AlÄº ErdemÄºr

List of Publications by Year
in descending order

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273 papers	23,017 citations	10986 71 h-index	9103 144 g-index
281 all docs	281 docs citations	281 times ranked	10698 citing authors

#	Article	IF	Citations
1	Global energy consumption due to friction in passenger cars. Tribology International, 2012, 47, 221-234.	5.9	1,156
2	Graphene: a new emerging lubricant. Materials Today, 2014, 17, 31-42.	14.2	1,115
3	Influence of tribology on global energy consumption, costs and emissions. Friction, 2017, 5, 263-284.	6.4	1,114
4	Tribology of diamond-like carbon films: recent progress and future prospects. Journal Physics D: Applied Physics, 2006, 39, R311-R327.	2.8	1,003
5	Macroscale superlubricity enabled by graphene nanoscroll formation. Science, 2015, 348, 1118-1122.	12.6	665
6	Few layer graphene to reduce wear and friction on sliding steel surfaces. Carbon, 2013, 54, 454-459.	10.3	607
7	A study of the wear mechanism of diamond-like carbon films. Surface and Coatings Technology, 1996, 82, 48-56.	4.8	514
8	The effect of laser surface texturing on transitions in lubrication regimes during unidirectional sliding contact. Tribology International, 2005, 38, 219-225.	5.9	497
9	The role of hydrogen in tribological properties of diamond-like carbon films. Surface and Coatings Technology, 2001, 146-147, 292-297.	4.8	477
10	Review of engineered tribological interfaces for improved boundary lubrication. Tribology International, 2005, 38, 249-256.	5.9	456
11	Reduced wear and friction enabled by graphene layers on sliding steel surfaces in dry nitrogen. Carbon, 2013, 59, 167-175.	10.3	417
12	Carbon-based tribofilms from lubricating oils. Nature, 2016, 536, 67-71.	27.8	370
13	Approaches for Achieving Superlubricity in Two-Dimensional Materials. ACS Nano, 2018, 12, 2122-2137.	14.6	364
14	Ultrananocrystalline diamond thin films for MEMS and moving mechanical assembly devices. Diamond and Related Materials, 2001, 10, 1952-1961.	3.9	349
15	Global energy consumption due to friction in trucks and buses. Tribology International, 2014, 78, 94-114.	5.9	340
16	The impact of tribology on energy use and CO2 emission globally and in combustion engine and electric cars. Tribology International, 2019, 135, 389-396.	5.9	335
17	An investigation of the relationship between graphitization and frictional behavior of DLC coatings. Surface and Coatings Technology, 1996, 86-87, 564-568.	4.8	326
18	Synthesis of diamondlike carbon films with superlow friction and wear properties. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2000, 18, 1987-1992.	2.1	312

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19	Solid Lubricant Coatings: Recent Developments and Future Trends. Tribology Letters, 2004, 17, 389-397.	2.6	311
20	Global energy consumption due to friction and wear in the mining industry. Tribology International, 2017, 115, 116-139.	5.9	294
21	A crystal-chemical approach to lubrication by solid oxides. Tribology Letters, 2000, 8, 97-102.	2.6	292
22	Genesis of superlow friction and wear in diamondlike carbon films. Tribology International, 2004, 37, 1005-1012.	5.9	267
23	Friction of diamond-like carbon films in different atmospheres. Wear, 2003, 254, 1070-1075.	3.1	264
24	Extraordinary Macroscale Wear Resistance of One Atom Thick Graphene Layer. Advanced Functional Materials, 2014, 24, 6640-6646.	14.9	251
25	Tribology of two-dimensional materials: From mechanisms to modulating strategies. Materials Today, 2019, 26, 67-86.	14.2	250
26	Superlow friction behavior of diamond-like carbon coatings: Time and speed effects. Applied Physics Letters, 2001, 78, 2449-2451.	3.3	230
27	Friction-induced structural transformations of diamondlike carbon coatings under various atmospheres. Surface and Coatings Technology, 2003, 163-164, 444-450.	4.8	211
28	Operando tribochemical formation of onion-like-carbon leads to macroscale superlubricity. Nature Communications, 2018, 9, 1164.	12.8	199
29	Friction and wear behavior of laser textured surface under lubricated initial point contact. Wear, 2011, 271, 1719-1725.	3.1	194
30	The Effect of Laser Texturing of Steel Surfaces and Speed-Load Parameters on the Transition of Lubrication Regime from Boundary to Hydrodynamic. Tribology Transactions, 2004, 47, 299-307.	2.0	193
31	A crystal chemical approach to the formulation of self-lubricating nanocomposite coatings. Surface and Coatings Technology, 2005, 200, 1792-1796.	4.8	192
32	Frictional behavior of diamondlike carbon films in vacuum and under varying water vapor pressure. Surface and Coatings Technology, 2003, 163-164, 535-540.	4.8	177
33	Synthesis of superlow-friction carbon films from highly hydrogenated methane plasmas. Surface and Coatings Technology, 2000, 133-134, 448-454.	4.8	166
34	A tribological investigation of the graphite-to-diamond-like behavior of amorphous carbon films ion beam deposited on ceramic substrates. Surface and Coatings Technology, 1991, 50, 17-23.	4.8	162
35	Effect of Medications for Root Canal Treatment on Bonding to Root Canal Dentin. Journal of Endodontics, 2004, 30, 113-116.	3.1	162
36	Tribological properties of nanocrystalline diamond films. Surface and Coatings Technology, 1999, 120-121, 565-572.	4.8	161

