

Jianzhong Wu

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4589366/publications.pdf>

Version: 2024-02-01

231
papers

11,677
citations

29994

54
h-index

33814

99
g-index

240
all docs

240
docs citations

240
times ranked

8575
citing authors

#	ARTICLE	IF	CITATIONS
1	Anti-Icing Superhydrophobic Coatings. <i>Langmuir</i> , 2009, 25, 12444-12448.	1.6	1,295
2	Structures of hard-sphere fluids from a modified fundamental-measure theory. <i>Journal of Chemical Physics</i> , 2002, 117, 10156-10164.	1.2	601
3	Density functional theory for chemical engineering: From capillarity to soft materials. <i>AIChE Journal</i> , 2006, 52, 1169-1193.	1.8	335
4	Density-Functional Theory for Complex Fluids. <i>Annual Review of Physical Chemistry</i> , 2007, 58, 85-112.	4.8	323
5	Density functional theory for inhomogeneous mixtures of polymeric fluids. <i>Journal of Chemical Physics</i> , 2002, 117, 2368-2376.	1.2	304
6	Oscillation of Capacitance inside Nanopores. <i>Nano Letters</i> , 2011, 11, 5373-5377.	4.5	290
7	Asphaltene precipitation in crude oils: Theory and experiments. <i>AIChE Journal</i> , 2004, 50, 2552-2570.	1.8	245
8	Density-functional theory of spherical electric double layers and ζ potentials of colloidal particles in restricted-primitive-model electrolyte solutions. <i>Journal of Chemical Physics</i> , 2004, 120, 7223-7233.	1.2	186
9	Understanding the Electric Double-Layer Structure, Capacitance, and Charging Dynamics. <i>Chemical Reviews</i> , 2022, 122, 10821-10859.	23.0	186
10	Solvent Effect on the Pore-Size Dependence of an Organic Electrolyte Supercapacitor. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 1727-1731.	2.1	182
11	Computational Insights into Materials and Interfaces for Capacitive Energy Storage. <i>Advanced Science</i> , 2017, 4, 1700059.	5.6	176
12	Molecular-thermodynamic framework for asphaltene-oil equilibria. <i>AIChE Journal</i> , 1998, 44, 1188-1199.	1.8	174
13	A classical density functional theory for interfacial layering of ionic liquids. <i>Soft Matter</i> , 2011, 7, 11222.	1.2	170
14	A fundamental-measure theory for inhomogeneous associating fluids. <i>Journal of Chemical Physics</i> , 2002, 116, 7094-7103.	1.2	169
15	Phase Behavior of Thermally Responsive Microgel Colloids. <i>Physical Review Letters</i> , 2003, 90, 048304.	2.9	162
16	Interaction between like-charged colloidal spheres in electrolyte solutions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1998, 95, 15169-15172.	3.3	154
17	Phase Equilibria for Systems Containing Hydrocarbons, Water, and Salt: An Extended Peng-Robinson Equation of State. <i>Industrial & Engineering Chemistry Research</i> , 1998, 37, 1634-1643.	1.8	153
18	Enhancing the Capacitive Performance of Electric Double-Layer Capacitors with Ionic Liquid Mixtures. <i>ACS Energy Letters</i> , 2016, 1, 21-26.	8.8	146

#	ARTICLE	IF	CITATIONS
19	Photo-induced ultrafast active ion transport through graphene oxide membranes. <i>Nature Communications</i> , 2019, 10, 1171.	5.8	146
20	Quantum Effects on the Capacitance of Graphene-Based Electrodes. <i>Journal of Physical Chemistry C</i> , 2015, 119, 22297-22303.	1.5	144
21	Density functional theory for differential capacitance of planar electric double layers in ionic liquids. <i>Chemical Physics Letters</i> , 2011, 504, 153-158.	1.2	130
22	Continuous transition from double-layer to Faradaic charge storage in confined electrolytes. <i>Nature Energy</i> , 2022, 7, 222-228.	19.8	130
23	Modeling inhomogeneous van der Waals fluids using an analytical direct correlation function. <i>Physical Review E</i> , 2004, 70, 011201.	0.8	113
24	Microscopic Insights into the Electrochemical Behavior of Nonaqueous Electrolytes in Electric Double-Layer Capacitors. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 1260-1267.	2.1	113
25	Selective Charging Behavior in an Ionic Mixture Electrolyte-Supercapacitor System for Higher Energy and Power. <i>Journal of the American Chemical Society</i> , 2017, 139, 18681-18687.	6.6	101
26	Assembly of Supertetrahedral T_{5} Copper-Indium Sulfide Clusters into a Super-Supertetrahedron of Infinite Order. <i>Journal of the American Chemical Society</i> , 2010, 132, 3283-3285.	6.6	99
27	Interparticle Potential and the Phase Behavior of Temperature-Sensitive Microgel Dispersions. <i>Macromolecules</i> , 2003, 36, 440-448.	2.2	94
28	Molecular thermodynamics of asphaltene precipitation in reservoir fluids. <i>AIChE Journal</i> , 2000, 46, 197-209.	1.8	93
29	Membrane-confined liquid-liquid phase separation toward artificial organelles. <i>Science Advances</i> , 2021, 7, .	4.7	89
30	Hunting ionic liquids with large electrochemical potential windows. <i>AIChE Journal</i> , 2019, 65, 804-810.	1.8	83
31	Density Functional Study of the Electric Double Layer Formed by a High Density Electrolyte. <i>Journal of Physical Chemistry B</i> , 2011, 115, 12911-12914.	1.2	81
32	Density functional theory for semiflexible and cyclic polyatomic fluids. <i>Journal of Chemical Physics</i> , 2004, 121, 4210-4220.	1.2	76
33	Insights from machine learning of carbon electrodes for electric double layer capacitors. <i>Carbon</i> , 2020, 157, 147-152.	5.4	74
34	Self-Diffusion of Methane in Single-Walled Carbon Nanotubes at Sub- and Supercritical Conditions. <i>Langmuir</i> , 2004, 20, 3759-3765.	1.6	73
35	A Generic Model for Electric Double Layers in Porous Electrodes. <i>Journal of Physical Chemistry C</i> , 2016, 120, 8704-8710.	1.5	73
36	A Site Density Functional Theory for Water: Application to Solvation of Amino Acid Side Chains. <i>Journal of Chemical Theory and Computation</i> , 2013, 9, 1896-1908.	2.3	72

