Jianbin Luo

List of Publications by Year
in descending order

390	13,558	58	90
papers	citations	h-index	g-index

23567 45317

394	394	394	7221
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Mechanical properties of nanoparticles: basics and applications. Journal Physics D: Applied Physics, 2014, 47, 013001.	2.8	454
2	Double-Walled Carbon Nanotube Solar Cells. Nano Letters, 2007, 7, 2317-2321.	9.1	321
3	Thin film lubrication. Part I. Study on the transition between EHL and thin film lubrication using a relative optical interference intensity technique. Wear, 1996, 194, 107-115.	3.1	270
4	Marangoni flow in an evaporating water droplet. Applied Physics Letters, 2007, 91, .	3.3	248
5	Robust microscale superlubricity under high contact pressure enabled by graphene-coated microsphere. Nature Communications, 2017, 8, 14029.	12.8	235
6	Nanotubeâ€"Silicon Heterojunction Solar Cells. Advanced Materials, 2008, 20, 4594-4598.	21.0	210
7	An investigation on the tribological properties of multilayer graphene and MoS2 nanosheets as additives used in hydraulic applications. Tribology International, 2016, 97, 14-20.	5.9	193
8	Evolution of tribo-induced interfacial nanostructures governing superlubricity in a-C:H and a-C:H:Si films. Nature Communications, 2017, 8, 1675.	12.8	179
9	Friction-induced nano-structural evolution of graphene as a lubrication additive. Applied Surface Science, 2018, 434, 21-27.	6.1	175
10	Superlubricity Behavior with Phosphoric Acidâ€"Water Network Induced by Rubbing. Langmuir, 2011, 27, 9413-9417.	3.5	173
11	Superlubricitive engineeringâ€"Future industry nearly getting rid of wear and frictional energy consumption. Friction, 2020, 8, 643-665.	6.4	142
12	Ultrathin MoS2 Nanosheets with Superior Extreme Pressure Property as Boundary Lubricants. Scientific Reports, 2015, 5, 12869.	3.3	140
13	Black phosphorus as a new lubricant. Friction, 2018, 6, 116-142.	6.4	136
14	Superlubricity of a graphene/MoS₂ heterostructure: a combined experimental and DFT study. Nanoscale, 2017, 9, 10846-10853.	5.6	133
15	Macroscale Superlubricity Enabled by the Synergy Effect of Graphene-Oxide Nanoflakes and Ethanediol. ACS Applied Materials & Interfaces, 2018, 10, 40863-40870.	8.0	131
16	Superlubricity Achieved with Mixtures of Acids and Glycerol. Langmuir, 2013, 29, 271-275.	3.5	126
17	CMP of hard disk substrate using a colloidal SiO2 slurry: preliminary experimental investigation. Wear, 2004, 257, 461-470.	3.1	123
18	Interlayer Friction and Superlubricity in Single-Crystalline Contact Enabled by Two-Dimensional Flake-Wrapped Atomic Force Microscope Tips. ACS Nano, 2018, 12, 7638-7646.	14.6	120

