12094-12099.	1.6	110
240	Structure and Dynamics of the Functionalized MOF Type UiO-66(Zr): NMR and Dielectric Relaxation Spectroscopies Coupled with DFT Calculations. Chemistry of Materials, 2012, 24, 2168-2177.	3.2	200
241	How Interpenetration Ensures Rigidity and Permanent Porosity in a Highly Flexible Hybrid Solid. Chemistry of Materials, 2012, 24, 2486-2492.	3.2	50
242	Effect of the organic functionalization of flexible MOFs on the adsorption of CO2. Journal of Materials Chemistry, 2012, 22, 10266.	6.7	125
243	A new aluminium-based microporous metalâ€“organic framework: Al(BTB) (BTB =) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 422 Td	2.2	58
244	A quantitative structure activity relationship approach to probe the influence of the functionalization on the drug encapsulation of porous metal-organic frameworks. Microporous and Mesoporous Materials, 2012, 157, 124-130.	2.2	76
245	Location of extra-framework Co2+, Ni2+, Cu2+ and Zn2+ cations in natural and dealuminated clinoptilolite. Microporous and Mesoporous Materials, 2012, 155, 233-239.	2.2	19
246	Exploration of the Long-Chain N-Alkanes Adsorption and Diffusion in the MOF-Type MIL-47 (V) Material by Combining Experimental and Molecular Simulation Tools. Journal of Physical Chemistry C, 2011, 115, 13868-13876.	1.5	49
247	Molecular Insight into the Adsorption and Diffusion of Water in the Versatile Hydrophilic/Hydrophobic Flexible MIL-53(Cr) MOF. Journal of Physical Chemistry C, 2011, 115, 10764-10776.	1.5	128
248	Influence of the Organic Ligand Functionalization on the Breathing of the Porous Iron Terephthalate Metal Organic Framework Type Material upon Hydrocarbon Adsorption. Journal of Physical Chemistry C, 2011, 115, 18683-18695.	1.5	50
249	Functionalizing porous zirconium terephthalate UiO-66(Zr) for natural gas upgrading: a computational exploration. Chemical Communications, 2011, 47, 9603.	2.2	345
250	Series of Porous 3-D Coordination Polymers Based on Iron(III) and Porphyrin Derivatives. Chemistry of Materials, 2011, 23, 4641-4651.	3.2	73
251	Understanding the Thermodynamic and Kinetic Behavior of the CO₂/CH₄ Gas Mixture within the Porous Zirconium Terephthalate UiO-66(Zr): A Joint Experimental and Modeling Approach. Journal of Physical Chemistry C, 2011, 115, 13768-13774.	1.5	166
252	Why hybrid porous solids capture greenhouse gases?. Chemical Society Reviews, 2011, 40, 550-562.	18.7	603

#	Article	IF	Citations
253	Molecular Insight into the Adsorption of H₂S in the Flexible MIL-53(Cr) and Rigid MIL-47(V) MOFs: Infrared Spectroscopy Combined to Molecular Simulations. Journal of Physical Chemistry C, 2011, 115, 2047-2056.	1.5	157
254	How Linkerâ€™s Modification Controls Swelling Properties of Highly Flexible Iron(III) Dicarboxylates MIL-88. Journal of the American Chemical Society, 2011, 133, 17839-17847.	6.6	383
255	An Evaluation of UiOâ€66 for Gasâ€Based Applications. Chemistry - an Asian Journal, 2011, 6, 3270-3280.	1.7	192
256	Porous metal organic framework nanoparticles to address the challenges related to busulfan encapsulation. Nanomedicine, 2011, 6, 1683-1695.	1.7	95
257	Probing the Dynamics of CO₂ and CH₄ within the Porous Zirconium Terephthalate UiOâ€66(Zr): A Synergic Combination of Neutron Scattering Measurements and Molecular Simulations. Chemistry - A European Journal, 2011, 17, 8882-8889.	1.7	137