#	ARTICLE	IF	CITATIONS
37	Density Functional Theory for Polyelectrolytes near Oppositely Charged Surfaces. <i>Physical Review Letters</i> , 2006, 96, 048302.	2.9	71
38	Density Functional Theory for Planar Electric Double Layers: Closing the Gap between Simple and Polyelectrolytes. <i>Journal of Physical Chemistry B</i> , 2006, 110, 7473-7484.	1.2	71
39	Polyelectrolyte complex coacervation: Effects of concentration asymmetry. <i>Journal of Chemical Physics</i> , 2018, 149, 163303.	1.2	71
40	Unusual effects of solvent polarity on capacitance for organic electrolytes in a nanoporous electrode. <i>Nanoscale</i> , 2014, 6, 5545-5550.	2.8	70
41	Growth Mechanism of Highly Branched Titanium Dioxide Nanowires via Oriented Attachment. <i>Crystal Growth and Design</i> , 2013, 13, 422-428.	1.4	68
42	Structure and Swelling of Grafted Polyelectrolytes: Predictions from a Nonlocal Density Functional Theory. <i>Macromolecules</i> , 2007, 40, 334-343.	2.2	64
43	Extended test-particle method for predicting the inter- and intramolecular correlation functions of polymeric fluids. <i>Journal of Chemical Physics</i> , 2003, 118, 3835-3842.	1.2	63
44	Density-functional theory for the structures and thermodynamic properties of highly asymmetric electrolyte and neutral component mixtures. <i>Physical Review E</i> , 2004, 70, 031109.	0.8	63
45	Salting-Out and Salting-In of Polyelectrolyte Solutions: A Liquid-State Theory Study. <i>Macromolecules</i> , 2016, 49, 9720-9730.	2.2	63
46	Modeling the selectivity of activated carbons for efficient separation of hydrogen and carbon dioxide. <i>Carbon</i> , 2005, 43, 1364-1370.	5.4	62
47	Kinetic Charging Inversion in Ionic Liquid Electric Double Layers. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 2195-2200.	2.1	62
48	A density-functional theory for bulk and inhomogeneous Lennard-Jones fluids from the energy route. <i>Journal of Chemical Physics</i> , 2003, 119, 7388-7397.	1.2	61
49	Volume transition and internal structures of small poly(N-isopropylacrylamide) microgels. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2005, 43, 849-860.	2.4	61
50	Density-functional theory and Monte Carlo simulation for the surface structure and correlation functions of freely jointed Lennard-Jones polymeric fluids. <i>Journal of Chemical Physics</i> , 2005, 122, 174708.	1.2	61
51	Surface Forces between Telechelic Brushes Revisited: The Origin of a Weak Attraction. <i>Langmuir</i> , 2006, 22, 2712-2718.	1.6	60
52	New Theoretical Method for Rapid Prediction of Solvation Free Energy in Water. <i>Journal of Physical Chemistry B</i> , 2011, 115, 6971-6975.	1.2	60
53	Microstructure of Block Copolymers near Selective Surfaces: Theoretical Predictions and Configurational-Bias Monte Carlo Simulation. <i>Macromolecules</i> , 2005, 38, 971-978.	2.2	58
54	Thermodynamic basis for the genome to capsid charge relationship in viral encapsidation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 16986-16991.	3.3	56

