Jinjin Li

List of Publications by Year
in descending order

94 papers	3,569 citations	94269 37 h-index	161609 54 g-index
96 all docs	96 docs citations	96 times ranked	1375 citing authors

#	Article	IF	Citations
1	Superlubricity Behavior with Phosphoric Acidâ€“Water Network Induced by Rubbing. Langmuir, 2011, 27, 9413-9417.	1.6	173
2	Superlubricity of carbon nanostructures. Carbon, 2020, 158, 1-23.	5.4	163
3	Macroscale Superlubricity Enabled by the Synergy Effect of Graphene-Oxide Nanoflakes and Ethanediol. ACS Applied Materials & Interfaces, 2018, 10, 40863-40870.	4.0	131
4	Superlubricity Achieved with Mixtures of Acids and Glycerol. Langmuir, 2013, 29, 271-275.	1.6	126
5	Superlubricity of Graphite Induced by Multiple Transferred Graphene Nanoflakes. Advanced Science, 2018, 5, 1700616.	5.6	99
6	Superlubricity Achieved with Mixtures of Polyhydroxy Alcohols and Acids. Langmuir, 2013, 29, 5239-5245.	1.6	92
7	Macroscale superlubricity under extreme pressure enabled by the combination of graphene-oxide nanosheets with ionic liquid. Carbon, 2019, 151, 76-83.	5.4	86
8	Superlubricity of Graphite Sliding against Graphene Nanoflake under Ultrahigh Contact Pressure. Advanced Science, 2018, 5, 1800810.	5.6	85
9	Graphene lubrication. Applied Materials Today, 2020, 20, 100662.	2.3	84
10	Tribochemistry and Superlubricity Induced by Hydrogen Ions. Langmuir, 2012, 28, 15816-15823.	1.6	83
11	Superlubricity and Antiwear Properties of In Situ-Formed Ionic Liquids at Ceramic Interfaces Induced by Tribochemical Reactions. ACS Applied Materials & Interfaces, 2019, 11, 6568-6574.	4.0	76
12	Excellent Lubricating Behavior of Brasenia schreberi Mucilage. Langmuir, 2012, 28, 7797-7802.	1.6	74
13	Enhancement of friction performance enabled by a synergetic effect between graphene oxide and molybdenum disulfide. Carbon, 2019, 154, 266-276.	5.4	64
14	In-situ formation of tribofilm with Ti3C2Tx MXene nanoflakes triggers macroscale superlubricity. Tribology International, 2021, 154, 106695.	3.0	64
15	Investigation of the difference in liquid superlubricity between water- and oil-based lubricants. RSC Advances, 2015, 5, 63827-63833.	1.7	62
16	Superlubricity of Polyalkylene Glycol Aqueous Solutions Enabled by Ultrathin Layered Double Hydroxide Nanosheets. ACS Applied Materials & Interfaces, 2019, 11, 20249-20256.	4.0	62
17	Liquid Superlubricity of Polyethylene Glycol Aqueous Solution Achieved with Boric Acid Additive. Langmuir, 2018, 34, 3578-3587.	1.6	59
18	Hydrodynamic effect on the superlubricity of phosphoric acid between ceramic and sapphire. Friction, 2014, 2, 173-181.	3.4	58