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19	Robust ultra-low-friction state of graphene via moirÃ© superlattice confinement. Nature Communications, 2016, 7, 13204.	12.8	116
20	Superlubricity of Black Phosphorus as Lubricant Additive. ACS Applied Materials & Interfaces, 2018, 10, 43203-43210.	8.0	113
21	Black Phosphorus: Degradation Favors Lubrication. Nano Letters, 2018, 18, 5618-5627.	9.1	107
22	Self-Assembled Graphene Film as Low Friction Solid Lubricant in Macroscale Contact. ACS Applied Materials & Interfaces, 2017, 9, 21554-21562.	8.0	103
23	Superlubricity of Graphite Induced by Multiple Transferred Graphene Nanoflakes. Advanced Science, 2018, 5, 1700616.	11.2	99
24	Superlubricity of two-dimensional fluorographene/MoS₂heterostructure: a first-principles study. Nanotechnology, 2014, 25, 385701.	2.6	98
25	Electrical bearing failures in electric vehicles. Friction, 2020, 8, 4-28.	6.4	97
26	Criterion for Reversal of Thermal Marangoni Flow in Drying Drops. Langmuir, 2010, 26, 1918-1922.	3.5	96
27	A review on tribology of polymer composite coatings. Friction, 2021, 9, 429-470.	6.4	95
28	Origin of friction and the new frictionless technologyâ€"Superlubricity: Advancements and future outlook. Nano Energy, 2021, 86, 106092.	16.0	93
29	Superlubricity Achieved with Mixtures of Polyhydroxy Alcohols and Acids. Langmuir, 2013, 29, 5239-5245.	3.5	92
30	Intelligent lubricating materials: A review. Composites Part B: Engineering, 2020, 202, 108450.	12.0	89
31	The Tribological Properties of Oils Added with Diamond Nano-Particles. Tribology Transactions, 2001, 44, 494-498.	2.0	88
32	Macroscale superlubricity under extreme pressure enabled by the combination of graphene-oxide nanosheets with ionic liquid. Carbon, 2019, 151, 76-83.	10.3	86
33	Superlubricity of Graphite Sliding against Graphene Nanoflake under Ultrahigh Contact Pressure. Advanced Science, 2018, 5, 1800810.	11.2	85
34	Tribochemistry and Superlubricity Induced by Hydrogen Ions. Langmuir, 2012, 28, 15816-15823.	3.5	83
35	Synergetic effect of H2O2 and glycine on cobalt CMP in weakly alkaline slurry. Microelectronic Engineering, 2014, 122, 82-86.	2.4	82
36	Ultra-Wear-Resistant MXene-Based Composite Coating via in Situ Formed Nanostructured Tribofilm. ACS Applied Materials & Interfaces, 2019, 11, 32569-32576.	8.0	82

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37	Mechanical and tribological properties of nanocomposites incorporated with two-dimensional materials. Friction, 2020, 8, 813-846.	6.4	79
38	Ultrasonic flexural vibration assisted chemical mechanical polishing for sapphire substrate. Applied Surface Science, 2010, 256, 3936-3940.	6.1	77
39	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.	8.0	76
40	Elastic Properties of Polystyrene Nanospheres Evaluated with Atomic Force Microscopy: Size Effect and Error Analysis. Langmuir, 2014, 30, 7206-7212.	3.5	75
41	Excellent Lubricating Behavior of Brasenia schreberi Mucilage. Langmuir, 2012, 28, 7797-7802.	3.5	74
42	Nanoconfined ionic liquids under electric fields. Applied Physics Letters, 2010, 96, .	3.3	73
43	1,2,4-Triazole as a corrosion inhibitor in copper chemical mechanical polishing. Thin Solid Films, 2014, 556, 395-404.	1.8	73
44	Thin film lubrication in the past 20 years. Friction, 2016, 4, 280-302.	6.4	70
45	Macroscale Superlubricity Enabled by Hydrated Alkali Metal Ions. Langmuir, 2018, 34, 11281-11291.	3.5	70
46	Effect of ionic strength on ruthenium CMP in H2O2-based slurries. Applied Surface Science, 2014, 317, 332-337.	6.1	69
47	The effect of sulfur on the number of layers in a carbon nanotube. Carbon, 2007, 45, 2152-2158.	10.3	68
48	Effects of the ultrasonic flexural vibration on the interaction between the abrasive particles; pad and sapphire substrate during chemical mechanical polishing (CMP). Applied Surface Science, 2011, 257, 2905-2911.	6.1	66
49	Self-Lubricating PTFE-Based Composites with Black Phosphorus Nanosheets. Tribology Letters, 2018, 66, 1.	2.6	66
50	Synergistic tribological behaviors of graphene oxide and nanodiamond as lubricating additives in water. Tribology International, 2019, 132, 177-184.	5.9	65
51	Optimization of groove texture profile to improve hydrodynamic lubrication performance: Theory and experiments. Friction, 2020, 8, 83-94.	6.4	65
52	Enhancement of friction performance enabled by a synergetic effect between graphene oxide and molybdenum disulfide. Carbon, 2019, 154, 266-276.	10.3	64
53	In-situ formation of tribofilm with Ti3C2Tx MXene nanoflakes triggers macroscale superlubricity. Tribology International, 2021, 154, 106695.	5.9	64
54	A comparative study between graphene oxide and diamond nanoparticles as water-based lubricating additives. Science China Technological Sciences, 2013, 56, 152-157.	4.0	63

