Xiaohua Lu

List of Publications by Year
in descending order

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230	7,000	81900	88630
papers	citations	39 h-index	70 g-index

233	233	233	8319
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Anaerobic co-digestion process for biogas production: Progress, challenges and perspectives. Renewable and Sustainable Energy Reviews, 2017, 76, 1485-1496.	16.4	590
2	The peculiar effect of water on ionic liquids and deep eutectic solvents. Chemical Society Reviews, 2018, 47, 8685-8720.	38.1	346
3	Bioinspired Graphene Nanopores with Voltage-Tunable Ion Selectivity for Na⁺ and K⁺. ACS Nano, 2013, 7, 10148-10157.	14.6	199
4	Enhanced Photocatalytic Activity in Anatase/TiO₂(B) Coreâ”Shell Nanofiber. Journal of Physical Chemistry C, 2008, 112, 20539-20545.	3.1	181
5	Effect of Water on the Density, Viscosity, and CO₂ Solubility in Choline Chloride/Urea. Journal of Chemical & Engineering Data, 2014, 59, 3344-3352.	1.9	170
6	Molecular dynamics study on ionic hydration. Fluid Phase Equilibria, 2002, 194-197, 257-270.	2.5	161
7	An enhanced CdS/TiO2 photocatalyst with high stability and activity: Effect of mesoporous substrate and bifunctional linking molecule. Journal of Materials Chemistry, 2011, 21, 4945.	6.7	156
8	Choline-based deep eutectic solvents for CO2 separation: Review and thermodynamic analysis. Renewable and Sustainable Energy Reviews, 2018, 97, 436-455.	16.4	134
9	Anomalous Hydration Shell Order of Na⁺ and K⁺ inside Carbon Nanotubes. Nano Letters, 2009, 9, 989-994.	9.1	113
10	Highly Thermal Stable and Highly Crystalline Anatase TiO₂ for Photocatalysis. Environmental Science & Technology, 2009, 43, 5423-5428.	10.0	103
11	CuO/Cu₂O porous composites: shape and composition controllable fabrication inherited from metal organic frameworks and further application in CO oxidation. Journal of Materials Chemistry A, 2015, 3, 5294-5298.	10.3	100
12	Screening of conventional ionic liquids for carbon dioxide capture and separation. Applied Energy, 2016, 162, 1160-1170.	10.1	93
13	Construction of Hierarchically Porous Nanoparticles@Metalâ€“Organic Frameworks Composites by Inherent Defects for the Enhancement of Catalytic Efficiency. Advanced Materials, 2018, 30, e1803263.	21.0	88
14	Coreâ€“shell TiO2/C nanofibers as supports for electrocatalytic and synergistic photoelectrocatalytic oxidation of methanol. Journal of Materials Chemistry, 2012, 22, 4025.	6.7	83
15	Energy consumption analysis for CO2 separation using imidazolium-based ionic liquids. Applied Energy, 2014, 136, 325-335.	10.1	78
16	Stability of Pt nanoparticles and enhanced photocatalytic performance in mesoporous Pt-(anatase/TiO2(B)) nanoarchitecture. Journal of Materials Chemistry, 2009, 19, 7055.	6.7	72
17	Wellâ€Dispersed and Sizeâ€Controlled Supported Metal Oxide Nanoparticles Derived from MOF Composites and Further Application in Catalysis. Small, 2015, 11, 3130-3134.	10.0	70
18	Solubilities of CO2, CH4, H2, CO and N2 in choline chloride/urea. Green Energy and Environment, 2016, 1, 195-200.	8.7	65

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19	Thermodynamic Study of Choline Chloride-Based Deep Eutectic Solvents with Water and Methanol. Journal of Chemical & Engineering Data, 2020, 65, 2446-2457.	1.9	65
20	Study on the formation and growth of potassium titanate whiskers. Journal of Materials Science, 2002, 37, 3035-3043.	3.7	64
21	Ice-like Water Structure in Carbon Nanotube (8,8) Induces Cationic Hydration Enhancement. Journal of Physical Chemistry C, 2013, 117, 11412-11420.	3.1	64
