

Xiaohua Lu

List of Publications by Year in descending order

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230
papers

7,000
citations

81900

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88630

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all docs

233
docs citations

233
times ranked

8319
citing authors

#	ARTICLE	IF	CITATIONS
1	Viscous behavior of 1-hexyl-methylimidazolium bis(trifluoromethylsulfonyl)imide/titanium dioxide/polyethylene glycol. Chinese Journal of Chemical Engineering, 2023, 54, 280-287.	3.5	0
2	Poly(ionic liquid)s as lubricant additives with insight into adsorption-lubrication relationship. Tribology International, 2022, 165, 107278.	5.9	18
3	Molecular insights on Ca ²⁺ /Na ⁺ separation via graphene-based nanopores: The role of electrostatic interactions to ionic dehydration. Chinese Journal of Chemical Engineering, 2022, 41, 220-229.	3.5	3
4	Advanced Materialâ€œOriented Biomass Precise Reconstruction: A Review on Porous Carbon with Inherited Natural Structure and Created Artificial Structure by Postâ€œtreatment. Macromolecular Bioscience, 2022, 22, e2100479.	4.1	13
5	Molecular Understanding of the Solid Interface-Induced Microstructures of 1-Hexyl-3-methylimidazolium Bis(trifluoromethylsulfonyl)imide in Gas Absorption. Industrial & Engineering Chemistry Research, 2022, 61, 3754-3765.	3.7	2
6	CO ₂ -negative biomass conversion: An economic route with co-production of green hydrogen and highly porous carbon. Applied Energy, 2022, 311, 118685.	10.1	14
7	A negative-carbon footprint process with mixed biomass feedstock maximizes conversion efficiency, product value and CO ₂ mitigation. Bioresource Technology, 2022, 351, 127004.	9.6	18
8	Effect of surface roughness on partition of ionic liquids in nanopores by a perturbed-chain SAFT density functional theory. Journal of Chemical Physics, 2022, 157, .	3.0	4
9	Mesoscience in supported nano-metal catalysts based on molecular thermodynamic modeling: A mini review and perspective. Chemical Engineering Science, 2021, 229, 116164.	3.8	9
10	A mini-review on the modeling of volatile organic compound adsorption in activated carbons: Equilibrium, dynamics, and heat effects. Chinese Journal of Chemical Engineering, 2021, 31, 153-163.	3.5	20
11	Effect of dimethyl carbonate on the behavior of water confined in carbon nanotube. Chinese Journal of Chemical Engineering, 2021, 31, 177-185.	3.5	2
12	Techno-economic analysis of biomass processing with dual outputs of energy and activated carbon. Bioresource Technology, 2021, 319, 124108.	9.6	41
13	A novel interfacial thermodynamic model for predicting solubility of nanoparticles coated by stabilizers. Chinese Journal of Chemical Engineering, 2021, 31, 103-112.	3.5	6
14	Modeling Interfacial Properties with Spot-DGT-ePC-SAFT for Binary Mixtures Including Ionic Liquid-Based Systems. Industrial & Engineering Chemistry Research, 2021, 60, 4484-4497.	3.7	5
15	Thermodynamic analysis and modification of Gibbsâ€œThomson equation for melting point depression of metal nanoparticles. Chinese Journal of Chemical Engineering, 2021, 31, 198-205.	3.5	9
16	Dynamical coupling of ion adsorption with fluid flow in nanopores. AIChE Journal, 2021, 67, e17266.	3.6	11
17	Molecular insight into flow resistance of choline chloride/urea confined in ionic model nanoslits. Fluid Phase Equilibria, 2021, 533, 112934.	2.5	4
18	Kinetics study and performance comparison of CO ₂ separation using aqueous choline-amino acid solutions. Separation and Purification Technology, 2021, 261, 118284.	7.9	9

