

# Seda Keskin

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/463323/publications.pdf>

Version: 2024-02-01

156  
papers

9,131  
citations

38660

50  
h-index

46693

89  
g-index

160  
all docs

160  
docs citations

160  
times ranked

7374  
citing authors

#	ARTICLE	IF	CITATIONS
1	MOF-based MMMs breaking the upper bounds of polymers for a large variety of gas separations. Separation and Purification Technology, 2022, 281, 119811.	3.9	30
2	Assessing CH <sub>4</sub> /N <sub>2</sub> separation potential of MOFs, COFs, IL/MOF, MOF/Polymer, and COF/Polymer composites. Chemical Engineering Journal, 2022, 428, 131239.	6.6	89
3	Accelerating discovery of COFs for CO <sub>2</sub> capture and H <sub>2</sub> purification using structurally guided computational screening. Chemical Engineering Journal, 2022, 427, 131574.	6.6	26
4	Computational insights into efficient CO <sub>2</sub> and H <sub>2</sub> S capture through zirconium MOFs. Journal of CO <sub>2</sub> Utilization, 2022, 55, 101811.	3.3	8
5	Multi-scale computational screening to accelerate discovery of IL/COF composites for CO <sub>2</sub> /N <sub>2</sub> separation. Separation and Purification Technology, 2022, 287, 120578.	3.9	12
6	Composites of porous materials with ionic liquids: Synthesis, characterization, applications, and beyond. Microporous and Mesoporous Materials, 2022, 332, 111703.	2.2	30
7	MOF adsorbents for flue gas separation: Comparison of material ranking approaches. Chemical Engineering Research and Design, 2022, 179, 308-318.	2.7	11
8	MOF Membranes for CO <sub>2</sub> Capture: Past, Present and Future. Carbon Capture Science & Technology, 2022, 2, 100026.	4.9	39
9	Hypothetical yet effective: Computational identification of high-performing MOFs for CO <sub>2</sub> capture. Computers and Chemical Engineering, 2022, 160, 107705.	2.0	11
10	[BMIM][OAc] coating layer makes activated carbon almost completely selective for CO <sub>2</sub> . Chemical Engineering Journal, 2022, 437, 135436.	6.6	14
11	Prediction of O <sub>2</sub> /N <sub>2</sub> Selectivity in Metal-Organic Frameworks via High-Throughput Computational Screening and Machine Learning. ACS Applied Materials & Interfaces, 2022, 14, 736-749.	4.0	30
12	High-Throughput Screening of COF Membranes and COF/Polymer MMMs for Helium Separation and Hydrogen Purification. ACS Applied Materials & Interfaces, 2022, 14, 21738-21749.	4.0	38
13	How Reproducible are Surface Areas Calculated from the BET Equation?. Advanced Materials, 2022, 34, .	11.1	82
14	Multi-Level Computational Screening of <i>in Silico</i> Designed MOFs for Efficient SO <sub>2</sub> Capture. Journal of Physical Chemistry C, 2022, 126, 9875-9888.	1.5	2
15	Exploring covalent organic frameworks for H <sub>2</sub> S+CO <sub>2</sub> separation from natural gas using efficient computational approaches. Journal of CO <sub>2</sub> Utilization, 2022, 62, 102077.	3.3	4
16	A novel IL/MOF/polymer mixed matrix membrane having superior CO <sub>2</sub> /N <sub>2</sub> selectivity. Journal of Membrane Science, 2022, 658, 120712.	4.1	32
17	An Integrated Computational-Experimental Hierarchical Approach for the Rational Design of an IL/UiO-66 Composite Offering Infinite CO <sub>2</sub> Selectivity. Advanced Functional Materials, 2022, 32, .	7.8	16
18	Combining Machine Learning and Molecular Simulations to Unlock Gas Separation Potentials of MOF Membranes and MOF/Polymer MMMs. ACS Applied Materials & Interfaces, 2022, 14, 32134-32148.	4.0	39

