All ErdemIr

List of Publications by Year in Descending Order

Source: https://exaly.com/author-pdf/5501581/ali-erdemir-publications-by-year.pdf

Version: 2024-04-22

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

 265
 18,021
 65
 128

 papers
 citations
 h-index
 g-index

 281
 20,391
 4.4
 7.3

 ext. papers
 ext. citations
 avg, IF
 L-index

#	Paper	IF	Citations
265	Tribological Interaction of Plasma-Functionalized CaCO3 Nanoparticles with Zinc and Ashless Dithiophosphate Additives. <i>Tribology Letters</i> , 2021 , 69, 1	2.8	1
264	Synthetic Lubricants Derived from Plastic Waste and their Tribological Performance. <i>ChemSusChem</i> , 2021 , 14, 4181-4189	8.3	8
263	Tribochemistry of fluorinated ZnO nanoparticles and ZDDP lubricated interface and implications for enhanced anti-wear performance at boundary lubricated contacts. <i>Wear</i> , 2021 , 474-475, 203717	3.5	4
262	Diamond-like carbon films and their superlubricity 2021 , 215-230		1
261	Robust Interfacial Tribofilms by Borate- and Polymer-Coated ZnO Nanoparticles Leading to Improved Wear Protection under a Boundary Lubrication Regime. <i>Langmuir</i> , 2021 , 37, 1743-1759	4	9
260	The effect of different irrigation solutions and activation techniques on the expression of growth factors from dentine of extracted premolar teeth. <i>International Endodontic Journal</i> , 2021 , 54, 1915-1924	4 ^{5.4}	2
259	Achieving Ultralow Friction and Wear by Tribocatalysis: Enabled by Formation of Nanocarbon Films <i>ACS Nano</i> , 2021 , 15, 18865-18879	16.7	4
258	Catalytically Active Oil-Based Lubricant Additives Enabled by Calcining Ni-Al Layered Double Hydroxides. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 113-120	6.4	11
257	Tribochemical Conversion of Methane to Graphene and Other Carbon Nanostructures: Implications for Friction and Wear. <i>ACS Applied Nano Materials</i> , 2020 , 3, 8060-8067	5.6	13
256	Comparison of dentin penetration ability of different root canal sealers used with different obturation methods. <i>Microscopy Research and Technique</i> , 2020 , 83, 1544-1551	2.8	1
255	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. <i>Journal of Endodontics</i> , 2020 , 46, 1428-1437	4.7	5
254	Effect of solvent use on postoperative pain in root canal retreatment: a randomized, controlled clinical trial. <i>Clinical Oral Investigations</i> , 2020 , 24, 257-263	4.2	3
253	Iron-Nanoparticle Driven Tribochemistry Leading to Superlubric Sliding Interfaces. <i>Advanced Materials Interfaces</i> , 2019 , 6, 1901416	4.6	19
252	Interaction of plasma functionalized TiO2 nanoparticles and ZDDP on friction and wear under boundary lubrication. <i>Applied Surface Science</i> , 2019 , 489, 372-383	6.7	14
251	Superlubricity of Polyalkylene Glycol Aqueous Solutions Enabled by Ultrathin Layered Double Hydroxide Nanosheets. <i>ACS Applied Materials & Amp; Interfaces</i> , 2019 , 11, 20249-20256	9.5	28
250	Antiwear Properties of Binary Ashless Blend of Phosphonium Ionic Liquids and Borate Esters in Partially Formulated Oil (No Zn). <i>Tribology Letters</i> , 2019 , 67, 1	2.8	11
249	The impact of tribology on energy use and CO2 emission globally and in combustion engine and electric cars. <i>Tribology International</i> , 2019 , 135, 389-396	4.9	147

248	Graphene - MoS2 ensembles to reduce friction and wear in DLC-Steel contacts. <i>Carbon</i> , 2019 , 146, 524-	5 2 7.4	69
247	Mechanism of Superlubricity Conversion with Polyalkylene Glycol Aqueous Solutions. <i>Langmuir</i> , 2019 , 35, 11784-11790	4	9
246	Tribology of two-dimensional materials: From mechanisms to modulating strategies. <i>Materials Today</i> , 2019 , 26, 67-86	21.8	129
245	Approaches for Achieving Superlubricity in Two-Dimensional Materials. <i>ACS Nano</i> , 2018 , 12, 2122-2137	16.7	207
244	Superlubricity: Friction vanishing act. <i>Physics Today</i> , 2018 , 71, 40-46	0.9	51
243	Friction and Wear Reduction Mechanism of Polyalkylene Glycol-Based Engine Oils. <i>Tribology Transactions</i> , 2018 , 61, 621-631	1.8	6
242	High-Performance Heterocyclic Friction Modifiers for Boundary Lubrication. <i>Tribology Letters</i> , 2018 , 66, 1	2.8	7
241	Operando tribochemical formation of onion-like-carbon leads to macroscale superlubricity. <i>Nature Communications</i> , 2018 , 9, 1164	17.4	120
240	Superior wear resistance of diamond and DLC coatings. <i>Current Opinion in Solid State and Materials Science</i> , 2018 , 22, 243-254	12	54
239	Effect of several laser systems on removal of smear layer with a variety of irrigation solutions. <i>Microscopy Research and Technique</i> , 2018 , 81, 1214-1222	2.8	9
238	Acid Treatment of Diamond-Like Carbon Surfaces for Enhanced Adsorption of Friction Modifiers and Friction Performance. <i>Tribology Letters</i> , 2018 , 66, 1	2.8	5
237	Effect of the addition of Si into V2O5 coatings: Structure and tribo-mechanical properties. <i>Surface and Coatings Technology</i> , 2018 , 349, 111-118	4.4	7
236	Operando formation of an ultra-low friction boundary film from synthetic magnesium silicon hydroxide additive. <i>Tribology International</i> , 2017 , 110, 35-40	4.9	33
235	Investigation of Shear-Thinning Behavior on Film Thickness and Friction Coefficient of Polyalphaolefin Base Fluids With Varying Olefin Copolymer Content. <i>Journal of Tribology</i> , 2017 , 139,	1.8	5
234	Tribological performance of quaternary CrSiCN coatings under dry and lubricated conditions. <i>Wear</i> , 2017 , 376-377, 1682-1690	3.5	9
233	Global energy consumption due to friction and wear in the mining industry. <i>Tribology International</i> , 2017 , 115, 116-139	4.9	170
232	Investigation of Nano-Mechanical and- Tribological Properties of Hydrogenated Diamond Like Carbon (DLC) Coatings. <i>Journal of Mechanics</i> , 2017 , 33, 769-776	1	7
231	Influence of tribology on global energy consumption, costs and emissions. <i>Friction</i> , 2017 , 5, 263-284	5.6	594