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55	Friction and wear performance of titanium alloy against tungsten carbide lubricated with phosphate ester. Tribology International, 2016, 95, 27-34.	5.9	63
56	Investigation of the difference in liquid superlubricity between water- and oil-based lubricants. RSC Advances, 2015, 5, 63827-63833.	3.6	62
57	Tribological properties of titanium alloys under lubrication of SEE oil and aqueous solutions. Tribology International, 2017, 109, 40-47.	5.9	62
58	Superlubricity of Polyalkylene Glycol Aqueous Solutions Enabled by Ultrathin Layered Double Hydroxide Nanosheets. ACS Applied Materials & Interfaces, 2019, 11, 20249-20256.	8.0	62
59	Atomic-scale insights into the interfacial instability of superlubricity in hydrogenated amorphous carbon films. Science Advances, 2020, 6, eaay1272.	10.3	61
60	Influence of the micromorphology of reduced graphene oxide sheets on lubrication properties as a lubrication additive. Tribology International, 2018, 119, 614-621.	5.9	60
61	Highly Exfoliated Reduced Graphite Oxide Powders as Efficient Lubricant Oil Additives. Advanced Materials Interfaces, 2016, 3, 1600700.	3.7	59
62	Tribological Behavior of NiAl-Layered Double Hydroxide Nanoplatelets as Oil-Based Lubricant Additives. ACS Applied Materials & Interfaces, 2017, 9, 30891-30899.	8.0	59
63	Liquid Superlubricity of Polyethylene Glycol Aqueous Solution Achieved with Boric Acid Additive. Langmuir, 2018, 34, 3578-3587.	3.5	59
64	Hydrodynamic effect on the superlubricity of phosphoric acid between ceramic and sapphire. Friction, 2014, 2, 173-181.	6.4	58
65	Synthesis of thermally reduced graphite oxide in sulfuric acid and its application as an efficient lubrication additive. Tribology International, 2017, 116, 303-309.	5.9	58
66	Rare earth effect on microstructure, mechanical and tribological properties of CoCrW coatings. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 444, 92-98.	5.6	57
67	Monoatomic layer removal mechanism in chemical mechanical polishing process: A molecular dynamics study. Journal of Applied Physics, 2010, 107, .	2.5	56
68	Lubrication under charged conditions. Tribology International, 2015, 84, 22-35.	5.9	56
69	Rare earth effect on the microstructure and wear resistance of Ni-based coatings. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 454-455, 194-202.	5.6	55
70	Tribochemistry of Phosphoric Acid Sheared between Quartz Surfaces: A Reactive Molecular Dynamics Study. Journal of Physical Chemistry C, 2013, 117, 25604-25614.	3.1	55
71	AFM Studies on Liquid Superlubricity between Silica Surfaces Achieved with Surfactant Micelles. Langmuir, 2016, 32, 5593-5599.	3.5	55
72	Contribution of a Tribo-Induced Silica Layer to Macroscale Superlubricity of Hydrated Ions. Journal of Physical Chemistry C, 2019, 123, 20270-20277.	3.1	55

