

Xiaohua Lu

List of Publications by Year in descending order

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230
papers

7,000
citations

81743

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88477

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233
all docs

233
docs citations

233
times ranked

8319
citing authors

#	ARTICLE	IF	CITATIONS
1	Anaerobic co-digestion process for biogas production: Progress, challenges and perspectives. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 76, 1485-1496.	8.2	590
2	The peculiar effect of water on ionic liquids and deep eutectic solvents. <i>Chemical Society Reviews</i> , 2018, 47, 8685-8720.	18.7	346
3	Bioinspired Graphene Nanopores with Voltage-Tunable Ion Selectivity for Na ⁺ and K ⁺ . <i>ACS Nano</i> , 2013, 7, 10148-10157.	7.3	199
4	Enhanced Photocatalytic Activity in Anatase/TiO ₂ (B) Core-Shell Nanofiber. <i>Journal of Physical Chemistry C</i> , 2008, 112, 20539-20545.	1.5	181
5	Effect of Water on the Density, Viscosity, and CO ₂ Solubility in Choline Chloride/Urea. <i>Journal of Chemical & Engineering Data</i> , 2014, 59, 3344-3352.	1.0	170
6	Molecular dynamics study on ionic hydration. <i>Fluid Phase Equilibria</i> , 2002, 194-197, 257-270.	1.4	161
7	An enhanced CdS/TiO ₂ photocatalyst with high stability and activity: Effect of mesoporous substrate and bifunctional linking molecule. <i>Journal of Materials Chemistry</i> , 2011, 21, 4945.	6.7	156
8	Choline-based deep eutectic solvents for CO ₂ separation: Review and thermodynamic analysis. <i>Renewable and Sustainable Energy Reviews</i> , 2018, 97, 436-455.	8.2	134
9	Anomalous Hydration Shell Order of Na ⁺ and K ⁺ inside Carbon Nanotubes. <i>Nano Letters</i> , 2009, 9, 989-994.	4.5	113
10	Highly Thermal Stable and Highly Crystalline Anatase TiO ₂ for Photocatalysis. <i>Environmental Science & Technology</i> , 2009, 43, 5423-5428.	4.6	103
11	CuO/Cu ₂ O porous composites: shape and composition controllable fabrication inherited from metal organic frameworks and further application in CO oxidation. <i>Journal of Materials Chemistry A</i> , 2015, 3, 5294-5298.	5.2	100
12	Screening of conventional ionic liquids for carbon dioxide capture and separation. <i>Applied Energy</i> , 2016, 162, 1160-1170.	5.1	93
13	Construction of Hierarchically Porous Nanoparticles@Metal-Organic Frameworks Composites by Inherent Defects for the Enhancement of Catalytic Efficiency. <i>Advanced Materials</i> , 2018, 30, e1803263.	11.1	88
14	Core-shell TiO ₂ /C nanofibers as supports for electrocatalytic and synergistic photoelectrocatalytic oxidation of methanol. <i>Journal of Materials Chemistry</i> , 2012, 22, 4025.	6.7	83
15	Energy consumption analysis for CO ₂ separation using imidazolium-based ionic liquids. <i>Applied Energy</i> , 2014, 136, 325-335.	5.1	78
16	Stability of Pt nanoparticles and enhanced photocatalytic performance in mesoporous Pt-(anatase/TiO ₂ (B)) nanoarchitecture. <i>Journal of Materials Chemistry</i> , 2009, 19, 7055.	6.7	72
17	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.	5.2	70
18	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.	4.7	65