230	Tribological Behavior of NiAl-Layered Double Hydroxide Nanoplatelets as Oil-Based Lubricant Additives. <i>ACS Applied Materials & amp; Interfaces</i> , 2017 , 9, 30891-30899	9.5	37
229	Plasma-Functionalized Polytetrafluoroethylene Nanoparticles for Improved Wear in Lubricated Contact. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 25631-25641	9.5	21
228	Ultralow Friction of ZrO2 Ball Sliding against DLC Films under Various Environments. <i>Applied Sciences (Switzerland)</i> , 2017 , 7, 938	2.6	8
227	Tribological Behavior of Oil-Lubricated Laser Textured Steel Surfaces in Conformal Flat and Non-Conformal Contacts. <i>Materials Performance and Characterization</i> , 2017 , 6, MPC20160013	0.5	5
226	Interaction of phosphonium ionic liquids with borate esters at tribological interfaces. <i>RSC Advances</i> , 2016 , 6, 53148-53161	3.7	18
225	Fatigue resistant carbon coatings for rolling/sliding contacts. <i>Tribology International</i> , 2016 , 98, 172-178	4.9	23
224	Engine Friction and Wear Performances with Polyalkylene Glycol Engine Oils 2016,		5
223	Tribochemistry of Carbon Films in Oxygen and Humid Environments: Oxidative Wear and Galvanic Corrosion. <i>Langmuir</i> , 2016 , 32, 1996-2004	4	25
222	Influence of tribofilm on superlubricity of highly-hydrogenated amorphous carbon films in inert gaseous environments. <i>Science China Technological Sciences</i> , 2016 , 59, 1795-1803	3.5	14
221	Carbon-based tribofilms from lubricating oils. <i>Nature</i> , 2016 , 536, 67-71	50.4	240
221	Carbon-based tribofilms from lubricating oils. <i>Nature</i> , 2016 , 536, 67-71 Silane Treatment of Diamond-Like Carbon: Improvement of Hydrophobicity, Oleophobicity, and Humidity Tolerance of Friction. <i>Tribology Letters</i> , 2016 , 63, 1	50.4	240
	Silane Treatment of Diamond-Like Carbon: Improvement of Hydrophobicity, Oleophobicity, and	2.8	
220	Silane Treatment of Diamond-Like Carbon: Improvement of Hydrophobicity, Oleophobicity, and Humidity Tolerance of Friction. <i>Tribology Letters</i> , 2016 , 63, 1	2.8	1
220	Silane Treatment of Diamond-Like Carbon: Improvement of Hydrophobicity, Oleophobicity, and Humidity Tolerance of Friction. <i>Tribology Letters</i> , 2016 , 63, 1 Friction. Macroscale superlubricity enabled by graphene nanoscroll formation. <i>Science</i> , 2015 , 348, 1118. Synthesis and Tribology of Micro-Carbon Sphere Additives for Enhanced Lubrication. <i>Tribology</i>	2.8 - 33 .3	, 1 481
220 219 218	Silane Treatment of Diamond-Like Carbon: Improvement of Hydrophobicity, Oleophobicity, and Humidity Tolerance of Friction. <i>Tribology Letters</i> , 2016 , 63, 1 Friction. Macroscale superlubricity enabled by graphene nanoscroll formation. <i>Science</i> , 2015 , 348, 1118. Synthesis and Tribology of Micro-Carbon Sphere Additives for Enhanced Lubrication. <i>Tribology Transactions</i> , 2015 , 58, 474-480 Nanoscale friction properties of graphene and graphene oxide. <i>Diamond and Related Materials</i> ,	2.8 - 22 .3	481 17
220219218217	Silane Treatment of Diamond-Like Carbon: Improvement of Hydrophobicity, Oleophobicity, and Humidity Tolerance of Friction. <i>Tribology Letters</i> , 2016 , 63, 1 Friction. Macroscale superlubricity enabled by graphene nanoscroll formation. <i>Science</i> , 2015 , 348, 1118. Synthesis and Tribology of Micro-Carbon Sphere Additives for Enhanced Lubrication. <i>Tribology Transactions</i> , 2015 , 58, 474-480 Nanoscale friction properties of graphene and graphene oxide. <i>Diamond and Related Materials</i> , 2015 , 54, 91-96 Superlubricity of the DLC films-related friction system at elevated temperature. <i>RSC Advances</i> ,	2.8 -2/2.3 1.8	1 481 17 85
220 219 218 217 216	Silane Treatment of Diamond-Like Carbon: Improvement of Hydrophobicity, Oleophobicity, and Humidity Tolerance of Friction. <i>Tribology Letters</i> , 2016 , 63, 1 Friction. Macroscale superlubricity enabled by graphene nanoscroll formation. <i>Science</i> , 2015 , 348, 1118. Synthesis and Tribology of Micro-Carbon Sphere Additives for Enhanced Lubrication. <i>Tribology Transactions</i> , 2015 , 58, 474-480 Nanoscale friction properties of graphene and graphene oxide. <i>Diamond and Related Materials</i> , 2015 , 54, 91-96 Superlubricity of the DLC films-related friction system at elevated temperature. <i>RSC Advances</i> , 2015 , 5, 93147-93154 An analytical study of tribofilms generated by the interaction of ashless antiwear additives with	2.8 -23.3 1.8 3.5	1 481 17 85 34