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73	In Situ Green Synthesis of the New Sandwichlike Nanostructure of Mn₃O₄/Graphene as Lubricant Additives. ACS Applied Materials & Interfaces, 2019, 11, 36931-36938.	8.0	55
74	Advancements in superlubricity. Science China Technological Sciences, 2013, 56, 2877-2887.	4.0	54
75	Tribochemical Mechanism of Amorphous Silica Asperities in Aqueous Environment: A Reactive Molecular Dynamics Study. Langmuir, 2015, 31, 1429-1436.	3.5	54
76	Superlubricity of silicone oil achieved between two surfaces by running-in with acid solution. RSC Advances, 2015, 5, 30861-30868.	3.6	53
77	Tribological behavior of polytetrafluoroethylene coating reinforced with black phosphorus nanoparticles. Applied Surface Science, 2018, 441, 670-677.	6.1	53
78	Macroscale Superlubricity Achieved on the Hydrophobic Graphene Coating with Glycerol. ACS Applied Materials & Interfaces, 2020, 12, 18859-18869.	8.0	51
79	Controllable Superlubricity of Glycerol Solution via Environment Humidity. Langmuir, 2013, 29, 11924-11930.	3.5	50
80	Synergetic effect of benzotriazole and non-ionic surfactant on copper chemical mechanical polishing in KIO4-based slurries. Thin Solid Films, 2014, 558, 272-278.	1.8	50
81	Direct Visualization of Exciton Transport in Defective Fewâ€Layer WS₂ by Ultrafast Microscopy. Advanced Materials, 2020, 32, e1906540.	21.0	50
82	Black Phosphorus Quantum Dots in Aqueous Ethylene Glycol for Macroscale Superlubricity. ACS Applied Nano Materials, 2020, 3, 4799-4809.	5.0	50
83	Investigation of running-in process in water-based lubrication aimed at achieving super-low friction. Tribology International, 2016, 102, 257-264.	5.9	49
84	Molecular behaviors in thin film lubricationâ€"Part three: Superlubricity attained by polar and nonpolar molecules. Friction, 2019, 7, 625-636.	6.4	49
85	Macroscale superlubricity of Si-doped diamond-like carbon film enabled by graphene oxide as additives. Carbon, 2021, 176, 358-366.	10.3	48
86	Abrasive rolling effects on material removal and surface finish in chemical mechanical polishing analyzed by molecular dynamics simulation. Journal of Applied Physics, 2011, 109, .	2.5	47
87	Temperature distribution along the surface of evaporating droplets. Physical Review E, 2014, 89, 032404.	2.1	47
88	Numerical optimization of the groove texture bottom profile for thrust bearings. Tribology International, 2017, 109, 69-77.	5.9	47
89	Superlubricity of 1-Ethyl-3-methylimidazolium trifluoromethanesulfonate Ionic Liquid Induced by Tribochemical Reactions. Langmuir, 2018, 34, 5245-5252.	3.5	47
90	Friction and wear behavior of PTFE coatings modified with poly (methyl methacrylate). Composites Part B: Engineering, 2019, 172, 316-322.	12.0	47

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91	Origins of Superlubricity Promoted by Hydrated Multivalent Ions. Journal of Physical Chemistry Letters, 2020, 11, 184-190.	4.6	47
92	Tribochemical Behaviors of Onion-like Carbon Films as High-Performance Solid Lubricants with Variable Interfacial Nanostructures. ACS Applied Materials & Interfaces, 2019, 11, 25535-25546.	8.0	46
93	Macroscale Superlubricity Achieved With Various Liquid Molecules: A Review. Frontiers in Mechanical Engineering, 2019, 5, .	1.8	46
94	Super-Slippery Degraded Black Phosphorus/Silicon Dioxide Interface. ACS Applied Materials & Interfaces, 2020, 12, 7717-7726.	8.0	46
95	Mechanism of Biological Liquid Superlubricity of <i>Brasenia schreberi</i> Mucilage. Langmuir, 2014, 30, 3811-3816.	3.5	45
96	Chemical mechanical polishing of steel substrate using colloidal silica-based slurries. Applied Surface Science, 2015, 330, 487-495.	6.1	45
97	Random occurrence of macroscale superlubricity of graphite enabled by tribo-transfer of multilayer graphene nanoflakes. Carbon, 2018, 138, 154-160.	10.3	45
98	Modified graphene as novel lubricating additive with high dispersion stability in oil. Friction, 2021, 9, 143-154.	6.4	45
99	Ultralow friction polymer composites incorporated with monodispersed oil microcapsules. Friction, 2021, 9, 29-40.	6.4	45
100	Ultra-low friction of a-C:H films enabled by lubrication of nanodiamond and graphene in ambient air. Carbon, 2019, 154, 203-210.	10.3	44
101	Tribological properties of rare earth oxide added Cr3C2â€“NiCr coatings. Applied Surface Science, 2007, 253, 4377-4385.	6.1	43
102	Effect of surface physicochemical properties on the lubricating properties of water film. Applied Surface Science, 2008, 254, 7137-7142.	6.1	43
103	Superlubricity of nanodiamonds glycerol colloidal solution between steel surfaces. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 489, 400-406.	4.7	43
104	Mechanism of Antiwear Property Under High Pressure of Synthetic Oil-Soluble Ultrathin MoS₂ Sheets as Lubricant Additives. Langmuir, 2018, 34, 1635-1644.	3.5	43
105	Superlubricity between Graphite Layers in Ultrahigh Vacuum. ACS Applied Materials & Interfaces, 2020, 12, 43167-43172.	8.0	43
106	Fluorinated Graphene: A Promising Macroscale Solid Lubricant under Various Environments. ACS Applied Materials & Interfaces, 2019, 11, 40470-40480.	8.0	42
107	Effects of grain boundary on wear of graphene at the nanoscale: A molecular dynamics study. Carbon, 2019, 143, 578-586.	10.3	42
108	2D metal-organic frameworks with square grid structure: A promising new-generation superlubricating material. Nano Today, 2021, 40, 101262.	11.9	42