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37	Comparative tribological behaviors of TiN, CrN and MoNCu nanocomposite coatings. Tribology International, 2008, 41, 49-59.	5.9	155
38	Influence of environmental parameters on the frictional behavior of DLC coatings. Surface and Coatings Technology, 1997, 94-95, 463-468.	4.8	149
39	Achieving superlubricity in DLC films by controlling bulk, surface, and tribochemistry. Friction, 2014, 2, 140-155.	6.4	142
40	Evaluation of the Effect of Endodontic Irrigation Solutions on the Microhardness and the Roughness of Root Canal Dentin. Journal of Endodontics, 2004, 30, 792-795.	3.1	141
41	Tribological characteristics of DLC films and duplex plasma nitriding/DLC coating treatments. Surface and Coatings Technology, 1995, 73, 39-45.	4.8	140
42	Material wear and fatigue in wind turbine Systems. Wear, 2013, 302, 1583-1591.	3.1	139
43	Comparison of hexahedral and tetrahedral elements in finite element analysis of the foot and footwear. Journal of Biomechanics, 2011, 44, 2337-2343.	2.1	132
44	Environmental effects on the friction of hydrogenated DLC films. Tribology Letters, 2006, 21, 51-56.	2.6	131
45	Effect of source gas chemistry on tribological performance of diamond-like carbon films. Diamond and Related Materials, 2000, 9, 632-637.	3.9	126
46	Formation of ultralow friction surface films on boron carbide. Applied Physics Letters, 1996, 68, 1637-1639.	3.3	121
47	Tribology of naturally occurring boric acid films on boron carbide. Surface and Coatings Technology, 1996, 86-87, 507-510.	4.8	110
48	Nanoscale friction properties of graphene and graphene oxide. Diamond and Related Materials, 2015, 54, 91-96.	3.9	108
49	Graphene - MoS2 ensembles to reduce friction and wear in DLC-Steel contacts. Carbon, 2019, 146, 524-527.	10.3	108
50	Superior wear resistance of diamond and DLC coatings. Current Opinion in Solid State and Materials Science, 2018, 22, 243-254.	11.5	105
51	Friction and wear behaviour of boron based surface treatment and nano-particle lubricant additives for wind turbine gearbox applications. Wear, 2011, 271, 1754-1760.	3.1	101
52	Characterization of transfer layers forming on surfaces sliding against diamond-like carbon. Surface and Coatings Technology, 1996, 86-87, 692-697.	4.8	97
53	Physical and tribological properties of diamond films grown in argoncarbon plasmas. Thin Solid Films, 1995, 270, 154-159.	1.8	96
54	Preparation of ultralow-friction surface films on vanadium diboride. Wear, 1997, 205, 236-239.	3.1	95

