Lei Li

List of Publications by Year
in descending order

61 papers	3,360 citations	257429 24 h-index	144002 57 g-index
62 all docs	62 docs citations	62 times ranked	5075 citing authors

#	Article	IF	Citations
1	Effect of airborne contaminants on the wettability of supported graphene and graphite. Nature Materials, 2013, 12, 925-931.	27.5	712
2	Study on the Surface Energy of Graphene by Contact Angle Measurements. Langmuir, 2014, 30, 8598-8606.	3.5	380
3	Enhanced Room-Temperature Corrosion of Copper in the Presence of Graphene. ACS Nano, 2013, 7, 6939-6947.	14.6	320
4	One-pot synthesis of carbon nanodots for fluorescence turn-on detection of Ag⁺ based on the Ag⁺-induced enhancement of fluorescence. Journal of Materials Chemistry C, 2015, 3, 2302-2309.	5.5	291
5	Understanding the intrinsic water wettability of graphite. Carbon, 2014, 74, 218-225.	10.3	178
6	Understanding the Intrinsic Water Wettability of Molybdenum Disulfide (MoS₂). Langmuir, 2015, 31, 8429-8435.	3.5	167
7	Are Graphitic Surfaces Hydrophobic?. Accounts of Chemical Research, 2016, 49, 2765-2773.	15.6	143
8	One-Step Synthesis of Label-Free Ratiometric Fluorescence Carbon Dots for the Detection of Silver Ions and Glutathione and Cellular Imaging Applications. ACS Applied Materials & Interfaces, 2019, 11, 16822-16829.	8.0	137
9	Characterization of the Intrinsic Water Wettability of Graphite Using Contact Angle Measurements: Effect of Defects on Static and Dynamic Contact Angles. Langmuir, 2017, 33, 959-967.	3.5	100
10	Water Protects Graphitic Surface from Airborne Hydrocarbon Contamination. ACS Nano, 2016, 10, 349-359.	14.6	97
11	What causes extended layering of ionic liquids on the mica surface?. Chemical Science, 2015, 6, 3478-3482.	7.4	62
12	Effect of Ï€â€“Ï€+ Stacking on the Layering of Ionic Liquids Confined to an Amorphous Carbon Surface. ACS Applied Materials & Interfaces, 2015, 7, 7078-7081.	8.0	54
13	Effect of Chemical Structure and Molecular Weight on High-Temperature Stability of Some Fomblin Z-Type Lubricants. Tribology Letters, 2004, 16, 21-27.	2.6	45
14	Why can a nanometer-thick polymer coated surface be more wettable to water than to oil?. Journal of Materials Chemistry, 2012, 22, 16719.	6.7	44
15	One-step synthesis of a dual-emitting carbon dot-based ratiometric fluorescent probe for the visual assay of Pb²⁺ and PPi and development of a paper sensor. Journal of Materials Chemistry B, 2019, 7, 5502-5509.	5.8	35
16	Thickness-dependent molecular arrangement and topography of ultrathin ionic liquid films on a silica surface. Chemical Communications, 2013, 49, 7803.	4.1	34
17	Influence of O₂, H₂O and airborne hydrocarbons on the properties of selected 2D materials. RSC Advances, 2017, 7, 27048-27057.	3.6	33
18	A study of the frictional properties of senofilcon-A contact lenses. Journal of the Mechanical Behavior of Biomedical Materials, 2011, 4, 1336-1342.	3.1	30

