

# Jianwen Jiang

## List of Publications by Year in descending order

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279  
papers

15,321  
citations

12330

69  
h-index

24982

109  
g-index

285  
all docs

285  
docs citations

285  
times ranked

14884  
citing authors

#	ARTICLE	IF	CITATIONS
1	A high-performance asymmetric supercapacitor fabricated with graphene-based electrodes. <i>Energy and Environmental Science</i> , 2011, 4, 4009.	30.8	741
2	Storage and Separation of CO <sub>2</sub> and CH <sub>4</sub> in Silicalite, C168 Schwarzite, and IRMOF-1: A Comparative Study from Monte Carlo Simulation. <i>Langmuir</i> , 2007, 23, 659-666.	3.5	388
3	Reversed thermo-switchable molecular sieving membranes composed of two-dimensional metal-organic nanosheets for gas separation. <i>Nature Communications</i> , 2017, 8, 14460.	12.8	382
4	Synthesis and Capacitive Properties of Manganese Oxide Nanosheets Dispersed on Functionalized Graphene Sheets. <i>Journal of Physical Chemistry C</i> , 2011, 115, 6448-6454.	3.1	365
5	Chiral BINOL-Based Covalent Organic Frameworks for Enantioselective Sensing. <i>Journal of the American Chemical Society</i> , 2019, 141, 7081-7089.	13.7	245
6	Molecular Screening of Metal-Organic Frameworks for CO <sub>2</sub> Storage. <i>Langmuir</i> , 2008, 24, 6270-6278.	3.5	227
7	Engineering chiral porous metal-organic frameworks for enantioselective adsorption and separation. <i>Nature Communications</i> , 2014, 5, 4406.	12.8	221
8	Amino functionalized zeolitic tetrazolate framework (ZTF) with high capacity for storage of carbon dioxide. <i>Chemical Communications</i> , 2011, 47, 2011-2013.	4.1	218
9	Unprecedentedly High Selective Adsorption of Gas Mixtures in $\rho$ Zeolite-like Metal-Organic Framework: A Molecular Simulation Study. <i>Journal of the American Chemical Society</i> , 2009, 131, 11417-11425.	13.7	202
10	A highly permeable and selective zeolitic imidazolate framework ZIF-95 membrane for H <sub>2</sub> /CO <sub>2</sub> separation. <i>Chemical Communications</i> , 2012, 48, 10981.	4.1	197
11	Zeolitic imidazolate framework-8 as a reverse osmosis membrane for water desalination: Insight from molecular simulation. <i>Journal of Chemical Physics</i> , 2011, 134, 134705.	3.0	182
12	Molecular dynamics and dissipative particle dynamics simulations for the miscibility of poly(ethylene terephthalate) / Poly(ethylene glycol) block copolymer. <i>Journal of Chemical Physics</i> , 2011, 134, 134705.	3.8	171
13	Catalytic amino acid production from biomass-derived intermediates. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 5093-5098.	7.1	168
14	Modulated Hydrothermal Synthesis of UiO-66(Hf)-Type Metal-Organic Frameworks for Optimal Carbon Dioxide Separation. <i>Inorganic Chemistry</i> , 2016, 55, 1134-1141.	4.0	161
15	Sorption-Induced Structural Transition of Zeolitic Imidazolate Framework-8: A Hybrid Molecular Simulation Study. <i>Journal of the American Chemical Society</i> , 2013, 135, 3722-3728.	13.7	160
16	pH-sensitive drug loading/releasing in amphiphilic copolymer PAA- <i>b</i> -PEG: Integrating molecular dynamics and dissipative particle dynamics simulations. <i>Journal of Controlled Release</i> , 2012, 162, 185-193.	9.9	157
17	Ultrathin two-dimensional porous organic nanosheets with molecular rotors for chemical sensing. <i>Nature Communications</i> , 2017, 8, 1142.	12.8	152
18	Template Synthesis of Tubular Ruthenium Oxides for Supercapacitor Applications. <i>Journal of Physical Chemistry C</i> , 2010, 114, 13608-13613.	3.1	144