22	Water on Titanium Dioxide Surface: A Revisiting by Reactive Molecular Dynamics Simulations. Langmuir, 2014, 30, 14832-14840.	3.5	64
23	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
24	Diffusion of water molecules confined in slits of rutile TiO2(110) and graphite(0001). Fluid Phase Equilibria, 2011, 302, 316-320.	2.5	59
25	A New Electrochemical System Based on a Flow-Field Shaped Solid Electrode and 3D-Printed Thin-Layer Flow Cell: Detection of Pb²⁺ Ions by Continuous Flow Accumulation Square-Wave Anodic Stripping Voltammetry. Analytical Chemistry, 2017, 89, 5024-5029.	6.5	59
26	Molecular Dynamics Study of Mg²⁺/Li⁺ Separation via Biomimetic Graphene-Based Nanopores: The Role of Dehydration in Second Shell. Langmuir, 2016, 32, 13778-13786.	3.5	58
27	Metalâ€“Organic Framework Derivatives for Improving the Catalytic Activity of the CO Oxidation Reaction. ACS Applied Materials & Interfaces, 2017, 9, 15394-15398.	8.0	53
28	Facile Synthesis of Mesoporous MoS₂â€TiO₂ Nanofibers for Ultrastable Lithium Ion Battery Anodes. ChemElectroChem, 2015, 2, 374-381.	3.4	51
29	Structurally tuning microwave absorption of core/shell structured CNT/polyaniline catalysts for energy efficient saccharide-HMF conversion. Applied Catalysis B: Environmental, 2018, 220, 581-588.	20.2	50
30	Elastic interlayer toughening of potassium titanate whiskers-nylon66 composites and their fractal research. Journal of Applied Polymer Science, 2001, 82, 368-374.	2.6	49
31	Molecular simulations on nanoconfined water molecule behaviors for nanoporous material applications. Microfluidics and Nanofluidics, 2013, 15, 191-205.	2.2	49
32	Molecular Dynamics Study on Diameter Effect in Structure of Ethanol Molecules Confined in Single-Walled Carbon Nanotubesâ€. Journal of Physical Chemistry C, 2007, 111, 15677-15685.	3.1	48
33	Carbon titania mesoporous composite whisker as stable supercapacitor electrode material. Journal of Materials Chemistry, 2010, 20, 7645.	6.7	47
34	Thermodynamic Study for Gas Absorption in Choline-2-pyrrolidine-carboxylic Acid + Polyethylene Glycol. Journal of Chemical & Engineering Data, 2016, 61, 3428-3437.	1.9	47
35	High Quality and Yield in Potassium Titanate Whiskers Synthesized by Calcination from Hydrous Titania. Journal of the American Ceramic Society, 2004, 87, 326-330.	3.8	45
36	Experimental study of CO 2 absorption in aqueous cholinium-based ionic liquids. Fluid Phase Equilibria, 2017, 445, 14-24.	2.5	45

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37	Carbon heterogeneous surface modification on a mesoporous TiO2-supported catalyst and its enhanced hydrodesulfurization performance. Chemical Communications, 2012, 48, 11525.	4.1	43
38	Modeling thermodynamic derivative properties of ionic liquids with ePC-SAFT. Fluid Phase Equilibria, 2015, 405, 73-82.	2.5	43
39	TiO2 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
40	Comparative Study of Tribological Properties of Different Fibers Reinforced PTFE/PEEK Composites at Elevated Temperatures. Tribology Transactions, 2010, 53, 189-194.	2.0	41
41	Melting and Freezing of Au Nanoparticles Confined in Armchair Single-Walled Carbon Nanotubes. Journal of Physical Chemistry C, 2010, 114, 2896-2902.	3.1	41
42	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
43	Techno-economic analysis of biomass processing with dual outputs of energy and activated carbon. Bioresource Technology, 2021, 319, 124108.	9.6	41