#	ARTICLE	IF	CITATIONS
19	Exploring the performance limits of MOF/polymer MMMs for O <sub>2</sub> /N <sub>2</sub> separation using computational screening. <i>Journal of Membrane Science</i> , 2021, 618, 118555.	4.1	41
20	MOF materials as therapeutic agents, drug carriers, imaging agents and biosensors in cancer biomedicine: Recent advances and perspectives. <i>Progress in Materials Science</i> , 2021, 117, 100743.	16.0	120
21	A new class of porous materials for efficient CO <sub>2</sub> separation: Ionic liquid/graphene aerogel composites. <i>Carbon</i> , 2021, 171, 79-87.	5.4	34
22	Zr-MOFs for CF <sub>4</sub> /CH <sub>4</sub> , CH <sub>4</sub> /H <sub>2</sub> , and CH <sub>4</sub> /N <sub>2</sub> separation: towards the goal of discovering stable and effective adsorbents. <i>Molecular Systems Design and Engineering</i> , 2021, 6, 627-642.	1.7	13
23	Recent advances in simulating gas permeation through MOF membranes. <i>Materials Advances</i> , 2021, 2, 5300-5317.	2.6	22
24	Effect of Metal-Organic Framework (MOF) Database Selection on the Assessment of Gas Storage and Separation Potentials of MOFs. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 7828-7837.	7.2	164
25	Effect of Metal-Organic Framework (MOF) Database Selection on the Assessment of Gas Storage and Separation Potentials of MOFs. <i>Angewandte Chemie</i> , 2021, 133, 7907-7916.	1.6	20
26	Doubling CO <sub>2</sub> /N <sub>2</sub> separation performance of CuBTC by incorporation of 1-n-ethyl-3-methylimidazolium diethyl phosphate. <i>Microporous and Mesoporous Materials</i> , 2021, 316, 110947.	2.2	19
27	Machine Learning Meets with Metal Organic Frameworks for Gas Storage and Separation. <i>Journal of Chemical Information and Modeling</i> , 2021, 61, 2131-2146.	2.5	97
28	Metal Exchange Boosts the CO <sub>2</sub> Selectivity of Metal Organic Frameworks Having Zn-Oxide Nodes. <i>Journal of Physical Chemistry C</i> , 2021, 125, 17311-17322.	1.5	3
29	Oxalamide-Functionalized Metal Organic Frameworks for CO <sub>2</sub> Adsorption. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 33188-33198.	4.0	35
30	Combined GCMC, MD, and DFT Approach for Unlocking the Performances of COFs for Methane Purification. <i>Industrial &amp; Engineering Chemistry Research</i> , 2021, 60, 12999-13012.	1.8	14
31	Computational Screening of MOFs for CO <sub>2</sub> Capture. , 2021, , 205-238.		0
32	Enhanced water stability and high CO <sub>2</sub> storage capacity of a Lewis basic sites-containing zirconium metal-organic framework. <i>Dalton Transactions</i> , 2021, 50, 16587-16592.	1.6	8
33	Recent advances in materials for high purity H <sub>2</sub> production by ethanol and glycerol steam reforming. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 34888-34917.	3.8	30
34	Recent advances in sustainable syngas production by catalytic CO <sub>2</sub> reforming of ethanol and glycerol. <i>Sustainable Energy and Fuels</i> , 2020, 4, 1029-1047.	2.5	40
35	Screening for selectivity. <i>Nature Energy</i> , 2020, 5, 8-9.	19.8	8
36	Can COFs replace MOFs in flue gas separation? high-throughput computational screening of COFs for CO <sub>2</sub> /N <sub>2</sub> separation. <i>Journal of Materials Chemistry A</i> , 2020, 8, 14609-14623.	5.2	69