258	Hydrocarbon adsorption in the isostructural metal organic frameworks MIL-53(Cr) and MIL-47(V). Microporous and Mesoporous Materials, 2011, 140, 114-119.	2.2	34
259	Molecular simulations of confined liquids: An alternative to the grand canonical Monte Carlo simulations. Journal of Chemical Physics, 2011, 134, 074104.	1.2	40
260	Functionalization in Flexible Porous Solids: Effects on the Pore Opening and the Hostâ^'Guest Interactions. Journal of the American Chemical Society, 2010, 132, 1127-1136.	6.6	445
261	Synthesis, Structure, Characterization, and Redox Properties of the Porous MILâ€68(Fe) Solid. European Journal of Inorganic Chemistry, 2010, 2010, 3789-3794.	1.0	191
262	Unusual Chainâ€Length Dependence of the Diffusion of nâ€Alkanes in the Metalâ€“Organic Framework MILâ€47(V): The Blowgun Effect. Chemistry - A European Journal, 2010, 16, 10337-10341.	1.7	42
263	Step-wise dealumination of natural clinoptilolite: Structural and physicochemical characterization. Microporous and Mesoporous Materials, 2010, 135, 187-196.	2.2	129
264	Effect of Water Adsorption on Ion Dynamics in Confined Geometry: Na+-Faujasites and Homoionic Alkali Exchanged Montmorillonite. Journal of the Physical Society of Japan, 2010, 79, 19-24.	0.7	0
265	Hybrid Monte Carlo Simulations Combined with a Phase Mixture Model to Predict the Structural Transitions of a Porous Metalâ^'Organic Framework Material upon Adsorption of Guest Molecules. Journal of Physical Chemistry C, 2010, 114, 6496-6502.	1.5	112
266	Diffusion of Pure CH₄ and Its Binary Mixture with CO₂ in Faujasite NaY: A Combination of Neutron Scattering Experiments and Molecular Dynamics Simulations. Journal of Physical Chemistry C, 2010, 114, 5027-5034.	1.5	35
267	Physics Behind the Guest-Assisted Structural Transitions of a Porous Metalâ^'Organic Framework Material. Journal of Physical Chemistry Letters, 2010, 1, 2810-2815.	2.1	59
268	Multistep N₂ Breathing in the Metalâ^'Organic Framework Co(1,4-benzenedipyrazolate). Journal of the American Chemical Society, 2010, 132, 13782-13788.	6.6	220
269	Explanation of the Adsorption of Polar Vapors in the Highly Flexible Metal Organic Framework MIL-53(Cr). Journal of the American Chemical Society, 2010, 132, 9488-9498.	6.6	185
270	Self and Transport Diffusivity of CO₂ in the Metalâ^'Organic Framework MIL-47(V) Explored by Quasi-elastic Neutron Scattering Experiments and Molecular Dynamics Simulations. ACS Nano, 2010, 4, 143-152.	7.3	109

#	Article	IF	Citations
271	Adsorption of light hydrocarbons in the flexible MIL-53(Cr) and rigid MIL-47(V) metalâ€“organic frameworks: a combination of molecular simulations and microcalorimetry/gravimetry measurements. Physical Chemistry Chemical Physics, 2010, 12, 6428.	1.3	82
272	Water and ethanol desorption in the flexible metal organic frameworks, MIL-53 (Cr, Fe), investigated by complex impedance spectrocopy and density functional theory calculations. Physical Chemistry Chemical Physics, 2010, 12, 12478.	1.3	41
273	Transport Diffusivity of CO₂ in the Highly Flexible Metalâ€“Organic Framework MILâ€53(Cr). Angewandte Chemie - International Edition, 2009, 48, 8335-8339.	7.2	109
274	Adsorption of CO2, CH4 and their binary mixture in Faujasite NaY: A combination of molecular simulations with gravimetryâ€“manometry and microcalorimetry measurements. Microporous and Mesoporous Materials, 2009, 119, 117-128.	2.2	86