#	ARTICLE	IF	CITATIONS
19	Diffusion and Separation of CO <sub>2</sub> and CH <sub>4</sub> in Silicalite, C <sub>168</sub> Schwarzite, and IRMOF-1: A Comparative Study from Molecular Dynamics Simulation. <i>Langmuir</i> , 2008, 24, 5474-5484.	3.5	140
20	A homochiral metal-organic framework membrane for enantioselective separation. <i>Chemical Communications</i> , 2012, 48, 7022.	4.1	139
21	Synthesis and seawater desalination of molecular sieving zeolitic imidazolate framework membranes. <i>Desalination</i> , 2016, 385, 75-82.	8.2	137
22	Molecular Simulations for Adsorptive Separation of CO <sub>2</sub> /CH <sub>4</sub> Mixture in Metal-Exposed, Catenated, and Charged Metal-Organic Frameworks. <i>Langmuir</i> , 2009, 25, 5239-5247.	3.5	134
23	Adsorption and Diffusion of CO <sub>2</sub> and CH <sub>4</sub> in Zeolitic Imidazolate Framework-8: Effect of Structural Flexibility. <i>Journal of Physical Chemistry C</i> , 2014, 118, 8788-8794.	3.1	132
24	Molecular simulations for energy, environmental and pharmaceutical applications of nanoporous materials: from zeolites, metal-organic frameworks to protein crystals. <i>Chemical Society Reviews</i> , 2011, 40, 3599.	38.1	130
25	Boosting Enantioselectivity of Chiral Organocatalysts with Ultrathin Two-Dimensional Metal-Organic Framework Nanosheets. <i>Journal of the American Chemical Society</i> , 2019, 141, 17685-17695.	13.7	128
26	Exceptionally high CO <sub>2</sub> storage in covalent-organic frameworks: Atomistic simulation study. <i>Energy and Environmental Science</i> , 2008, 1, 139.	30.8	126
27	Restriction of Molecular Rotors in Ultrathin Two-Dimensional Covalent Organic Framework Nanosheets for Sensing Signal Amplification. <i>Chemistry of Materials</i> , 2019, 31, 146-160.	6.7	125
28	A Rationally Designed Nitrogen-Rich Metal-Organic Framework and Its Exceptionally High CO <sub>2</sub> and H <sub>2</sub> Uptake Capability. <i>Scientific Reports</i> , 2013, 3, 1149.	3.3	122
29	Chiral NH-Controlled Supramolecular Metallacycles. <i>Journal of the American Chemical Society</i> , 2017, 139, 1554-1564.	13.7	122
30	Confinement of Aggregation-Induced Emission Molecular Rotors in Ultrathin Two-Dimensional Porous Organic Nanosheets for Enhanced Molecular Recognition. <i>Journal of the American Chemical Society</i> , 2018, 140, 4035-4046.	13.7	119
31	Monte Carlo Simulation for the Adsorption and Separation of Linear and Branched Alkanes in IRMOF-1. <i>Langmuir</i> , 2006, 22, 5702-5707.	3.5	118
32	Thermal Conductivity of Zeolitic Imidazolate Framework-8: A Molecular Simulation Study. <i>Journal of Physical Chemistry C</i> , 2013, 117, 18441-18447.	3.1	117
33	Crystalline C=C and C-C Bond-Linked Chiral Covalent Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2021, 143, 369-381.	13.7	117
34	Ionic Liquid/Metal-Organic Framework Composite for CO <sub>2</sub> Capture: A Computational Investigation. <i>Journal of Physical Chemistry C</i> , 2011, 115, 21736-21742.	3.1	114
35	Metal-Organic Framework MIL-101 for Adsorption and Effect of Terminal Water Molecules: From Quantum Mechanics to Molecular Simulation. <i>Langmuir</i> , 2010, 26, 8743-8750.	3.5	113
36	Metal-organic framework supported ionic liquid membranes for CO <sub>2</sub> capture: anion effects. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 5785.	2.8	113