44	Molecular Simulation Study of the Adsorption and Diffusion of a Mixture of CO₂/CH₄ in Activated Carbon: Effect of Textural Properties and Surface Chemistry. Journal of Chemical & Engineering Data, 2016, 61, 4139-4147.	1.9	40
45	Modeling, simulation and evaluation of biogas upgrading using aqueous choline chloride/urea. Applied Energy, 2018, 229, 1269-1283.	10.1	40
46	Molecular insights into multilayer 18-crown-6-like graphene nanopores for K+/Na+ separation: A molecular dynamics study. Carbon, 2019, 144, 32-42.	10.3	40
47	Tribological and mechanical properties of carbon-nanofiber-filled polytetrafluoroethylene composites. Journal of Applied Polymer Science, 2007, 104, 2430-2437.	2.6	38
48	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
49	Mg²⁺-Channel-Inspired Nanopores for Mg²⁺/Li⁺ Separation: The Effect of Coordination on the Ionic Hydration Microstructures. Langmuir, 2017, 33, 9201-9210.	3.5	38
50	A shortcut for evaluating activities of TiO2 facets: water dissociative chemisorption on TiO2-B (100) and (001). Physical Chemistry Chemical Physics, 2010, 12, 8721.	2.8	37
51	Effect of water concentration on the microstructures of choline chloride/urea (1:2) /water mixture. Fluid Phase Equilibria, 2018, 470, 134-139.	2.5	37
52	Improving high-pressure water scrubbing through process integration and solvent selection for biogas upgrading. Applied Energy, 2020, 276, 115462.	10.1	37
53	Enriching Heteroelements in Lignin as Lubricating Additives for Bioionic Liquids. ACS Sustainable Chemistry and Engineering, 2016, 4, 3877-3887.	6.7	36
54	Evaluation of imidazolium-based ionic liquids for biogas upgrading. Applied Energy, 2016, 175, 69-81.	10.1	36

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55	Tribological properties of PTFE composites filled with surface-treated carbon fiber. Journal of Materials Science, 2007, 42, 8465-8469.	3.7	35
56	Facile synthesis of amino-functionalized mesoporous TiO 2 microparticles for adenosine deaminase immobilization. Microporous and Mesoporous Materials, 2017, 239, 158-166.	4.4	35
57	A controllable approach for the synthesis of titanate derivatives of potassium tetratitanate fiber. Journal of Materials Science, 2004, 39, 3745-3750.	3.7	34
58	Molecular behavior of water in TiO2 nano-slits with varying coverages of carbon: a molecular dynamics simulation study. Physical Chemistry Chemical Physics, 2012, 14, 16536.	2.8	34
59	Massâ€transfer rate enhancement for CO₂ separation by ionic liquids: Theoretical study on the mechanism. AICHE Journal, 2015, 61, 4437-4444.	3.6	34
60	Niobium-doped TiO2 solid acid catalysts: Strengthened interfacial polarization, amplified microwave heating and enhanced energy efficiency of hydroxymethylfurfural production. Applied Catalysis B: Environmental, 2019, 243, 741-749.	20.2	34
61	A template-free method for stable CuO hollow microspheres fabricated from a metal organic framework (HKUST-1). Nanoscale, 2015, 7, 9411-9415.	5.6	33
62	Modeling Thermodynamic Derivative Properties and Gas Solubility of Ionic Liquids with ePC-SAFT. Industrial & Engineering Chemistry Research, 2019, 58, 8401-8417.	3.7	33
63	Modeling the Viscosity of Ionic Liquids with the Electrolyte Perturbed-Chain Statistical Association Fluid Theory. Industrial & Engineering Chemistry Research, 2014, 53, 20258-20268.	3.7	32
64	Enhancing Energy Efficiency in Saccharideâ€“HMF Conversion with Core/shell Structured Microwave Responsive Catalysts. ACS Sustainable Chemistry and Engineering, 2017, 5, 4352-4358.	6.7	32
65	Water in Narrow Carbon Nanotubes: Roughness Promoted Diffusion Transition. Journal of Physical Chemistry C, 2018, 122, 19124-19132.	3.1	32