#	ARTICLE	IF	CITATIONS
37	Revealing the effect of structure curations on the simulated CO <sub>2</sub> separation performances of MOFs. <i>Materials Advances</i> , 2020, 1, 341-353.	2.6	17
38	Recent advances, opportunities, and challenges in high-throughput computational screening of MOFs for gas separations. <i>Coordination Chemistry Reviews</i> , 2020, 422, 213470.	9.5	124
39	Computational Selection of High-Performing Covalent Organic Frameworks for Adsorption and Membrane-Based CO <sub>2</sub> /H <sub>2</sub> Separation. <i>Journal of Physical Chemistry C</i> , 2020, 124, 22577-22590.	1.5	36
40	Do New MOFs Perform Better for CO <sub>2</sub> Capture and H <sub>2</sub> Purification? Computational Screening of the Updated MOF Database. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 41567-41579.	4.0	74
41	Role of partial charge assignment methods in high-throughput screening of MOF adsorbents and membranes for CO <sub>2</sub> /CH <sub>4</sub> separation. <i>Molecular Systems Design and Engineering</i> , 2020, 5, 532-543.	1.7	31
42	Towards complete elucidation of structural factors controlling thermal stability of IL/MOF composites: effects of ligand functionalization on MOFs. <i>Journal of Physics Condensed Matter</i> , 2020, 32, 484001.	0.7	8
43	Influence of anion size and electronic structure on the gas separation performance of ionic liquid/ZIF-8 composites. <i>Microporous and Mesoporous Materials</i> , 2020, 306, 110446.	2.2	20
44	Unlocking the Effect of H <sub>2</sub> O on CO <sub>2</sub> Separation Performance of Promising MOFs Using Atomically Detailed Simulations. <i>Industrial &amp; Engineering Chemistry Research</i> , 2020, 59, 3141-3152.	1.8	26
45	Fast and Selective Adsorption of Methylene Blue from Water Using [BMIM][PF <sub>6</sub> ]-Incorporated UiO-66 and NH <sub>2</sub> -UiO-66. <i>Crystal Growth and Design</i> , 2020, 20, 3590-3595.	1.4	33
46	CO <sub>2</sub> separation from flue gas mixture using [BMIM][BF <sub>4</sub> ]/MOF composites: Linking high-throughput computational screening with experiments. <i>Chemical Engineering Journal</i> , 2020, 394, 124916.	6.6	46
47	Enhanced Water Purification Performance of Ionic Liquid Impregnated Metal-Organic Framework: Dye Removal by [BMIM][PF <sub>6</sub> ]/MIL-53(Al) Composite. <i>Frontiers in Chemistry</i> , 2020, 8, 622567.	1.8	14
48	A Review on Computational Modeling Tools for MOF-Based Mixed Matrix Membranes. <i>Computation</i> , 2019, 7, 36.	1.0	23
49	MIL-53(Al) as a Versatile Platform for Ionic-Liquid/MOF Composites to Enhance CO <sub>2</sub> Selectivity over CH <sub>4</sub> and N <sub>2</sub> . <i>Chemistry - an Asian Journal</i> , 2019, 14, 3655-3667.	1.7	44
50	Structural Factors Determining Thermal Stability Limits of Ionic Liquid/MOF Composites: Imidazolium Ionic Liquids Combined with CuBTC and ZIF-8. <i>Industrial &amp; Engineering Chemistry Research</i> , 2019, 58, 14124-14138.	1.8	40
51	High-Throughput Screening of Metal Organic Frameworks as Fillers in Mixed Matrix Membranes for Flue Gas Separation. <i>Advanced Theory and Simulations</i> , 2019, 2, 1900109.	1.3	19
52	In Silico Design of Metal Organic Frameworks with Enhanced CO <sub>2</sub> Separation Performances: Role of Metal Sites. <i>Journal of Physical Chemistry C</i> , 2019, 123, 28255-28265.	1.5	10
53	Simulation of H <sub>2</sub> /CH <sub>4</sub> mixture permeation through MOF membranes using non-equilibrium molecular dynamics. <i>Journal of Materials Chemistry A</i> , 2019, 7, 2301-2314.	5.2	32
54	Unlocking CO <sub>2</sub> separation performance of ionic liquid/CuBTC composites: Combining experiments with molecular simulations. <i>Chemical Engineering Journal</i> , 2019, 373, 1179-1189.	6.6	44