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19	AFM Studies on Liquid Superlubricity between Silica Surfaces Achieved with Surfactant Micelles. Langmuir, 2016, 32, 5593-5599.	1.6	55
20	Contribution of a Tribo-Induced Silica Layer to Macroscale Superlubricity of Hydrated Ions. Journal of Physical Chemistry C, 2019, 123, 20270-20277.	1.5	55
21	Advancements in superlubricity. Science China Technological Sciences, 2013, 56, 2877-2887.	2.0	54
22	Superlubricity of silicone oil achieved between two surfaces by running-in with acid solution. RSC Advances, 2015, 5, 30861-30868.	1.7	53
23	Investigation of machining Ti-6Al-4V with graphene oxide nanofluids: Tool wear, cutting forces and cutting vibration. Journal of Manufacturing Processes, 2020, 49, 35-49.	2.8	52
24	Macroscale Superlubricity Achieved on the Hydrophobic Graphene Coating with Glycerol. ACS Applied Materials & Interfaces, 2020, 12, 18859-18869.	4.0	51
25	Electricity generation from the interaction of liquidâ€“solid interface: a review. Journal of Materials Chemistry A, 2021, 9, 8870-8895.	5.2	50
26	Investigation of running-in process in water-based lubrication aimed at achieving super-low friction. Tribology International, 2016, 102, 257-264.	3.0	49
27	Molecular behaviors in thin film lubricationâ€"Part three: Superlubricity attained by polar and nonpolar molecules. Friction, 2019, 7, 625-636.	3.4	49
28	Macroscale superlubricity of Si-doped diamond-like carbon film enabled by graphene oxide as additives. Carbon, 2021, 176, 358-366.	5.4	48
29	Superlubricity of 1-Ethyl-3-methylimidazolium trifluoromethanesulfonate Ionic Liquid Induced by Tribochemical Reactions. Langmuir, 2018, 34, 5245-5252.	1.6	47
30	Origins of Superlubricity Promoted by Hydrated Multivalent Ions. Journal of Physical Chemistry Letters, 2020, 11, 184-190.	2.1	47
31	Tribochemical Behaviors of Onion-like Carbon Films as High-Performance Solid Lubricants with Variable Interfacial Nanostructures. ACS Applied Materials & Interfaces, 2019, 11, 25535-25546.	4.0	46
32	Macroscale Superlubricity Achieved With Various Liquid Molecules: A Review. Frontiers in Mechanical Engineering, 2019, 5, .	0.8	46
33	Mechanism of Biological Liquid Superlubricity of <i>Brasenia schreberi</i> Mucilage. Langmuir, 2014, 30, 3811-3816.	1.6	45
34	Random occurrence of macroscale superlubricity of graphite enabled by tribo-transfer of multilayer graphene nanoflakes. Carbon, 2018, 138, 154-160.	5.4	45
35	Fluorinated Graphene: A Promising Macroscale Solid Lubricant under Various Environments. ACS Applied Materials & Interfaces, 2019, 11, 40470-40480.	4.0	42
36	Investigations of the superlubricity of sapphire against ruby under phosphoric acid lubrication. Friction, 2014, 2, 164-172.	3.4	40

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37	Zwitterionic Hydrogel Incorporated Graphene Oxide Nanosheets with Improved Strength and Lubricity. Langmuir, 2019, 35, 11452-11462.	1.6	40
38	Hexadecane-containing sandwich structure based triboelectric nanogenerator with remarkable performance enhancement. Nano Energy, 2021, 87, 106198.	8.2	40
39	Superlubrication obtained with mixtures of hydrated ions and polyethylene glycol solutions in the mixed and hydrodynamic lubrication regimes. Journal of Colloid and Interface Science, 2020, 579, 479-488.	5.0	39
40	Investigation of Superlubricity Achieved by Polyalkylene Glycol Aqueous Solutions. Advanced Materials Interfaces, 2016, 3, 1600531.	1.9	37
41	Molecular Origin of Superlubricity between Graphene and a Highly Hydrophobic Surface in Water. Journal of Physical Chemistry Letters, 2019, 10, 2978-2984.	2.1	37
42	Origin of hydration lubrication of zwitterions on graphene. Nanoscale, 2018, 10, 16887-16894.	2.8	36
43	Tribo-Induced Interfacial Material Transfer of an Atomic Force Microscopy Probe Assisting Superlubricity in a WS₂/Graphene Heterojunction. ACS Applied Materials & Interfaces, 2020, 12, 4031-4040.	4.0	35
44	Tribological behavior of layered double hydroxides with various chemical compositions and morphologies as grease additives. Friction, 2021, 9, 952-962.	3.4	35
45	Investigations on the mechanism of superlubricity achieved with phosphoric acid solution by direct observation. Journal of Applied Physics, 2013, 114, 114901.	1.1	34
46	Synthesis and characterizations of zwitterionic copolymer hydrogels with excellent lubrication behavior. Tribology International, 2020, 143, 106026.	3.0	33
47	Shear-Induced Interfacial Structural Conversion Triggers Macroscale Superlubricity: From Black Phosphorus Nanoflakes to Phosphorus Oxide. ACS Applied Materials & Interfaces, 2021, 13, 31947-31956.	4.0	33
48	New achievements in superlubricity from international workshop on superlubricity: fundamental and applications. Friction, 2015, 3, 344-351.	3.4	32
49	Enhancement of friction performance of fluorinated graphene and molybdenum disulfide coating by microdimple arrays. Carbon, 2020, 167, 122-131.	5.4	32
50	Analysis of Measurement Inaccuracy in Superlubricity Tests. Tribology Transactions, 2013, 56, 141-147.	1.1	30
51	Macroscale superlubricity achieved between zwitterionic copolymer hydrogel and sapphire in water. Materials and Design, 2020, 188, 108441.	3.3	30
52	Reduction of friction stress of ethylene glycol by attached hydrogen ions. Scientific Reports, 2014, 4, 7226.	1.6	23
53	AFM Study on Superlubricity between Ti6Al4V/Polymer Surfaces Achieved with Liposomes. Biomacromolecules, 2019, 20, 1522-1529.	2.6	23
54	Graphene-induced reconstruction of the sliding interface assisting the improved lubricity of various tribo-couples. Materials and Design, 2020, 191, 108661.	3.3	23

