

Philip Egberts

List of Publications by Citations

Source: <https://exaly.com/author-pdf/4001429/philip-egberts-publications-by-citations.pdf>

Version: 2024-04-28

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.

43
papers

1,288
citations

17
h-index

35
g-index

46
ext. papers

1,564
ext. citations

4.4
avg, IF

4.38
L-index

#	Paper	IF	Citations
43	A review on mechanics and mechanical properties of 2D materials Graphene and beyond. <i>Extreme Mechanics Letters</i> , 2017 , 13, 42-77	3.9	581
42	Frictional behavior of atomically thin sheets: hexagonal-shaped graphene islands grown on copper by chemical vapor deposition. <i>ACS Nano</i> , 2014 , 8, 5010-21	16.7	112
41	Environmental dependence of atomic-scale friction at graphite surface steps. <i>Physical Review B</i> , 2013 , 88,	3.3	58
40	Dynamics of atomic stick-slip friction examined with atomic force microscopy and atomistic simulations at overlapping speeds. <i>Physical Review Letters</i> , 2015 , 114, 146102	7.4	53
39	Load-Dependent Friction Hysteresis on Graphene. <i>ACS Nano</i> , 2016 , 10, 5161-8	16.7	46
38	Nanoscale Adhesive Properties of Graphene: The Effect of Sliding History. <i>Advanced Materials Interfaces</i> , 2014 , 1, 1300053	4.6	45
37	Correlation Between Probe Shape and Atomic Friction Peaks at Graphite Step Edges. <i>Tribology Letters</i> , 2013 , 50, 49-57	2.8	42
36	Angle-resolved environmental X-ray photoelectron spectroscopy: a new laboratory setup for photoemission studies at pressures up to 0.4 Torr. <i>Review of Scientific Instruments</i> , 2012 , 83, 093112	1.7	41
35	Microscopic Friction Studies on Metal Surfaces. <i>Tribology Letters</i> , 2010 , 39, 19-24	2.8	36
34	Evaluation of wetting transparency and surface energy of pristine and aged graphene through nanoscale friction. <i>Carbon</i> , 2018 , 132, 749-759	10.4	24
33	Friction model for single-asperity elastic-plastic contacts. <i>Physical Review B</i> , 2012 , 86,	3.3	23
32	Contrast in nanoscale friction between rotational domains of graphene on Pt(111). <i>Carbon</i> , 2017 , 113, 132-138	10.4	22
31	A kelvin probe force microscopy of charged indentation-induced dislocation structures in KBr. <i>Nanotechnology</i> , 2009 , 20, 264005	3.4	19
30	Mesoscale structure in electrodeposited nanocrystalline NiBe alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006 , 441, 336-341	5.3	19
29	Atomic-scale nanoindentation: detection and identification of single glide events in three dimensions by force microscopy. <i>Nanotechnology</i> , 2011 , 22, 425703	3.4	18
28	Contrast mechanisms on nanoscale subsurface imaging in ultrasonic AFM: scattering of ultrasonic waves and contact stiffness of the tip-sample. <i>Nanoscale</i> , 2017 , 9, 2330-2339	7.7	17
27	Molecular order and disorder in the frictional response of alkanethiol self-assembled monolayers. <i>Journal of Physical Chemistry A</i> , 2011 , 115, 6942-7	2.8	17