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19	Modeling interfacial properties of ionic liquids with ePC-SAFT combined with density gradient theory. <i>Fluid Phase Equilibria</i> , 2021, 536, 112984.	2.5	5
20	CO ₂ absorption using a hybrid 1-hexyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide/titanium dioxide/polyethylene glycol absorbent. <i>Fluid Phase Equilibria</i> , 2021, 538, 113011.	2.5	5
21	Accelerate the ePC-SAFT-DFT Calculation with the Chebyshev Pseudospectral Collocation Method. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 9269-9285.	3.7	7
22	Cycling pressure-switching process enriches micropores in activated carbon by accelerating reactive gas internal diffusion in porous channels. <i>Sustainable Materials and Technologies</i> , 2021, 28, e00248.	3.3	2
23	Feasibility of Solar Updraft Towers as Photocatalytic Reactors for Removal of Atmospheric Methane—The Role of Catalysts and Rate Limiting Steps. <i>Frontiers in Chemistry</i> , 2021, 9, 745347.	3.6	6
24	Partition and selectivity of electrolytes in cylindrical nanopores with heterogeneous surface charge. <i>Journal of Molecular Liquids</i> , 2021, 340, 116839.	4.9	5
25	Simultaneous representation of thermodynamic properties and viscosities of ILs/DESs+co-solvent systems by Eyring-NRTL model. <i>Fluid Phase Equilibria</i> , 2021, 547, 113176.	2.5	4
26	Versatile Ionic Gel Driven by Dual Hydrogen Bond Networks: Toward Advanced Lubrication and Self-Healing. <i>ACS Applied Polymer Materials</i> , 2021, 3, 5932-5941.	4.4	14
27	Hollow IF-MoS ₂ /r-GO Nanocomposite Filled Polyimide Coating with Improved Mechanical, Thermal and Tribological Properties. <i>Coatings</i> , 2021, 11, 25.	2.6	7
28	Accelerate the Electrolyte Perturbed-Chain Statistical Associating Fluid Theory—Density Functional Theory Calculation With the Chebyshev Pseudo-Spectral Collocation Method. Part II. Spherical Geometry and Anderson Mixing. <i>Frontiers in Chemistry</i> , 2021, 9, 801551.	3.6	4
29	Thermodynamic study on aqueous polyethylene glycol 200 solution and performance assessment for CO ₂ separation. <i>Fluid Phase Equilibria</i> , 2020, 504, 112336.	2.5	9
30	CO ₂ separation using a hybrid choline-2-pyrrolidine-carboxylic acid/polyethylene glycol/water absorbent. <i>Applied Energy</i> , 2020, 257, 113962.	10.1	17
31	Multi-objective optimization and dynamic control of biogas pressurized water scrubbing process. <i>Renewable Energy</i> , 2020, 147, 2335-2344.	8.9	14
32	Heterogeneous interfacial engineering of Pd/TiO ₂ with controllable carbon content for improved direct synthesis efficiency of H ₂ O ₂ . <i>Chinese Journal of Catalysis</i> , 2020, 41, 312-321.	14.0	14
33	Molecular insights into the microstructure of ethanol/water binary mixtures confined within typical 2D nanoslits: The role of the adsorbed layers induced by different solid surfaces. <i>Fluid Phase Equilibria</i> , 2020, 509, 112452.	2.5	10
34	Solvent effects on a derivative of 1,3,4-oxadiazole tautomerization reaction in water: A reaction density functional theory study. <i>Chemical Engineering Science</i> , 2020, 213, 115380.	3.8	15
35	Improving high-pressure water scrubbing through process integration and solvent selection for biogas upgrading. <i>Applied Energy</i> , 2020, 276, 115462.	10.1	37
36	Physicochemical properties and structure of fluid at nano-/micro-interface: Progress in simulation and experimental study. <i>Green Energy and Environment</i> , 2020, 5, 274-285.	8.7	23