#	ARTICLE	IF	CITATIONS
55	Protein Refolding Assisted by Periodic Mesoporous Organosilicas. <i>Langmuir</i> , 2007, 23, 5735-5739.	1.6	55
56	Crystallization Kinetics of Thermosensitive Colloids Probed by Transmission Spectroscopy. <i>Langmuir</i> , 2004, 20, 8858-8864.	1.6	54
57	Structures and correlation functions of multicomponent and polydisperse hard-sphere mixtures from a density functional theory. <i>Journal of Chemical Physics</i> , 2004, 121, 1535-1541.	1.2	53
58	Mixed Ionic Liquid Improves Electrolyte Dynamics in Supercapacitors. <i>Journal of Physical Chemistry C</i> , 2018, 122, 10476-10481.	1.5	53
59	Vapor-Liquid Equilibria and Interfacial Tensions of Associating Fluids within a Density Functional Theory. <i>Industrial & Engineering Chemistry Research</i> , 2005, 44, 1120-1128.	1.8	51
60	A comprehensive analysis of the BET area for nanoporous materials. <i>AIChE Journal</i> , 2018, 64, 286-293.	1.8	51
61	Forces between aqueous nonuniformly charged colloids from molecular simulation. <i>Journal of Chemical Physics</i> , 2002, 116, 7733-7743.	1.2	50
62	Revisiting density functionals for the primitive model of electric double layers. <i>Journal of Chemical Physics</i> , 2014, 140, 044714.	1.2	50
63	Osmotic pressures of aqueous bovine serum albumin solutions at high ionic strength. <i>Fluid Phase Equilibria</i> , 1999, 155, 139-154.	1.4	48
64	Molecular Simulation of Novel Carbonaceous Materials for Hydrogen Storage. <i>Nano Letters</i> , 2004, 4, 1489-1492.	4.5	47
65	Density Functional Methods for Fast Screening of Metal-Organic Frameworks for Hydrogen Storage. <i>Journal of Physical Chemistry C</i> , 2015, 119, 5374-5385.	1.5	46
66	Orientation-Averaged Pair Potentials between Dipolar Proteins or Colloids. <i>Journal of Physical Chemistry B</i> , 2002, 106, 2714-2720.	1.2	45
67	Time-dependent density functional theory for ion diffusion in electrochemical systems. <i>Journal of Physics Condensed Matter</i> , 2014, 26, 284102.	0.7	45
68	Chemical and Radiation Stability of Ionic Liquids: A Computational Screening Study. <i>Journal of Physical Chemistry C</i> , 2016, 120, 27757-27767.	1.5	45
69	Impurity Effects on Charging Mechanism and Energy Storage of Nanoporous Supercapacitors. <i>Journal of Physical Chemistry C</i> , 2017, 121, 14066-14072.	1.5	45
70	Monte Carlo Simulation for the Double Layer Structure of an Ionic Liquid Using a Dimer Model: A Comparison with the Density Functional Theory. <i>Journal of Physical Chemistry B</i> , 2012, 116, 10364-10370.	1.2	44
71	Electrostatic origins of polyelectrolyte adsorption: Theory and Monte Carlo simulations. <i>Journal of Chemical Physics</i> , 2010, 133, 044906.	1.2	43
72	Effect of the range of attractive interactions on crystallization, metastable phase transition, and percolation in colloidal dispersions. <i>Physical Review E</i> , 2003, 68, 011403.	0.8	42

#	ARTICLE	IF	CITATIONS
73	Pairwise-additive hydrophobic effect for alkanes in water. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 9512-9515.	3.3	42
74	Toward the inverse design of MOF membranes for efficient D2/H2 separation by combination of physics-based and data-driven modeling. Journal of Membrane Science, 2020, 598, 117675.	4.1	42
75	Interaction between oppositely charged micelles or globular proteins. Physical Review E, 2000, 62, 5273-5280.	0.8	41
76	Layering, condensation, and evaporation of short chains in narrow slit pores. Journal of Chemical Physics, 2005, 122, 224701.	1.2	41
77	Application of Density Functional Theory To Study the Double Layer of an Electrolyte with an Explicit Dimer Model for the Solvent. Journal of Physical Chemistry B, 2012, 116, 11356-11361.	1.2	41
78	Time-dependent density functional theory for the charging kinetics of electric double layer containing room-temperature ionic liquids. Journal of Chemical Physics, 2016, 145, 204707.	1.2	41
79	Ionic Effects in Collapse of Polyelectrolyte Brushes. Journal of Physical Chemistry B, 2008, 112, 7713-7720.	1.2	40
80	A hybrid method for predicting the microstructure of polymers with complex architecture: Combination of single-chain simulation with density functional theory. Journal of Chemical Physics, 2006, 124, 164904.	1.2	39
81	Electrochemical Properties of the Double Layer of an Ionic Liquid Using a Dimer Model Electrolyte and Density Functional Theory. Journal of Physical Chemistry B, 2012, 116, 2520-2525.	1.2	38
82	High-Throughput Prediction of the Hydration Free Energies of Small Molecules from a Classical Density Functional Theory. Journal of Physical Chemistry Letters, 2013, 4, 3687-3691.	2.1	37
83	Boosting the Performance of Ionic-Liquid-Based Supercapacitors with Polar Additives. Journal of Physical Chemistry C, 2016, 120, 24041-24047.	1.5	37
84	Structural Transitions of Confined Model Proteins: Molecular Dynamics Simulation and Experimental Validation. Biophysical Journal, 2006, 90, 3224-3238.	0.2	35
85	Excess-Entropy Scaling for Gas Diffusivity in Nanoporous Materials. Langmuir, 2013, 29, 12997-13002.	1.6	35
86	Thermodynamic and Structural Evidence for Reduced Hydrogen Bonding among Water Molecules near Small Hydrophobic Solutes. Journal of Physical Chemistry B, 2015, 119, 12108-12116.	1.2	35
87	A modified fundamental measure theory for spherical particles in microchannels. Journal of Chemical Physics, 2003, 119, 2288-2295.	1.2	34
88	Osmotic Pressure and Packaging Structure of Caged DNA. Biophysical Journal, 2008, 94, 737-746.	0.2	34
89	Classical density functional theory for methane adsorption in metal-organic framework materials. AIChE Journal, 2015, 61, 3012-3021.	1.8	34
90	Data-Driven Approach to Understanding the <i>In-Operando</i> Performance of Heteroatom-Doped Carbon Electrodes. ACS Applied Energy Materials, 2020, 3, 5993-6000.	2.5	34