(2013-2015)

212	Compositionally graded SiCu thin film anode by magnetron sputtering for lithium ion battery. <i>Thin Solid Films</i> , 2015 , 596, 190-197	2.2	10
211	Electrochemical boriding of molybdenum in molten borax. Surface Engineering, 2015, 31, 575-580	2.6	8
210	Comparison of different irrigation activation techniques on smear layer removal: an in vitro study. <i>Microscopy Research and Technique</i> , 2015 , 78, 230-9	2.8	23
209	Surface structure of hydrogenated diamond-like carbon: origin of run-in behavior prior to superlubricious interfacial shear. <i>Langmuir</i> , 2015 , 31, 1711-21	4	42
208	Nano-texture for a wear-resistant and near-frictionless diamond-like carbon. <i>Carbon</i> , 2014 , 73, 403-412	10.4	27
207	Graphene: a new emerging lubricant. <i>Materials Today</i> , 2014 , 17, 31-42	21.8	850
206	Global energy consumption due to friction in trucks and buses. <i>Tribology International</i> , 2014 , 78, 94-114	4.9	246
205	Extraordinary Macroscale Wear Resistance of One Atom Thick Graphene Layer. <i>Advanced Functional Materials</i> , 2014 , 24, 6640-6646	15.6	193
204	Bipolar tribocharging signal during friction force fluctuations at metal-insulator interfaces. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 12101-5	16.4	21
203	Effect of tribochemistry on lubricity of DLC films in hydrogen. <i>Surface and Coatings Technology</i> , 2014 , 257, 241-246	4.4	43
202	Achieving superlubricity in DLC films by controlling bulk, surface, and tribochemistry. <i>Friction</i> , 2014 , 2, 140-155	5.6	102
201	Graphene: Extraordinary Macroscale Wear Resistance of One Atom Thick Graphene Layer (Adv. Funct. Mater. 42/2014). <i>Advanced Functional Materials</i> , 2014 , 24, 6639-6639	15.6	
200	Graphene as a protective coating and superior lubricant for electrical contacts. <i>Applied Physics Letters</i> , 2014 , 105, 231907	3.4	62
199	InnenrEktitelbild: Bipolar Tribocharging Signal During Friction Force Fluctuations at MetalEnsulator Interfaces (Angew. Chem. 45/2014). <i>Angewandte Chemie</i> , 2014 , 126, 12461-12461	3.6	
198	Bipolar Tribocharging Signal During Friction Force Fluctuations at Metallhsulator Interfaces. <i>Angewandte Chemie</i> , 2014 , 126, 12297-12301	3.6	7
197	Structured SiCu thin films in LiB as anodes. <i>Thin Solid Films</i> , 2014 , 572, 134-141	2.2	11
196	Effect of microstructure and thickness on the friction and wear behavior of CrN coatings. <i>Wear</i> , 2013 , 302, 963-971	3.5	52
195	Evaluation of electrochemical boriding of Inconel 600. Surface and Coatings Technology, 2013, 215, 452-	459	46

194	Effects of nanoscale surface texture and lubricant molecular structure on boundary lubrication in liquid. <i>Langmuir</i> , 2013 , 29, 13419-26	4	32
193	Extreme Pressure Lubricant Additives Interacting on the Surface of Steel- and Tungsten CarbideDoped Diamond-Like Carbon. <i>Tribology Transactions</i> , 2013 , 56, 623-629	1.8	16
192	Tribological Performance of EP Lubricants with Phosphorus-Based Additives. <i>Tribology Transactions</i> , 2013 , 56, 645-651	1.8	14
191	Direct Observation of Tribochemically Assisted Wear on Diamond-Like Carbon Thin Films. <i>Tribology Letters</i> , 2013 , 49, 351-356	2.8	16
190	Material wear and fatigue in wind turbine Systems. Wear, 2013, 302, 1583-1591	3.5	108
189	Reduced wear and friction enabled by graphene layers on sliding steel surfaces in dry nitrogen. <i>Carbon</i> , 2013 , 59, 167-175	10.4	338
188	Few layer graphene to reduce wear and friction on sliding steel surfaces. <i>Carbon</i> , 2013 , 54, 454-459	10.4	496
187	Global energy consumption due to friction in passenger cars. <i>Tribology International</i> , 2012 , 47, 221-234	4.9	890
186	Fundamental understanding of the tribological and thermal behavior of AgMoS2 nanoparticle-based multi-component lubricating system. <i>Wear</i> , 2012 , 288, 9-16	3.5	59
185	Tribological Properties of Nanodiamond-Epoxy Composites. <i>Tribology Letters</i> , 2012 , 47, 195-202	2.8	61
184	A three-dimensional inverse finite element analysis of the heel pad. <i>Journal of Biomechanical Engineering</i> , 2012 , 134, 031002	2.1	19
183	Friction reducing properties of onion-like carbon based lubricant under high contact pressure. <i>Tribology - Materials, Surfaces and Interfaces</i> , 2012 , 6, 116-120	1.4	15
182	Effect of surfactant on tribological performance and tribochemistry of boric acid based colloidal lubricants. <i>Tribology - Materials, Surfaces and Interfaces</i> , 2012 , 6, 134-141	1.4	13
181	Mandibular second premolar with four roots. European Journal of General Dentistry, 2012, 1, 54	0.2	
180	Quantification of sliding-induced phase transformation in N3FC diamond-like carbon films. <i>Diamond and Related Materials</i> , 2011 , 20, 1143-1148	3.5	16
179	Does chlorhexidine affect the shear bond strengths of orthodontic brackets?. <i>Journal of Dental Sciences</i> , 2011 , 6, 76-81	2.5	2
178	Understanding run-in behavior of diamond-like carbon friction and preventing diamond-like carbon wear in humid air. <i>Langmuir</i> , 2011 , 27, 12702-8	4	69
177	Comparison of hexahedral and tetrahedral elements in finite element analysis of the foot and footwear. <i>Journal of Biomechanics</i> , 2011 , 44, 2337-43	2.9	92