#	ARTICLE	IF	CITATIONS
55	Large-Scale Computational Screening of Metal Organic Framework (MOF) Membranes and MOF-Based Polymer Membranes for H <sub>2</sub> /N <sub>2</sub> Separations. ACS Sustainable Chemistry and Engineering, 2019, 7, 9525-9536.	3.2	65
56	Improving CO <sub>2</sub> Separation Performance of MIL-53(Al) by Incorporating 1-butyl-3-methylimidazolium Methyl Sulfate. Energy Technology, 2019, 7, 1900157.	1.8	26
57	An extensive comparative analysis of two MOF databases: high-throughput screening of computation-ready MOFs for CH <sub>4</sub> and H <sub>2</sub> adsorption. Journal of Materials Chemistry A, 2019, 7, 9593-9608.	5.2	87
58	Analysis of CH <sub>4</sub> Uptake over Metal-Organic Frameworks Using Data-Mining Tools. ACS Combinatorial Science, 2019, 21, 257-268.	3.8	19
59	Selection rules for estimating the solubility of C <sub>4</sub> -hydrocarbons in imidazolium ionic liquids determined by machine-learning tools. Journal of Molecular Liquids, 2019, 284, 511-521.	2.3	9
60	Reply to Comment on "Database for CO <sub>2</sub> Separation Performances of MOFs Based on Computational Materials Screening". ACS Applied Materials & Interfaces, 2019, 11, 16266-16271.	4.0	4
61	Evaluating Charge Equilibration Methods To Generate Electrostatic Fields in Nanoporous Materials. Journal of Chemical Theory and Computation, 2019, 15, 382-401.	2.3	70
62	Molecular Simulations of MOF Membranes and Performance Predictions of MOF/Polymer Mixed Matrix Membranes for CO <sub>2</sub> /CH <sub>4</sub> Separations. ACS Sustainable Chemistry and Engineering, 2019, 7, 2739-2750.	3.2	69
63	Effects of Force Field Selection on the Computational Ranking of MOFs for CO <sub>2</sub> Separations. Industrial & Engineering Chemistry Research, 2018, 57, 2298-2309.	1.8	28
64	High-Throughput Computational Screening of the Metal Organic Framework Database for CH <sub>4</sub> /H <sub>2</sub> Separations. ACS Applied Materials & Interfaces, 2018, 10, 3668-3679.	4.0	108
65	Database for CO <sub>2</sub> Separation Performances of MOFs Based on Computational Materials Screening. ACS Applied Materials & Interfaces, 2018, 10, 17257-17268.	4.0	129
66	Computer simulations of 4240 MOF membranes for H <sub>2</sub> /CH <sub>4</sub> separations: insights into structure-performance relations. Journal of Materials Chemistry A, 2018, 6, 5836-5847.	5.2	56
67	Modeling and simulation of water-gas shift in a heat exchange integrated microchannel converter. International Journal of Hydrogen Energy, 2018, 43, 1094-1104.	3.8	22
68	Efficient separation of helium from methane using MOF membranes. Separation and Purification Technology, 2018, 191, 192-199.	3.9	49
69	Effect of methylation of ionic liquids on the gas separation performance of ionic liquid/metal-organic framework composites. CrystEngComm, 2018, 20, 7137-7143.	1.3	25
70	An Emerging Family of Hybrid Nanomaterials: Metal-Organic Framework/Aerogel Composites. ACS Applied Nano Materials, 2018, 1, 5959-5980.	2.4	84
71	High-Throughput Screening of MOF Adsorbents and Membranes for H <sub>2</sub> Purification and CO <sub>2</sub> Capture. ACS Applied Materials & Interfaces, 2018, 10, 33693-33706.	4.0	133
72	Enhancing CO <sub>2</sub> /CH <sub>4</sub> and CO <sub>2</sub> /N <sub>2</sub> separation performances of ZIF-8 by post-synthesis modification with [BMIM][SCN]. Polyhedron, 2018, 155, 485-492.	1.0	50