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37	Excellent Protein Immobilization and Stability on Heterogeneous TiO_2 Hybrid Nanostructures: A Single Protein AFM Study. <i>Langmuir</i> , 2020, 36, 9323-9332.	3.5	9
38	Energy-consumption analysis of carbon-based material for CO ₂ capture process. <i>Fluid Phase Equilibria</i> , 2020, 510, 112504.	2.5	3
39	Molecular insight into wetting behavior of deep eutectic solvent droplets on ionic substrates: A molecular dynamics study. <i>Journal of Molecular Liquids</i> , 2020, 319, 114298.	4.9	10
40	Thermodynamic Study of Choline Chloride-Based Deep Eutectic Solvents with Water and Methanol. <i>Journal of Chemical & Engineering Data</i> , 2020, 65, 2446-2457.	1.9	65
41	How to detect possible pitfalls in ePC-SAFT modelling: Extension to ionic liquids. <i>Fluid Phase Equilibria</i> , 2020, 519, 112641.	2.5	12
42	Acetone adsorption on activated carbons: Roles of functional groups and humidity. <i>Fluid Phase Equilibria</i> , 2020, 521, 112645.	2.5	15
43	Interfacial structure and differential capacitance of ionic liquid/graphite interface: A perturbed-chain SAFT density functional theory study. <i>Journal of Molecular Liquids</i> , 2020, 310, 113199.	4.9	14
44	Carbon recycling – An immense resource and key to a smart climate engineering: A survey of technologies, cost and impurity impact. <i>Renewable and Sustainable Energy Reviews</i> , 2020, 131, 110010.	16.4	29
45	Atomistic insights into the effects of carbonyl oxygens in functionalized graphene nanopores on Ca ²⁺ /Na ⁺ sieving. <i>Carbon</i> , 2020, 164, 305-316.	10.3	12
46	How to Detect Possible Pitfalls in ePC-SAFT Modeling. 2. Extension to Binary Mixtures of 96 Ionic Liquids with CO ₂ , H ₂ S, CO, O ₂ , CH ₄ , N ₂ , and H ₂ . <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 21579-21591.	3.7	12
47	Critical Role of Carbonized Cellulose in the Evolution of Highly Porous Biocarbon: Seeing the Structural and Compositional Changes of Spent Mushroom Substrate by Deconvoluted Thermogravimetric Analysis. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 22541-22548.	3.7	7
48	Excellent Trace Detection of Proteins on TiO_2 Nanotube Substrates through Novel Topography Optimization. <i>Journal of Physical Chemistry C</i> , 2020, 124, 27790-27800.	3.1	10
49	Mechanistic Study of Protein Adsorption on Mesoporous TiO_2 in Aqueous Buffer Solutions. <i>Langmuir</i> , 2019, 35, 11037-11047.	3.5	8
50	Atomistic Insights into the Layered Microstructure and Time-Dependent Stability of [BMIM][PF ₆] Confined within the Meso-Slit of Carbon. <i>Journal of Physical Chemistry B</i> , 2019, 123, 6857-6869.	2.6	12
51	Novel Solvent for CO ₂ Capture. <i>Energy Procedia</i> , 2019, 158, 5124-5129.	1.8	1
52	AFM Study of pH-Dependent Adhesion of Single Protein to TiO_2 Surface. <i>Advanced Materials Interfaces</i> , 2019, 6, 1900411.	3.7	19
53	Computational screening carbon-based adsorbents for CH ₄ delivery capacity. <i>Fluid Phase Equilibria</i> , 2019, 494, 184-191.	2.5	8
54	Improved CO ₂ separation performance of aqueous choline-glycine solution by partially replacing water with polyethylene glycol. <i>Fluid Phase Equilibria</i> , 2019, 495, 12-20.	2.5	4