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55	A study of the formation and self-lubrication mechanisms of boric acid films on boric oxide coatings. Surface and Coatings Technology, 1990, 43-44, 588-596.	4.8	90
56	Friction and wear performance of ion-beam-deposited diamond-like carbon films on steel substrates. Diamond and Related Materials, 1994, 3, 119-125.	3.9	90
57	Reinforcement effect of polyethylene fibre in root-filled teeth: comparison of two restoration techniques. International Endodontic Journal, 2006, 39, 136-142.	5.0	90
58	Effects of Endodontic Irrigation Solutions on Mineral Content of Root Canal Dentin Using ICP-AES Technique. Journal of Endodontics, 2005, 31, 187-189.	3.1	89
59	Kinetics of electrochemical boriding of low carbon steel. Applied Surface Science, 2011, 257, 6928-6934.	6.1	88
60	Characterization of transfer layers on steel surfaces sliding against diamond-like hydrocarbon films in dry nitrogen. Surface and Coatings Technology, 1995, 76-77, 559-563.	4.8	87
61	Design criteria for superlubricity in carbon films and related microstructures. Tribology International, 2004, 37, 577-583.	5.9	86
62	Mechanical and tribological properties of CrAlN-Ag self-lubricating films. Surface and Coatings Technology, 2007, 202, 1011-1016.	4.8	84
63	Ultrananocrystalline Diamond Film as a Wear-Resistant and Protective Coating for Mechanical Seal Applications. Tribology Transactions, 2005, 48, 24-31.	2.0	82
64	In situ TEM studies of tribo-induced bonding modifications in near-frictionless carbon films. Carbon, 2010, 48, 587-591.	10.3	82
65	Understanding Run-In Behavior of Diamond-Like Carbon Friction and Preventing Diamond-Like Carbon Wear in Humid Air. Langmuir, 2011, 27, 12702-12708.	3.5	82
66	Effect of EDTA and Citric Acid Solutions on the Microhardness and the Roughness of Human Root Canal Dentin. Journal of Endodontics, 2005, 31, 107-110.	3.1	80
67	Shear Bond Strength of Three Resin Based Sealers to Dentin With and Without the Smear Layer. Journal of Endodontics, 2005, 31, 293-296.	3.1	80
68	The Tribological Properties of Low-friction Hydrogenated Diamond-like Carbon Measured in Ultrahigh Vacuum. Tribology Letters, 2005, 20, 221-227.	2.6	77
69	Fundamental understanding of the tribological and thermal behavior of Agâ€“MoS2 nanoparticle-based multi-component lubricating system. Wear, 2012, 288, 9-16.	3.1	77
70	Graphene as a protective coating and superior lubricant for electrical contacts. Applied Physics Letters, 2014, 105, .	3.3	75
71	Electrochemical boriding of titanium for improved mechanical properties. Surface and Coatings Technology, 2010, 204, 3935-3939.	4.8	74
72	Superlubricity: Frictionâ€™s vanishing act. Physics Today, 2018, 71, 40-46.	0.3	73