#	ARTICLE	IF	CITATIONS
73	Computational Screening of Metal-Organic Frameworks for Membrane-Based CO <sub>2</sub> /N <sub>2</sub> /H <sub>2</sub> O Separations: Best Materials for Flue Gas Separation. Journal of Physical Chemistry C, 2018, 122, 17347-17357.	1.5	92
74	High-Throughput Molecular Simulations of Metal Organic Frameworks for CO <sub>2</sub> Separation: Opportunities and Challenges. Frontiers in Materials, 2018, 5, .	1.2	26
75	Core-Shell Type Ionic Liquid/Metal Organic Framework Composite: An Exceptionally High CO <sub>2</sub> /CH <sub>4</sub> Selectivity. Journal of the American Chemical Society, 2018, 140, 10113-10116.	6.6	120
76	Computational Screening of MOFs for Acetylene Separation. Frontiers in Chemistry, 2018, 6, 36.	1.8	22
77	The role of ovarian reserve markers in prediction of clinical pregnancy. Journal of Obstetrics and Gynaecology, 2017, 37, 492-497.	0.4	11
78	Molecular simulations of MOF adsorbents and membranes for noble gas separations. Chemical Engineering Science, 2017, 164, 108-121.	1.9	47
79	Improving Gas Separation Performance of ZIF-8 by [BMIM][BF <sub>4</sub> ] Incorporation: Interactions and Their Consequences on Performance. Journal of Physical Chemistry C, 2017, 121, 10370-10381.	1.5	101
80	Ionic Liquid/Metal-Organic Framework Composites: From Synthesis to Applications. ChemSusChem, 2017, 10, 2842-2863.	3.6	210
81	Molecular Modeling of MOF Membranes for Gas Separations. , 2017, , 97-143.		0
82	Toward Rational Design of Ionic Liquid/Metal-Organic Framework Composites: Effects of Interionic Interaction Energy. ACS Omega, 2017, 2, 6613-6618.	1.6	25
83	Computational investigation of metal organic frameworks for storage and delivery of anticancer drugs. Journal of Materials Chemistry B, 2017, 5, 7342-7351.	2.9	44
84	Molecular simulations of MOF membranes for separation of ethane/ethene and ethane/methane mixtures. RSC Advances, 2017, 7, 52283-52295.	1.7	25
85	Adsorption- and Membrane-Based CH <sub>4</sub> /N <sub>2</sub> Separation Performances of MOFs. Industrial & Engineering Chemistry Research, 2017, 56, 8713-8722.	1.8	53
86	Computational Screening of MOF-Based Mixed Matrix Membranes for CO <sub>2</sub> /N <sub>2</sub> Separations. Journal of Nanomaterials, 2016, 2016, 1-12.	1.5	15
87	Molecular Simulations for Adsorption-Based CO <sub>2</sub> Separation Using Metal Organic Frameworks. , 2016, , .		0
88	Ranking of MOF Adsorbents for CO <sub>2</sub> Separations: A Molecular Simulation Study. Industrial & Engineering Chemistry Research, 2016, 55, 10404-10419.	1.8	56
89	A new approach for predicting gas separation performances of MOF membranes. Journal of Membrane Science, 2016, 519, 45-54.	4.1	19
90	[BMIM][PF <sub>6</sub> ] Incorporation Doubles CO <sub>2</sub> Selectivity of ZIF-8: Elucidation of Interactions and Their Consequences on Performance. ACS Applied Materials & Interfaces, 2016, 8, 30992-31005.	4.0	131

#	ARTICLE	IF	CITATIONS
91	Computational assessment of MOF membranes for CH <sub>4</sub> /H <sub>2</sub> separations. Journal of Membrane Science, 2016, 514, 313-321.	4.1	37
92	Computational Methods for MOF/Polymer Membranes. Chemical Record, 2016, 16, 703-718.	2.9	16
93	Tuning the Gas Separation Performance of CuBTC by Ionic Liquid Incorporation. Langmuir, 2016, 32, 1139-1147.	1.6	110
94	Efficient Storage of Drug and Cosmetic Molecules in Biocompatible Metal Organic Frameworks: A Molecular Simulation Study. Industrial & Engineering Chemistry Research, 2016, 55, 1929-1939.	1.8	71
95	Computational screening of MOFs for C <sub>2</sub> H <sub>6</sub> /C <sub>2</sub> H <sub>4</sub> and C <sub>2</sub> H <sub>6</sub> /CH <sub>4</sub> separations. Chemical Engineering Science, 2016, 139, 49-60.	1.9	64
96	Application of MD Simulations to Predict Membrane Properties of MOFs. Journal of Nanomaterials, 2015, 2015, 1-9.	1.5	21
97	A phytochemical-containing metal-organic framework: Synthesis, characterization and molecular simulations for hydrogen adsorption. Inorganica Chimica Acta, 2015, 427, 138-143.	1.2	21
98	Multivariable linear models of structural parameters to predict methane uptake in metal-organic frameworks. Chemical Engineering Science, 2015, 124, 125-134.	1.9	47
99	A zinc(II) metal organic framework based on flexible o-phenylenediacetate and rigid 4,4'-azobis(pyridine) ligands: Synthesis, crystal structure and hydrogen gas adsorption property. Polyhedron, 2015, 100, 108-113.	1.0	8
100	Molecular simulations of porous coordination network-based mixed matrix membranes for CO <sub>2</sub> /N <sub>2</sub> separations. Molecular Simulation, 2015, 41, 1396-1408.	0.9	9
101	Computational Modeling of bio-MOFs for CO <sub>2</sub> /CH <sub>4</sub> separations. Chemical Engineering Science, 2015, 130, 120-128.	1.9	30
102	Identifying Highly Selective Metal Organic Frameworks for CH <sub>4</sub> /H <sub>2</sub> Separations Using Computational Tools. Industrial & Engineering Chemistry Research, 2015, 54, 8479-8491.	1.8	51
103	Opportunities and challenges of MOF-based membranes in gas separations. Separation and Purification Technology, 2015, 152, 207-237.	3.9	233
104	Effects of molecular simulation parameters on predicting gas separation performance of ZIFs. Journal of Chemical Technology and Biotechnology, 2015, 90, 1707-1718.	1.6	11
105	Computational screening of ZIFs for CO <sub>2</sub> separations. Molecular Simulation, 2015, 41, 713-726.	0.9	28
106	Simulation and modelling of MOFs for hydrogen storage. CrystEngComm, 2015, 17, 261-275.	1.3	96
107	Molecular Modeling of Metal-Organic Frameworks for Carbon Dioxide Separation Applications. , 2015, , 339-379.		0
108	Molecular modeling of MOF and ZIF-filled MMMs for CO <sub>2</sub> /N <sub>2</sub> separations. Journal of Membrane Science, 2014, 454, 407-417.	4.1	45