#	ARTICLE	IF	CITATIONS
91	Density functional theory for predicting polymeric forces against surface fouling. <i>Soft Matter</i> , 2010, 6, 4631.	1.2	33
92	Non-Negligible Roles of Pore Size Distribution on Electroosmotic Flow in Nanoporous Materials. <i>ACS Nano</i> , 2019, 13, 8185-8192.	7.3	33
93	Nitrogen-doped porous aromatic frameworks for enhanced CO ₂ adsorption. <i>Journal of Colloid and Interface Science</i> , 2015, 438, 191-195.	5.0	32
94	A self-consistent approach for modelling the interfacial properties and phase diagrams of Yukawa, Lennard-Jones and square-well fluids. <i>Molecular Physics</i> , 2004, 102, 1479-1488.	0.8	31
95	Surface-induced phase transitions in ultrathin films of block copolymers. <i>Journal of Chemical Physics</i> , 2005, 122, 194703.	1.2	31
96	The tail effect on the shape of an electrical double layer differential capacitance curve. <i>Journal of Chemical Physics</i> , 2013, 138, 144704.	1.2	30
97	Toward a Quantitative Theory of Ultrasmall Liquid Droplets and Vapor-Liquid Nucleation. <i>Industrial & Engineering Chemistry Research</i> , 2008, 47, 4988-4995.	1.8	29
98	Influence of anisotropic ion shape on structure and capacitance of an electric double layer: A Monte Carlo and density functional study. <i>Journal of Chemical Physics</i> , 2013, 139, 054703.	1.2	28
99	Graphene oxide enabled long-term enzymatic transesterification in an anhydrous gas flux. <i>Nature Communications</i> , 2019, 10, 2684.	5.8	28
100	Density functional theory for a primitive model of nanoparticle-block copolymer mixtures. <i>Journal of Chemical Physics</i> , 2007, 126, 144912.	1.2	27
101	Electrostatic Regulation of Genome Packaging in Human Hepatitis B Virus. <i>Biophysical Journal</i> , 2009, 96, 3065-3073.	0.2	27
102	Communication: Long-range angular correlations in liquid water. <i>Journal of Chemical Physics</i> , 2013, 139, 041103.	1.2	27
103	Lectin corona enhances enzymatic catalysis on the surface of magnetic nanoparticles. <i>Biochemical Engineering Journal</i> , 2018, 129, 26-32.	1.8	27
104	Ionic Liquid Mixture Expands the Potential Window and Capacitance of a Supercapacitor in Tandem. <i>Journal of Physical Chemistry C</i> , 2018, 122, 18304-18310.	1.5	27
105	Theoretical Study of Cooperativity in Multivalent Polymers for Colloidal Stabilization. <i>Langmuir</i> , 2005, 21, 9786-9791.	1.6	26
106	A contact-corrected density functional theory for electrolytes at an interface. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 3934.	1.3	26
107	Molecular Theory for Electrokinetic Transport in pH-Regulated Nanochannels. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 3015-3020.	2.1	26
108	Melting Kinetics of Thermally Responsive Microgel Crystals. <i>Macromolecules</i> , 2007, 40, 9544-9548.	2.2	25