275	Co-adsorption and Separation of CO₂â^'CH₄ Mixtures in the Highly Flexible MIL-53(Cr) MOF. Journal of the American Chemical Society, 2009, 131, 17490-17499.	6.6	398
276	Complex Adsorption of Short Linear Alkanes in the Flexible Metal-Organic-Framework MIL-53(Fe). Journal of the American Chemical Society, 2009, 131, 13002-13008.	6.6	281
277	Cation Behavior in Faujasite Zeolites upon Water Adsorption: A Combination of Monte Carlo and Molecular Dynamics Simulations. Journal of Physical Chemistry C, 2009, 113, 10696-10705.	1.5	37
278	A New Photoactive Crystalline Highly Porous Titanium(IV) Dicarboxylate. Journal of the American Chemical Society, 2009, 131, 10857-10859.	6.6	1,127
279	Estimation of the breathing energy of flexible MOFs by combining TGA and DSC techniques. Chemical Communications, 2009, , 2733.	2.2	54
280	Adsorption and Diffusion of H₂ in the MOF Type Systems MIL-47(V) and MIL-53(Cr): A Combination of Microcalorimetry and QENS Experiments with Molecular Simulations. Journal of Physical Chemistry C, 2009, 113, 7802-7812.	1.5	89
281	Adsorption of carbon dioxide in SAPO STA-7 and AlPO-18: Grand Canonical Monte Carlo simulations andÂmicrocalorimetry measurements. Adsorption, 2008, 14, 207-213.	1.4	41
282	A molecular simulation study of the distribution of cation inÂzeolites. Adsorption, 2008, 14, 743-754.	1.4	32
283	Quasiâ€Elastic Neutron Scattering and Molecular Dynamics Study of Methane Diffusion in Metal Organic Frameworks MILâ€47(V) and MILâ€53(Cr). Angewandte Chemie - International Edition, 2008, 47, 6611-6615.	7.2	154
284	Molecular Dynamics Simulations of Breathing MOFs: Structural Transformations of MILâ€53(Cr) upon Thermal Activation and CO₂ Adsorption. Angewandte Chemie - International Edition, 2008, 47, 8487-8491.	7.2	302
285	Observations of the Sagittarius dwarf galaxy by the HESS experiment and search for a dark matter signal. Astroparticle Physics, 2008, 29, 55-62.	1.9	87
286	Silicon distribution in SAPO materials: A computational study of STA-7 Combined to 29Si MAS NMR spectroscopy. Microporous and Mesoporous Materials, 2008, 107, 268-275.	2.2	8
287	Location and de-trapping energy of sodium ions in dehydrated X and Y faujasites determined by dielectric relaxation spectroscopy. Microporous and Mesoporous Materials, 2008, 109, 413-419.	2.2	44
288	Flexible Porous Metal-Organic Frameworks for a Controlled Drug Delivery. Journal of the American Chemical Society, 2008, 130, 6774-6780.	6.6	1,564

#	Article	IF	Citations
289	Prediction of the Conditions for Breathing of Metal Organic Framework Materials Using a Combination of X-ray Powder Diffraction, Microcalorimetry, and Molecular Simulation. Journal of the American Chemical Society, 2008, 130, 12808-12814.	6.6	246
290	Probing the Adsorption Sites for CO₂ in Metal Organic Frameworks Materials MIL-53 (Al,) Tj ETQq0 0 0 rgBT /Overlock 10 T	1.5	137
291	Experimental Evidence Supported by Simulations of a Very High<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi mathvariant="normal">H</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math>Diffusion in Metal Organic Framework Materials. Physical Review Letters, 2008, 100, 245901.	2.9	99
292	Ionic Mobility and Hydration Energies in Montmorillonite Clay. Journal of Physical Chemistry C, 2008, 112, 14001-14009.	1.5	35