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19	Thermodynamic Study of Choline Chloride-Based Deep Eutectic Solvents with Water and Methanol. <i>Journal of Chemical & Engineering Data</i> , 2020, 65, 2446-2457.	1.0	65
20	Study on the formation and growth of potassium titanate whiskers. <i>Journal of Materials Science</i> , 2002, 37, 3035-3043.	1.7	64
21	Ice-like Water Structure in Carbon Nanotube (8,8) Induces Cationic Hydration Enhancement. <i>Journal of Physical Chemistry C</i> , 2013, 117, 11412-11420.	1.5	64
22	Water on Titanium Dioxide Surface: A Revisiting by Reactive Molecular Dynamics Simulations. <i>Langmuir</i> , 2014, 30, 14832-14840.	1.6	64
23	Techno-economic analysis and performance comparison of aqueous deep eutectic solvent and other physical absorbents for biogas upgrading. <i>Applied Energy</i> , 2018, 225, 437-447.	5.1	60
24	Diffusion of water molecules confined in slits of rutile TiO ₂ (110) and graphite(0001). <i>Fluid Phase Equilibria</i> , 2011, 302, 316-320.	1.4	59
25	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. <i>Analytical Chemistry</i> , 2017, 89, 5024-5029.	3.2	59
26	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.	1.6	58
27	Metal-Organic Framework Derivatives for Improving the Catalytic Activity of the CO Oxidation Reaction. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 15394-15398.	4.0	53
28	Facile Synthesis of Mesoporous MoS ₂ @TiO ₂ Nanofibers for Ultrastable Lithium Ion Battery Anodes. <i>ChemElectroChem</i> , 2015, 2, 374-381.	1.7	51
29	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.	10.8	50
30	Elastic interlayer toughening of potassium titanate whiskers-nylon66 composites and their fractal research. <i>Journal of Applied Polymer Science</i> , 2001, 82, 368-374.	1.3	49
31	Molecular simulations on nanoconfined water molecule behaviors for nanoporous material applications. <i>Microfluidics and Nanofluidics</i> , 2013, 15, 191-205.	1.0	49
32	Molecular Dynamics Study on Diameter Effect in Structure of Ethanol Molecules Confined in Single-Walled Carbon Nanotubes. <i>Journal of Physical Chemistry C</i> , 2007, 111, 15677-15685.	1.5	48
33	Carbon titania mesoporous composite whisker as stable supercapacitor electrode material. <i>Journal of Materials Chemistry</i> , 2010, 20, 7645.	6.7	47
34	Thermodynamic Study for Gas Absorption in Choline-2-pyrrolidine-carboxylic Acid + Polyethylene Glycol. <i>Journal of Chemical & Engineering Data</i> , 2016, 61, 3428-3437.	1.0	47
35	High Quality and Yield in Potassium Titanate Whiskers Synthesized by Calcination from Hydrous Titania. <i>Journal of the American Ceramic Society</i> , 2004, 87, 326-330.	1.9	45
36	Experimental study of CO ₂ absorption in aqueous cholinium-based ionic liquids. <i>Fluid Phase Equilibria</i> , 2017, 445, 14-24.	1.4	45

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37	Carbon heterogeneous surface modification on a mesoporous TiO ₂ -supported catalyst and its enhanced hydrodesulfurization performance. <i>Chemical Communications</i> , 2012, 48, 11525.	2.2	43
38	Modeling thermodynamic derivative properties of ionic liquids with ePC-SAFT. <i>Fluid Phase Equilibria</i> , 2015, 405, 73-82.	1.4	43
39	TiO ₂ nanofibers heterogeneously wrapped with reduced graphene oxide as efficient Pt electrocatalyst supports for methanol oxidation. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 3679-3688.	3.8	42
40	Comparative Study of Tribological Properties of Different Fibers Reinforced PTFE/PEEK Composites at Elevated Temperatures. <i>Tribology Transactions</i> , 2010, 53, 189-194.	1.1	41
41	Melting and Freezing of Au Nanoparticles Confined in Armchair Single-Walled Carbon Nanotubes. <i>Journal of Physical Chemistry C</i> , 2010, 114, 2896-2902.	1.5	41
42	Coupled Chemical and Thermal Drivers in Microwaves toward Ultrafast HMF Oxidation to FDCA. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 11493-11501.	3.2	41
43	Techno-economic analysis of biomass processing with dual outputs of energy and activated carbon. <i>Bioresource Technology</i> , 2021, 319, 124108.	4.8	41
44	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.	1.0	40
45	Modeling, simulation and evaluation of biogas upgrading using aqueous choline chloride/urea. <i>Applied Energy</i> , 2018, 229, 1269-1283.	5.1	40
46	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.	5.4	40
47	Tribological and mechanical properties of carbon-nanofiber-filled polytetrafluoroethylene composites. <i>Journal of Applied Polymer Science</i> , 2007, 104, 2430-2437.	1.3	38
48	Excellent performance of Pt-C/TiO ₂ for methanol oxidation: Contribution of mesopores and partially coated carbon. <i>Applied Surface Science</i> , 2017, 426, 890-896.	3.1	38
49	Mg ²⁺ -Channel-Inspired Nanopores for Mg ²⁺ /Li ⁺ Separation: The Effect of Coordination on the Ionic Hydration Microstructures. <i>Langmuir</i> , 2017, 33, 9201-9210.	1.6	38
50	A shortcut for evaluating activities of TiO ₂ facets: water dissociative chemisorption on TiO ₂ -B (100) and (001). <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 8721.	1.3	37
51	Effect of water concentration on the microstructures of choline chloride/urea (1:2) /water mixture. <i>Fluid Phase Equilibria</i> , 2018, 470, 134-139.	1.4	37
52	Improving high-pressure water scrubbing through process integration and solvent selection for biogas upgrading. <i>Applied Energy</i> , 2020, 276, 115462.	5.1	37
53	Enriching Heteroelements in Lignin as Lubricating Additives for Bioionic Liquids. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 3877-3887.	3.2	36
54	Evaluation of imidazolium-based ionic liquids for biogas upgrading. <i>Applied Energy</i> , 2016, 175, 69-81.	5.1	36