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55	Mechanism of Superlubricity Conversion with Polyalkylene Glycol Aqueous Solutions. Langmuir, 2019, 35, 11784-11790.	1.6	22
56	The role of water lubrication in critical state fault slip. Engineering Geology, 2020, 271, 105606.	2.9	20
57	Superlubricity Achieved with Zwitterionic Brushes in Diverse Conditions Induced by Shear Actions. Macromolecules, 2021, 54, 5719-5727.	2.2	20
58	Superlubricity of Si3N4 sliding against SiO2 under linear contact conditions in phosphoric acid solutions. Science China Technological Sciences, 2013, 56, 1678-1684.	2.0	19
59	Graphene Nanoflakes: Superlubricity of Graphite Induced by Multiple Transferred Graphene Nanoflakes (Adv. Sci. 3/2018). Advanced Science, 2018, 5, 1870018.	5.6	19
60	Nonlinear Frictional Energy Dissipation between Silica-Adsorbed Surfactant Micelles. Journal of Physical Chemistry Letters, 2017, 8, 2258-2262.	2.1	18
61	Investigation of the lubrication properties and synergistic interaction of biocompatible liposome-polymer complexes applicable to artificial joints. Colloids and Surfaces B: Biointerfaces, 2019, 178, 469-478.	2.5	18
62	Microscale superlubricity at multiple goldâ€“graphite heterointerfaces under ambient conditions. Carbon, 2020, 161, 827-833.	5.4	18
63	Two-dimensional molybdenum carbide (MXene) as an efficient nanoadditive for achieving superlubricity under ultrahigh pressure. Friction, 2023, 11, 369-382.	3.4	18
64	Superlow Friction of Graphite Induced by the Self-Assembly of Sodium Dodecyl Sulfate Molecular Layers. Langmuir, 2017, 33, 12596-12601.	1.6	17
65	Water-based superlubricity in vacuum. Friction, 2019, 7, 192-198.	3.4	17
66	Fabrication of a graphene layer probe to measure force interactions in layered heterojunctions. Nanoscale, 2020, 12, 5435-5443.	2.8	17
67	Temporary or permanent liquid superlubricity failure depending on shear-induced evolution of surface topography. Tribology International, 2021, 161, 107076.	3.0	17
68	Fluorination to enhance superlubricity performance between self-assembled monolayer and graphite in water. Journal of Colloid and Interface Science, 2021, 596, 44-53.	5.0	15
69	Liquid-based nanogenerator fabricated by a self-assembled fluoroalkyl monolayer with high charge density for energy harvesting. Matter, 2022, 5, 1466-1480.	5.0	15
70	Alkyl-functionalized black phosphorus nanosheets triggers macroscale superlubricity on diamond-like carbon film. Chemical Engineering Journal, 2022, 449, 137764.	6.6	15
71	Electricity generation by sliding an ionic solution droplet on a self-assembled reduced graphene oxide film. Journal of Materials Chemistry A, 2020, 8, 12735-12743.	5.2	14
72	Quantum dots of graphene oxide as nano-additives trigger macroscale superlubricity with an extremely short running-in period. Materials Today Nano, 2022, 18, 100219.	2.3	14