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55	Modeling Thermodynamic Derivative Properties and Gas Solubility of Ionic Liquids with ePC-SAFT. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 8401-8417.	3.7	33
56	Progress in molecular-simulation-based research on the effects of interface-induced fluid microstructures on flow resistance. <i>Chinese Journal of Chemical Engineering</i> , 2019, 27, 1403-1415.	3.5	6
57	Study of CO ₂ absorption/desorption behaviors in aqueous (2-hydroxyethyl)-trimethyl-ammonium (S)-2-pyrrolidine-carboxylic acid salt ([Cho][Pro]) + K ₂ CO ₃ solutions. <i>International Journal of Greenhouse Gas Control</i> , 2019, 83, 51-60.	4.6	6
58	Effects of ionic hydration and hydrogen bonding on flow resistance of ionic aqueous solutions confined in molybdenum disulfide nanoslits: Insights from molecular dynamics simulations. <i>Fluid Phase Equilibria</i> , 2019, 489, 23-29.	2.5	9
59	Niobium-doped TiO ₂ solid acid catalysts: Strengthened interfacial polarization, amplified microwave heating and enhanced energy efficiency of hydroxymethylfurfural production. <i>Applied Catalysis B: Environmental</i> , 2019, 243, 741-749.	20.2	34
60	Determination of the small amount of proteins interacting with TiO ₂ nanotubes by AFM-measurement. <i>Biomaterials</i> , 2019, 192, 368-376.	11.4	19
61	Poly(alkylimidazolium bis(trifluoromethylsulfonyl)imide)-Based Polymerized Ionic Liquids: A Potential High-Performance Lubricating Grease. <i>Advanced Materials Interfaces</i> , 2019, 6, 1801796.	3.7	5
62	Adjusting the rheological properties of corn-straw slurry to reduce the agitation power consumption in anaerobic digestion. <i>Bioresource Technology</i> , 2019, 272, 360-369.	9.6	25
63	Molecular insights into multilayer 18-crown-6-like graphene nanopores for K ⁺ /Na ⁺ separation: A molecular dynamics study. <i>Carbon</i> , 2019, 144, 32-42.	10.3	40
64	Thermodynamic analysis of CO ₂ separation from biogas with conventional ionic liquids. <i>Applied Energy</i> , 2018, 217, 75-87.	10.1	20
65	Effect of water concentration on the microstructures of choline chloride/urea (1:2) /water mixture. <i>Fluid Phase Equilibria</i> , 2018, 470, 134-139.	2.5	37
66	Turning the solubility and lubricity of ionic liquids by absorbing CO ₂ . <i>Tribology International</i> , 2018, 121, 223-230.	5.9	22
67	Interfacial Engineering of NiMo/Mesoporous TiO ₂ Catalyst with Carbon for Enhanced Hydrodesulfurization Performance. <i>Catalysis Letters</i> , 2018, 148, 992-1002.	2.6	4
68	Localizing microwave heat by surface polarization of titanate nanostructures for enhanced catalytic reaction efficiency. <i>Applied Catalysis B: Environmental</i> , 2018, 227, 266-275.	20.2	21
69	Extra low friction coefficient caused by the formation of a solid-like layer: A new lubrication mechanism found through molecular simulation of the lubrication of MoS ₂ nanoslits. <i>Chinese Journal of Chemical Engineering</i> , 2018, 26, 2412-2419.	3.5	10
70	Modeling, simulation and evaluation of biogas upgrading using aqueous choline chloride/urea. <i>Applied Energy</i> , 2018, 229, 1269-1283.	10.1	40
71	Structurally tuning microwave absorption of core/shell structured CNT/polyaniline catalysts for energy efficient saccharide-HMF conversion. <i>Applied Catalysis B: Environmental</i> , 2018, 220, 581-588.	20.2	50
72	Effect of endogenous hydrogen utilization on improved methane production in an integrated microbial electrolysis cell and anaerobic digestion: Employing catalyzed stainless steel mesh cathode. <i>Chinese Journal of Chemical Engineering</i> , 2018, 26, 574-582.	3.5	18

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73	Pd catalysts supported on rGO-TiO ₂ composites for direct synthesis of H ₂ O ₂ : Modification of Pd ²⁺ /Pd ⁰ ratio and hydrophilic property. Chinese Journal of Chemical Engineering, 2018, 26, 534-539.	3.5	5
74	The peculiar effect of water on ionic liquids and deep eutectic solvents. Chemical Society Reviews, 2018, 47, 8685-8720.	38.1	346
75	TiO ₂ Nanofoam@Nanotube Array for Surface-Enhanced Raman Scattering. ACS Applied Nano Materials, 2018, 1, 6563-6566.	5.0	20
76	Construction of Hierarchically Porous Nanoparticles@Metal-Organic Frameworks Composites by Inherent Defects for the Enhancement of Catalytic Efficiency. Advanced Materials, 2018, 30, e1803263.	21.0	88
77	Unique Structures and Vibrational Spectra of Protic Ionic Liquids Confined in TiO ₂ Slits: The Role of Interfacial Hydrogen Bonds. Langmuir, 2018, 34, 13449-13458.	3.5	9
78	Choline-based deep eutectic solvents for CO ₂ separation: Review and thermodynamic analysis. Renewable and Sustainable Energy Reviews, 2018, 97, 436-455.	16.4	134
79	Techno-economic analysis and performance comparison of aqueous deep eutectic solvent and other physical absorbents for biogas upgrading. Applied Energy, 2018, 225, 437-447.	10.1	60
80	Supported ionic liquid sorbents for CO ₂ capture from simulated flue-gas. Chinese Journal of Chemical Engineering, 2018, 26, 2377-2384.	3.5	20
81	Water in Narrow Carbon Nanotubes: Roughness Promoted Diffusion Transition. Journal of Physical Chemistry C, 2018, 122, 19124-19132.	3.1	32
82	Coupled Chemical and Thermal Drivers in Microwaves toward Ultrafast HMF Oxidation to FDCA. ACS Sustainable Chemistry and Engineering, 2018, 6, 11493-11501.	6.7	41
83	Right Way of Using Graphene Oxide Additives for Water-Lubricated PEEK: Adding in Polymer or Water?. Tribology Letters, 2018, 66, 1.	2.6	15
84	Modeling Viscosity of Ionic Liquids with Electrolyte Perturbed-Chain Statistical Associating Fluid Theory and Free Volume Theory. Industrial & Engineering Chemistry Research, 2018, 57, 8784-8801.	3.7	28
85	<i>In Situ</i> Template-Synthesis of Hollow CeO ₂ Nanobeads in scCO ₂ with Improved Catalytic Activity Towards CO Oxidation. Journal of Nanoscience and Nanotechnology, 2018, 18, 2068-2071.	0.9	0
86	Developing Electrolyte Perturbed-Chain Statistical Associating Fluid Theory Density Functional Theory for CO ₂ Separation by Confined Ionic Liquids. Journal of Physical Chemistry C, 2018, 122, 15464-15473.	3.1	12
87	Hydrophilicity effect on CO ₂ /CH ₄ separation using carbon nanotube membranes: insights from molecular simulation. Molecular Simulation, 2017, 43, 502-509.	2.0	5
88	A New Electrochemical System Based on a Flow-Field Shaped Solid Electrode and 3D-Printed Thin-Layer Flow Cell: Detection of Pb ²⁺ Ions by Continuous Flow Accumulation Square-Wave Anodic Stripping Voltammetry. Analytical Chemistry, 2017, 89, 5024-5029.	6.5	59
89	Experimental study of CO ₂ absorption in aqueous cholinium-based ionic liquids. Fluid Phase Equilibria, 2017, 445, 14-24.	2.5	45
90	Anaerobic co-digestion process for biogas production: Progress, challenges and perspectives. Renewable and Sustainable Energy Reviews, 2017, 76, 1485-1496.	16.4	590