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55	Tribological properties of PTFE composites filled with surface-treated carbon fiber. <i>Journal of Materials Science</i> , 2007, 42, 8465-8469.	1.7	35
56	Facile synthesis of amino-functionalized mesoporous TiO ₂ microparticles for adenosine deaminase immobilization. <i>Microporous and Mesoporous Materials</i> , 2017, 239, 158-166.	2.2	35
57	A controllable approach for the synthesis of titanate derivatives of potassium tetratitanate fiber. <i>Journal of Materials Science</i> , 2004, 39, 3745-3750.	1.7	34
58	Molecular behavior of water in TiO ₂ nano-slits with varying coverages of carbon: a molecular dynamics simulation study. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 16536.	1.3	34
59	Mass transfer rate enhancement for CO ₂ separation by ionic liquids: Theoretical study on the mechanism. <i>AIChE Journal</i> , 2015, 61, 4437-4444.	1.8	34
60	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.	10.8	34
61	A template-free method for stable CuO hollow microspheres fabricated from a metal organic framework (HKUST-1). <i>Nanoscale</i> , 2015, 7, 9411-9415.	2.8	33
62	Modeling Thermodynamic Derivative Properties and Gas Solubility of Ionic Liquids with ePC-SAFT. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 8401-8417.	1.8	33
63	Modeling the Viscosity of Ionic Liquids with the Electrolyte Perturbed-Chain Statistical Association Fluid Theory. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 20258-20268.	1.8	32
64	Enhancing Energy Efficiency in Saccharide HMF Conversion with Core/shell Structured Microwave Responsive Catalysts. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 4352-4358.	3.2	32
65	Water in Narrow Carbon Nanotubes: Roughness Promoted Diffusion Transition. <i>Journal of Physical Chemistry C</i> , 2018, 122, 19124-19132.	1.5	32
66	Single-crystalline and reactive facets exposed anatase TiO ₂ nanofibers with enhanced photocatalytic properties. <i>Journal of Materials Chemistry</i> , 2011, 21, 6718.	6.7	31
67	TiO ₂ -B nanofibers with high thermal stability as improved anodes for lithium ion batteries. <i>Electrochemistry Communications</i> , 2013, 27, 124-127.	2.3	31
68	A hybrid perturbed-chain SAFT density functional theory for representing fluid behavior in nanopores. <i>Journal of Chemical Physics</i> , 2013, 138, 224706.	1.2	31
69	Energy consumption analysis for CO ₂ separation from gas mixtures. <i>Applied Energy</i> , 2014, 130, 237-243.	5.1	31
70	Bovine Serum Albumin Adsorption in Mesoporous Titanium Dioxide: Pore Size and Pore Chemistry Effect. <i>Langmuir</i> , 2016, 32, 3995-4003.	1.6	31
71	Liquid-Solid Nanofriction and Interfacial Wetting. <i>Langmuir</i> , 2016, 32, 743-750.	1.6	31
72	A hybrid perturbed-chain SAFT density functional theory for representing fluid behavior in nanopores: Mixtures. <i>Journal of Chemical Physics</i> , 2013, 139, 194705.	1.2	30