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37	Molecular Understanding for the Adsorption of Water and Alcohols in Hydrophilic and Hydrophobic Zeolitic Metal-Organic Frameworks. <i>Journal of Physical Chemistry C</i> , 2010, 114, 11542-11550.	3.1	111
38	Cellulose dissolution and regeneration in ionic liquids: A computational perspective. <i>Chemical Engineering Science</i> , 2015, 121, 180-189.	3.8	111
39	In silico screening of 4764 computation-ready, experimental metal-organic frameworks for CO <sub>2</sub> separation. <i>Journal of Materials Chemistry A</i> , 2016, 4, 2105-2114.	10.3	109
40	Water Desalination through Zeolitic Imidazolate Framework Membranes: Significant Role of Functional Groups. <i>Langmuir</i> , 2015, 31, 13230-13237.	3.5	108
41	Highly Stable Zr(IV)-Based Metal-Organic Frameworks for Chiral Separation in Reversed-Phase Liquid Chromatography. <i>Journal of the American Chemical Society</i> , 2021, 143, 390-398.	13.7	103
42	Fluorinated Metal-Organic Frameworks: Advantageous for Higher H <sub>2</sub> and CO <sub>2</sub> Adsorption or Not?. <i>Chemistry - A European Journal</i> , 2012, 18, 688-694.	3.3	101
43	High-Flux High-Selectivity Metal-Organic Framework MIL-160 Membrane for Xylene Isomer Separation by Pervaporation. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 15354-15358.	13.8	101
44	Post-synthesis of a covalent organic framework nanofiltration membrane for highly efficient water treatment. <i>Journal of Materials Chemistry A</i> , 2019, 7, 24205-24210.	10.3	101
45	High-throughput computational screening of 137953 metal-organic frameworks for membrane separation of a CO <sub>2</sub> /N <sub>2</sub> /CH <sub>4</sub> mixture. <i>Journal of Materials Chemistry A</i> , 2016, 4, 15904-15912.	10.3	99
46	Self-Assembly of Highly Stable Zirconium(IV) Coordination Cages with Aggregation Induced Emission Molecular Rotors for Live-Cell Imaging. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 10151-10159.	13.8	99
47	Unraveling the Energetics and Dynamics of Ibuprofen in Mesoporous Metal-Organic Frameworks. <i>Journal of Physical Chemistry C</i> , 2009, 113, 18287-18291.	3.1	97
48	A Bio-Metal-Organic Framework for Highly Selective CO <sub>2</sub> Capture: A Molecular Simulation Study. <i>ChemSusChem</i> , 2010, 3, 982-988.	6.8	95
49	A Highly Hydrophobic Metal-Organic Framework Zn(BDC)(TED) <sub>0.5</sub> for Adsorption and Separation of CH <sub>3</sub> OH/H <sub>2</sub> O and CO <sub>2</sub> /CH <sub>4</sub> : An Integrated Experimental and Simulation Study. <i>Journal of Physical Chemistry C</i> , 2010, 114, 6602-6609.	3.1	94
50	Submicrometer-Sized ZIF-71 Filled Organophilic Membranes for Improved Bioethanol Recovery: Mechanistic Insights by Monte Carlo Simulation and FTIR Spectroscopy. <i>Advanced Functional Materials</i> , 2015, 25, 516-525.	14.9	94
51	Equation of state for thermodynamic properties of chain fluids near-to and far-from the vapor-liquid critical region. <i>Journal of Chemical Physics</i> , 1999, 111, 5964-5974.	3.0	93
52	Adsorption and separation of linear and branched alkanes on carbon nanotube bundles from configurational-bias Monte Carlo simulation. <i>Physical Review B</i> , 2005, 72, .	3.2	93
53	Design and self-assembly of hexahedral coordination cages for cascade reactions. <i>Nature Communications</i> , 2018, 9, 4423.	12.8	85
54	Molecular Insights into the Nucleation and Growth of CH <sub>4</sub> and CO <sub>2</sub> Mixed Hydrates from Microsecond Simulations. <i>Journal of Physical Chemistry C</i> , 2016, 120, 25225-25236.	3.1	84