293	Influence of the Silicon Content and Chemical Disorder of the SAPO STA-7 Framework on the CO₂ Adsorption Mechanism:â€‰ Grand Canonical Monte Carlo Simulations Combined to Microcalorimetry Measurements. Journal of Physical Chemistry C, 2008, 112, 5048-5056.	1.5	17
294	Upper limits from HESS active galactic nuclei observations in 2005â€“2007. Astronomy and Astrophysics, 2008, 478, 387-393.	2.1	29
295	CH4 adsorption in Faujasite systems: Microcalorimetry and Grand Canonical Monte Carlo simulations. Studies in Surface Science and Catalysis, 2007, 160, 335-342.	1.5	3
296	A multidisciplary approach to understanding sorption induced breathing in the metal organic framework MIL53(Cr). Studies in Surface Science and Catalysis, 2007, , 1008-1014.	1.5	5
297	On the breathing effect of a metalâ€“organic framework upon CO2 adsorption: Monte Carlo compared to microcalorimetry experiments. Chemical Communications, 2007, , 3261.	2.2	137
298	Diffusion of Methanol in Zeolite NaY:Â A Molecular Dynamics Study. Journal of Physical Chemistry B, 2007, 111, 2836-2844.	1.2	54
299	Gas Adsorption in Zeolites and Related Materials. Studies in Surface Science and Catalysis, 2007, 168, 555-XVI.	1.5	14
300	Derivation of new interatomic potential for flexible metal-organic frameworks: a pre-requisite for understanding swelling under adsorption conditions.. Studies in Surface Science and Catalysis, 2007, , 918-925.	1.5	2
301	Charge distribution in metal organic framework materials: transferability to a preliminary molecular simulation study of the CO2adsorption in the MIL-53 (Al) system. Physical Chemistry Chemical Physics, 2007, 9, 1059-1063.	1.3	112
302	Cation Dynamics upon Adsorption of Methanol in Naâ^'Y Faujasite Type Zeolites:â€‰ A Dielectric Relaxation Spectroscopy Investigation. Journal of Physical Chemistry C, 2007, 111, 4722-4726.	1.5	17
303	An Explanation for the Very Large Breathing Effect of a Metalâ€“Organic Framework during CO₂ Adsorption. Advanced Materials, 2007, 19, 2246-2251.	11.1	501
304	Investigation of CO2 adsorption in Faujasite systems: Grand Canonical Monte Carlo and molecular dynamics simulations based on a new derived Na+â€“CO2 force field. Microporous and Mesoporous Materials, 2007, 99, 70-78.	2.2	58
305	Use of dielectric relaxation for measurements of surface energy variations during adsorption of water on mordenite. Journal of Colloid and Interface Science, 2007, 306, 440-448.	5.0	13
306	Cation mobility upon adsorption of methanol in NaY faujasite type zeolite: A molecular dynamics study compared to dielectric relaxation experiments. European Physical Journal: Special Topics, 2007, 141, 113-116.	1.2	1

#	Article	IF	Citations
307	Diffusion of CO2 in NaY and NaX Faujasite systems: Quasi-elastic neutron scattering experiments and molecular dynamics simulations. European Physical Journal: Special Topics, 2007, 141, 127-132.	1.2	18
308	Adsorption of CO2 in metal organic frameworks of different metal centres: Grand Canonical Monte Carlo simulations compared to experiments. Adsorption, 2007, 13, 461-467.	1.4	123
309	CO2 adsorption in LiY and NaY at high temperature: molecularÂsimulations compared to experiments. Adsorption, 2007, 13, 453-460.	1.4	38
310	CO2 diffusivity in LiY and NaY faujasite systems: aÂcombination of molecular dynamics simulations and quasi-elastic neutron scattering experiments. Adsorption, 2007, 13, 209-214.	1.4	11