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73	Molar Enthalpy of Mixing for Choline Chloride/Urea Deep Eutectic Solvent + Water System. Journal of Chemical & Engineering Data, 2016, 61, 4172-4177.	1.0	30
74	Low-temperature controllable calcination syntheses of potassium dititanate. AIChE Journal, 2004, 50, 1568-1577.	1.8	29
75	A Simple Prediction Model for Higher Heat Value of Biomass. Journal of Chemical & Engineering Data, 2016, 61, 4039-4045.	1.0	29
76	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.	1.6	29
77	Carbon recycling – An immense resource and key to a smart climate engineering: A survey of technologies, cost and impurity impact. Renewable and Sustainable Energy Reviews, 2020, 131, 110010.	8.2	29
78	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.	1.8	28
79	Molecular Dynamics Study of Pore Inner Wall Modification Effect in Structure of Water Molecules Confined in Single-Walled Carbon Nanotubes. Journal of Physical Chemistry C, 2009, 113, 882-889.	1.5	25
80	Friction and Wear Behavior of CF/PTFE Composites Lubricated by Choline Chloride Ionic Liquids. Tribology Letters, 2013, 49, 413-420.	1.2	25
81	Carbon-protected Au nanoparticles supported on mesoporous TiO ₂ for catalytic reduction of p-nitrophenol. RSC Advances, 2014, 4, 29591-29594.	1.7	25
82	Mass Transfer Rate Enhancement for CO ₂ Separation by Ionic Liquids: Effect of Film Thickness. Industrial & Engineering Chemistry Research, 2016, 55, 366-372.	1.8	25
83	Molecular Interactions of Protein with TiO ₂ by the AFM-Measured Adhesion Force. Langmuir, 2017, 33, 11626-11634.	1.6	25
84	Adjusting the rheological properties of corn-straw slurry to reduce the agitation power consumption in anaerobic digestion. Bioresource Technology, 2019, 272, 360-369.	4.8	25
85	Non-equilibrium thermodynamics analysis and its application in interfacial mass transfer. Science China Chemistry, 2011, 54, 1659-1666.	4.2	24
86	Wetting Behavior of Ionic Liquid on Mesoporous Titanium Dioxide Surface by Atomic Force Microscopy. ACS Applied Materials & Interfaces, 2013, 5, 2692-2698.	4.0	24
87	Review on heat-utilization processes and heat-exchange equipment in biogas engineering. Journal of Renewable and Sustainable Energy, 2016, 8, .	0.8	24
88	Determination of dissolution kinetics of K ₂ SO ₄ crystal with ion selective electrode. Chemical Engineering Science, 2001, 56, 7017-7024.	1.9	23
89	Theoretical Investigation of CO Adsorption on Clean and Hydroxylated TiO ₂ -B (100) Surfaces. Journal of Physical Chemistry C, 2011, 115, 8622-8629.	1.5	23
90	Controllable atomistic graphene oxide model and its application in hydrogen sulfide removal. Journal of Chemical Physics, 2013, 139, 194707.	1.2	23