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73	Tribological Properties of Nanodiamond-Epoxy Composites. Tribology Letters, 2012, 47, 195-202.	2.6	72
74	The growth of single Fe2B phase on low carbon steel via phase homogenization in electrochemical boriding (PHEB). Surface and Coatings Technology, 2011, 206, 2005-2011.	4.8	70
75	Tribological Performance of Diamond and Diamondlike Carbon Films at Elevated Temperatures. Tribology Transactions, 1996, 39, 787-794.	2.0	68
76	Friction and wear performance of diamond-like carbon films grown in various source gas plasmas. Surface and Coatings Technology, 1999, 120-121, 589-593.	4.8	68
77	A study of the corrosion behavior of TiN films. Materials Science and Engineering, 1985, 69, 89-93.	0.1	67
78	Effect of microstructure and thickness on the friction and wear behavior of CrN coatings. Wear, 2013, 302, 963-971.	3.1	66
79	Concurrent musculoskeletal dynamics and finite element analysis predicts altered gait patterns to reduce foot tissue loading. Journal of Biomechanics, 2010, 43, 2810-2815.	2.1	65
80	Friction and wear properties of smooth diamond films grown in fullerene + argon plasmas. Diamond and Related Materials, 1996, 5, 923-931.	3.9	64
81	Relationship of hertzian contact pressure to friction behavior of self-lubricating boric acid films. Surface and Coatings Technology, 1991, 49, 435-438.	4.8	63
82	Effect of source gas and deposition method on friction and wear performance of diamondlike carbon films. Surface and Coatings Technology, 1997, 94-95, 525-530.	4.8	63
83	Ultralow friction behavior of borided steel surfaces after flash annealing. Applied Physics Letters, 1996, 68, 923-925.	3.3	62
84	Superlubricity of Polyalkylene Glycol Aqueous Solutions Enabled by Ultrathin Layered Double Hydroxide Nanosheets. ACS Applied Materials & Interfaces, 2019, 11, 20249-20256.	8.0	62
85	Surface Structure of Hydrogenated Diamond-like Carbon: Origin of Run-In Behavior Prior to Superlubricious Interfacial Shear. Langmuir, 2015, 31, 1711-1721.	3.5	61
86	Friction and Wear Mechanisms of Smooth Diamond Films During Sliding in Air and Dry Nitrogen. Tribology Transactions, 1997, 40, 667-675.	2.0	60
87	Evaluation of electrochemical boriding of Inconel 600. Surface and Coatings Technology, 2013, 215, 452-459.	4.8	60
88	Tribological Behavior of NiAl-Layered Double Hydroxide Nanoplatelets as Oil-Based Lubricant Additives. ACS Applied Materials & Interfaces, 2017, 9, 30891-30899.	8.0	59
89	Durability and tribological performance of smooth diamond films produced by Ar-C60 microwave plasmas and by laser polishing. Surface and Coatings Technology, 1997, 94-95, 537-542.	4.8	57
90	On the hydrogen lubrication mechanism(s) of DLC films: An imaging TOF-SIMS study. Surface and Coatings Technology, 2008, 203, 750-755.	4.8	57

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91	TOF-SIMS and XPS characterization of diamond-like carbon films after tests in inert and oxidizing environments. Wear, 2008, 265, 244-254.	3.1	57
92	Tribological analysis of TiN and DLC coated contacts by 3D FEM modelling and stress simulation. Wear, 2008, 264, 877-884.	3.1	56
93	Superlubricity of the DLC films-related friction system at elevated temperature. RSC Advances, 2015, 5, 93147-93154.	3.6	55
94	Phase Transformations in Silicon Under Dry and Lubricated Sliding. Tribology Transactions, 2002, 45, 372-380.	2.0	54
95	Rolling-contact fatigue and wear resistance of hard coatings on bearing-steel substrates. Surface and Coatings Technology, 1992, 54-55, 482-489.	4.8	53
96	Operando formation of an ultra-low friction boundary film from synthetic magnesium silicon hydroxide additive. Tribology International, 2017, 110, 35-40.	5.9	53
97	Tribological performance of some alternative bearing materials for artificial joints. Wear, 2003, 255, 1015-1021.	3.1	52
98	Effect of tribochemistry on lubricity of DLC films in hydrogen. Surface and Coatings Technology, 2014, 257, 241-246.	4.8	52
99	Title is missing!. Tribology Letters, 2003, 15, 51-55.	2.6	51
100	Surface analytical investigation of nearly-frictionless carbon films after tests in dry and humid nitrogen. Surface and Coatings Technology, 2007, 201, 7401-7407.	4.8	50
101	Self-replenishing solid lubricant films on boron carbide. Surface Engineering, 1999, 15, 291-295.	2.2	49
102	Friction and wear of diamond and diamond-like carbon films. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2002, 216, 387-400.	1.8	48
103	The effects of beam energy and substrate temperature on the tribological properties of hard-carbon films on aluminum. Surface and Coatings Technology, 1992, 51, 139-145.	4.8	47
104	Relation of Certain Quantum Chemical Parameters to Lubrication Behavior of Solid Oxides. International Journal of Molecular Sciences, 2005, 6, 203-218.	4.1	47
105	On the possible role of triboplasma in friction and wear of diamond-like carbon films in hydrogen-containing environments. Journal Physics D: Applied Physics, 2009, 42, 075307.	2.8	47
106	Effects of high-temperature hydrogenation treatment on sliding friction and wear behavior of carbide-derived carbon films. Surface and Coatings Technology, 2004, 188-189, 588-593.	4.8	46
107	Correlation of interface structure with adhesive strength of ion-plated TiN hard coatings. Surface and Coatings Technology, 1989, 39-40, 365-376.	4.8	45
108	Transfer of 319 Al alloy to titanium diboride and titanium nitride based (TiAlN, TiCN, TiN) coatings: effects of sliding speed, temperature and environment. Surface and Coatings Technology, 2005, 200, 2260-2270.	4.8	45