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109	Effect of substrate morphology on the roughness evolution of ultra thin DLC films. Applied Surface Science, 2008, 254, 6742-6748.	6.1	41
110	Layered Double Hydroxide Nanoplatelets with Excellent Tribological Properties under High Contact Pressure as Water-Based Lubricant Additives. Scientific Reports, 2016, 6, 22748.	3.3	41
111	Mild thermal reduction of graphene oxide as a lubrication additive for friction and wear reduction. RSC Advances, 2017, 7, 1766-1770.	3.6	41
112	Characteristics of Liquid Lubricant Films at the Nano-Scale. Journal of Tribology, 1999, 121, 872-878.	1.9	40
113	Investigations of the superlubricity of sapphire against ruby under phosphoric acid lubrication. Friction, 2014, 2, 164-172.	6.4	40
114	Zwitterionic Hydrogel Incorporated Graphene Oxide Nanosheets with Improved Strength and Lubricity. Langmuir, 2019, 35, 11452-11462.	3.5	40
115	Superlubricity under ultrahigh contact pressure enabled by partially oxidized black phosphorus nanosheets. Npj 2D Materials and Applications, 2021, 5, .	7.9	40
116	Hexadecane-containing sandwich structure based triboelectric nanogenerator with remarkable performance enhancement. Nano Energy, 2021, 87, 106198.	16.0	40
117	Electrochemical investigation of copper passivation kinetics and its application to low-pressure CMP modeling. Applied Surface Science, 2013, 265, 764-770.	6.1	39
118	Preparation and tribological properties of solid-liquid synergetic self-lubricating PTFE/SiO2/PAO6 composites. Composites Part B: Engineering, 2020, 196, 108133.	12.0	39
119	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.	9.4	39
120	Tribochemical mechanism of superlubricity in graphene quantum dots modified DLC films under high contact pressure. Carbon, 2021, 173, 329-338.	10.3	38
121	The protective properties of ultra-thin diamond like carbon films for high density magnetic storage devices. Applied Surface Science, 2009, 256, 322-328.	6.1	37
122	Investigation of Superlubricity Achieved by Polyalkylene Glycol Aqueous Solutions. Advanced Materials Interfaces, 2016, 3, 1600531.	3.7	37
123	Molecular Origin of Superlubricity between Graphene and a Highly Hydrophobic Surface in Water. Journal of Physical Chemistry Letters, 2019, 10, 2978-2984.	4.6	37
124	Origin of hydration lubrication of zwitterions on graphene. Nanoscale, 2018, 10, 16887-16894.	5.6	36
125	Nano-tribological properties and mechanisms of the liquid crystal as an additive. Science Bulletin, 2001, 46, 1227-1232.	1.7	35
126	Investigation of the running-in process and friction coefficient under the lubrication of ionic liquid/water mixture. Applied Surface Science, 2009, 255, 6408-6414.	6.1	35