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55	Computational screening of hydrophobic metal-organic frameworks for the separation of H <sub>2</sub> S and CO <sub>2</sub> from natural gas. <i>Journal of Materials Chemistry A</i> , 2018, 6, 18898-18905.	10.3	84
56	Organic Small Molecule Based Photothermal Agents with Molecular Rotors for Malignant Breast Cancer Therapy. <i>Advanced Functional Materials</i> , 2020, 30, 1907093.	14.9	84
57	A Combinatorial Approach towards Water-Stable Metal-Organic Frameworks for Highly Efficient Carbon Dioxide Separation. <i>ChemSusChem</i> , 2014, 7, 2791-2795.	6.8	82
58	CH <sub>4</sub> Hydrate Formation between Silica and Graphite Surfaces: Insights from Microsecond Molecular Dynamics Simulations. <i>Langmuir</i> , 2017, 33, 11956-11967.	3.5	80
59	Effects of Solvent Viscosity on Protein Dynamics: Infrared Vibrational Echo Experiments and Theory. <i>Journal of Physical Chemistry B</i> , 2001, 105, 1081-1092.	2.6	79
60	Structural Isomerism and Effect of Fluorination on Gas Adsorption in Copper-Tetrazolate Based Metal Organic Frameworks. <i>Chemistry of Materials</i> , 2011, 23, 2908-2916.	6.7	79
61	Ionic Liquid Membranes Supported by Hydrophobic and Hydrophilic Metal-Organic Frameworks for CO <sub>2</sub> Capture. <i>Journal of Physical Chemistry C</i> , 2013, 117, 5792-5799.	3.1	79
62	Ion Exchange in Metal-Organic Framework for Water Purification: Insight from Molecular Simulation. <i>Journal of Physical Chemistry C</i> , 2012, 116, 6925-6931.	3.1	77
63	Separation of CO <sub>2</sub> and N <sub>2</sub> by Adsorption in C168 Schwarzite: A Combination of Quantum Mechanics and Molecular Simulation Study. <i>Journal of the American Chemical Society</i> , 2005, 127, 11989-11997.	13.7	76
64	Design of amine-functionalized metal-organic frameworks for CO <sub>2</sub> separation: the more amine, the better?. <i>Chemical Communications</i> , 2016, 52, 974-977.	4.1	76
65	What are the key factors governing the nucleation of CO <sub>2</sub> hydrate?. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 15657-15661.	2.8	75
66	Highly porous nanofiber-supported monolayer graphene membranes for ultrafast organic solvent nanofiltration. <i>Science Advances</i> , 2021, 7, eabg6263.	10.3	75
67	High-throughput computational screening of metal-organic framework membranes for upgrading of natural gas. <i>Journal of Membrane Science</i> , 2018, 551, 47-54.	8.2	73
68	All-in-One Molecular Aggregation-Induced Emission Theranostics: Fluorescence Image Guided and Mitochondria Targeted Chemo- and Photodynamic Cancer Cell Ablation. <i>Chemistry of Materials</i> , 2020, 32, 4681-4691.	6.7	73
69	A molecular-thermodynamic model for polyelectrolyte solutions. <i>Journal of Chemical Physics</i> , 1998, 108, 780-784.	3.0	72
70	Highly Porous Ionic Metal-Organic Framework for H <sub>2</sub> and CO <sub>2</sub> Storage and Separation: A Molecular Simulation Study. <i>Langmuir</i> , 2010, 26, 11196-11203.	3.5	72
71	Metal-Organic Framework/Polymer Mixed-Matrix Membranes for H <sub>2</sub> /CO <sub>2</sub> Separation: A Fully Atomistic Simulation Study. <i>Journal of Physical Chemistry C</i> , 2012, 116, 19268-19277.	3.1	72
72	Seawater Pervaporation through Zeolitic Imidazolate Framework Membranes: Atomistic Simulation Study. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 13392-13399.	8.0	72