(2010-2011)

176	Effect of different light sources in combination with a light-transmitting post on the degree of conversion of resin composite at different depths of simulated root canals. <i>Dental Traumatology</i> , 2011 , 27, 195-8	4.5	7
175	The growth of single Fe2B phase on low carbon steel via phase homogenization in electrochemical boriding (PHEB). <i>Surface and Coatings Technology</i> , 2011 , 206, 2005-2011	4.4	60
174	Electrochemical boriding and characterization of AISI D2 tool steel. <i>Thin Solid Films</i> , 2011 , 520, 1582-15	8 8 .2	29
173	Ultra-fast boriding of nickel aluminide. <i>Thin Solid Films</i> , 2011 , 520, 1575-1581	2.2	20
172	Friction and wear behaviour of boron based surface treatment and nano-particle lubricant additives for wind turbine gearbox applications. <i>Wear</i> , 2011 , 271, 1754-1760	3.5	79
171	Friction and wear behavior of laser textured surface under lubricated initial point contact. <i>Wear</i> , 2011 , 271, 1719-1725	3.5	166
170	Is Ultra-Low Friction Needed to Prevent Wear of Diamond-Like Carbon (DLC)? An Alcohol Vapor Lubrication Study for Stainless Steel/DLC Interface. <i>Tribology Letters</i> , 2011 , 42, 285-291	2.8	30
169	Kinetics of electrochemical boriding of low carbon steel. <i>Applied Surface Science</i> , 2011 , 257, 6928-6934	6.7	67
168	Quantification of oxygenated species on a diamond-like carbon (DLC) surface. <i>Applied Surface Science</i> , 2011 , 257, 7633-7638	6.7	35
167	Development of ultrananocrystalline diamond (UNCD) coatings for multipurpose mechanical pump seals. <i>Wear</i> , 2011 , 270, 325-331	3.5	34
166	Analysis of plastic deformation in diamond like carbon films teel substrate system with tribological tests. <i>Thin Solid Films</i> , 2011 , 519, 3203-3212	2.2	30
165	Effects of different curing units and luting agents on push-out bond strength of translucent posts. Journal of Endodontics, 2010, 36, 1521-5	4.7	35
164	Nanocomposite Coatings for Severe Applications 2010 , 679-715		6
163	MEMS lubrication with alcohol vapour. <i>Tribology - Materials, Surfaces and Interfaces</i> , 2010 , 4, 109-114	1.4	
162	Electrochemical boriding of titanium for improved mechanical properties. <i>Surface and Coatings Technology</i> , 2010 , 204, 3935-3939	4.4	65
161	The effects of three different desensitizing agents on the shear bond strength of composite resin bonding agents. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2010 , 3, 399-404	4.1	10
160	Concurrent musculoskeletal dynamics and finite element analysis predicts altered gait patterns to reduce foot tissue loading. <i>Journal of Biomechanics</i> , 2010 , 43, 2810-5	2.9	56
159	Influence of process duration on structure and chemistry of borided low carbon steel. <i>Surface and Coatings Technology</i> , 2010 , 205, 1578-1583	4.4	24

158	In situ TEM studies of tribo-induced bonding modifications in near-frictionless carbon films. <i>Carbon</i> , 2010 , 48, 587-591	10.4	68
157	On the possible role of triboplasma in friction and wear of diamond-like carbon films in hydrogen-containing environments. <i>Journal Physics D: Applied Physics</i> , 2009 , 42, 075307	3	41
156	Temperature and Water Vapor Pressure Effects on the Friction Coefficient of Hydrogenated Diamondlike Carbon Films. <i>Journal of Tribology</i> , 2009 , 131,	1.8	15
155	Micro-to-nano triboactivity of hydrogenated DLC films. Journal Physics D: Applied Physics, 2009, 42, 085	397	14
154	Effects of different chlorhexidine formulations on shear bond strengths of orthodontic brackets. Angle Orthodontist, 2009 , 79, 312-6	2.6	8
153	Accuracy of two electronic apex locators in primary teeth with and without apical resorption: a laboratory study. <i>International Endodontic Journal</i> , 2008 , 41, 436-41	5.4	23
152	Carbon-hydrogen bonding in near-frictionless carbon. <i>Applied Physics Letters</i> , 2008 , 93, 131911	3.4	5
151	Effect of temporary filling materials on repair bond strengths of composite resins. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2008 , 86, 303-9	3.5	4
150	On the hydrogen lubrication mechanism(s) of DLC films: An imaging TOF-SIMS study. <i>Surface and Coatings Technology</i> , 2008 , 203, 750-755	4.4	51
149	TOF-SIMS and XPS characterization of diamond-like carbon films after tests in inert and oxidizing environments. <i>Wear</i> , 2008 , 265, 244-254	3.5	53
148	Comparative tribological behaviors of TiN, CrN and MoNCu nanocomposite coatings. <i>Tribology International</i> , 2008 , 41, 49-59	4.9	125
147	Tribological analysis of TiN and DLC coated contacts by 3D FEM modelling and stress simulation. <i>Wear</i> , 2008 , 264, 877-884	3.5	46
146	Tribochemistry of Multiply Alkylated Cyclopentane Oils on Diamond-like Carbon (DLC) Coated Thrust Bearings. <i>Journal of ASTM International</i> , 2008 , 5, 101223		1
145	Top-surface characterization of a near frictionless carbon film. <i>Diamond and Related Materials</i> , 2007 , 16, 209-215	3.5	34
144	Microfabrication issues in constructing freestanding membranes of near-frictionless carbon and diamond-like films. <i>Diamond and Related Materials</i> , 2007 , 16, 342-349	3.5	6
143	Surface analytical investigation of nearly-frictionless carbon films after tests in dry and humid nitrogen. <i>Surface and Coatings Technology</i> , 2007 , 201, 7401-7407	4.4	43
142	Effect of copper addition on the temperature dependent reciprocating wear behaviour of CrN coatings. <i>Surface and Coatings Technology</i> , 2007 , 202, 866-870	4.4	33
141	Mechanical and tribological properties of CrAlN-Ag self-lubricating films. <i>Surface and Coatings Technology</i> , 2007 , 202, 1011-1016	4.4	70