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109	Structural order in near-frictionless hydrogenated diamondlike carbon films probed at three length scales via transmission electron microscopy. Physical Review B, 2007, 75, .	3.2	44
110	Surface metallurgical and tribological characteristics of TiN-coated bearing steels. Surface and Coatings Technology, 1988, 36, 755-763.	4.8	42
111	Tribological Properties of Hard Carbon Films on Zirconia Ceramics. Tribology Transactions, 1996, 39, 735-744.	2.0	42
112	Finite Element Modeling of the First Ray of the Foot: A Tool for the Design of Interventions. Journal of Biomechanical Engineering, 2007, 129, 750-756.	1.3	42
113	Effects of Different Curing Units and Luting Agents on Push-out Bond Strength of Translucent Posts. Journal of Endodontics, 2010, 36, 1521-1525.	3.1	42
114	Quantification of oxygenated species on a diamond-like carbon (DLC) surface. Applied Surface Science, 2011, 257, 7633-7638.	6.1	42
115	Achieving Ultralow Friction and Wear by Tribocatalysis: Enabled by In-Operando Formation of Nanocarbon Films. ACS Nano, 2021, 15, 18865-18879.	14.6	42
116	Solid/liquid lubrication of ceramics at elevated temperatures. Wear, 1997, 203-204, 588-595.	3.1	41
117	Tribological Properties of Carbon Coatings Produced by High Temperature Chlorination of Silicon Carbide. Tribology Transactions, 2000, 43, 809-815.	2.0	41
118	Effect of Solvents on Bonding to Root Canal Dentin. Journal of Endodontics, 2004, 30, 589-592.	3.1	41
119	Development of ultrananocrystalline diamond (UNCD) coatings for multipurpose mechanical pump seals. Wear, 2011, 270, 325-331.	3.1	41
120	Ironâ€Nanoparticle Driven Tribochemistry Leading to Superlubric Sliding Interfaces. Advanced Materials Interfaces, 2019, 6, 1901416.	3.7	41
121	Insights into â€œnear-frictionless carbon filmsâ€. Journal of Applied Physics, 2004, 95, 7765-7771.	2.5	40
122	Assessment of antibacterial activity of EndoREZ. Oral Surgery Oral Medicine Oral Pathology Oral Radiology and Endodontics, 2006, 102, 119-126.	1.4	39
123	Top-surface characterization of a near frictionless carbon film. Diamond and Related Materials, 2007, 16, 209-215.	3.9	39
124	Tribochemistry of Carbon Films in Oxygen and Humid Environments: Oxidative Wear and Galvanic Corrosion. Langmuir, 2016, 32, 1996-2004.	3.5	39
125	Nano-texture for a wear-resistant and near-frictionless diamond-like carbon. Carbon, 2014, 73, 403-412.	10.3	38
126	An analytical study of tribofilms generated by the interaction of ashless antiwear additives with ZDDP using XANES and nano-indentation. Tribology International, 2015, 82, 43-57.	5.9	38