66	Single-crystalline and reactive facets exposed anatase TiO2 nanofibers with enhanced photocatalytic properties. Journal of Materials Chemistry, 2011, 21, 6718.	6.7	31
67	TiO2-B nanofibers with high thermal stability as improved anodes for lithium ion batteries. Electrochemistry Communications, 2013, 27, 124-127.	4.7	31
68	A hybrid perturbed-chain SAFT density functional theory for representing fluid behavior in nanopores. Journal of Chemical Physics, 2013, 138, 224706.	3.0	31
69	Energy consumption analysis for CO2 separation from gas mixtures. Applied Energy, 2014, 130, 237-243.	10.1	31
70	Bovine Serum Albumin Adsorption in Mesoporous Titanium Dioxide: Pore Size and Pore Chemistry Effect. Langmuir, 2016, 32, 3995-4003.	3.5	31
71	Liquidâ€“Solid Nanofriction and Interfacial Wetting. Langmuir, 2016, 32, 743-750.	3.5	31
72	A hybrid perturbed-chain SAFT density functional theory for representing fluid behavior in nanopores: Mixtures. Journal of Chemical Physics, 2013, 139, 194705.	3.0	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.	1.9	30
74	Low-temperature controllable calcination syntheses of potassium dititanate. AICHE Journal, 2004, 50, 1568-1577.	3.6	29
75	A Simple Prediction Model for Higher Heat Value of Biomass. Journal of Chemical & Engineering Data, 2016, 61, 4039-4045.	1.9	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.	3.5	29
77	Carbon recycling â€“ 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.	16.4	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.	3.7	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.	3.1	25
80	Friction and Wear Behavior of CF/PTFE Composites Lubricated by Choline Chloride Ionic Liquids. Tribology Letters, 2013, 49, 413-420.	2.6	25
81	Carbon-protected Au nanoparticles supported on mesoporous TiO₂ for catalytic reduction of p-nitrophenol. RSC Advances, 2014, 4, 29591-29594.	3.6	25
82	Mass Transfer Rate Enhancement for CO2 Separation by Ionic Liquids: Effect of Film Thickness. Industrial & Engineering Chemistry Research, 2016, 55, 366-372.	3.7	25
83	Molecular Interactions of Protein with TiO₂ by the AFM-Measured Adhesion Force. Langmuir, 2017, 33, 11626-11634.	3.5	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.	9.6	25
85	Non-equilibrium thermodynamics analysis and its application in interfacial mass transfer. Science China Chemistry, 2011, 54, 1659-1666.	8.2	24
86	Wetting Behavior of Ionic Liquid on Mesoporous Titanium Dioxide Surface by Atomic Force Microscopy. ACS Applied Materials & Interfaces, 2013, 5, 2692-2698.	8.0	24
87	Review on heat-utilization processes and heat-exchange equipment in biogas engineering. Journal of Renewable and Sustainable Energy, 2016, 8, .	2.0	24
88	Determination of dissolution kinetics of K2SO4 crystal with ion selective electrode. Chemical Engineering Science, 2001, 56, 7017-7024.	3.8	23
89	Theoretical Investigation of CO Adsorption on Clean and Hydroxylated TiO₂-B (100) Surfaces. Journal of Physical Chemistry C, 2011, 115, 8622-8629.	3.1	23
90	Controllable atomistic graphene oxide model and its application in hydrogen sulfide removal. Journal of Chemical Physics, 2013, 139, 194707.	3.0	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.	3.5	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.	8.7	23
93	Reaction and Crystallization Mechanism of Potassium Dititanate Fibers Synthesized by Low-Temperature Calcination. Crystal Growth and Design, 2005, 5, 1399-1404.	3.0	22
94	Modelling of mass transfer coupling with crystallization kinetics in microscale. Chemical Engineering Science, 2010, 65, 2649-2655.	3.8	22
