Gianpietro Moras

List of Publications by Year in Descending Order

21 papers	450 citations	11 h-index	21 g-index
22 ext. papers	542 ext. citations	5.8 avg, IF	3.75 L-index

#	Paper	IF	Citations
21	Interplay of mechanics and chemistry governs wear of diamond-like carbon coatings interacting with ZDDP-additivated lubricants. *Nature Communications*, **2021**, 12, 4550	17.4	7
20	In Situ Synthesis of Graphene Nitride Nanolayers on Glycerol-Lubricated Si3N4 for Superlubricity Applications. *ACS Applied Nano Materials*, **2021**, 4, 2721-2732	5.6	5
19	Superlow Friction of a-C:H Coatings in Vacuum: Passivation Regimes and Structural Characterization of the Sliding Interfaces. *Coatings*, **2021**, 11, 1069	2.9	2
18	A Combined Experimental and Atomistic Investigation of PTFE Double Transfer Film Formation and Lubrication in Rolling Point Contacts. *Tribology Letters*, **2021**, 69, 1	2.8	2
17	Solid-Phase Silicon Homoepitaxy via Shear-Induced Amorphization and Recrystallization. *Physical Review Letters*, **2021**, 127, 126101	7.4	
16	Steric Effects Control Dry Friction of H- and F-Terminated Carbon Surfaces. *ACS Applied Materials & Interfaces*, **2020**, 12, 8805-8816	9.5	7
15	Mechano-chemical decomposition of organic friction modifiers with multiple reactive centres induces superlubricity of ta-C. *Nature Communications*, **2019**, 10, 151	17.4	66
14	Role of oxygen functional groups in the friction of water-lubricated low-index diamond surfaces. *Physical Review Materials*, **2018**, 2,	3.2	10
13	Shear melting of silicon and diamond and the disappearance of the polyamorphic transition under shear. *Physical Review Materials*, **2018**, 2,	3.2	14
12	Friction Regimes of Water-Lubricated Diamond (111): Role of Interfacial Ether Groups and Tribo-Induced Aromatic Surface Reconstructions. *Physical Review Letters*, **2017**, 119, 096101	7.4	54
11	Activation and mechanochemical breaking of C□C bonds initiate wear of diamond (110) surfaces in contact with silica. *Carbon*, **2016**, 98, 474-483	10.4	44
10	Fluorine-Terminated Diamond Surfaces as Dense Dipole Lattices: The Electrostatic Origin of Polar Hydrophobicity. *Journal of the American Chemical Society*, **2016**, 138, 4018-28	16.4	30
9	Accuracy of buffered-force QM/MM simulations of silica. *Journal of Chemical Physics*, **2015**, 142, 064116	3.9	15
8	Ab initio derived force-field parameters for molecular dynamics simulations of deprotonated amorphous-SiO2/water interfaces. *Physica Status Solidi (B): Basic Research*, **2012**, 249, 292-305	1.3	58
7	Back Cover: Ab initio derived force-field parameters for molecular dynamics simulations of deprotonated amorphous-SiO2/water interfaces (Phys. Status Solidi B 2/2012). *Physica Status Solidi (B): Basic Research*, **2012**, 249,	1.3	1
6	Formation and Oxidation of Linear Carbon Chains and Their Role in the Wear of Carbon Materials. *Tribology Letters*, **2011**, 44, 355-365	2.8	37
5	Progressive Shortening of sp-Hybridized Carbon Chains through Oxygen-Induced Cleavage. *Journal of Physical Chemistry C*, **2011**, 115, 24653-24661	3.8	34

4	Hybrid Quantum/Classical Modeling of Material Systems: The Learn on the Fly Molecular Dynamics Scheme. *Challenges and Advances in Computational Chemistry and Physics*, **2010**, 1-23	0.7	1
3	Atomically smooth stress-corrosion cleavage of a hydrogen-implanted crystal. *Physical Review Letters*, **2010**, 105, 075502	7.4	28
2	Multiscale Modeling of Defectsin Semiconductors:A Novel Molecular-Dynamics Scheme. *Topics in Applied Physics*, **2006**, 193-212	0.5	3
1	Multiscale hybrid simulation methods for material systems. *Journal of Physics Condensed Matter*, **2005**, 17, R691-R703	1.8	32