311	Cation Migration upon Adsorption of Methanol in NaY and NaX Faujasite Systems:Â A Molecular Dynamics Approach. Journal of Physical Chemistry B, 2006, 110, 18447-18454.	1.2	32
312	Fast Variability of Tera-Electron Volt Â Rays from the Radio Galaxy M87. Science, 2006, 314, 1424-1427.	6.0	277
313	Modeling the Concentration Dependence of the Methanol Self-Diffusivity in Faujasite Systems:Â Comparison with the Liquid Phase. Journal of Physical Chemistry B, 2006, 110, 15926-15931.	1.2	20
314	Molecular Dynamics Simulation of the Cation Motion upon Adsorption of CO2in Faujasite Zeolite Systems. Journal of Physical Chemistry B, 2006, 110, 14372-14378.	1.2	58
315	Aluminosilicate surface energy and its evolution upon adsorption using dielectric relaxation spectroscopy. Chemical Physics Letters, 2006, 423, 71-75.	1.2	9
316	CO2 adsorption in alkali cation exchanged Y faujasites: A quantum chemical study compared to experiments. Chemical Physics Letters, 2006, 426, 387-392.	1.2	62
317	Simulation of the adsorption properties of CH4 in faujasites up to high pressure: Comparison with microcalorimetry. Microporous and Mesoporous Materials, 2006, 89, 96-102.	2.2	25
318	Adsorption of argon and nitrogen in X-faujasites: relationships for understanding the interactions with monovalent and divalent cations. Microporous and Mesoporous Materials, 2005, 79, 53-59.	2.2	34
319	Gas adsorption microcalorimetry and modelling to characterise zeolites and related materials. Comptes Rendus Chimie, 2005, 8, 283-302.	0.2	124
320	Do the Differential Enthalpies of Adsorption Vary Between 77 K and 302 K? An Experimental Case Study of Argon and Nitrogen on Two Faujasite Type Zeolites. Adsorption, 2005, 11, 73-78.	1.4	9
321	Adsorption of Non Polar and Quadrupolar Gases in Siliceous Faujasite: Molecular Simulations and Experiments. Adsorption, 2005, 11, 331-336.	1.4	39
322	Nitrogen Adsorption on Divalent Cation Substituted X-Faujasites: Microcalorimetry and Monte Carlo Simulation. Adsorption, 2005, 11, 343-347.	1.4	2
323	Influence of Strength of Atom-Wall Interactions on Adsorption Mechanism. Adsorption, 2005, 11, 367-372.	1.4	2
324	Modeling of adsorption in nanopores. Journal of Molecular Modeling, 2005, 11, 293-300.	0.8	16

#	Article	IF	Citations
325	Mechanism of adsorption in cylindrical nanopores: The roles of fluctuations and correlations in stabilizing the adsorbed phase. Journal of Chemical Physics, 2005, 123, 174711.	1.2	8
326	CO2 adsorption in faujasite systems: microcalorimetry and molecular simulation. Studies in Surface Science and Catalysis, 2005, 158, 955-962.	1.5	3
327	Molecular dynamics simulation of methanol in zeolite NaY. Studies in Surface Science and Catalysis, 2005, 158, 963-970.	1.5	0
328	Influence of Extra-Framework Cations on the Adsorption Properties of X-Faujasite Systems:Â Microcalorimetry and Molecular Simulations. Journal of Physical Chemistry B, 2005, 109, 125-129.	1.2	83
329	Adsorption Mechanism of Carbon Dioxide in Faujasites: Grand Canonical Monte Carlo Simulations and Microcalorimetry Measurements. Journal of Physical Chemistry B, 2005, 109, 16084-16091.	1.2	185
330	Adsorption microcalorimetry of methane and carbon dioxide on various zeolites. Studies in Surface Science and Catalysis, 2005, , 1121-1128.	1.5	16
331	Dynamique des ions et propriÃ©tÃ©s de surface de certains aluminosilicates : Ã‰tude par spectroscopie de relaxation diÃ©lectrique. European Journal of Control, 2005, 30, 235-246.	1.6	2