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73	Speed dependence of liquid superlubricity stability with H₃PO₄ solution. RSC Advances, 2017, 7, 49337-49343.	1.7	13
74	Investigation on the Nanomechanics of Liposome Adsorption on Titanium Alloys: Temperature and Loading Effects. Polymers, 2018, 10, 383.	2.0	13
75	Boundary Slip of Oil Molecules at MoS₂ Homojunctions Governing Superlubricity. ACS Applied Materials & Interfaces, 2022, 14, 8644-8653.	4.0	13
76	Effect of Immersion Duration on Shear Behavior of Granite Fractures. Rock Mechanics and Rock Engineering, 2021, 54, 4809-4823.	2.6	12
77	Gradual degeneration of liquid superlubricity: Transition from superlubricity to ordinary lubrication, and lubrication failure. Tribology International, 2019, 130, 352-358.	3.0	11
78	Potential-Dependent Friction on a Graphitic Surface in Ionic Solution. Journal of Physical Chemistry C, 2020, 124, 23745-23751.	1.5	11
79	Effect of pH on the liquid superlubricity between Si₃N₄ and glass achieved with phosphoric acid. RSC Advances, 2014, 4, 45735-45741.	1.7	10
80	Cationic Surfactant Micelles Lubricate Graphitic Surface in Water. Langmuir, 2019, 35, 11108-11113.	1.6	10
81	Cylindrical bearing inspired oil enhanced rolling friction based nanogenerator. Nano Energy, 2022, 99, 107372.	8.2	10
82	Functionalized graphene-oxide nanosheets with amino groups facilitate macroscale superlubricity. Friction, 2023, 11, 187-200.	3.4	9
83	Improvement of Load Bearing Capacity of Nanoscale Superlow Friction by Synthesized Fluorinated Surfactant Micelles. ACS Applied Nano Materials, 2018, 1, 953-959.	2.4	8
84	Normal and Frictional Force Hysteresis between Selfâ€Assembled Fluorosurfactant Micelle Arrays at the Nanoscale. Advanced Materials Interfaces, 2018, 5, 1700802.	1.9	7
85	Insight into the Lubrication Behavior of Phospholipids Pre-adsorbed on Silica Surfaces at Different Adsorption Temperatures. Langmuir, 2020, 36, 13477-13484.	1.6	6
86	Synergy of phospholipid and hyaluronan based super-lubricated hydrogels. Applied Materials Today, 2022, 27, 101499.	2.3	5
87	Extremely low friction on gold surface with surfactant molecules induced by surface potential. Friction, 2023, 11, 513-523.	3.4	3
88	Relationship between the size of SiO2 nanospheres and the structure colour. Micro and Nano Letters, 2011, 6, 527.	0.6	2
89	Self-Retraction of Surfactant Droplets on a Superhydrophilic Surface. Langmuir, 2018, 34, 15388-15395.	1.6	2
90	Friction Process of Superlubricity. , 2012, , .		1

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91	Liquid superlubricity with 2D material additives. , 2021, , 167-187.		1
92	Superlubricity of water-based lubricants. , 2021, , 333-357.		1
93	Relationship between the size of SiO<inf>2</inf> nano spheres and the structure color. , 2011, , .		0
94	Superlubricity Mechanism of Brasenia Schreberi Mucilage. , 2012, , .		0