#	ARTICLE	IF	CITATIONS
109	A theoretical study for nanoparticle partitioning in the lamellae of diblock copolymers. Journal of Chemical Physics, 2008, 128, 074901.	1.2	25
110	Density functional theory study of the capacitance of single file ions in a narrow cylinder. Journal of Colloid and Interface Science, 2015, 449, 130-135.	5.0	25
111	Ion distribution and selectivity of ionic liquids in microporous electrodes. Journal of Chemical Physics, 2017, 146, 174701.	1.2	25
112	Electrolyte cation length influences electrosorption and dynamics in porous carbon supercapacitors. Electrochimica Acta, 2018, 283, 882-893.	2.6	25
113	Overcharging of Nanoparticles in Electrolyte Solutions. Langmuir, 2004, 20, 7333-7338.	1.6	24
114	Potential distribution theorem for the polymer-induced depletion between colloidal particles. Journal of Chemical Physics, 2007, 126, 144904.	1.2	24
115	A perturbative density functional theory for square-well fluids. Journal of Chemical Physics, 2011, 134, 174702.	1.2	24
116	Differential Heat of Adsorption and Isotheres. Langmuir, 2017, 33, 996-1003.	1.6	24
117	Ion association at discretely-charged dielectric interfaces: Giant charge inversion. Journal of Chemical Physics, 2017, 147, 024703.	1.2	24
118	Electric double layer capacitance for ionic liquids in nanoporous electrodes: Effects of pore size and ion composition. Journal of Molecular Liquids, 2018, 270, 145-150.	2.3	24
119	A new perturbation method for electrolyte solutions based on MSA. Fluid Phase Equilibria, 1994, 101, 121-136.	1.4	23
120	A Theoretical Model for the Dynamic Structure of Hepatitis B Nucleocapsid. Biophysical Journal, 2011, 101, 2476-2484.	0.2	23
121	Can ionophobic nanopores enhance the energy storage capacity of electric-double-layer capacitors containing nonaqueous electrolytes?. Journal of Physics Condensed Matter, 2016, 28, 414005.	0.7	23
122	Modeling Surface Charge Regulation of Colloidal Particles in Aqueous Solutions. Langmuir, 2020, 36, 11918-11928.	1.6	23
123	On the hydrophilicity of electrodes for capacitive energy extraction. Journal of Physics Condensed Matter, 2016, 28, 464008.	0.7	22
124	Self-consistent equations governing the dynamics of nonequilibrium colloidal systems. Journal of Chemical Physics, 2011, 134, 054514.	1.2	21
125	Capacitive Energy Extraction by Few-Layer Graphene Electrodes. Journal of Physical Chemistry C, 2017, 121, 14010-14018.	1.5	21
126	Understanding surface charge regulation in silica nanopores. Physical Chemistry Chemical Physics, 2020, 22, 15373-15380.	1.3	21

#	ARTICLE	IF	CITATIONS
127	An efficient method for accurate evaluation of the site-site direct correlation functions of molecular fluids. <i>Molecular Physics</i> , 2011, 109, 2553-2564.	0.8	20
128	Shape Effect on Nanoparticle Solvation: A Comparison of Morphometric Thermodynamics and Microscopic Theories. <i>Langmuir</i> , 2012, 28, 6997-7006.	1.6	20
129	Seeking metal-organic frameworks for methane storage in natural gas vehicles. <i>Adsorption</i> , 2015, 21, 499-507.	1.4	20
130	Concanavalin A Coated Activated Carbon for High Performance Enzymatic Catalysis. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 90-96.	3.2	20
131	Cluster formation and bulk phase behavior of colloidal dispersions. <i>Physical Review E</i> , 2009, 80, 021401.	0.8	19
132	Hybrid MC ⁺ DFT Method for Studying Multidimensional Entropic Forces. <i>Journal of Physical Chemistry B</i> , 2011, 115, 1450-1460.	1.2	19
133	Molecular density functional theory for multiscale modeling of hydration free energy. <i>Chemical Engineering Science</i> , 2015, 126, 370-382.	1.9	19
134	Molecular thermodynamics for charged biomacromolecules. <i>Fluid Phase Equilibria</i> , 2006, 241, 317-333.	1.4	18
135	Molecular dynamics for the charging behavior of nanostructured electric double layer capacitors containing room temperature ionic liquids. <i>Nano Research</i> , 2015, 8, 931-940.	5.8	18
136	Impurity effects on ionic-liquid-based supercapacitors. <i>Molecular Physics</i> , 2017, 115, 454-464.	0.8	18
137	Structure and capacitance of an electric double layer of an asymmetric valency dimer electrolyte: A comparison of the density functional theory with Monte Carlo simulations. <i>Journal of Molecular Liquids</i> , 2017, 228, 236-242.	2.3	18
138	Separation of long DNA molecules through cleavage of hydrogen bonds under a stretching force. <i>Applied Physics Letters</i> , 2007, 91, .	1.5	17
139	Self-organization of multivalent counterions in polyelectrolyte brushes. <i>Journal of Chemical Physics</i> , 2008, 129, 084903.	1.2	17
140	Equation of State for the Phase Behavior of Carbon Dioxide-Polymer Systems. <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 7678-7684.	1.8	17
141	Modeling selective ion adsorption into cylindrical nanopores. <i>Chemical Physics Letters</i> , 2018, 709, 116-124.	1.2	17
142	Microscopic insights into the Faradaic reaction effects on the electric double layers. <i>Chemical Engineering Science</i> , 2020, 215, 115452.	1.9	17
143	Modeling Microscopic Morphology and Mechanical Properties of Block Copolymer/Nanoparticle Composites. <i>Macromolecules</i> , 2009, 42, 7537-7544.	2.2	16
144	Solvation of a Spherical Cavity in Simple Liquids: Interpolating between the Limits. <i>Journal of Physical Chemistry B</i> , 2009, 113, 6813-6818.	1.2	16