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73	Capillary Phase Transitions of n-Alkanes in a Carbon Nanotube. <i>Nano Letters</i> , 2004, 4, 241-244.	9.1	71
74	Adsorption of C <sub>1</sub> -C <sub>4</sub> Alcohols in Zeolitic Imidazolate Framework-8: Effects of Force Fields, Atomic Charges, and Framework Flexibility. <i>Journal of Physical Chemistry C</i> , 2013, 117, 25628-25635.	3.1	70
75	Computational design of 2D functional covalent-organic framework membranes for water desalination. <i>Environmental Science: Water Research and Technology</i> , 2017, 3, 735-743.	2.4	69
76	Cellulose regeneration from a cellulose/ionic liquid mixture: the role of anti-solvents. <i>RSC Advances</i> , 2013, 3, 12794.	3.6	68
77	Upgrade of natural gas in rho zeolite-like metal-organic framework and effect of water: a computational study. <i>Energy and Environmental Science</i> , 2009, 2, 1088.	30.8	67
78	Mechanistic understanding of CO <sub>2</sub> -induced plasticization of a polyimide membrane: A combination of experiment and simulation study. <i>Polymer</i> , 2010, 51, 4439-4447.	3.8	67
79	Development of a force field for zeolitic imidazolate framework-8 with structural flexibility. <i>Journal of Chemical Physics</i> , 2012, 136, 244703.	3.0	67
80	Thermodynamic properties and phase equilibria of charged hard sphere chain model for polyelectrolyte solutions. <i>Molecular Physics</i> , 2001, 99, 1121-1128.	1.7	66
81	Density Functional Theory for Adsorption of Gas Mixtures in Metal-Organic Frameworks. <i>Journal of Physical Chemistry B</i> , 2010, 114, 2820-2827.	2.6	65
82	Interactions between bovine serum albumin and gemini surfactant alkanediyl- $\beta$ -bis(dimethyldodecyl-ammonium bromide). <i>Biopolymers</i> , 2006, 83, 243-249.	2.4	63
83	Nitrogen adsorption on carbon nanotube bundles: Role of the external surface. <i>Physical Review B</i> , 2003, 68, .	3.2	62
84	Nitrogen and Oxygen Mixture Adsorption on Carbon Nanotube Bundles from Molecular Simulation. <i>Langmuir</i> , 2004, 20, 10910-10918.	3.5	62
85	1D-2D-3D Transformation Synthesis of Hierarchical Metal-Organic Framework Adsorbent for Multicomponent Alkane Separation. <i>Journal of the American Chemical Society</i> , 2017, 139, 819-828.	13.7	62
86	Gas Permeation and Separation in Functionalized Polymers of Intrinsic Microporosity: A Combination of Molecular Simulations and Ab Initio Calculations. <i>Journal of Physical Chemistry C</i> , 2011, 115, 14123-14130.	3.1	61
87	Ag nanoprisms with Ag <sub>2</sub> S attachment. <i>Scientific Reports</i> , 2013, 3, 2177.	3.3	61
88	Click-extended nitrogen-rich metal-organic frameworks and their high performance in CO <sub>2</sub> -selective capture. <i>Chemical Communications</i> , 2014, 50, 4683.	4.1	61
89	Intercalation of Metal Ions into Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> MXene Electrodes for High-Areal Capacitance Microsupercapacitors with Neutral Multivalent Electrolytes. <i>Advanced Functional Materials</i> , 2020, 30, 2003721.	14.9	61
90	Free-standing homochiral 2D monolayers by exfoliation of molecular crystals. <i>Nature</i> , 2022, 602, 606-611.	27.8	60