(2006-2007)

140	Investigation of Initial and Steady-State Sliding Behavior of a Nearly Frictionless Carbon Film by Imaging 2- and 3-D TOF-SIMS. <i>Tribology Letters</i> , 2007 , 28, 241-249	2.8	26	
139	Finite element modeling of the first ray of the foot: a tool for the design of interventions. <i>Journal of Biomechanical Engineering</i> , 2007 , 129, 750-6	2.1	33	
138	Complementary neutron and x-ray reflectivity studies of Bear-frictionless Larbon films. <i>Journal of Applied Physics</i> , 2007 , 101, 103538	2.5	6	
137	Complementary neutron and x-ray reflectivity studies of Bear-frictionlessEarbon films. <i>Journal of Applied Physics</i> , 2007 , 101, 123516	2.5		
136	Superlubricity in Diamondlike Carbon Films 2007 , 253-271		19	
135	Structural order in near-frictionless hydrogenated diamondlike carbon films probed at three length scales via transmission electron microscopy. <i>Physical Review B</i> , 2007 , 75,	3.3	42	
134	Evaluation of DLC Coatings for Foil Bearing Applications 2007 , 5		2	
133	Evaluation of pH and calcium ion release of Acroseal sealer in comparison with Apexit and Sealapex sealers. <i>Oral Surgery Oral Medicine Oral Pathology Oral Radiology and Endodontics</i> , 2007 , 103, e86-91		28	
132	Friction Mechanisms and Fundamental Aspects in Solid Lubricant Coatings 2006 , 573-593		4	
131	Comparing the Young Modulus of Near-Frictionless Carbon Films Obtained From Different Methods. <i>Materials Research Society Symposia Proceedings</i> , 2006 , 956, 1			
130	Depth-dependent defect and residual stress distribution in magnetron sputtered MoN:Cu nanocomposite films by x-ray microdiffraction. <i>Materials Research Society Symposia Proceedings</i> , 2006 , 977, 1		1	
129	Deposition, characterization, and tribological applications of near-frictionless carbon films on glass and ceramic substrates. <i>Journal of Physics Condensed Matter</i> , 2006 , 18, S1751-62	1.8	14	
128	Annealing effects on the mechanical properties of near-frictionless carbon thin films. <i>Diamond and Related Materials</i> , 2006 , 15, 2051-2054	3.5	12	
127	The mechanical properties of freestanding near-frictionless carbon films relevant to MEMS. <i>Journal of Micromechanics and Microengineering</i> , 2006 , 16, 1374-1381	2	13	
126	The detection of salivary minerals in smokers and non-smokers with chronic periodontitis by the inductively coupled plasma-atomic emission spectrophotometry technique. <i>Journal of Periodontology</i> , 2006 , 77, 990-5	4.6	17	
125	Assessment of antibacterial activity of EndoREZ. <i>Oral Surgery Oral Medicine Oral Pathology Oral Radiology and Endodontics</i> , 2006 , 102, 119-26		30	
124	Synthesis and Tribology of Carbide-Derived Carbon Films. <i>International Journal of Applied Ceramic Technology</i> , 2006 , 3, 236-244	2	18	
123	Reinforcement effect of polyethylene fibre in root-filled teeth: comparison of two restoration techniques. <i>International Endodontic Journal</i> , 2006 , 39, 136-42	5.4	65	

122	Tribology of diamond-like carbon films: recent progress and future prospects. <i>Journal Physics D: Applied Physics</i> , 2006 , 39, R311-R327	3	834
121	Environmental effects on the friction of hydrogenated DLC films. <i>Tribology Letters</i> , 2006 , 21, 51-56	2.8	118
120	Tribology of Nanostructured and Composite Coatings 2006,		3
119	A Gas-Surface Interaction Model for Spatial and Time-Dependent Friction Coefficient in Reciprocating Contacts: Applications to Near-Frictionless Carbon. <i>Journal of Tribology</i> , 2005 , 127, 82-88	1.8	24
118	The effect of laser surface texturing on transitions in lubrication regimes during unidirectional sliding contact. <i>Tribology International</i> , 2005 , 38, 219-225	4.9	426
117	Effect of EDTA and citric acid solutions on the microhardness and the roughness of human root canal dentin. <i>Journal of Endodontics</i> , 2005 , 31, 107-10	4.7	64
116	Effects of endodontic irrigation solutions on mineral content of root canal dentin using ICP-AES technique. <i>Journal of Endodontics</i> , 2005 , 31, 187-9	4.7	75
115	Shear bond strength of three resin based sealers to dentin with and without the smear layer. Journal of Endodontics, 2005 , 31, 293-6	4.7	68
114	Ultrananocrystalline Diamond Film as a Wear-Resistant and Protective Coating for Mechanical Seal Applications. <i>Tribology Transactions</i> , 2005 , 48, 24-31	1.8	72
113	Si3N4/BN fibrous monoliths: Mechanical properties and tribological responses. <i>Materials Science</i> & Samp; Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 412, 146-152	5.3	6
112	Review of engineered tribological interfaces for improved boundary lubrication. <i>Tribology International</i> , 2005 , 38, 249-256	4.9	384
111	Transfer of 319 Al alloy to titanium diboride and titanium nitride based (TiAlN, TiCN, TiN) coatings: effects of sliding speed, temperature and environment. <i>Surface and Coatings Technology</i> , 2005 , 200, 2260-2270	4.4	39
110	A crystal chemical approach to the formulation of self-lubricating nanocomposite coatings. <i>Surface and Coatings Technology</i> , 2005 , 200, 1792-1796	4.4	148
109	Orthodontic movement of a horizontally fractured tooth: a case report. <i>Dental Traumatology</i> , 2005 , 21, 160-4	4.5	17
108	Dry and oil-lubricated sliding wear of Si3N4 and Si3N4/BN fibrous monoliths. <i>Tribology Letters</i> , 2005 , 18, 231-237	2.8	13
107	The Tribological Properties of Low-friction Hydrogenated Diamond-like Carbon Measured in Ultrahigh Vacuum. <i>Tribology Letters</i> , 2005 , 20, 221-227	2.8	64
106	Nano-structured carbide-derived carbon films and their tribology. <i>Tsinghua Science and Technology</i> , 2005 , 10, 699-703	3.4	24
105	Relation of Certain Quantum Chemical Parameters to Lubrication Behavior of Solid Oxides. International Journal of Molecular Sciences, 2005, 6, 203-218	6.3	43