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91	CO ₂ Absorption in Mixed Aqueous Solution of MDEA and Cholinium Glycinate. Energy & Fuels, 2017, 31, 7325-7333.	5.1	20
92	Investigation of Structural, Thermal, and Dynamical Properties of Pd-Au-Pt Ternary Metal Nanoparticles Confined in Carbon Nanotubes Based on MD Simulation. Journal of Physical Chemistry C, 2017, 121, 12911-12920.	3.1	12
93	Carbon coated Li ₄ Ti ₅ O ₁₂ fibers: Relying on the lithium diffusivity in TiO ₂ -B crystal structure for high rate lithium battery. Journal of Alloys and Compounds, 2017, 721, 545-553.	5.5	7
94	Enhancing Energy Efficiency in Saccharide-HMF Conversion with Core/shell Structured Microwave Responsive Catalysts. ACS Sustainable Chemistry and Engineering, 2017, 5, 4352-4358.	6.7	32
95	Metal-Organic Framework Derivatives for Improving the Catalytic Activity of the CO Oxidation Reaction. ACS Applied Materials & Interfaces, 2017, 9, 15394-15398.	8.0	53
96	Efficient Molecular Approach to Quantifying Solvent-Mediated Interactions. Langmuir, 2017, 33, 11817-11824.	3.5	13
97	Confinement Phenomenon Effect on the CO ₂ Absorption Working Capacity in Ionic Liquids Immobilized into Porous Solid Supports. Langmuir, 2017, 33, 11719-11726.	3.5	17
98	Effect of Adsorbed Alcohol Layers on the Behavior of Water Molecules Confined in a Graphene Nanoslit: A Molecular Dynamics Study. Langmuir, 2017, 33, 11467-11474.	3.5	29
99	CO ₂ Absorption in the Ionic Liquids Immobilized on Solid Surface by Molecular Dynamics Simulation. Langmuir, 2017, 33, 11658-11669.	3.5	19
100	Generalized Gibbs free energy of confined nanoparticles. AIChE Journal, 2017, 63, 4595-4603.	3.6	18
101	Biomethane storage in activated carbons: a grand canonical Monte Carlo simulation study. Molecular Simulation, 2017, 43, 1142-1152.	2.0	3
102	Excellent performance of Pt-C/TiO ₂ for methanol oxidation: Contribution of mesopores and partially coated carbon. Applied Surface Science, 2017, 426, 890-896.	6.1	38
103	Mg ²⁺ -Channel-Inspired Nanopores for Mg ²⁺ /Li ⁺ Separation: The Effect of Coordination on the Ionic Hydration Microstructures. Langmuir, 2017, 33, 9201-9210.	3.5	38
104	Molecular Interactions of Protein with TiO ₂ by the AFM-Measured Adhesion Force. Langmuir, 2017, 33, 11626-11634.	3.5	25
105	Biogas upgrading using single-walled carbon nanotubes by molecular simulation. Molecular Simulation, 2017, 43, 1034-1044.	2.0	0
106	Wetting control through topography and surface hydrophilic/hydrophobic property changes by coarse grained simulation. Molecular Simulation, 2017, 43, 1202-1208.	2.0	5
107	Flow-resistance analysis of nano-confined fluids inspired from liquid nano-lubrication: A review. Chinese Journal of Chemical Engineering, 2017, 25, 1552-1562.	3.5	12
108	The effect of H ₂ O ₂ desorption on achieving improved selectivity for direct synthesis of H ₂ O ₂ over TiO ₂ (B)/anatase supported Pd catalyst. Catalysis Communications, 2017, 89, 69-72.	3.3	14

