

Gianpietro Moras

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4608986/publications.pdf>

Version: 2024-02-01

21
papers

684
citations

623188

14
h-index

676716

22
g-index

22
all docs

22
docs citations

22
times ranked

726
citing authors

#	ARTICLE	IF	CITATIONS
1	Mechano-chemical decomposition of organic friction modifiers with multiple reactive centres induces superlubricity of ta-C. Nature Communications, 2019, 10, 151.	5.8	118
2	<i>Ab initio</i> derived force field parameters for molecular dynamics simulations of deprotonated amorphous SiO ₂ /water interfaces. Physica Status Solidi (B): Basic Research, 2012, 249, 292-305.	0.7	71
3	Friction Regimes of Water-Lubricated Diamond (111): Role of Interfacial Ether Groups and Tribo-Induced Aromatic Surface Reconstructions. Physical Review Letters, 2017, 119, 096101.	2.9	63
4	Activation and mechanochemical breaking of C-C bonds initiate wear of diamond (110) surfaces in contact with silica. Carbon, 2016, 98, 474-483.	5.4	61
5	Fluorine-Terminated Diamond Surfaces as Dense Dipole Lattices: The Electrostatic Origin of Polar Hydrophobicity. Journal of the American Chemical Society, 2016, 138, 4018-4028.	6.6	47
6	Formation and Oxidation of Linear Carbon Chains and Their Role in the Wear of Carbon Materials. Tribology Letters, 2011, 44, 355-365.	1.2	43
7	Interplay of mechanics and chemistry governs wear of diamond-like carbon coatings interacting with ZDDP-additivated lubricants. Nature Communications, 2021, 12, 4550.	5.8	42
8	Progressive Shortening of sp-Hybridized Carbon Chains through Oxygen-Induced Cleavage. Journal of Physical Chemistry C, 2011, 115, 24653-24661.	1.5	38
9	Multiscale hybrid simulation methods for material systems. Journal of Physics Condensed Matter, 2005, 17, R691-R703.	0.7	36
10	Atomically Smooth Stress-Corrosion Cleavage of a Hydrogen-Implanted Crystal. Physical Review Letters, 2010, 105, 075502.	2.9	29
11	Shear melting of silicon and diamond and the disappearance of the polyamorphic transition under shear. Physical Review Materials, 2018, 2, .	0.9	26
12	Accuracy of buffered-force QM/MM simulations of silica. Journal of Chemical Physics, 2015, 142, 064116.	1.2	17
13	Role of oxygen functional groups in the friction of water-lubricated low-index diamond surfaces. Physical Review Materials, 2018, 2, .	0.9	17
14	<i>In Situ</i> Synthesis of Graphene Nitride Nanolayers on Glycerol-Lubricated Si ₃ N ₄ for Superlubricity Applications. ACS Applied Nano Materials, 2021, 4, 2721-2732.	2.4	16
15	Steric Effects Control Dry Friction of H- and F-Terminated Carbon Surfaces. ACS Applied Materials & Interfaces, 2020, 12, 8805-8816.	4.0	15
16	Superlow Friction of a-C:H Coatings in Vacuum: Passivation Regimes and Structural Characterization of the Sliding Interfaces. Coatings, 2021, 11, 1069.	1.2	14
17	A Combined Experimental and Atomistic Investigation of PTFE Double Transfer Film Formation and Lubrication in Rolling Point Contacts. Tribology Letters, 2021, 69, 1.	1.2	13
18	Relating Dry Friction to Interdigitation of Surface Passivation Species: A Molecular Dynamics Study on Amorphous Carbon. Materials, 2022, 15, 3247.	1.3	8

#	ARTICLE	IF	CITATIONS
19	Solid-Phase Silicon Homoepitaxy via Shear-Induced Amorphization and Recrystallization. Physical Review Letters, 2021, 127, 126101.	2.9	5
20	Multiscale Modeling of Defects in Semiconductors: A Novel Molecular-Dynamics Scheme. Topics in Applied Physics, 2006, , 193-212.	0.4	3
21	Back Cover: <i>Ab initio</i> derived force field parameters for molecular dynamics simulations of deprotonated amorphous SiO_2 /water interfaces (Phys. Status Solidi B 2/2012). Physica Status Solidi (B): Basic Research, 2012, 249, .	0.7	1