(2004-2005)

104	Assessment of Amorphous Carbon Coating for Artificial Joints Application. <i>Tribology Transactions</i> , 2005 , 48, 190-198	1.8	7
103	Insights into Bear-frictionless carbon films Journal of Applied Physics, 2004, 95, 7765-7771	2.5	37
102	Tribological Characterization of Carbide-Derived Carbon Layers on Silicon Carbide for Dry Friction Applications. <i>Key Engineering Materials</i> , 2004 , 264-268, 465-468	0.4	1
101	X-Ray Studies of Near-Frictionless Carbon Films. <i>Materials Research Society Symposia Proceedings</i> , 2004 , 843, 271		2
100	Effect of the gutta-percha solvents on the microhardness and the roughness of human root dentine. <i>Journal of Oral Rehabilitation</i> , 2004 , 31, 1145-8	3.4	7
99	Structure and tribological behaviour of nanoscale multilayer C/Cr coatings deposited by the combined steered cathodic arc/unbalanced magnetron sputtering technique. <i>Thin Solid Films</i> , 2004 , 447-448, 7-13	2.2	33
98	Solid Lubricant Coatings: Recent Developments and Future Trends. <i>Tribology Letters</i> , 2004 , 17, 389-397	2.8	267
97	Evaluation of DLC coatings for spark-ignited, direct-injected fuel systems. <i>Surface and Coatings Technology</i> , 2004 , 179, 237-244	4.4	22
96	Design criteria for superlubricity in carbon films and related microstructures. <i>Tribology International</i> , 2004 , 37, 577-583	4.9	75
95	Genesis of superlow friction and wear in diamondlike carbon films. <i>Tribology International</i> , 2004 , 37, 100	05-901	2 220
94	Friction and wear behavior of near-frictionless carbon coatings in formulated gasolines. <i>Surface and Coatings Technology</i> , 2004 , 183, 111-117	4.4	3
93	Effects of high-temperature hydrogenation treatment on sliding friction and wear behavior of carbide-derived carbon films. <i>Surface and Coatings Technology</i> , 2004 , 188-189, 588-593	4.4	41
92	The Effect of Laser Texturing of Steel Surfaces and Speed-Load Parameters on the Transition of Lubrication Regime from Boundary to Hydrodynamic. <i>Tribology Transactions</i> , 2004 , 47, 299-307	1.8	167
91	Effect of gutta-percha solvents on mineral contents of human root dentin using ICP-AES technique. <i>Journal of Endodontics</i> , 2004 , 30, 54-6	4.7	19
90	Effect of medications for root canal treatment on bonding to root canal dentin. <i>Journal of Endodontics</i> , 2004 , 30, 113-6	4.7	140
89	Effect of solvents on bonding to root canal dentin. <i>Journal of Endodontics</i> , 2004 , 30, 589-92	4.7	34
88	Evaluation of the effect of endodontic irrigation solutions on the microhardness and the roughness of root canal dentin. <i>Journal of Endodontics</i> , 2004 , 30, 792-5	4.7	115
87	Fractional Coverage Model for the Adsorption and Removal of Gas Species and Application to Superlow Friction Diamond-Like Carbon. <i>Journal of Tribology</i> , 2004 , 126, 615-619	1.8	29

86	Surface Damage and Wear Mechanisms of Amorphous Carbon Coatings under Boundary Lubrication Conditions. <i>Surface Engineering</i> , 2003 , 19, 447-453	2.6	3
85	In vitro evaluation of the dissolving effect of solvents on root canal sealers. <i>Journal of Oral Science</i> , 2003 , 45, 123-6	1.5	13
84	Effect of Humidity on the Tribological Properties of Carbide-Derived Carbon (CDC) Films on Silicon Carbide. <i>Tribology Letters</i> , 2003 , 15, 51-55	2.8	46
83	Tribological behavior of hard carbon coatings on steel substrates. <i>Wear</i> , 2003 , 255, 854-858	3.5	25
82	Tribological performance of some alternative bearing materials for artificial joints. Wear, 2003, 255, 10	15-5102	2144
81	Friction of diamond-like carbon films in different atmospheres. <i>Wear</i> , 2003 , 254, 1070-1075	3.5	231
80	Frictional behavior of diamondlike carbon films in vacuum and under varying water vapor pressure. <i>Surface and Coatings Technology</i> , 2003 , 163-164, 535-540	4.4	157
79	Friction-induced structural transformations of diamondlike carbon coatings under various atmospheres. <i>Surface and Coatings Technology</i> , 2003 , 163-164, 444-450	4.4	192
78	Near-surface characterization of amorphous carbon films by neutron reflectivity. <i>Applied Physics Letters</i> , 2003 , 83, 452-454	3.4	20
77	Raman Chemical Imaging of Tribological Surfaces. <i>Tribology Transactions</i> , 2002 , 45, 239-245	1.8	2
76	Friction and wear of diamond and diamond-like carbon films. <i>Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology</i> , 2002 , 216, 387-400	1.4	43
75	Phase Transformations in Silicon Under Dry and Lubricated Sliding. <i>Tribology Transactions</i> , 2002 , 45, 37	2-B 8 0	49
74	Scuffing Performance of Amorphous Carbon During Dry-Sliding Contact. <i>Tribology Transactions</i> , 2001 , 44, 591-596	1.8	9
73	The role of hydrogen in tribological properties of diamond-like carbon films. <i>Surface and Coatings Technology</i> , 2001 , 146-147, 292-297	4.4	407
72	Effect of Carbon Coating on Scuffing Performance in Diesel Fuels. <i>Tribology Transactions</i> , 2001 , 44, 298	3-3084	11
71	Superlow friction behavior of diamond-like carbon coatings: Time and speed effects. <i>Applied Physics Letters</i> , 2001 , 78, 2449-2451	3.4	204
70	Ultrananocrystalline diamond thin films for MEMS and moving mechanical assembly devices. <i>Diamond and Related Materials</i> , 2001 , 10, 1952-1961	3.5	318
69	Hysteresis and Related Error Mechanisms in the NIST Watt Balance Experiment. <i>Journal of Research of the National Institute of Standards and Technology</i> , 2001 , 106, 627-40	1.3	16