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19	What Is the Role of the Interfacial Interaction in the Slow Relaxation of Nanometer-Thick Polymer Melts on a Solid Surface?. Langmuir, 2012, 28, 6151-6156.	3.5	30
20	Effect of end-groups on simultaneous oleophobicity/hydrophilicity and anti-fogging performance of nanometer-thick perfluoropolyethers (PFPEs). RSC Advances, 2015, 5, 30570-30576.	3.6	27
21	Graphitic materials: Intrinsic hydrophilicity and its implications. Extreme Mechanics Letters, 2017, 14, 44-50.	4.1	27
22	3D-Printed Membranes with a Zwitterionic Hydrogel Coating for More Robust Oilâ€"Water Separation. Industrial & Engineering Chemistry Research, 2020, 59, 21058-21065.	3.7	27
23	Adventitious hydrocarbons and the graphite-water interface. Carbon, 2018, 134, 464-469.	10.3	25
24	Surface energy and adhesion of perfluoropolyether nanofilms on carbon overcoat: The end group and backbone chain effect. Journal of Applied Physics, 2006, 99, 08N103.	2.5	24
25	Characterization of a nanometer-thick sputtered polytetrafluoroethylene film. Applied Surface Science, 2011, 257, 4478-4485.	6.1	24
26	Nanometerâ€Thick Ionic Liquids as Boundary Lubricants. Advanced Engineering Materials, 2018, 20, 1700617.	3.5	22
27	Lubricant layer formation during the dip-coating process: influence of adsorption and viscous flow mechanisms. Tribology Letters, 2005, 18, 279-286.	2.6	19
28	Fabricating Nanometer-Thick Simultaneously Oleophobic/Hydrophilic Polymer Coatings via a Photochemical Approach. Langmuir, 2016, 32, 6723-6729.	3.5	19
29	Study on Nanometer-Thick Room-Temperature Ionic Liquids (RTILs) for Application as the Media Lubricant in Heat-Assisted Magnetic Recording (HAMR). Industrial & Engineering Chemistry Research, 2016, 55, 6391-6397.	3.7	16
30	From Molecular Arrangement to Macroscopic Wetting of Ionic Liquids on the Mica Surface: Effect of Humidity. Langmuir, 2018, 34, 12167-12173.	3.5	16
31	Parahydrophobicity and stick-slip wetting dynamics of vertically aligned carbon nanotube forests. Carbon, 2019, 152, 474-481.	10.3	16
32	Understanding the Friction of Nanometer-Thick Fluorinated Ionic Liquids. Industrial & Engineering Chemistry Research, 2018, 57, 11681-11685.	3.7	15
33	Spreading of Nanodroplets of Ionic Liquids on the Mica Surface. ACS Omega, 2018, 3, 16398-16402.	3.5	14
34	3D-Printed Repeating Re-Entrant Topography to Achieve On-Demand Wettability and Separation. ACS Applied Materials & Interfaces, 2020, 12, 35725-35730.	8.0	13
35	Nanometer-Thick Fluorinated Ionic Liquid Films as Lubricants in Data-Storage Devices. ACS Applied Nano Materials, 2019, 2, 5260-5265.	5.0	12
36	Effect of the Scale of Local Segmental Motion on Nanovoid Growth in Polyester Copolymer Glasses. Macromolecules, 2003, 36, 2793-2801.	4.8	11