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91	Growing single crystals of two-dimensional covalent organic frameworks enabled by intermediate tracing study. <i>Nature Communications</i> , 2022, 13, 1370.	12.8	60
92	A New Model for the Viscosity of Electrolyte Solutions. <i>Industrial &amp; Engineering Chemistry Research</i> , 2003, 42, 6267-6272.	3.7	58
93	pH-Sensitive Vesicles Formed by Amphiphilic Grafted Copolymers with Tunable Membrane Permeability for Drug Loading/Release: A Multiscale Simulation Study. <i>Macromolecules</i> , 2016, 49, 6084-6094.	4.8	58
94	Biofuel purification in zeolitic imidazolate frameworks: the significant role of functional groups. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 9643-9655.	2.8	57
95	Computer Simulation for Adsorption of CO <sub>2</sub> , N <sub>2</sub> and Flue Gas in a Mimetic MCM-41. <i>Journal of Physical Chemistry C</i> , 2008, 112, 11295-11300.	3.1	55
96	Charged metal-organic framework for high efficacy H <sub>2</sub> adsorption and syngas purification: Atomistic simulation study. <i>AIChE Journal</i> , 2009, 55, 2422-2432.	3.6	55
97	CO <sub>2</sub> capture in poly(ionic liquid) membranes: atomistic insight into the role of anions. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 651-658.	2.8	55
98	Synthesis of highly hydrophobic and permselective metal-organic framework Zn(BDC)(TED)0.5 membranes for H <sub>2</sub> /CO <sub>2</sub> separation. <i>Journal of Membrane Science</i> , 2014, 454, 126-132.	8.2	55
99	Water desalination and biofuel dehydration through a thin membrane of polymer of intrinsic microporosity: Atomistic simulation study. <i>Journal of Membrane Science</i> , 2018, 545, 49-56.	8.2	55
100	Experimental and computational approach of understanding the gas adsorption in amino functionalized interpenetrated metal organic frameworks (MOFs). <i>Journal of Materials Chemistry</i> , 2011, 21, 17737.	6.7	54
101	Computational Design of 2D Covalent-Organic Framework Membranes for Organic Solvent Nanofiltration. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 1734-1744.	6.7	52
102	Development of a Density Functional Theory in Three-Dimensional Nanoconfined Space: H <sub>2</sub> Storage in Metal-Organic Frameworks. <i>Journal of Physical Chemistry B</i> , 2009, 113, 12326-12331.	2.6	50
103	Chiral Phosphoric Acids in Metal-Organic Frameworks with Enhanced Acidity and Tunable Catalytic Selectivity. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 14748-14757.	13.8	50
104	A molecular simulation protocol for swelling and organic solvent nanofiltration of polymer membranes. <i>Journal of Membrane Science</i> , 2019, 573, 639-646.	8.2	50
105	Polymers of intrinsic microporosity for gas permeation: a molecular simulation study. <i>Molecular Simulation</i> , 2010, 36, 992-1003.	2.0	49
106	Mechanistic insight into highly efficient gas permeation and separation in a shape-persistent ladder polymer membrane. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 6075.	2.8	49
107	Molecular Insight into Adsorption and Diffusion of Alkane Isomer Mixtures in Metal-Organic Frameworks. <i>Journal of Physical Chemistry B</i> , 2009, 113, 9129-9136.	2.6	48
108	Biofuel purification by pervaporation and vapor permeation in metal-organic frameworks: a computational study. <i>Energy and Environmental Science</i> , 2011, 4, 2107.	30.8	48