95	Self-Lubricating Polytetrafluoroethylene/Polyimide Blends Reinforced with Zinc Oxide Nanoparticles. Journal of Nanomaterials, 2015, 2015, 1-8.	2.7	22
96	Turning the solubility and lubricity of ionic liquids by absorbing CO 2. Tribology International, 2018, 121, 223-230.	5.9	22
97	Highly Crystalline Mesoporous TiO₂(B) Nanofibers. Journal of Physical Chemistry C, 2014, 118, 3049-3055.	3.1	21
98	CO₂ Uptake Behavior of Supported Tetraethylenepentamine Sorbents. Energy & Fuels, 2016, 30, 5083-5091.	5.1	21
99	Localizing microwave heat by surface polarization of titanate nanostructures for enhanced catalytic reaction efficiency. Applied Catalysis B: Environmental, 2018, 227, 266-275.	20.2	21
100	Simple Physical Approach to Reducing Frictional and Adhesive Forces on a TiO₂ Surface via Creating Heterogeneous Nanopores. Langmuir, 2012, 28, 15270-15277.	3.5	20
101	CO₂ Absorption in Mixed Aqueous Solution of MDEA and Cholinium Glycinate. Energy & Fuels, 2017, 31, 7325-7333.	5.1	20
102	Thermodynamic analysis of CO2 separation from biogas with conventional ionic liquids. Applied Energy, 2018, 217, 75-87.	10.1	20
103	TiO₂ Nanofoamâ€“Nanotube Array for Surface-Enhanced Raman Scattering. ACS Applied Nano Materials, 2018, 1, 6563-6566.	5.0	20
104	Supported ionic liquid sorbents for CO2 capture from simulated flue-gas. Chinese Journal of Chemical Engineering, 2018, 26, 2377-2384.	3.5	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.	3.5	20
106	Protein adsorptive behavior on mesoporous titanium dioxide determined by geometrical topography. Chemical Engineering Science, 2014, 117, 146-155.	3.8	19
107	Temperature-dependent structural properties of water molecules confined in TiO2 nanoslits: Insights from molecular dynamics simulations. Fluid Phase Equilibria, 2016, 430, 169-177.	2.5	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.	3.8	19

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109	CO₂ Absorption in the Ionic Liquids Immobilized on Solid Surface by Molecular Dynamics Simulation. Langmuir, 2017, 33, 11658-11669.	3.5	19
110	AFM Study of pHâ€Dependent Adhesion of Single Protein to TiO₂ Surface. Advanced Materials Interfaces, 2019, 6, 1900411.	3.7	19
111	Determination of the small amount of proteins interacting with TiO2 nanotubes by AFM-measurement. Biomaterials, 2019, 192, 368-376.	11.4	19
112	DFT study of coverage-depended adsorption of NH3 on TiO2-B (100) surface. Physical Chemistry Chemical Physics, 2012, 14, 16618.	2.8	18
113	Flow resistance analysis of nanoconfined water in silt pores by molecular simulations: Effect of pore wall interfacial properties. Fluid Phase Equilibria, 2014, 362, 235-241.	2.5	18
114	Nanomaterial-oriented molecular simulations of ion behaviour in aqueous solution under nanoconfinement. Molecular Simulation, 2016, 42, 784-798.	2.0	18
115	Generalized Gibbs free energy of confined nanoparticles. AICHE Journal, 2017, 63, 4595-4603.	3.6	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. Chinese Journal of Chemical Engineering, 2018, 26, 574-582.	3.5	18
117	Poly(ionic liquid)s as lubricant additives with insight into adsorption-lubrication relationship. Tribology International, 2022, 165, 107278.	5.9	18
118	A negative-carbon footprint process with mixed biomass feedstock maximizes conversion efficiency, product value and CO2 mitigation. Bioresource Technology, 2022, 351, 127004.	9.6	18
119	In-situ synthesized mesoporous TiO2-B/anatase microparticles: Improved anodes for lithium ion batteries. Chinese Journal of Chemical Engineering, 2015, 23, 583-589.	3.5	17