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37	A Costâ€Effective Approach to Fabricate Superhydrophobic Coatings Using Hydrophilic Materials. Advanced Engineering Materials, 2016, 18, 567-571.	3.5	11
38	Understanding the wettability of nanometer-thick room temperature ionic liquids (RTILs) on solid surfaces. Chinese Chemical Letters, 2017, 28, 2045-2052.	9.0	11
39	Uncovering the Underlying Mechanisms Governing the Solidlike Layering of Ionic Liquids (ILs) on Mica. Langmuir, 2020, 36, 2743-2756.	3.5	11
40	Lubricating graphene with a nanometer-thick perfluoropolyether. Thin Solid Films, 2013, 549, 299-305.	1.8	10
41	Manipulating the molecular conformation of a nanometer-thick environmentally friendly coating to control the surface energy. Journal of Materials Chemistry A, 2017, 5, 9752-9759.	10.3	10
42	Lifshitz-van der Waals and Lewis Acid-Base Approach for Analyzing Surface Energy of Molecularly Thin Lubricant Films. IEEE Transactions on Magnetics, 2007, 43, 2226-2228.	2.1	9
43	A Nanometer-Thick, Mechanically Robust, and Easy-to-Fabricate Simultaneously Oleophobic/Hydrophilic Polymer Coating for Oilâ€“Water Separation. Industrial & Engineering Chemistry Research, 0, , .	3.7	9
44	Effect of Linkage Groups on Motional Cooperativity in the Secondary Relaxations of Some Glassy Polymers. Macromolecules, 2002, 35, 425-432.	4.8	8
45	Study on the friction of Îº-carrageenan hydrogels in air and aqueous environments. Materials Science and Engineering C, 2014, 36, 173-179.	7.3	7
46	Effect of the Local Motions of Chemical Linkages on Segmental Mobility in Poly(ester carbonate) Block Copolymers. Macromolecules, 2001, 34, 2559-2568.	4.8	6
47	Separating Miscible Liquidâ€“Liquid Mixtures Using Supported Ionic Liquid Membranes. Industrial & Engineering Chemistry Research, 2022, 61, 747-753.	3.7	6
48	Assessing and Mitigating Surface Contamination of Carbon Electrode Materials. Chemistry of Materials, 2019, 31, 7133-7142.	6.7	5
49	Highly Fluorinated Ionic Liquid Films as Nanometer-Thick Media Lubricants for Hard Disk Drives. ACS Applied Nano Materials, 2020, 3, 8803-8809.	5.0	5
50	Direct observation of the double-layering quantized growth of mica-confined ionic liquids. Nanoscale, 2021, 13, 17961-17971.	5.6	5
51	Effect of Solid Substrates on the Molecular Structure of Ionic Liquid Nanofilms. Langmuir, 2021, 37, 14753-14759.	3.5	5
52	Resistance of Fomblin Z-Type Lubricants to Lewis Acid-Catalyzed Decomposition: Effect of the Chemical and Electronic Structure of End-Groups. Tribology Letters, 2004, 17, 953-959.	2.6	4
53	Measurement of disjoining pressure of Z-type perfluoropolyether lubricants on Si and SiNx surfaces. Tribology International, 2005, 38, 528-532.	5.9	4
54	The Influence of Ultraviolet Irradiation on the Surface Chemistry of Ztetraol Magnetic Hard Disk Lubricant: a Combined Temperature Programed Desorption and X-Ray Photoelectron Spectroscopic Study. Tribology Letters, 2011, 44, 201-211.	2.6	3

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55	Room-temperature ionic liquids (RTILs): media lubricants for Heat-assisted magnetic recording (HAMR)?. IEEE Transactions on Magnetics, 2024, , 1-1.	2.1	3
56	Developing a Selective Zirconium Phosphate Cation Exchanger to Adsorb Ammonium: Effect of a Gas-Permeable and Hydrophobic Coating. Langmuir, 2022, 38, 8677-8685.	3.5	3
57	Torsional Energy Barriers in Dimethyl Ether and Perfluoro-Dimethyl Ether: Electronic Structure Contributions. Tribology Letters, 2011, 44, 177-185.	2.6	2
58	Study on the Interaction between Talc and Perfluoropolyethers under Tribological Contact. Tribology Transactions, 2015, 58, 679-685.	2.0	2
59	Separating a multicomponent and multiphase liquid mixture with a 3D-printed membrane device. RSC Advances, 2021, 11, 40033-40039.	3.6	1
60	Understanding the Mechanism of Anomalous Viscosityâ€"Molecular Weight Relationships of Diolic Perfluoropoly (Oxyethyleneâ€ranâ€oxymethylene): What is Missing in the Debyeâ€"Bueche Model?. Macromolecular Chemistry and Physics, 2011, 212, 2685-2690.	2.2	0
61	Uncovering the Underlying Mechanisms of the Fouling in Maleic Anhydride Condensers. Industrial & Engineering Chemistry Research, 2019, 58, 3721-3725.	3.7	0