#	ARTICLE	IF	CITATIONS
109	2D+3D polycatenated and 3D+3D interpenetrated metal-organic frameworks constructed from thiophene-2,5-dicarboxylate and rigid bis(imidazole) ligands. <i>Journal of Solid State Chemistry</i> , 2014, 210, 261-266.	1.4	29
110	Site characteristics in metal organic frameworks for gas adsorption. <i>Progress in Surface Science</i> , 2014, 89, 56-79.	3.8	86
111	Effects of electrostatic interactions on gas adsorption and permeability of MOF membranes. <i>Molecular Simulation</i> , 2014, 40, 557-570.	0.9	22
112	Gas adsorption/separation properties of metal directed self-assembly of two coordination polymers with 5-nitroisophthalate. <i>Journal of Solid State Chemistry</i> , 2014, 210, 280-286.	1.4	18
113	Computational Screening of Porous Coordination Networks for Adsorption and Membrane-Based Gas Separations. <i>Journal of Physical Chemistry C</i> , 2014, 118, 13988-13997.	1.5	27
114	Molecular Modeling of MOF-based Mixed Matrix Membranes. <i>Current Organic Chemistry</i> , 2014, 18, 2364-2380.	0.9	8
115	Recent Advances in Metal-Organic Framework-Based Mixed Matrix Membranes. <i>Chemistry - an Asian Journal</i> , 2013, 8, 1692-1704.	1.7	95
116	Predicting Gas Separation Performances of Porous Coordination Networks Using Atomistic Simulations. <i>Industrial &amp; Engineering Chemistry Research</i> , 2013, 52, 17627-17639.	1.8	21
117	Gas adsorption and diffusion in a highly CO <sub>2</sub> selective metal-organic framework: molecular simulations. <i>Molecular Simulation</i> , 2013, 39, 14-24.	0.9	20
118	Predicting Noble Gas Separation Performance of Metal Organic Frameworks Using Theoretical Correlations. <i>Journal of Physical Chemistry C</i> , 2013, 117, 5229-5241.	1.5	34
119	Novel nanostructured composites of silica aerogels with a metal organic framework. <i>Microporous and Mesoporous Materials</i> , 2013, 170, 352-358.	2.2	55
120	High CO <sub>2</sub> Selectivity of an Amine-Functionalized Metal Organic Framework in Adsorption-Based and Membrane-Based Gas Separations. <i>Industrial &amp; Engineering Chemistry Research</i> , 2013, 52, 3462-3472.	1.8	47
121	Construction of homo- and heterometallic-pyridine-2,3-dicarboxylate metallosupramolecular networks with structural diversity: 1D T5(2) water tape and unexpected coordination mode of pyridine-2,3-dicarboxylate. <i>CrystEngComm</i> , 2013, 15, 1244.	1.3	17
122	Synthesis, crystal structures, molecular simulations for hydrogen gas adsorption, fluorescent and antimicrobial properties of pyrazine-2,3-dicarboxylate complexes. <i>Inorganica Chimica Acta</i> , 2013, 399, 19-35.	1.2	18
123	A two-dimensional photoluminescent cadmium(II) coordination polymer containing a new coordination mode of pyridine-2,3-dicarboxylate: Synthesis, structure and molecular simulations for gas storage and separation applications. <i>Polyhedron</i> , 2013, 50, 314-320.	1.0	41
124	The synthesis, characterization, and theoretical hydrogen gas adsorption properties of copper(II)-3,3'-thiodipropionate complexes with imidazole derivatives. <i>Journal of Coordination Chemistry</i> , 2013, 66, 4093-4106.	0.8	6
125	Predicting the Performance of Zeolite Imidazolite Framework/Polymer Mixed Matrix Membranes for CO <sub>2</sub> , CH <sub>4</sub> , and H <sub>2</sub> Separations Using Molecular Simulations. <i>Industrial &amp; Engineering Chemistry Research</i> , 2012, 51, 14218-14228.	1.8	68
126	Adsorption, Diffusion, and Separation of CH <sub>4</sub> /H <sub>2</sub> Mixtures in Covalent Organic Frameworks: Molecular Simulations and Theoretical Predictions. <i>Journal of Physical Chemistry C</i> , 2012, 116, 1772-1779.	1.5	67

