

# Filippo Mangolini

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8789605/publications.pdf>

Version: 2024-02-01

44  
papers

2,387  
citations

331670

21  
h-index

276875

41  
g-index

45  
all docs

45  
docs citations

45  
times ranked

3507  
citing authors

#	ARTICLE	IF	CITATIONS
1	Nonaqueous Synthesis of TiO <sub>2</sub> Nanocrystals Using TiF <sub>4</sub> to Engineer Morphology, Oxygen Vacancy Concentration, and Photocatalytic Activity. <i>Journal of the American Chemical Society</i> , 2012, 134, 6751-6761.	13.7	854
2	Mechanisms of antiwear tribofilm growth revealed in situ by single-asperity sliding contacts. <i>Science</i> , 2015, 348, 102-106.	12.6	411
3	Chain-length-identification strategy in zinc polyphosphate glasses by means of XPS and ToF-SIMS. <i>Analytical and Bioanalytical Chemistry</i> , 2012, 403, 1415-1432.	3.7	102
4	Understanding the hydrogen and oxygen gas pressure dependence of the tribological properties of silicon oxide-doped hydrogenated amorphous carbon coatings. <i>Carbon</i> , 2015, 93, 851-860.	10.3	74
5	Complete characterization by Raman spectroscopy of the structural properties of thin hydrogenated diamond-like carbon films exposed to rapid thermal annealing. <i>Journal of Applied Physics</i> , 2014, 116, .	2.5	71
6	Accounting for Nanometer-Thick Adventitious Carbon Contamination in X-ray Absorption Spectra of Carbon-Based Materials. <i>Analytical Chemistry</i> , 2014, 86, 12258-12265.	6.5	68
7	Tribochemistry of Bulk Zinc Metaphosphate Glasses. <i>Tribology Letters</i> , 2010, 39, 121-134.	2.6	66
8	Thermally induced evolution of hydrogenated amorphous carbon. <i>Applied Physics Letters</i> , 2013, 103, .	3.3	60
9	Si doping enhances the thermal stability of diamond-like carbon through reductions in carbon-carbon bond length disorder. <i>Carbon</i> , 2018, 131, 72-78.	10.3	59
10	Chemical Reactivity of Triphenyl Phosphorothionate (TPPT) with Iron: An ATR/FT-IR and XPS Investigation. <i>Journal of Physical Chemistry C</i> , 2011, 115, 1339-1354.	3.1	57
11	Boron-doped ultrananocrystalline diamond synthesized with an H-rich/Ar-lean gas system. <i>Carbon</i> , 2015, 84, 103-117.	10.3	49
12	Effect of silicon and oxygen dopants on the stability of hydrogenated amorphous carbon under harsh environmental conditions. <i>Carbon</i> , 2018, 130, 127-136.	10.3	45
13	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.	1.3	42
14	Reactivity of Triphenyl Phosphorothionate in Lubricant Oil Solution. <i>Tribology Letters</i> , 2009, 35, 31-43.	2.6	30
15	Influence of metallic and oxidized iron/steel on the reactivity of triphenyl phosphorothionate in oil solution. <i>Tribology International</i> , 2011, 44, 670-683.	5.9	30
16	Tribochemistry of Triphenyl Phosphorothionate (TPPT) by In Situ Attenuated Total Reflection (ATR/FT-IR) Tribometry. <i>Journal of Physical Chemistry C</i> , 2012, 116, 5614-5627.	3.1	29
17	Solid state magnetic resonance investigation of the thermally-induced structural evolution of silicon oxide-doped hydrogenated amorphous carbon. <i>Carbon</i> , 2016, 105, 163-175.	10.3	24
18	Quantitative Evaluation of the Carbon Hybridization State by Near Edge X-ray Absorption Fine Structure Spectroscopy. <i>Analytical Chemistry</i> , 2016, 88, 2817-2824.	6.5	24