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109	Facile synthesis of amino-functionalized mesoporous TiO ₂ microparticles for adenosine deaminase immobilization. <i>Microporous and Mesoporous Materials</i> , 2017, 239, 158-166.	4.4	35
110	Tribological Properties of Porous PEEK Composites Containing Ionic Liquid under Dry Friction Condition. <i>Lubricants</i> , 2017, 5, 19.	2.9	14
111	Carbon-Modified Mesoporous Anatase/TiO ₂ (B) Whisker for Enhanced Activity in Direct Synthesis of Hydrogen Peroxide by Palladium. <i>Catalysts</i> , 2017, 7, 175.	3.5	13
112	Electric Field-Responsive Nanopores with Ion Selectivity: Controlling Based on Transport Resistance. <i>Chemical Engineering and Technology</i> , 2016, 39, 993-997.	1.5	7
113	Review on heat-utilization processes and heat-exchange equipment in biogas engineering. <i>Journal of Renewable and Sustainable Energy</i> , 2016, 8, .	2.0	24
114	CO ₂ /N ₂ separation using supported ionic liquid membranes with green and cost-effective [Choline][Pro]/PEG200 mixtures. <i>Chinese Journal of Chemical Engineering</i> , 2016, 24, 1513-1521.	3.5	23
115	Bovine Serum Albumin Adsorption in Mesoporous Titanium Dioxide: Pore Size and Pore Chemistry Effect. <i>Langmuir</i> , 2016, 32, 3995-4003.	3.5	31
116	Modelling interfacial properties of ionic liquids with ePC-SAFT combined with density gradient theory. <i>Molecular Physics</i> , 2016, 114, 2492-2499.	1.7	14
117	CO ₂ Uptake Behavior of Supported Tetraethylenepentamine Sorbents. <i>Energy & Fuels</i> , 2016, 30, 5083-5091.	5.1	21
118	Solubilities of CO ₂ , CH ₄ , H ₂ , CO and N ₂ in choline chloride/urea. <i>Green Energy and Environment</i> , 2016, 1, 195-200.	8.7	65
119	Temperature-dependent structural properties of water molecules confined in TiO ₂ nanoslits: Insights from molecular dynamics simulations. <i>Fluid Phase Equilibria</i> , 2016, 430, 169-177.	2.5	19
120	Thermodynamic Study for Gas Absorption in Choline-2-pyrrolidine-carboxylic Acid + Polyethylene Glycol. <i>Journal of Chemical & Engineering Data</i> , 2016, 61, 3428-3437.	1.9	47
121	Abnormal change of melting points of gold nanoparticles confined between two-layer graphene nanosheets. <i>RSC Advances</i> , 2016, 6, 108343-108346.	3.6	6
122	A Simple Prediction Model for Higher Heat Value of Biomass. <i>Journal of Chemical & Engineering Data</i> , 2016, 61, 4039-4045.	1.9	29
123	Lubrication Behavior of Water Molecules Confined in TiO ₂ Nanoslits: A Molecular Dynamics Study. <i>Journal of Chemical & Engineering Data</i> , 2016, 61, 4023-4030.	1.9	15
124	Molecular Behavior of Water on Titanium Dioxide Nanotubes: A Molecular Dynamics Simulation Study. <i>Journal of Chemical & Engineering Data</i> , 2016, 61, 4131-4138.	1.9	12
125	Molecular Simulation Study of the Adsorption and Diffusion of a Mixture of CO ₂ /CH ₄ in Activated Carbon: Effect of Textural Properties and Surface Chemistry. <i>Journal of Chemical & Engineering Data</i> , 2016, 61, 4139-4147.	1.9	40
126	Molar Enthalpy of Mixing for Choline Chloride/Urea Deep Eutectic Solvent + Water System. <i>Journal of Chemical & Engineering Data</i> , 2016, 61, 4172-4177.	1.9	30