#	ARTICLE	IF	CITATIONS
127	A three-dimensional silver(I) framework assembled from 3,3- $\alpha^2$ -thiodipropionate: Synthesis, structure and molecular simulations for hydrogen gas adsorption. <i>Polyhedron</i> , 2012, 45, 103-106.	1.0	11
128	Understanding the Potential of Zeolite Imidazolate Framework Membranes in Gas Separations Using Atomically Detailed Calculations. <i>Journal of Physical Chemistry C</i> , 2012, 116, 15525-15537.	1.5	42
129	An unusual 3D metal-organic framework, $\{[Ag_4(\frac{1}{4}\text{-pzdc})_2(\frac{1}{4}\text{-en})_2]\cdot H_2O\}_n$ : $C\hat{C}H\hat{C}Ag$ , $N\hat{C}H\hat{C}Ag$ and $(O\hat{C}H)\hat{C}Ag$ interactions and an unprecedented coordination mode for pyrazine-2,3-dicarboxylate. <i>CrystEngComm</i> , 2012, 14, 2817.	1.3	36
130	Different dimensionality in Mn(II), Co(II) and Ni(II) aminoisophthalate metal-organic compounds: Synthesis, characterization and gas adsorption properties. <i>Polyhedron</i> , 2012, 48, 199-211.	1.0	10
131	Atomically Detailed Models for Transport of Gas Mixtures in ZIF Membranes and ZIF/Polymer Composite Membranes. <i>Industrial &amp; Engineering Chemistry Research</i> , 2012, 51, 3091-3100.	1.8	36
132	Atomically Detailed Modeling of Metal Organic Frameworks for Adsorption, Diffusion, and Separation of Noble Gas Mixtures. <i>Industrial &amp; Engineering Chemistry Research</i> , 2012, 51, 7373-7382.	1.8	53
133	Parametric study of methane steam reforming to syngas in a catalytic microchannel reactor. <i>Applied Catalysis A: General</i> , 2012, 411-412, 114-122.	2.2	32
134	Computational screening of metal organic frameworks for mixed matrix membrane applications. <i>Journal of Membrane Science</i> , 2012, 407-408, 221-230.	4.1	43
135	Separation of $CO_2$ Mixtures Using $Zn(bdc)(ted)_{0.5}$ Membranes and Composites: A Molecular Simulation Study. <i>Journal of Physical Chemistry C</i> , 2011, 115, 13637-13644.	1.5	23
136	Atomistic Simulations for Adsorption, Diffusion, and Separation of Gas Mixtures in Zeolite Imidazolate Frameworks. <i>Journal of Physical Chemistry C</i> , 2011, 115, 800-807.	1.5	85
137	Biomedical Applications of Metal Organic Frameworks. <i>Industrial &amp; Engineering Chemistry Research</i> , 2011, 50, 1799-1812.	1.8	520
138	Screening Metal-Organic Framework-Based Mixed-Matrix Membranes for $CO_2/CH_4$ Separations. <i>Industrial &amp; Engineering Chemistry Research</i> , 2011, 50, 12606-12616.	1.8	62
139	High $CO_2$ Selectivity of A Microporous Metal-Imidazolate Framework: A Molecular Simulation Study. <i>Industrial &amp; Engineering Chemistry Research</i> , 2011, 50, 8230-8236.	1.8	26
140	Molecular Simulations and Theoretical Predictions for Adsorption and Diffusion of $CH_4/H_2$ and $CO_2/CH_4$ Mixtures in ZIFs. <i>Journal of Physical Chemistry C</i> , 2011, 115, 12560-12566.	1.5	101
141	Adsorption and Transport of $CH_4$ , $CO_2$ , $H_2$ Mixtures in a Bio-MOF Material from Molecular Simulations. <i>Journal of Physical Chemistry C</i> , 2011, 115, 6833-6840.	1.5	72
142	Two novel 2D and 3D coordination polymers constructed from pyrazine-2,3-dicarboxylic acid and chloride bridged secondary building units. <i>Synthetic Metals</i> , 2011, 161, 2471-2480.	2.1	12
143	Can Metal-Organic Framework Materials Play a Useful Role in Large-Scale Carbon Dioxide Separations?. <i>ChemSusChem</i> , 2010, 3, 879-891.	3.6	556
144	Comparing Performance of CPO and IRMOF Membranes for Gas Separations Using Atomistic Models. <i>Industrial &amp; Engineering Chemistry Research</i> , 2010, 49, 11689-11696.	1.8	22