#	ARTICLE	IF	CITATIONS
19	Quantification of the carbon bonding state in amorphous carbon materials: A comparison between EELS and NEXAFS measurements. <i>Carbon</i> , 2021, 173, 557-564.	10.3	23
20	Tunable, Source- Controlled Formation of Platinum Silicides and Nanogaps from Thin Precursor Films. <i>Advanced Materials Interfaces</i> , 2014, 1, 1300120.	3.7	22
21	In Situ Attenuated Total Reflection (ATR/FT-IR) Tribometry: A Powerful Tool for Investigating Tribochemistry at the Lubricant- Substrate Interface. <i>Tribology Letters</i> , 2012, 45, 207-218.	2.6	21
22	Pulse Plating of Mn- Cu Alloys on Steel. <i>Journal of the Electrochemical Society</i> , 2006, 153, C623.	2.9	20
23	Novel Metal Silicide Thin Films by Design via Controlled Solid-State Diffusion. <i>Chemistry of Materials</i> , 2015, 27, 4247-4253.	6.7	19
24	Thermally Induced Structural Evolution of Silicon- and Oxygen-Containing Hydrogenated Amorphous Carbon: A Combined Spectroscopic and Molecular Dynamics Simulation Investigation. <i>Langmuir</i> , 2018, 34, 2989-2995.	3.5	19
25	Lubrication Mechanism of Phosphonium Phosphate Ionic Liquid in Nanoscale Single- Asperity Sliding Contacts. <i>Advanced Materials Interfaces</i> , 2020, 7, 2000426.	3.7	18
26	Engineering encapsulated ionic liquids for next-generation applications. <i>RSC Advances</i> , 2021, 11, 36273-36288.	3.6	16
27	Wafer-Scalable Single-Layer Amorphous Molybdenum Trioxide. <i>ACS Nano</i> , 2022, 16, 3756-3767.	14.6	16
28	Magnesium-Promoted Rapid Nucleation of Carbon Dioxide Hydrates. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 11137-11146.	6.7	15
29	Silicon Oxide- Rich Diamond- Like Carbon: A Conformal, Ultrasoother Thin Film Material with High Thermo- Oxidative Stability. <i>Advanced Materials Interfaces</i> , 2019, 6, 1801416.	3.7	13
30	Recent Advances in Nanotribology of Ionic Liquids. <i>Experimental Mechanics</i> , 2021, 61, 1093-1107.	2.0	13
31	Investigation of the Mechanics, Composition, and Functional Behavior of Thick Tribofilms Formed from Silicon- and Oxygen-Containing Hydrogenated Amorphous Carbon. <i>Tribology Letters</i> , 2019, 67, 1.	2.6	11
32	Aggregation of Lactoferrin Caused by Droplet Atomization Process via a Two-Fluid Nozzle: The Detrimental Effect of Air- Water Interfaces. <i>Molecular Pharmaceutics</i> , 2022, 19, 2662-2675.	4.6	10
33	Pulse plating of sacrificial Mn- Cu alloys from sulphate bath. <i>Transactions of the Institute of Metal Finishing</i> , 2007, 85, 27-33.	1.3	8
34	Substituent Effect on the Reactivity of Alkylated Triphenyl Phosphorothionates in Oil Solution in the Presence of Iron Particles. <i>Tribology Letters</i> , 2010, 40, 375-394.	2.6	8
35	How Hydrogen and Oxygen Vapor Affect the Tribochemistry of Silicon- and Oxygen-Containing Hydrogenated Amorphous Carbon under Low-Friction Conditions: A Study Combining X-ray Absorption Spectromicroscopy and Data Science Methods. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 12610-12621.	8.0	7
36	Valence Band Control of Metal Silicide Films via Stoichiometry. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 2573-2578.	4.6	6

#	ARTICLE	IF	CITATIONS
37	Tuning the Surface Reactivity and Tribological Performance of Phosphonium-Based Ionic Liquid at Steel/Steel Interfaces by Bromide/Phosphate Anion Mixtures. <i>Applied Surface Science</i> , 2021, 570, 151245.	6.1	6
38	4. Attenuated total reflection-Fourier transform infrared spectroscopy: A powerful tool for investigating polymer surfaces and interfaces. , 2014, , 113-152.		5
39	<i>In situ</i> nanoscale evaluation of pressure-induced changes in structural morphology of phosphonium phosphate ionic liquid at single-asperity contacts. <i>RSC Advances</i> , 2021, 12, 413-419.	3.6	5
40	Investigation of Multilayered Structures of Ionic Liquids on Graphite and Platinum Using Atomic Force Microscopy and Molecular Simulations. <i>Langmuir</i> , 2022, 38, 4036-4047.	3.5	5
41	Near Edge X-Ray Absorption Fine Structure Spectroscopy: A Powerful Tool for Investigating the Surface Structure and Chemistry of Solid Lubricants. <i>Microtechnology and MEMS</i> , 2018, , 63-106.	0.2	2
42	Monte-Carlo evaluation of bias and variance in Hurst exponents computed from power spectral analysis of atomic force microscopy topographic images. <i>Applied Surface Science</i> , 2022, 581, 152092.	6.1	2
43	Thermo-Oxidative Stability of SiO <sub>x</sub> -doped Diamondlike Carbon Studied via Environmental XPS and AFM. <i>Microscopy and Microanalysis</i> , 2014, 20, 2092-2093.	0.4	0
44	Ionic Liquids: Lubrication Mechanism of Phosphonium Phosphate Ionic Liquid in Nanoscale Single-Asperity Sliding Contacts ( <i>Adv. Mater. Interfaces</i> 17/2020). <i>Advanced Materials Interfaces</i> , 2020, 7, 2070099.	3.7	0