26	Enhancement of tribo-corrosion performance of carbon steel through boronizing and BN-based coatings. <i>Tribology International</i> , 2021 , 153, 106666	4.9	13
25	Tribological Behavior of Multi-scaled Patterned Surfaces Machined Through Inclined End Milling and Micro Shot Blasting. <i>Tribology Letters</i> , 2018 , 66, 1	2.8	11
24	Directional friction surfaces through asymmetrically shaped dimpled surfaces patterned using inclined flat end milling. <i>Tribology International</i> , 2015 , 91, 67-73	4.9	10
23	Effect of counterface on cartilage boundary lubricating ability by proteoglycan 4 and hyaluronan: Cartilage-glass versus cartilage-cartilage. <i>Journal of Orthopaedic Research</i> , 2018 , 36, 2923-2931	3.8	10
22	Molecular dynamics simulation of amplitude modulation atomic force microscopy. <i>Nanotechnology</i> , 2015 , 26, 235705	3.4	10
21	Reinterpretation of velocity-dependent atomic friction: influence of the inherent instrumental noise in friction force microscopes. <i>Physical Review E</i> , 2014 , 90, 012125	2.4	10
20	Adhesion Mechanics between Nanoscale Silicon Oxide Tips and Few-Layer Graphene. <i>Tribology Letters</i> , 2017 , 65, 1	2.8	9
19	Tip convolution on HOPG surfaces measured in AM-AFM and interpreted using a combined experimental and simulation approach. <i>Nanotechnology</i> , 2017 , 28, 025702	3.4	7
18	Temporal development of indentation plasticity on the atomic scale revealed by force microscopy. <i>Physical Review B</i> , 2012 , 86,	3.3	7
17	Quantitative analysis of nanoscale electrical properties of CNT/PVDF nanocomposites by current sensing AFM. <i>RSC Advances</i> , 2017 , 7, 32564-32573	3.7	4
16	Seeking Supersolidity in Helium Layers. <i>Physics Magazine</i> , 2013 , 6,	1.1	3
15	Mechanisms of friction reduction of nanoscale sliding contacts achieved through ultrasonic excitation. <i>Nanotechnology</i> , 2019 , 30, 075502	3.4	3
14	Nanoscale spatial mapping of mechanical properties through dynamic atomic force microscopy. <i>Beilstein Journal of Nanotechnology</i> , 2019 , 10, 1332-1347	3	2
13	Reduction of Friction Using Electrospun Polymer Composite Microbeads Emulsified in Mineral Oil. <i>Procedia Manufacturing</i> , 2017 , 10, 339-350	1.5	2
12	The Role of Plastic Deformation in Nanometer-Scale Wear. <i>Advances in Science and Technology</i> , 2010 , 64, 25-32	0.1	2
11	Nano-meter scale plasticity in KBr studied by nanoindenter and force microscopy. <i>Materials Research Society Symposia Proceedings</i> , 2009 , 1185, 90		2
10	Tribo-corrosion inhibition of AISI 4715 steel pipe carrying hydraulic fracturing fluid. <i>Tribology International</i> , 2021 , 161, 107066	4.9	2
9	Quantitative determination of the interaction potential between two surfaces using frequency-modulated atomic force microscopy. <i>Beilstein Journal of Nanotechnology</i> , 2020 , 11, 729-739	3	1

8	In situ monitoring of the morphology evolution of interfacially-formed conductive nanocomposite films and their use as strain sensors. <i>Journal of Colloid and Interface Science</i> , 2019 , 554, 305-314	9.3	1
7	A Novel Tribometer Designed to Evaluate Geological Sliding Contacts Lubricated by Drilling Muds. <i>Journal of Testing and Evaluation</i> , 2019 , 47, 20170468	1	1
6	Insights into dynamic sliding contacts from conductive atomic force microscopy. <i>Nanoscale Advances</i> , 2020 , 2, 4117-4124	5.1	1
5	Influence of heating on the measured friction behavior of graphene evaluated under ultra-high vacuum conditions. <i>Applied Physics Letters</i> , 2021 , 119, 063102	3.4	1
4	Prediction of Optimal Process Parameters in Tribocorrosion Inhibition of Steel Pipes Using Response Surface Methodology. <i>Tribology Letters</i> , 2021 , 69, 1	2.8	0
3	Mesoscale Compositionally Modulated Nanocrystalline Ni-Fe Electrodeposits for Nanopatterning Applications. <i>Journal of Nanomaterials</i> , 2008 , 2008, 1-8	3.2	
2	Layer dependent out-of-plane elastic modulus of graphene. <i>Applied Physics Letters</i> , 2021 , 118, 263101	3.4	
1	Atomic-Scale Friction 2018 , 40-54		