120	Confinement Phenomenon Effect on the CO₂ Absorption Working Capacity in Ionic Liquids Immobilized into Porous Solid Supports. Langmuir, 2017, 33, 11719-11726.	3.5	17
121	CO2 separation using a hybrid choline-2-pyrrolidine-carboxylic acid/polyethylene glycol/water absorbent. Applied Energy, 2020, 257, 113962.	10.1	17
122	Interfaceâ€Strengthened Polyimide/Carbon Nanofibers Nanocomposites with Superior Mechanical and Tribological Properties. Macromolecular Chemistry and Physics, 2014, 215, 1407-1414.	2.2	15
123	Lubrication Behavior of Water Molecules Confined in TiO₂ Nanoslits: A Molecular Dynamics Study. Journal of Chemical & Engineering Data, 2016, 61, 4023-4030.	1.9	15
124	Diffusion of CO₂/CH₄ confined in narrow carbon nanotube bundles. Molecular Physics, 2016, 114, 2530-2540.	1.7	15
125	Tribological behaviors of carbon series additions reinforced <scp>CF/PTFE</scp> composites at high speed. Journal of Applied Polymer Science, 2016, 133, .	2.6	15
126	Right Way of Using Graphene Oxide Additives for Water-Lubricated PEEK: Adding in Polymer or Water?. Tribology Letters, 2018, 66, 1.	2.6	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. Chemical Engineering Science, 2020, 213, 115380.	3.8	15
128	Acetone adsorption on activated carbons: Roles of functional groups and humidity. Fluid Phase Equilibria, 2020, 521, 112645.	2.5	15
129	Dissociation of methanol on hydroxylated TiO2-B (100) surface: Insights from first principle DFT calculation. Catalysis Today, 2011, 165, 32-40.	4.4	14
130	Modelling interfacial properties of ionic liquids with ePC-SAFT combined with density gradient theory. Molecular Physics, 2016, 114, 2492-2499.	1.7	14
131	The effect of H2O2 desorption on achieving improved selectivity for direct synthesis of H2O2 over TiO2(B)/anatase supported Pd catalyst. Catalysis Communications, 2017, 89, 69-72.	3.3	14
132	Tribological Properties of Porous PEEK Composites Containing Ionic Liquid under Dry Friction Condition. Lubricants, 2017, 5, 19.	2.9	14
133	Multi-objective optimization and dynamic control of biogas pressurized water scrubbing process. Renewable Energy, 2020, 147, 2335-2344.	8.9	14
134	Heterogeneous interfacial engineering of Pd/TiO2 with controllable carbon content for improved direct synthesis efficiency of H2O2. Chinese Journal of Catalysis, 2020, 41, 312-321.	14.0	14
135	Interfacial structure and differential capacitance of ionic liquid/graphite interface: A perturbed-chain SAFT density functional theory study. Journal of Molecular Liquids, 2020, 310, 113199.	4.9	14
136	Versatile Ionic Gel Driven by Dual Hydrogen Bond Networks: Toward Advanced Lubrication and Self-Healing. ACS Applied Polymer Materials, 2021, 3, 5932-5941.	4.4	14
137	CO2-negative biomass conversion: An economic route with co-production of green hydrogen and highly porous carbon. Applied Energy, 2022, 311, 118685.	10.1	14
138	Efficient Molecular Approach to Quantifying Solvent-Mediated Interactions. Langmuir, 2017, 33, 11817-11824.	3.5	13
139	Carbon-Modified Mesoporous Anatase/TiO2(B) Whisker for Enhanced Activity in Direct Synthesis of Hydrogen Peroxide by Palladium. Catalysts, 2017, 7, 175.	3.5	13
140	Advanced Materialâ€Oriented Biomass Precise Reconstruction: A Review on Porous Carbon with Inherited Natural Structure and Created Artificial Structure by Postâ€Treatment. Macromolecular Bioscience, 2022, 22, e2100479.	4.1	13
141	Atomic force microscopy (AFM) study on potassium hexatitanate whisker (K2OÂ·6TiO2). Journal of Materials Science, 2003, 38, 3641-3646.	3.7	12