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127	Functions of TrilonÂ® P as a polyamine in copper chemical mechanical polishing. Applied Surface Science, 2014, 288, 265-274.	6.1	35
128	Microstructure, mechanical and adhesive properties of CrN/CrTiAlSiN/WCrTiAlN multilayer coatings deposited on nitrided AISI 4140 steel. Materials Characterization, 2019, 147, 353-364.	4.4	35
129	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.	8.0	35
130	Tribological behavior of layered double hydroxides with various chemical compositions and morphologies as grease additives. Friction, 2021, 9, 952-962.	6.4	35
131	Investigations on the mechanism of superlubricity achieved with phosphoric acid solution by direct observation. Journal of Applied Physics, 2013, 114, 114901.	2.5	34
132	Interfacial Nanostructure of 2D Ti₃C₂/Graphene Quantum Dots Hybrid Multicoating for Ultralow Wear. Advanced Engineering Materials, 2020, 22, 1901369.	3.5	34
133	MoirÃ© superlattice-level stick-slip instability originated from geometrically corrugated graphene on a strongly interacting substrate. 2D Materials, 2017, 4, 025079.	4.4	33
134	Synthesis and characterizations of zwitterionic copolymer hydrogels with excellent lubrication behavior. Tribology International, 2020, 143, 106026.	5.9	33
135	Influence Factors on Mechanisms of Superlubricity in DLC Films: A Review. Frontiers in Mechanical Engineering, 2020, 6, .	1.8	33
136	An investigation on the tribological behaviors of steel/copper and steel/steel friction pairs via lubrication with a graphene additive. Friction, 2021, 9, 228-238.	6.4	33
137	Shear-Induced Interfacial Structural Conversion Triggers Macroscale Superlubricity: From Black Phosphorus Nanoflakes to Phosphorus Oxide. ACS Applied Materials & Interfaces, 2021, 13, 31947-31956.	8.0	33
138	Investigation of the film formation mechanism of oil-in-water (O/W) emulsions. Soft Matter, 2011, 7, 4207.	2.7	32
139	Mechanisms for nano particle removal in brush scrubber cleaning. Applied Surface Science, 2011, 257, 3055-3062.	6.1	32
140	Enhancement of friction performance of fluorinated graphene and molybdenum disulfide coating by microdimple arrays. Carbon, 2020, 167, 122-131.	10.3	32
141	Radial-velocity profile along the surface of evaporating liquid droplets. Soft Matter, 2012, 8, 5797.	2.7	31
142	Exciton Radiative Recombination Dynamics and Nonradiative Energy Transfer in Two-Dimensional Transition-Metal Dichalcogenides. Journal of Physical Chemistry C, 2019, 123, 10087-10093.	3.1	31
143	A novel route to the synthesis of an Fe₃O₄/h-BN 2D nanocomposite as a lubricant additive. RSC Advances, 2019, 9, 6583-6588.	3.6	31
144	Ultrastable Lubricating Properties of Robust Self-Repairing Tribofilms Enabled by in Situ-Assembled Polydopamine Nanoparticles. Langmuir, 2020, 36, 852-861.	3.5	31