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127	Molecular Dynamics Study of Mg ²⁺ /Li ⁺ Separation via Biomimetic Graphene-Based Nanopores: The Role of Dehydration in Second Shell. <i>Langmuir</i> , 2016, 32, 13778-13786.	3.5	58
128	Large-Scale Fabrication of Rutile TiO ₂ with 3D Hierarchical Flower-Like Morphology. <i>Journal of Nanoscience and Nanotechnology</i> , 2016, 16, 12991-12995.	0.9	0
129	Diffusion of CO ₂ /CH ₄ confined in narrow carbon nanotube bundles. <i>Molecular Physics</i> , 2016, 114, 2530-2540.	1.7	15
130	Enriching Heteroelements in Lignin as Lubricating Additives for Bioionic Liquids. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 3877-3887.	6.7	36
131	Evaluation of imidazolium-based ionic liquids for biogas upgrading. <i>Applied Energy</i> , 2016, 175, 69-81.	10.1	36
132	Confined molecular motion across liquid/liquid interfaces in a triphasic reaction towards free-standing conductive polymer tube arrays. <i>Journal of Materials Chemistry A</i> , 2016, 4, 6290-6294.	10.3	7
133	Tribological behaviors of carbon series additions reinforced <i>CF/PTFE</i> composites at high speed. <i>Journal of Applied Polymer Science</i> , 2016, 133, .	2.6	15
134	Mass Transfer Rate Enhancement for CO ₂ Separation by Ionic Liquids: Effect of Film Thickness. <i>Industrial & Engineering Chemistry Research</i> , 2016, 55, 366-372.	3.7	25
135	Nanomaterial-oriented molecular simulations of ion behaviour in aqueous solution under nanoconfinement. <i>Molecular Simulation</i> , 2016, 42, 784-798.	2.0	18
136	Adsorption of binary CO ₂ /CH ₄ mixtures using carbon nanotubes: Effects of confinement and surface functionalization. <i>Separation Science and Technology</i> , 2016, 51, 1079-1092.	2.5	4
137	Liquid-Solid Nanofriction and Interfacial Wetting. <i>Langmuir</i> , 2016, 32, 743-750.	3.5	31
138	Influences of geometrical topography and surface chemistry on the stable immobilization of adenosine deaminase on mesoporous TiO ₂ . <i>Chemical Engineering Science</i> , 2016, 139, 142-151.	3.8	19
139	Screening of conventional ionic liquids for carbon dioxide capture and separation. <i>Applied Energy</i> , 2016, 162, 1160-1170.	10.1	93
140	Surface Structure and Interaction of Surface/Interface Probed by Mesoscale Simulations and Experiments. <i>Advances in Chemical Engineering</i> , 2015, 47, 85-162.	0.9	1
141	Mass transfer rate enhancement for CO ₂ separation by ionic liquids: Theoretical study on the mechanism. <i>AIChE Journal</i> , 2015, 61, 4437-4444.	3.6	34
142	Well-Dispersed and Size-Controlled Supported Metal Oxide Nanoparticles Derived from MOF Composites and Further Application in Catalysis. <i>Small</i> , 2015, 11, 3130-3134.	10.0	70
143	Self-Lubricating Polytetrafluoroethylene/Polyimide Blends Reinforced with Zinc Oxide Nanoparticles. <i>Journal of Nanomaterials</i> , 2015, 2015, 1-8.	2.7	22
144	In-situ synthesized mesoporous TiO ₂ -B/anatase microparticles: Improved anodes for lithium ion batteries. <i>Chinese Journal of Chemical Engineering</i> , 2015, 23, 583-589.	3.5	17

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145	TiO ₂ nanofibers heterogeneously wrapped with reduced graphene oxide as efficient Pt electrocatalyst supports for methanol oxidation. International Journal of Hydrogen Energy, 2015, 40, 3679-3688.	7.1	42
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