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109	Molecular insight into cellulose regeneration from a cellulose/ionic liquid mixture: effects of water concentration and temperature. <i>RSC Advances</i> , 2013, 3, 4425.	3.6	48
110	Confinement-Driven Enantioselectivity in 3D Porous Chiral Covalent Organic Frameworks. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 6086-6093.	13.8	48
111	Rapid Screening of Metal-Organic Frameworks for Propane/Propylene Separation by Synergizing Molecular Simulation and Machine Learning. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 53454-53467.	8.0	48
112	Equation of State for the Vapor-Liquid Equilibria of Binary Systems Containing Imidazolium-Based Ionic Liquids. <i>Industrial &amp; Engineering Chemistry Research</i> , 2007, 46, 4323-4329.	3.7	46
113	Mechanistic understanding of interactions between cellulose and ionic liquids: A molecular simulation study. <i>Polymer</i> , 2011, 52, 5904-5911.	3.8	46
114	Criticality and phase behavior in the restricted-primitive model electrolyte: Description of ion association. <i>Journal of Chemical Physics</i> , 2002, 116, 7977-7982.	3.0	45
115	Hydrophobic Shielding of Outer Surface: Enhancing the Chemical Stability of Metal-Organic Polyhedra. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 1041-1045.	13.8	45
116	HM-E: Quantum Chemical Hybrid Methods for Calculating Interaction Energies. <i>Journal of Physical Chemistry A</i> , 2004, 108, 107-112.	2.5	44
117	Systematic Investigation of Nitrile Based Ionic Liquids for CO <sub>2</sub> Capture: A Combination of Molecular Simulation and <i>ab Initio</i> Calculation. <i>Journal of Physical Chemistry C</i> , 2014, 118, 3110-3118.	3.1	44
118	CO <sub>2</sub> capture in cation-exchanged metal-organic frameworks: Holistic modeling from molecular simulation to process optimization. <i>Chemical Engineering Science</i> , 2015, 124, 70-78.	3.8	44
119	In silico screening and design strategies of ethane-selective metal-organic frameworks for ethane/ethylene separation. <i>AIChE Journal</i> , 2021, 67, e17025.	3.6	44
120	Cation Characterization and CO <sub>2</sub> Capture in Li <sup>+</sup> -Exchanged Metal-Organic Frameworks: From First-Principles Modeling to Molecular Simulation. <i>Industrial &amp; Engineering Chemistry Research</i> , 2011, 50, 62-68.	3.7	43
121	Porous organic cages as synthetic water channels. <i>Nature Communications</i> , 2020, 11, 4927.	12.8	43
122	Critical temperatures and pressures for hydrocarbon mixtures from an equation of state with renormalization-group theory corrections. <i>Fluid Phase Equilibria</i> , 2000, 169, 127-147.	2.5	42
123	Assessment of biomolecular force fields for molecular dynamics simulations in a protein crystal. <i>Journal of Computational Chemistry</i> , 2010, 31, 371-380.	3.3	42
124	Propylene/Propane Separation Using SiCHA. <i>Industrial &amp; Engineering Chemistry Research</i> , 2013, 52, 3877-3892.	3.7	41
125	Nanostructural Control Enables Optimized Photoacoustic-Fluorescence-Magnetic Resonance Multimodal Imaging and Photothermal Therapy of Brain Tumor. <i>Advanced Functional Materials</i> , 2020, 30, 1907077.	14.9	41
126	Phase equilibria for chain-fluid mixtures near to and far from the critical region. <i>AIChE Journal</i> , 2000, 46, 2525-2536.	3.6	39



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127	Characterization of hexavalent chromium interaction with Sargassum by X-ray absorption fine structure spectroscopy, X-ray photoelectron spectroscopy, and quantum chemistry calculation. <i>Journal of Colloid and Interface Science</i> , 2011, 356, 741-748.	9.4	39
128	Synthesis, characterization and capacitive performance of hydrous manganese dioxide nanostructures. <i>Nanotechnology</i> , 2011, 22, 125703.	2.6	39
129	CO <sub>2</sub> Adsorption in Mono-, Di- and Trivalent Cation-Exchanged Metal-Organic Frameworks: A Molecular Simulation Study. <i>Langmuir</i> , 2012, 28, 3903-3910.	3.5	39
130	Self-Assembly of Amphiphilic Peptide (AF) <sub>6</sub> H <sub>5</sub> K <sub>15</sub> : Coarse-Grained Molecular Dynamics Simulation. <i>Journal of Physical Chemistry B</i> , 2013, 117, 9690-9698.	2.6	39
131	High-Throughput Computational Screening of Metal-Organic Frameworks for Thiol Capture. <i>Journal of Physical Chemistry C</i> , 2017, 121, 22208-22215.	3.1	38
132	Dendritic Pt-Cu bimetallic nanocrystals with a high electrocatalytic activity toward methanol oxidation. <i>Materials Chemistry and Physics</i> , 2012, 132, 244-247.	4.0	37
133	Computational Characterization of Ultrathin Polymer Membranes in Liquids. <i>Macromolecules</i> , 2018, 51, 7169-7177.	4.8	37
134	Molecular Dynamics Simulations for Water and Ions in Protein Crystals. <i>Langmuir</i> , 2008, 24, 4215-4223.	3.5	36
135	Functionalized metal-organic framework MIL-101 for CO <sub>2</sub> capture: multi-scale modeling from ab initio calculation and molecular simulation to breakthrough prediction. <i>CrystEngComm</i> , 2013, 15, 10358.	2.6	36
136	Molecular Design of Zirconium Tetrazolate Metal-Organic Frameworks for CO <sub>2</sub> Capture. <i>Crystal Growth and Design</i> , 2017, 17, 543-549.	3.0	36
137	Polyelectrolyte solutions with stickiness between polyions and counterions. <i>Journal of Chemical Physics</i> , 1999, 110, 4952-4962.	3.0	35
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