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127	Electrochemical boriding and characterization of AISI D2 tool steel. Thin Solid Films, 2011, 520, 1582-1588.	1.8	37
128	Comparison of different irrigation activation techniques on smear layer removal: An in vitro study. Microscopy Research and Technique, 2015, 78, 230-239.	2.2	37
129	Evaluation of pH and calcium ion release of Acroseal sealer in comparison with Apexit and Sealapex sealers. Oral Surgery Oral Medicine Oral Pathology Oral Radiology and Endodontics, 2007, 103, e86-e91.	1.4	36
130	Effect of copper addition on the temperature dependent reciprocating wear behaviour of CrN coatings. Surface and Coatings Technology, 2007, 202, 866-870.	4.8	35
131	Analysis of plastic deformation in diamond like carbon filmsâ€“steel substrate system with tribological tests. Thin Solid Films, 2011, 519, 3203-3212.	1.8	35
132	Effects of Nanoscale Surface Texture and Lubricant Molecular Structure on Boundary Lubrication in Liquid. Langmuir, 2013, 29, 13419-13426.	3.5	35
133	Fractional Coverage Model for the Adsorption and Removal of Gas Species and Application to Superlow Friction Diamond-Like Carbon. Journal of Tribology, 2004, 126, 615-619.	1.9	34
134	Sliding Wear of Silicon Carbide-Titanium Boride Ceramic-Matrix Composite. Journal of the American Ceramic Society, 1993, 76, 511-517.	3.8	33
135	Structure and tribological behaviour of nanoscale multilayer C/Cr coatings deposited by the combined steered cathodic arc/unbalanced magnetron sputtering technique. Thin Solid Films, 2004, 447-448, 7-13.	1.8	33
136	Accuracy of two electronic apex locators in primary teeth with and without apical resorption: a laboratory study. International Endodontic Journal, 2008, 41, 436-441.	5.0	32
137	Influence of process duration on structure and chemistry of borided low carbon steel. Surface and Coatings Technology, 2010, 205, 1578-1583.	4.8	32
138	Is Ultra-Low Friction Needed to Prevent Wear of Diamond-Like Carbon (DLC)? An Alcohol Vapor Lubrication Study for Stainless Steel/DLC Interface. Tribology Letters, 2011, 42, 285-291.	2.6	32
139	Tribochemical Conversion of Methane to Graphene and Other Carbon Nanostructures: Implications for Friction and Wear. ACS Applied Nano Materials, 2020, 3, 8060-8067.	5.0	32
140	Tribological behavior of hard carbon coatings on steel substrates. Wear, 2003, 255, 854-858.	3.1	31
141	Effect of different irrigant activation protocols on push-out bond strength. Lasers in Medical Science, 2015, 30, 2143-2149.	2.1	31
142	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
143	Bipolar Tribocharging Signal During Friction Force Fluctuations at Metalâ€“Insulator Interfaces. Angewandte Chemie - International Edition, 2014, 53, 12101-12105.	13.8	30
144	Rolling contact fatigue behavior of Cu and TiN coatings on bearing steel substrates. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1985, 3, 2348-2353.	2.1	29

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145	Dry Lubricant Films for Aluminum Forming. Tribology Transactions, 2000, 43, 535-541.	2.0	29
146	Investigation of Initial and Steady-State Sliding Behavior of a Nearly Frictionless Carbon Film by Imaging 2- and 3-D TOF-SIMS. Tribology Letters, 2007, 28, 241-249.	2.6	29
147	Fatigue resistant carbon coatings for rolling/sliding contacts. Tribology International, 2016, 98, 172-178.	5.9	29
148	Nano-structured carbide-derived carbon films and their tribology. Tsinghua Science and Technology, 2005, 10, 699-703.	6.1	28
149	Plasma-Functionalized Polytetrafluoroethylene Nanoparticles for Improved Wear in Lubricated Contact. ACS Applied Materials & Interfaces, 2017, 9, 25631-25641.	8.0	28
150	Solid Lubrication of Ceramic Surfaces by IAD-Silver Coatings for Heat Engine Applications. Tribology Transactions, 1990, 33, 511-518.	2.0	27
151	The boron oxideâ€“boric acid system: Nanoscale mechanical and wear properties. Journal of Materials Research, 1999, 14, 3455-3466.	2.6	26
152	A Gas-Surface Interaction Model for Spatial and Time-Dependent Friction Coefficient in Reciprocating Contacts: Applications to Near-Frictionless Carbon. Journal of Tribology, 2005, 127, 82-88.	1.9	26
153	The Detection of Salivary Minerals in Smokers and Non-Smokers With Chronic Periodontitis by the Inductively Coupled Plasma-Atomic Emission Spectrophotometry Technique. Journal of Periodontology, 2006, 77, 990-995.	3.4	26
154	Crystal Chemistry and Solid Lubricating Properties of the Monochalcogenides Gallium Selenide and Tin Selenide. Tribology Transactions, 1994, 37, 471-478.	2.0	25
155	Ultra-fast boriding of nickel aluminide. Thin Solid Films, 2011, 520, 1575-1581.	1.8	25
156	Synthetic Lubricants Derived from Plastic Waste and their Tribological Performance. ChemSusChem, 2021, 14, 4181-4189.	6.8	25
157	Interaction of plasma functionalized TiO2 nanoparticles and ZDDP on friction and wear under boundary lubrication. Applied Surface Science, 2019, 489, 372-383.	6.1	24
158	Periodic ab initio calculations of orthoboric acid. Journal of Chemical Physics, 2000, 113, 3338-3343.	3.0	23
159	Evaluation of DLC coatings for spark-ignited, direct-injected fuel systems. Surface and Coatings Technology, 2004, 179, 237-244.	4.8	23
160	Tribological Performance of EP Lubricants with Phosphorus-Based Additives. Tribology Transactions, 2013, 56, 645-651.	2.0	23
161	Tribological behavior of oil-lubricated TiN-coated steel. Surface and Coatings Technology, 1992, 54-55, 496-501.	4.8	22
162	Effect of Gutta-percha Solvents on Mineral Contents of Human Root Dentin Using ICP-AES Technique. Journal of Endodontics, 2004, 30, 54-56.	3.1	22