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91	CO ₂ /N ₂ separation using supported ionic liquid membranes with green and cost-effective [Choline][Pro]/PEG200 mixtures. Chinese Journal of Chemical Engineering, 2016, 24, 1513-1521.	1.7	23
92	Physicochemical properties and structure of fluid at nano-/micro-interface: Progress in simulation and experimental study. Green Energy and Environment, 2020, 5, 274-285.	4.7	23
93	Reaction and Crystallization Mechanism of Potassium Dtitanate Fibers Synthesized by Low-Temperature Calcination. Crystal Growth and Design, 2005, 5, 1399-1404.	1.4	22
94	Modelling of mass transfer coupling with crystallization kinetics in microscale. Chemical Engineering Science, 2010, 65, 2649-2655.	1.9	22
95	Self-Lubricating Polytetrafluoroethylene/Polyimide Blends Reinforced with Zinc Oxide Nanoparticles. Journal of Nanomaterials, 2015, 2015, 1-8.	1.5	22
96	Turning the solubility and lubricity of ionic liquids by absorbing CO ₂ . Tribology International, 2018, 121, 223-230.	3.0	22
97	Highly Crystalline Mesoporous TiO ₂ (B) Nanofibers. Journal of Physical Chemistry C, 2014, 118, 3049-3055.	1.5	21
98	CO ₂ Uptake Behavior of Supported Tetraethylenepentamine Sorbents. Energy & Fuels, 2016, 30, 5083-5091.	2.5	21
99	Localizing microwave heat by surface polarization of titanate nanostructures for enhanced catalytic reaction efficiency. Applied Catalysis B: Environmental, 2018, 227, 266-275.	10.8	21
100	Simple Physical Approach to Reducing Frictional and Adhesive Forces on a TiO ₂ Surface via Creating Heterogeneous Nanopores. Langmuir, 2012, 28, 15270-15277.	1.6	20
101	CO ₂ Absorption in Mixed Aqueous Solution of MDEA and Cholinium Glycinate. Energy & Fuels, 2017, 31, 7325-7333.	2.5	20
102	Thermodynamic analysis of CO ₂ separation from biogas with conventional ionic liquids. Applied Energy, 2018, 217, 75-87.	5.1	20
103	TiO ₂ Nanofoam "Nanotube Array for Surface-Enhanced Raman Scattering. ACS Applied Nano Materials, 2018, 1, 6563-6566.	2.4	20
104	Supported ionic liquid sorbents for CO ₂ capture from simulated flue-gas. Chinese Journal of Chemical Engineering, 2018, 26, 2377-2384.	1.7	20
105	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.	1.7	20
106	Protein adsorptive behavior on mesoporous titanium dioxide determined by geometrical topography. Chemical Engineering Science, 2014, 117, 146-155.	1.9	19
107	Temperature-dependent structural properties of water molecules confined in TiO ₂ nanoslits: Insights from molecular dynamics simulations. Fluid Phase Equilibria, 2016, 430, 169-177.	1.4	19
108	Influences of geometrical topography and surface chemistry on the stable immobilization of adenosine deaminase on mesoporous TiO ₂ . Chemical Engineering Science, 2016, 139, 142-151.	1.9	19

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109	CO ₂ Absorption in the Ionic Liquids Immobilized on Solid Surface by Molecular Dynamics Simulation. <i>Langmuir</i> , 2017, 33, 11658-11669.	1.6	19
110	AFM Study of pH-Dependent Adhesion of Single Protein to TiO ₂ Surface. <i>Advanced Materials Interfaces</i> , 2019, 6, 1900411.	1.9	19
111	Determination of the small amount of proteins interacting with TiO ₂ nanotubes by AFM-measurement. <i>Biomaterials</i> , 2019, 192, 368-376.	5.7	19
112	DFT study of coverage-depended adsorption of NH ₃ on TiO ₂ -B (100) surface. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 16618.	1.3	18
113	Flow resistance analysis of nanoconfined water in silt pores by molecular simulations: Effect of pore wall interfacial properties. <i>Fluid Phase Equilibria</i> , 2014, 362, 235-241.	1.4	18
114	Nanomaterial-oriented molecular simulations of ion behaviour in aqueous solution under nanoconfinement. <i>Molecular Simulation</i> , 2016, 42, 784-798.	0.9	18
115	Generalized Gibbs free energy of confined nanoparticles. <i>AIChE Journal</i> , 2017, 63, 4595-4603.	1.8	18
116	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.	1.7	18
117	Poly(ionic liquid)s as lubricant additives with insight into adsorption-lubrication relationship. <i>Tribology International</i> , 2022, 165, 107278.	3.0	18
118	A negative-carbon footprint process with mixed biomass feedstock maximizes conversion efficiency, product value and CO ₂ mitigation. <i>Bioresource Technology</i> , 2022, 351, 127004.	4.8	18
119	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.	1.7	17
120	Confinement Phenomenon Effect on the CO ₂ Absorption Working Capacity in Ionic Liquids Immobilized into Porous Solid Supports. <i>Langmuir</i> , 2017, 33, 11719-11726.	1.6	17
121	CO ₂ separation using a hybrid choline-2-pyrrolidine-carboxylic acid/polyethylene glycol/water absorbent. <i>Applied Energy</i> , 2020, 257, 113962.	5.1	17
122	Interface-strengthened Polyimide/Carbon Nanofibers Nanocomposites with Superior Mechanical and Tribological Properties. <i>Macromolecular Chemistry and Physics</i> , 2014, 215, 1407-1414.	1.1	15
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.	1.0	15
124	Diffusion of CO ₂ /CH ₄ confined in narrow carbon nanotube bundles. <i>Molecular Physics</i> , 2016, 114, 2530-2540.	0.8	15
125	Tribological behaviors of carbon series additions reinforced <i>CF/PTFE</i> composites at high speed. <i>Journal of Applied Polymer Science</i> , 2016, 133, .	1.3	15
126	Right Way of Using Graphene Oxide Additives for Water-Lubricated PEEK: Adding in Polymer or Water?. <i>Tribology Letters</i> , 2018, 66, 1.	1.2	15