68	Superlubricity and Wearless Sliding in Diamondlike Carbon Films. <i>Materials Research Society Symposia Proceedings</i> , 2001 , 697, 911		2
67	Tribology of Diamond, Diamond-like Carbon and Related Films. Mechanics & Materials Science, 2000,		12
66	Synthesis of superlow-friction carbon films from highly hydrogenated methane plasmas. <i>Surface and Coatings Technology</i> , 2000 , 133-134, 448-454	4.4	146
65	A crystal-chemical approach to lubrication by solid oxides. <i>Tribology Letters</i> , 2000 , 8, 97-102	2.8	240
64	Near-Frictionless Carbon Coatings for Use in Fuel Injectors and Pump Systems Operating with Low-Sulfur Diesel Fuels 2000 ,		7
63	Tribological Properties of Carbon Coatings Produced by High Temperature Chlorination of Silicon Carbide. <i>Tribology Transactions</i> , 2000 , 43, 809-815	1.8	36
62	Periodic ab initio calculations of orthoboric acid. <i>Journal of Chemical Physics</i> , 2000 , 113, 3338-3343	3.9	19
61	Effect of source gas chemistry on tribological performance of diamond-like carbon films. <i>Diamond and Related Materials</i> , 2000 , 9, 632-637	3.5	108
60	Synthesis of diamondlike carbon films with superlow friction and wear properties. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2000 , 18, 1987-1992	2.9	268
59	Dry Lubricant Films for Aluminum Forming. <i>Tribology Transactions</i> , 2000 , 43, 535-541	1.8	22
58	Solid Lubricants and Self-Lubricating Films. Mechanics & Materials Science, 2000,		18
57	The boron oxideBoric acid system: Nanoscale mechanical and wear properties. <i>Journal of Materials Research</i> , 1999 , 14, 3455-3466	2.5	24
56	Nano-Tribological and Wear Behavior of Boric Acid Solid Lubricant . <i>Tribology Transactions</i> , 1999 , 42, 180-185	1.8	8
55	Tribological properties of nanocrystalline diamond films. <i>Surface and Coatings Technology</i> , 1999 , 120-121, 565-572	4.4	144
54	Friction and wear performance of diamond-like carbon films grown in various source gas plasmas. <i>Surface and Coatings Technology</i> , 1999 , 120-121, 589-593	4.4	59
53	Self-replenishing solid lubricant films on boron carbide. Surface Engineering, 1999 , 15, 291-295	2.6	45
52	Clean and Cost-effective Dry Boundary Lubricants for Aluminum Forming 1998,		3
51	Friction and Wear Mechanisms of Smooth Diamond Films During Sliding in Air and Dry Nitrogen. <i>Tribology Transactions</i> , 1997 , 40, 667-675	1.8	55

50	Influence of environmental parameters on the frictional behavior of DLC coatings. <i>Surface and Coatings Technology</i> , 1997 , 94-95, 463-468	4.4	139
49	Effect of source gas and deposition method on friction and wear performance of diamondlike carbon films. <i>Surface and Coatings Technology</i> , 1997 , 94-95, 525-530	4.4	59
48	Durability and tribological performance of smooth diamond films produced by Ar-C60 microwave plasmas and by laser polishing. <i>Surface and Coatings Technology</i> , 1997 , 94-95, 537-542	4.4	53
47	Solid/liquid lubrication of ceramics at elevated temperatures. <i>Wear</i> , 1997 , 203-204, 588-595	3.5	37
46	Preparation of ultralow-friction surface films on vanadium diboride. Wear, 1997, 205, 236-239	3.5	82
45	High-Temperature Durability and Tribological Performance of Diamond and Diamondlike Carbon Films 1997 , 169-184		2
44	Formation of ultralow friction surface films on boron carbide. <i>Applied Physics Letters</i> , 1996 , 68, 1637-16	3 9 .4	111
43	Friction and wear properties of smooth diamond films grown in fullerene + argon plasmas. <i>Diamond and Related Materials</i> , 1996 , 5, 923-931	3.5	61
42	Energy and wear analysis in lubricated sliding contact. <i>Wear</i> , 1996 , 191, 261-264	3.5	9
41	Tribology and surface engineering at Argonne National Laboratory. <i>Tribology International</i> , 1996 , 29, 263-264	4.9	
40	A study of the wear mechanism of diamond-like carbon films. <i>Surface and Coatings Technology</i> , 1996 , 82, 48-56	4.4	448
39	Tribology of naturally occurring boric acid films on boron carbide. <i>Surface and Coatings Technology</i> , 1996 , 86-87, 507-510	4.4	92
38	An investigation of the relationship between graphitization and frictional behavior of DLC coatings. <i>Surface and Coatings Technology</i> , 1996 , 86-87, 564-568	4.4	274
37	Characterization of transfer layers forming on surfaces sliding against diamond-like carbon. <i>Surface and Coatings Technology</i> , 1996 , 86-87, 692-697	4.4	88
36	Effect of niobium interlayer on high-temperature sliding friction and wear of silver films on alumina. <i>Tribology Letters</i> , 1996 , 2, 23	2.8	10
35	Tribological Properties of Hard Carbon Films on Zirconia Ceramics. <i>Tribology Transactions</i> , 1996 , 39, 735	5-7. 8 4	39
34	Ultralow friction behavior of borided steel surfaces after flash annealing. <i>Applied Physics Letters</i> , 1996 , 68, 923-925	3.4	58
33	Tribological Performance of Diamond and Diamondlike Carbon Films at Elevated Temperatures. <i>Tribology Transactions</i> , 1996 , 39, 787-794	1.8	60