142	Direct Electrochemistry and Electrocatalysis of Hemoglobinâ€“TiO₂ Whisker Film Modified Glassy Carbon Electrode. Electroanalysis, 2010, 22, 668-672.	2.9	12
143	Preparation and Characterization of Mesoporous MoO3/TiO2 Composite with High Surface Area by Self-Supporting and Ammonia Method. Catalysis Letters, 2012, 142, 480-485.	2.6	12
144	Molecular Behavior of Water on Titanium Dioxide Nanotubes: A Molecular Dynamics Simulation Study. Journal of Chemical & Engineering Data, 2016, 61, 4131-4138.	1.9	12

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145	Investigation of Structural, Thermal, and Dynamical Properties of Pdâ€“Auâ€“Pt Ternary Metal Nanoparticles Confined in Carbon Nanotubes Based on MD Simulation. Journal of Physical Chemistry C, 2017, 121, 12911-12920.	3.1	12
146	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
147	Developing Electrolyte Perturbed-Chain Statistical Associating Fluid Theory Density Functional Theory for CO₂ Separation by Confined Ionic Liquids. Journal of Physical Chemistry C, 2018, 122, 15464-15473.	3.1	12
148	Atomistic Insights into the Layered Microstructure and Time-Dependent Stability of [BMIM][PF₆] Confined within the Meso-Slit of Carbon. Journal of Physical Chemistry B, 2019, 123, 6857-6869.	2.6	12
149	How to detect possible pitfalls in ePC-SAFT modelling: Extension to ionic liquids. Fluid Phase Equilibria, 2020, 519, 112641.	2.5	12
150	Atomistic insights into the effects of carbonyl oxygens in functionalized graphene nanopores on Ca2+/Na+ sieving. Carbon, 2020, 164, 305-316.	10.3	12
151	How to Detect Possible Pitfalls in ePC-SAFT Modeling. 2. Extension to Binary Mixtures of 96 Ionic Liquids with CO2, H2S, CO, O2, CH4, N2, and H2. Industrial & Engineering Chemistry Research, 2020, 59, 21579-21591.	3.7	12
152	Shape and size characterization of potassium titanate fibers by image analysis. Journal of Materials Science, 2004, 39, 469-476.	3.7	11
153	Changes in CNT-confined water structural properties induced by the variation in water molecule orientation. Molecular Simulation, 2012, 38, 1094-1102.	2.0	11
154	A study of tribological and mechanical properties of PTFE composites filled with surface treated K₂Ti₆O₁₃ whisker. Journal of Applied Polymer Science, 2012, 124, 1456-1463.	2.6	11
155	A Novel Exploration of a Combination of Gambogic Acid with TiO2 Nanofibers: The Photodynamic Effect for HepG2 Cell Proliferation. Materials, 2014, 7, 6865-6878.	2.9	11
156	Dynamical coupling of ion adsorption with fluid flow in nanopores. AICHE Journal, 2021, 67, e17266.	3.6	11
157	Large-Scale Hydrothermal Synthesis of Twinned Rutile Titania. Journal of the American Ceramic Society, 2007, 90, 319-321.	3.8	10
158	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 MoS2 nanoslits. Chinese Journal of Chemical Engineering, 2018, 26, 2412-2419.	3.5	10
159	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. Fluid Phase Equilibria, 2020, 509, 112452.	2.5	10
160	Molecular insight into wetting behavior of deep eutectic solvent droplets on ionic substrates: A molecular dynamics study. Journal of Molecular Liquids, 2020, 319, 114298.	4.9	10
161	Excellent Trace Detection of Proteins on TiO₂ Nanotube Substrates through Novel Topography Optimization. Journal of Physical Chemistry C, 2020, 124, 27790-27800.	3.1	10
162	Durable polytetrafluoroethylene composites in harsh environments: Tribology and corrosion investigation. Journal of Applied Polymer Science, 2012, 124, 4307-4314.	2.6	9

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