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145	Catalytically Active Oil-Based Lubricant Additives Enabled by Calcining Niâ€“Al Layered Double Hydroxides. Journal of Physical Chemistry Letters, 2020, 11, 113-120.	4.6	31
146	The Failure of Fluid Film at Nano-Scale. Tribology Transactions, 1999, 42, 912-916.	2.0	30
147	Extrusion formation mechanism on silicon surface under the silica cluster impact studied by molecular dynamics simulation. Journal of Applied Physics, 2008, 104, .	2.5	30
148	Analysis of Measurement Inaccuracy in Superlubricity Tests. Tribology Transactions, 2013, 56, 141-147.	2.0	30
149	Investigation of Protein Adsorption Mechanism and Biotribological Properties at Simulated Stem-Cement Interface. Journal of Tribology, 2013, 135, .	1.9	30
150	Molecular behaviors in thin film lubricationâ€"Part two: Direct observation of the molecular orientation near the solid surface. Friction, 2019, 7, 479-488.	6.4	30
151	Macroscale superlubricity achieved between zwitterionic copolymer hydrogel and sapphire in water. Materials and Design, 2020, 188, 108441.	7.0	30
152	Superhigh-exfoliation graphene with a unique two-dimensional (2D) microstructure for lubrication application. Applied Surface Science, 2020, 513, 145608.	6.1	30
153	Preparation of Î±-alumina-g-polyacrylamide composite abrasive and chemical mechanical polishing behavior. Thin Solid Films, 2008, 516, 3005-3008.	1.8	29
154	Effects of Chemical Additives of CMP Slurry on Surface Mechanical Characteristics and Material Removal of Copper. Tribology Letters, 2012, 45, 309-317.	2.6	29
155	Material Removal Mechanism of Copper CMP from a Chemicalâ€“Mechanical Synergy Perspective. Tribology Letters, 2013, 49, 11-19.	2.6	29
156	Tribological properties of few-layer graphene oxide sheets as oil-based lubricant additives. Chinese Journal of Mechanical Engineering (English Edition), 2016, 29, 439-444.	3.7	29
157	Molecular behaviors in thin film lubricationâ€"Part one: Film formation for different polarities of molecules. Friction, 2019, 7, 372-387.	6.4	29
158	Coreâ€“shell nanospheres to achieve ultralow friction polymer nanocomposites with superior mechanical properties. Nanoscale, 2019, 11, 8237-8246.	5.6	29
159	A molecular dynamics study of lubricating mechanism of graphene nanoflakes embedded in Cu-based nanocomposite. Applied Surface Science, 2020, 511, 145620.	6.1	29
160	Film forming characteristics of oil-in-water emulsion with super-low oil concentration. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2009, 340, 70-76.	4.7	28
161	Failure analysis of journal bearing used in turboset of a power plant. Materials & Design, 2013, 52, 923-931.	5.1	28
162	Experimental Investigation of Centrifugal Effects on Lubricant Replenishment in the Starved Regime at High Speeds. Tribology Letters, 2015, 59, 1.	2.6	28

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163	The film forming behavior at high speeds under oilâˆ’air lubrication. Tribology International, 2015, 91, 6-13.	5.9	27
164	Superlubricity of 1,3-diketone based on autonomous viscosity control at various velocities. Tribology International, 2018, 126, 127-132.	5.9	27
165	Understanding Interlayer Contact Conductance in Twisted Bilayer Graphene. Small, 2020, 16, e1902844.	10.0	27
166	In situ synthesis of Mn3O4/graphene nanocomposite and its application as a lubrication additive at high temperatures. Applied Surface Science, 2021, 546, 149019.	6.1	27
167	Preparation and characterization of La2O3 doped diamond-like carbon nanofilms (I): Structure analysis. Diamond and Related Materials, 2007, 16, 1905-1911.	3.9	26
168	Combined effects of underlying substrate and evaporative cooling on the evaporation of sessile liquid droplets. Soft Matter, 2015, 11, 5632-5640.	2.7	26
169	Laser irradiation-induced laminated graphene/MoS₂ composites with synergistically improved tribological properties. Nanotechnology, 2018, 29, 265704.	2.6	26
170	Influence of a carbon-based tribofilm induced by the friction temperature on the tribological properties of impregnated graphite sliding against a cemented carbide. Friction, 2021, 9, 686-696.	6.4	26
171	Micro-Bubble Phenomenon in Nanoscale Water-based Lubricating Film Induced by External Electric Field. Tribology Letters, 2008, 29, 169-176.	2.6	25
172	A highly tough and ultralow friction resin nanocomposite with crosslinkable polymer-encapsulated nanoparticles. Composites Part B: Engineering, 2020, 197, 108157.	12.0	25
173	Wear in-situ self-healing polymer composites incorporated with bifunctional microcapsules. Composites Part B: Engineering, 2022, 232, 109566.	12.0	25
174	Comparison of surface damage under the dry and wet impact: Molecular dynamics simulation. Applied Surface Science, 2011, 258, 1756-1761.	6.1	24
175	Experimental Investigation of Lubrication Film Starvation of Polyalphaolefin Oil at High Speeds. Tribology Letters, 2014, 56, 491-500.	2.6	24
176	Preparation of self-lubricating NiTi alloy and its self-adaptive behavior. Tribology International, 2019, 130, 43-51.	5.9	24
177	â€œFreezingâ€•of Nanoconfined Fluids under an Electric Field. Langmuir, 2010, 26, 1445-1448.	3.5	23
178	Modification on the tribological properties of ceramics lubricated by water using fullerenol as a lubricating additive. Science China Technological Sciences, 2012, 55, 2656-2661.	4.0	23
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