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127	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.	1.9	15
128	Acetone adsorption on activated carbons: Roles of functional groups and humidity. <i>Fluid Phase Equilibria</i> , 2020, 521, 112645.	1.4	15
129	Dissociation of methanol on hydroxylated TiO ₂ -B (100) surface: Insights from first principle DFT calculation. <i>Catalysis Today</i> , 2011, 165, 32-40.	2.2	14
130	Modelling interfacial properties of ionic liquids with ePC-SAFT combined with density gradient theory. <i>Molecular Physics</i> , 2016, 114, 2492-2499.	0.8	14
131	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. <i>Catalysis Communications</i> , 2017, 89, 69-72.	1.6	14
132	Tribological Properties of Porous PEEK Composites Containing Ionic Liquid under Dry Friction Condition. <i>Lubricants</i> , 2017, 5, 19.	1.2	14
133	Multi-objective optimization and dynamic control of biogas pressurized water scrubbing process. <i>Renewable Energy</i> , 2020, 147, 2335-2344.	4.3	14
134	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.	6.9	14
135	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.	2.3	14
136	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.	2.0	14
137	CO ₂ -negative biomass conversion: An economic route with co-production of green hydrogen and highly porous carbon. <i>Applied Energy</i> , 2022, 311, 118685.	5.1	14
138	Efficient Molecular Approach to Quantifying Solvent-Mediated Interactions. <i>Langmuir</i> , 2017, 33, 11817-11824.	1.6	13
139	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.	1.6	13
140	Advanced Material-Oriented Biomass Precise Reconstruction: A Review on Porous Carbon with Inherited Natural Structure and Created Artificial Structure by Post-Treatment. <i>Macromolecular Bioscience</i> , 2022, 22, e2100479.	2.1	13
141	Atomic force microscopy (AFM) study on potassium hexatitanate whisker (K ₂ O·6TiO ₂). <i>Journal of Materials Science</i> , 2003, 38, 3641-3646.	1.7	12
142	Direct Electrochemistry and Electrocatalysis of Hemoglobin on TiO ₂ Whisker Film Modified Glassy Carbon Electrode. <i>Electroanalysis</i> , 2010, 22, 668-672.	1.5	12
143	Preparation and Characterization of Mesoporous MoO ₃ /TiO ₂ Composite with High Surface Area by Self-Supporting and Ammonia Method. <i>Catalysis Letters</i> , 2012, 142, 480-485.	1.4	12
144	Molecular Behavior of Water on Titanium Dioxide Nanotubes: A Molecular Dynamics Simulation Study. <i>Journal of Chemical & Engineering Data</i> , 2016, 61, 4131-4138.	1.0	12

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145	Investigation of Structural, Thermal, and Dynamical Properties of Pd-Au-Pt Ternary Metal Nanoparticles Confined in Carbon Nanotubes Based on MD Simulation. <i>Journal of Physical Chemistry C</i> , 2017, 121, 12911-12920.	1.5	12
146	Flow-resistance analysis of nano-confined fluids inspired from liquid nano-lubrication: A review. <i>Chinese Journal of Chemical Engineering</i> , 2017, 25, 1552-1562.	1.7	12
147	Developing Electrolyte Perturbed-Chain Statistical Associating Fluid Theory Density Functional Theory for CO ₂ Separation by Confined Ionic Liquids. <i>Journal of Physical Chemistry C</i> , 2018, 122, 15464-15473.	1.5	12
148	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.	1.2	12
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