#	ARTICLE	IF	CITATIONS
145	A molecular theory for optimal blue energy extraction by electrical double layer expansion. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 23970-23976.	1.3	16
146	Potential of mean force and transient states in polyelectrolyte pair complexation. <i>Journal of Chemical Physics</i> , 2016, 145, 034901.	1.2	16
147	Isotropic-nematic phase transition in athermal solutions of rod-coil diblock copolymers. <i>Journal of Chemical Physics</i> , 2007, 127, 034902.	1.2	15
148	Non-scaling behavior of electroosmotic flow in voltage-gated nanopores. <i>Physical Chemistry Chemical Physics</i> , 2016, 19, 450-457.	1.3	15
149	Demystifying the Stern layer at a metal-electrolyte interface: Local dielectric constant, specific ion adsorption, and partial charge transfer. <i>Journal of Chemical Physics</i> , 2021, 154, 124701.	1.2	15
150	Fast prediction of hydration free energies for SAMPL4 blind test from a classical density functional theory. <i>Journal of Computer-Aided Molecular Design</i> , 2014, 28, 299-304.	1.3	14
151	Partitioning of proteins between an aqueous solution and a weakly-ionizable polyelectrolyte hydrogel. <i>Polymer</i> , 1996, 37, 4803-4808.	1.8	13
152	Self-Amplified Surface Charging and Partitioning of Ionic Liquids in Nanopores. <i>Physical Review Applied</i> , 2017, 8, .	1.5	13
153	Electrochemical Behavior of Nanoporous Supercapacitors with Oligomeric Ionic Liquids. <i>Journal of Physical Chemistry C</i> , 2018, 122, 14402-14407.	1.5	13
154	Entropic forces of single-chain confinement in spherical cavities. <i>Physical Review E</i> , 2010, 82, 041805.	0.8	12
155	A molecular thermodynamic model for the stability of hepatitis B capsids. <i>Journal of Chemical Physics</i> , 2014, 140, 235101.	1.2	12
156	Spreading of a Unilamellar Liposome on Charged Substrates: A Coarse-Grained Molecular Simulation. <i>Langmuir</i> , 2016, 32, 3785-3793.	1.6	12
157	Cation Molecular Structure Affects Mobility and Transport of Electrolytes in Porous Carbons. <i>Journal of the Electrochemical Society</i> , 2019, 166, A507-A514.	1.3	12
158	Generalizations for the Potential of Mean Force between Two Isolated Colloidal Particles from Monte Carlo Simulations. <i>Journal of Colloid and Interface Science</i> , 2002, 252, 326-330.	5.0	11
159	Molecular dynamics for surfactant-assisted protein refolding. <i>Journal of Chemical Physics</i> , 2007, 126, 064906.	1.2	11
160	Dynamic Control of Protein Folding Pathway with a Polymer of Tunable Hydrophobicity. <i>Journal of Physical Chemistry B</i> , 2007, 111, 12303-12309.	1.2	11
161	Structure of an electric double layer containing a 2:2 valency dimer electrolyte. <i>Journal of Colloid and Interface Science</i> , 2015, 449, 175-179.	5.0	11
162	Toward high-throughput predictions of the hydration free energies of small organic molecules from first principles. <i>Fluid Phase Equilibria</i> , 2016, 407, 304-313.	1.4	11

#	ARTICLE	IF	CITATIONS
163	Kinetics of CO ₂ diffusion in human carbonic anhydrase: a study using molecular dynamics simulations and the Markov-state model. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 11690-11697.	1.3	11
164	Thermodynamic Route to Efficient Prediction of Gas Diffusivity in Nanoporous Materials. <i>Langmuir</i> , 2017, 33, 11797-11803.	1.6	11
165	Separation of Carbon Isotopes in Methane with Nanoporous Materials. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 5151-5160.	1.8	11
166	Does capillary evaporation limit the accessibility of nonaqueous electrolytes to the ultrasmall pores of carbon electrodes?. <i>Journal of Chemical Physics</i> , 2018, 149, 234708.	1.2	11
167	Side-chain effects on the capacitive behaviour of ionic liquids in microporous electrodes. <i>Molecular Physics</i> , 2019, 117, 3603-3613.	0.8	11
168	Curvature effects on electric-double-layer capacitance. <i>Chinese Journal of Chemical Engineering</i> , 2021, 31, 145-152.	1.7	11
169	Phase equilibria in a system of "breathing" molecules. <i>Fluid Phase Equilibria</i> , 2002, 194-197, 689-700.	1.4	10
170	An improved theoretical procedure for the pore-size analysis of activated carbon by gas adsorption. <i>Chinese Journal of Chemical Engineering</i> , 2018, 26, 551-559.	1.7	10
171	Polyelectrolytes Tailored Enzyme Cascades with Enhanced Stability and Activity for One-pot Synthesis. <i>ChemCatChem</i> , 2018, 10, 5391-5396.	1.8	10
172	Flow effects on silicate dissolution and ion transport at an aqueous interface. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 6970-6975.	1.3	10
173	Charge Regulation of Natural Amino Acids in Aqueous Solutions. <i>Journal of Chemical & Engineering Data</i> , 2020, 65, 5630-5642.	1.0	10
174	A GPU implementation of classical density functional theory for rapid prediction of gas adsorption in nanoporous materials. <i>Journal of Chemical Physics</i> , 2020, 153, 074101.	1.2	10
175	Theoretical Insights into MXene Termination and Surface Charge Regulation. <i>Journal of Physical Chemistry C</i> , 2021, 125, 21771-21779.	1.5	10
176	Application of the new perturbation method to predict densities of single electrolyte aqueous solutions. <i>Fluid Phase Equilibria</i> , 1995, 107, 45-59.	1.4	9
177	Structural and dynamic properties of colloids near jamming transition. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2004, 247, 145-151.	2.3	9
178	Gaussian fluctuations in tethered DNA chains. <i>Journal of Chemical Physics</i> , 2011, 134, 065103.	1.2	9
179	Site-site direct correlation functions for three popular molecular models of liquid water. <i>Journal of Chemical Physics</i> , 2013, 139, 064509.	1.2	9
180	An improved classical mapping method for homogeneous electron gases at finite temperature. <i>Journal of Chemical Physics</i> , 2014, 141, 064115.	1.2	9