332	Liaison chimique et conductivitÃ© ionique : Comparaison du comportement des cations alcalins de diffÃ©rents oxydes poreux et massifs. European Journal of Control, 2005, 30, 247-262.	1.6	0
333	Dielectric relaxation spectroscopy: The location and de-trapping energy of extra-framework cations in zeolites. Studies in Surface Science and Catalysis, 2004, 154, 1560-1567.	1.5	2
334	Static and Dynamic Properties of the Nonframework Cations in Na-Mordenites Zeolite. Molecular Simulation, 2004, 30, 587-592.	0.9	4
335	Modeling the Effect of Hydration in Zeolite Na+â€”Mordenite.. ChemInform, 2004, 35, no.	0.1	0
336	Theoretical prediction of low-frequency vibrations of extra-framework cations in mordenite zeolites. Physical Chemistry Chemical Physics, 2004, 6, 182.	1.3	8
337	Alkali Metal Bonding Energy and Activation Energy for dc Conductivity in Porous and Glassy Solid Oxides. Journal of Physical Chemistry B, 2004, 108, 13936-13943.	1.2	10
338	Modeling the Effect of Hydration in Zeolite Na+âˆ’Mordenite. Journal of Physical Chemistry B, 2004, 108, 3739-3745.	1.2	59
339	Computational studies of hydration in Na+-mordenite zeolites. Studies in Surface Science and Catalysis, 2004, 154, 1606-1611.	1.5	1
340	Activated cation motions in zeolites. Journal of Chemical Physics, 2002, 117, 1405-1408.	1.2	15
341	Modelling of the cation motions in complex system: case of Na-mordenites. Journal of Non-Crystalline Solids, 2002, 307-310, 1050-1054.	1.5	9
342	Lithium Doping of Multiwalled Carbon Nanotubes Produced by Catalytic Decomposition. Nano Letters, 2001, 1, 75-79.	4.5	44

#	Article	IF	Citations
343	Monte Carlo simulations of dielectric relaxation in Na-mordenites. Computational Materials Science, 2001, 22, 106-111.	1.4	12
344	Combining the Monte Carlo Technique with 29SI NMR Spectroscopy:â€‰ Simulations of Cation Locations in Zeolites with Various Si/Al Ratios. Journal of Physical Chemistry B, 2001, 105, 9157-9161.	1.2	48
345	Segmented and opened multi-walled carbon nanotubes. Carbon, 2001, 39, 1273-1278.	5.4	82
346	Nano-mechanical cutting and opening of single wall carbon nanotubes. Chemical Physics Letters, 2000, 331, 125-131.	1.2	88
347	Electrochemical lithium intercalation into multiwall carbon nanotubes: a micro-Raman study. Solid State Ionics, 2000, 136-137, 1295-1299.	1.3	73
348	Experimental evidence of polarization effects on exchangeable cations trapped in zeolites. Journal of Chemical Physics, 2000, 113, 4498-4500.	1.2	13
349	Influence of framework Si/Al ratio on the Na+/mordenite interaction energy. Physical Chemistry Chemical Physics, 2000, 2, 2027-2031.	1.3	25
350	Electrochemical intercalation of lithium into multiwall carbon nanotubes. Chemical Physics Letters, 1999, 312, 14-18.	1.2	159
351	Determination of the chemical diffusion coefficient of lithium in multiwall carbon nanotubes. Ionics, 1999, 5, 156-160.	1.2	6
352	Cutting Single Wall Carbon Nanotubes. Materials Research Society Symposia Proceedings, 1999, 593, 119.	0.1	0
353	Dielectric relaxation in zeolites: theoretical calculation of the ionic dipole re-orientational energy and comparison with TSDC data. , 0, , .		0
354	Adsorption of Benzene in the Cation-Containing MOFs MIL-141. Journal of Physical Chemistry C, 0, , 130913101409004.	1.5	2
355	Unravelling pore network and gas dynamics in highly adaptive rubbery organic frameworks. Chemical Science, 0, , .	3.7	0