(1991-1995)

32	Tribological characteristics of DLC films and duplex plasma nitriding/DLC coating treatments. <i>Surface and Coatings Technology</i> , 1995 , 73, 39-45	4.4	127
31	Characterization of transfer layers on steel surfaces sliding against diamond-like hydrocarbon films in dry nitrogen. <i>Surface and Coatings Technology</i> , 1995 , 76-77, 559-563	4.4	71
30	Physical and tribological properties of diamond films grown in argoncarbon plasmas. <i>Thin Solid Films</i> , 1995 , 270, 154-159	2.2	90
29	Crystal Chemistry and Solid Lubricating Properties of the Monochalcogenides Gallium Selenide and Tin Selenide. <i>Tribology Transactions</i> , 1994 , 37, 471-478	1.8	19
28	Effect of Metallic-Coating Properties on the Tribology of Coated and Oil-Lubricated Ceramics. <i>Tribology Transactions</i> , 1994 , 37, 656-660	1.8	8
27	Friction and wear performance of ion-beam-deposited diamond-like carbon films on steel substrates. <i>Diamond and Related Materials</i> , 1994 , 3, 119-125	3.5	87
26	High Energy (MeV) Ion Beam Modifications of Sputtered MoS2 Coatings on Ceramics. <i>Tribology Transactions</i> , 1993 , 36, 621-626	1.8	5
25	Boundary film for structural ceramic materials. <i>Wear</i> , 1993 , 162-164, 1150-1155	3.5	5
24	Sliding Wear of Silicon Carbidellitanium Boride Ceramic-Matrix Composite. <i>Journal of the American Ceramic Society</i> , 1993 , 76, 511-517	3.8	28
23	The Synergistic Effects of Solid and Liquid Lubrication on the Tribological Behavior of Transformation-Toughened ZrO2 Ceramics. <i>Tribology Transactions</i> , 1992 , 35, 287-297	1.8	16
22	Rolling-contact fatigue and wear resistance of hard coatings on bearing-steel substrates. <i>Surface and Coatings Technology</i> , 1992 , 54-55, 482-489	4.4	47
21	Tribological behavior of oil-lubricated TiN-coated steel. <i>Surface and Coatings Technology</i> , 1992 , 54-55, 496-501	4.4	17
20	The effects of beam energy and substrate temperature on the tribological properties of hard-carbon films on aluminum. <i>Surface and Coatings Technology</i> , 1992 , 51, 139-145	4.4	47
19	The role of soft (metallic) films in the tribological behavior of ceramic materials. <i>Wear</i> , 1991 , 149, 221-2	1 332 5	6
18	Cross-sectional transmission electron microscopy study of phase transformations at TiN film/steel substrate interfaces. <i>Ultramicroscopy</i> , 1991 , 37, 286-293	3.1	2
17	Relationship of hertzian contact pressure to friction behavior of self-lubricating boric acid films. <i>Surface and Coatings Technology</i> , 1991 , 49, 435-438	4.4	57
16	High energy (MeV) ion beam modifications of sputtered MoS2 coatings on sapphire. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1991 , 59-60, 788-792	1.2	13
15	A tribological investigation of the graphite-to-diamond-like behavior of amorphous carbon films ion beam deposited on ceramic substrates. <i>Surface and Coatings Technology</i> , 1991 , 50, 17-23	4.4	152

14	Effect of post-deposition annealing on structure and chemistry of the TiN film/steel substrate interfaces. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1991 , 9, 439-443	2.9	3
13	Sliding Friction and Wear of Ceramics With and Without Soft Metallic Films. MRS Bulletin, 1991, 16, 49-	533.2	6
12	Tribological performance of ion-beam-mixed Fe/B multilayers on M50 steel. <i>Surface and Coatings Technology</i> , 1990 , 42, 283-297	4.4	17
11	Effect of film adhesion on tribological properties of silver-coated alumina. <i>Surface and Coatings Technology</i> , 1990 , 43-44, 577-587	4.4	16
10	A study of the formation and self-lubrication mechanisms of boric acid films on boric oxide coatings. <i>Surface and Coatings Technology</i> , 1990 , 43-44, 588-596	4.4	80
9	Nucleation and growth mechanisms in ion-plated TiN films on steel substrates. <i>Surface and Coatings Technology</i> , 1990 , 41, 285-293	4.4	11
8	Solid Lubrication of Ceramic Surfaces by IAD-Silver Coatings for Heat Engine Applications. <i>Tribology Transactions</i> , 1990 , 33, 511-518	1.8	25
7	Correlation of interface structure with adhesive strength of ion-plated TiN hard coatings. <i>Surface and Coatings Technology</i> , 1989 , 39-40, 365-376	4.4	43
6	Characterization of ceramic films and interfaces by electron microscopic and spectroscopic techniques. <i>Ultramicroscopy</i> , 1989 , 29, 266-276	3.1	14
5	Cross-sectional transmission electron microscopy of the interfaces between physical vapor deposited TiNx coatings and steel substrates. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films,</i> 1989 , 7, 2486-2490	2.9	16
4	Surface metallurgical and tribological characteristics of TiN-coated bearing steels. <i>Surface and Coatings Technology</i> , 1988 , 36, 755-763	4.4	38
3	A study of the corrosion behavior of TiN films. <i>Materials Science and Engineering</i> , 1985 , 69, 89-93		65
2	Rolling contact fatigue behavior of Cu and TiN coatings on bearing steel substrates. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1985 , 3, 2348-2353	2.9	27
1	Boron-Based Solid Nanolubricants and Lubrication Additives203-223		9