#	ARTICLE	IF	CITATIONS
181	A Theoretical Study of SRPK Interaction with the Flexible Domains of Hepatitis B Capsids. <i>Biophysical Journal</i> , 2014, 107, 1453-1461.	0.2	9
182	A bridge-functional-based classical mapping method for predicting the correlation functions of uniform electron gases at finite temperature. <i>Journal of Chemical Physics</i> , 2014, 140, 084103.	1.2	9
183	Classical Density Functional Theory for Molecular Systems. <i>Molecular Modeling and Simulation</i> , 2017, , 65-99.	0.2	9
184	Molecular Theory of Hydration at Different Temperatures. <i>Journal of Physical Chemistry B</i> , 2017, 121, 6898-6908.	1.2	9
185	A molecular theory for predicting the thermodynamic efficiency of electrokinetic energy conversion in slit nanochannels. <i>Journal of Chemical Physics</i> , 2018, 148, 084701.	1.2	9
186	Computational screening and design of nanoporous membranes for efficient carbon isotope separation. <i>Green Energy and Environment</i> , 2020, 5, 364-373.	4.7	9
187	Virtual Screening of Nanoporous Materials for Noble Gas Separation. <i>ACS Applied Nano Materials</i> , 2022, 5, 3701-3711.	2.4	9
188	Jamming phase diagram of colloidal dispersions by molecular dynamics simulations. <i>Applied Physics Letters</i> , 2004, 84, 4565-4567.	1.5	8
189	Separation of single-stranded DNA fragments at a 10-nucleotide resolution by stretching in microfluidic channels. <i>Lab on A Chip</i> , 2011, 11, 4036.	3.1	8
190	A Diffusion-Reaction Model for One-Pot Synthesis of Chemicals with Enzyme Cascades. <i>ChemCatChem</i> , 2020, 12, 528-535.	1.8	8
191	Thermodynamic non-ideality in charge regulation of weak polyelectrolytes. <i>Soft Matter</i> , 2021, 17, 9221-9234.	1.2	8
192	A theoretical study of colloidal forces near amphiphilic polymer brushes. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2011, 384, 115-120.	2.3	7
193	Sorting Short Fragments of Single-Stranded DNA with an Evolving Electric Double Layer. <i>Journal of Physical Chemistry B</i> , 2013, 117, 2267-2272.	1.2	7
194	Pluronic-Conjugated Enzyme Cascade for In-Situ Oxidation in Biphasic Media. <i>ChemCatChem</i> , 2018, 10, 2003-2008.	1.8	7
195	Molecular dynamics simulations reveal how graphene oxide stabilizes and activates lipase in an anhydrous gas. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 25425-25430.	1.3	7
196	Formation of lamellar structures from spherical particles. <i>Journal of Chemical Physics</i> , 2009, 130, 165102.	1.2	6
197	Multiscale simulation of surfactant-aquaporin complex formation and water permeability. <i>RSC Advances</i> , 2014, 4, 37592-37599.	1.7	6
198	Predicting hydration free energies of amphetamine-type stimulants with a customized molecular model. <i>Journal of Physics Condensed Matter</i> , 2016, 28, 344001.	0.7	6