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163	A Three-Dimensional Inverse Finite Element Analysis of the Heel Pad. Journal of Biomechanical Engineering, 2012, 134, 031002.	1.3	22
164	Synthesis and Tribology of Micro-Carbon Sphere Additives for Enhanced Lubrication. Tribology Transactions, 2015, 58, 474-480.	2.0	22
165	Mechanism of Superlubricity Conversion with Polyalkylene Glycol Aqueous Solutions. Langmuir, 2019, 35, 11784-11790.	3.5	22
166	Near-surface characterization of amorphous carbon films by neutron reflectivity. Applied Physics Letters, 2003, 83, 452-454.	3.3	21
167	Interaction of phosphonium ionic liquids with borate esters at tribological interfaces. RSC Advances, 2016, 6, 53148-53161.	3.6	21
168	Solid Lubricants and Self-Lubricating Films. Mechanics & Materials Science, 2000, , .	0.1	20
169	Orthodontic movement of a horizontally fractured tooth: a case report. Dental Traumatology, 2005, 21, 160-164.	2.0	20
170	Synthesis and Tribology of Carbide-Derived Carbon Films. International Journal of Applied Ceramic Technology, 2006, 3, 236-244.	2.1	20
171	Influence of tribofilm on superlubricity of highly-hydrogenated amorphous carbon films in inert gaseous environments. Science China Technological Sciences, 2016, 59, 1795-1803.	4.0	20
172	The Synergistic Effects of Solid and Liquid Lubrication on the Tribological Behavior of Transformation-Toughened ZrO2Ceramics. Tribology Transactions, 1992, 35, 287-297.	2.0	19
173	Tribology of Diamond, Diamond-like Carbon and Related Films. Mechanics & Materials Science, 2000, , .	0.1	19
174	Superlubricity in Diamondlike Carbon Films. , 2007, , 253-271.		19
175	Quantification of sliding-induced phase transformation in N3FC diamond-like carbon films. Diamond and Related Materials, 2011, 20, 1143-1148.	3.9	19
176	Friction reducing properties of onion-like carbon based lubricant under high contact pressure. Tribology - Materials, Surfaces and Interfaces, 2012, 6, 116-120.	1.4	19
177	Direct Observation of Tribochemically Assisted Wear on Diamond-Like Carbon Thin Films. Tribology Letters, 2013, 49, 351-356.	2.6	19
178	Comparison of Neurokinin A, Substance P, Interleukin 8, and Matrix Metalloproteinase-8 Changes in Pulp tissue and Gingival Crevicular Fluid Samples of Healthy and Symptomatic Irreversible Pulpitis Teeth. Journal of Endodontics, 2020, 46, 1428-1437.	3.1	19
179	Tribological performance of ion-beam-mixed Fe/B multilayers on M50 steel. Surface and Coatings Technology, 1990, 42, 283-297.	4.8	18
180	Hysteresis and related error mechanisms in the NIST watt balance experiment. Journal of Research of the National Institute of Standards and Technology, 2001, 106, 627.	1.2	18

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