#	ARTICLE	IF	CITATIONS
145	Selecting metal organic frameworks as enabling materials in mixed matrix membranes for high efficiency natural gas purification. <i>Energy and Environmental Science</i> , 2010, 3, 343.	15.6	172
146	Molecular Simulation Study of CH <sub>4</sub> /H <sub>2</sub> Mixture Separations Using Metal Organic Framework Membranes and Composites. <i>Journal of Physical Chemistry C</i> , 2010, 114, 13047-13054.	1.5	36
147	Atomically detailed models of gas mixture diffusion through CuBTC membranes. <i>Microporous and Mesoporous Materials</i> , 2009, 125, 101-106.	2.2	90
148	Efficient Methods for Screening of Metal Organic Framework Membranes for Gas Separations Using Atomically Detailed Models. <i>Langmuir</i> , 2009, 25, 11786-11795.	1.6	161
149	Assessment of a Metal-Organic Framework Membrane for Gas Separations Using Atomically Detailed Calculations: CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> , H <sub>2</sub> Mixtures in MOF-5. <i>Industrial &amp; Engineering Chemistry Research</i> , 2009, 48, 914-922.	1.8	143
150	Progress, Opportunities, and Challenges for Applying Atomically Detailed Modeling to Molecular Adsorption and Transport in Metal-Organic Framework Materials. <i>Industrial &amp; Engineering Chemistry Research</i> , 2009, 48, 2355-2371.	1.8	283
151	Computational identification of a metal organic framework for high selectivity membrane-based CO <sub>2</sub> /CH <sub>4</sub> separations: Cu(hfipbb)(H <sub>2</sub> hfipbb) <sub>0.5</sub> . <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 11389.	1.3	83
152	Soil remediation via an ionic liquid and supercritical CO <sub>2</sub> . <i>Chemical Engineering and Processing: Process Intensification</i> , 2008, 47, 1693-1704.	1.8	19
153	Testing the Accuracy of Correlations for Multicomponent Mass Transport of Adsorbed Gases in Metal-Organic Frameworks: Diffusion of H <sub>2</sub> /CH <sub>4</sub> Mixtures in CuBTC. <i>Langmuir</i> , 2008, 24, 8254-8261.	1.6	67
154	Screening Metal-Organic Framework Materials for Membrane-based Methane/Carbon Dioxide Separations. <i>Journal of Physical Chemistry C</i> , 2007, 111, 14055-14059.	1.5	186
155	A review of ionic liquids towards supercritical fluid applications. <i>Journal of Supercritical Fluids</i> , 2007, 43, 150-180.	1.6	648
156	Recent Advances in Molecular Dynamics Simulations of Gas Diffusion in Metal Organic Frameworks. , , ,		3