#	ARTICLE	IF	CITATIONS
199	Fractionation of Isotopic Methanes with Metal-Organic Frameworks. <i>Journal of Physical Chemistry C</i> , 2019, 123, 7397-7407.	1.5	6
200	Predicting the Materials Properties Using a 3D Graph Neural Network With Invariant Representation. <i>IEEE Access</i> , 2022, 10, 62440-62449.	2.6	6
201	A liquid-state theory for electron correlation functions and thermodynamics. <i>Chemical Physics Letters</i> , 2013, 556, 336-340.	1.2	5
202	Solvation Structure of Surface-Supported Amine Fragments: A Molecular Dynamics Study. <i>Journal of Physical Chemistry C</i> , 2017, 121, 22156-22163.	1.5	5
203	Multimodels computation for adsorption capacity of activated carbon. <i>Adsorption Science and Technology</i> , 2018, 36, 508-520.	1.5	5
204	Recent progress in enzymatic functionalization of carbon-hydrogen bonds for the green synthesis of chemicals. <i>Chinese Journal of Chemical Engineering</i> , 2020, 28, 2499-2506.	1.7	5
205	Massively Parallel GPU-Accelerated String Method for Fast and Accurate Prediction of Molecular Diffusivity in Nanoporous Materials. <i>ACS Applied Nano Materials</i> , 2021, 4, 5394-5403.	2.4	5
206	Molecular thermodynamics for amino acid adsorption at inorganic surfaces. <i>AIChE Journal</i> , 0, , e17432.	1.8	5
207	Efficient force field and energy emulation through partition of permutationally equivalent atoms. <i>Journal of Chemical Physics</i> , 2022, 156, 184304.	1.2	5
208	Density functional theory for encapsidated polyelectrolytes: A comparison with Monte Carlo simulation. <i>Journal of Chemical Physics</i> , 2012, 137, 044905.	1.2	4
209	Contact value relations and density functional theory for the electrical double layer. <i>Molecular Physics</i> , 2014, 112, 3144-3151.	0.8	4
210	A Thermodynamic Model for Genome Packaging in Hepatitis B Virus. <i>Biophysical Journal</i> , 2015, 109, 1689-1697.	0.2	4
211	Detachment of HCO ₃ ⁻ from the Active Site of Carbonic Anhydrase: Molecular Dynamics Simulation and Machine Learning. <i>Journal of Physical Chemistry C</i> , 2018, 122, 20539-20549.	1.5	4
212	A Multiscale Procedure for Predicting the Hydration Free Energies of Polycyclic Aromatic Hydrocarbons. <i>Journal of Chemical & Engineering Data</i> , 2020, 65, 2206-2211.	1.0	4
213	Mechanistic Insights of Pore Contributions in Carbon Supercapacitors by Modified Step Potential Electrochemical Spectroscopy. <i>Journal of the Electrochemical Society</i> , 2021, 168, 060530.	1.3	4
214	Theoretical insights on the hydration of quinones as catholytes in aqueous redox flow batteries. <i>Chinese Journal of Chemical Engineering</i> , 2021, 37, 72-78.	1.7	4
215	Ising density functional theory for weak polyelectrolytes with strong coupling of ionization and intrachain correlations. <i>Journal of Chemical Physics</i> , 2021, 155, 241102.	1.2	4
216	A Theoretical Model for the Charging Dynamics of Associating Ionic Liquids. <i>Frontiers in Chemical Engineering</i> , 2022, 4, .	1.3	4

#	ARTICLE	IF	CITATIONS
217	Modeling the Electrostatics and Size Effect within a Crowded Bioenvironment. <i>Macromolecular Symposia</i> , 2005, 219, 51-58.	0.4	3
218	A new exchangeâ€œcorrelation functional free of delocalization and static correlation errors. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 16373-16377.	1.3	3
219	Markov-state model for CO2 binding with carbonic anhydrase under confinement. <i>Journal of Chemical Physics</i> , 2018, 148, 035101.	1.2	3
220	Accelerating CO2 Absorption in Aqueous Amine Solutions at High Temperature with Carbonic Anhydrase in Magnetic Nanogels. <i>Catalysis Letters</i> , 2018, 148, 1827-1833.	1.4	3
221	Wettability of ultra-small pores of carbon electrodes by size-asymmetric ionic fluids. <i>Journal of Chemical Physics</i> , 2020, 152, 054708.	1.2	3
222	Direct correlation functions for three-site and four-site water models. <i>Molecular Physics</i> , 2016, 114, 2351-2363.	0.8	2
223	110th Anniversary: Molecular Thermodynamics: An Endless Frontier. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 9707-9708.	1.8	2
224	A Coreâ€œShell Cascade of Chloroperoxidase and Gold Nanoclusters for Asymmetric Hydroxylation of Ethylbenzene. <i>ChemCatChem</i> , 2022, 14, .	1.8	2
225	Structure and thermodynamic properties of relativistic electron gases. <i>Physical Review E</i> , 2014, 90, 012141.	0.8	1
226	A life dedicated to the theory of simple fluids â€œ in memory of Yiping Tang. <i>Molecular Physics</i> , 2016, 114, 2325-2327.	0.8	1
227	A theoretical study on the morphological phase diagram of supported lipid bilayers. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 16897-16903.	1.3	1
228	A hybrid theoretical method for predicting electrokinetic energy conversion in nanochannels. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 9110-9116.	1.3	1
229	Modeling Multicomponent Gas Adsorption in Nanoporous Materials with Two Versions of Nonlocal Classical Density Functional Theory. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 17016-17025.	1.8	1
230	Modeling Nanoporous Materials for the Next Generation of Supercapacitors. , 2021, , 1-69.		0
231	Glucose Induces Heme Leakage and Suppresses H2O2 Uptake of Chloroperoxidase in the Asymmetric Hydroxylation of Ethylbenzene. <i>ChemCatChem</i> , 0, , .	1.8	0