

# RÃ©my Pawlak

## List of Publications by Year in descending order

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74  
papers

3,159  
citations

186265

28  
h-index

155660

55  
g-index

78  
all docs

78  
docs citations

78  
times ranked

3963  
citing authors

#	ARTICLE	IF	CITATIONS
1	Organized Formation of 2D Extended Covalent Organic Frameworks at Surfaces. <i>Journal of the American Chemical Society</i> , 2008, 130, 6678-6679.	13.7	525
2	Superlubricity of graphene nanoribbons on gold surfaces. <i>Science</i> , 2016, 351, 957-961.	12.6	302
3	Probing atomic structure and Majorana wavefunctions in mono-atomic Fe chains on superconducting Pb surface. <i>Npj Quantum Information</i> , 2016, 2, .	6.7	283
4	Multiple heteroatom substitution to graphene nanoribbon. <i>Science Advances</i> , 2018, 4, eaar7181.	10.3	151
5	Bottom-up Synthesis of Nitrogen-Doped Porous Graphene Nanoribbons. <i>Journal of the American Chemical Society</i> , 2020, 142, 12568-12573.	13.7	97
6	Substrate-mediated ordering and defect analysis of a surface covalent organic framework. <i>Physical Review B</i> , 2011, 84, .	3.2	81
7	Direct quantitative measurement of the C-C bond by atomic force microscopy. <i>Science Advances</i> , 2017, 3, e1603258.	10.3	80
8	Atomic-Scale Mechanical Properties of Orientated C <sub>60</sub> Molecules Revealed by Noncontact Atomic Force Microscopy. <i>ACS Nano</i> , 2011, 5, 6349-6354.	14.6	74
9	Water interaction with hydrogenated and oxidized detonation nanodiamonds – Microscopic and spectroscopic analyses. <i>Diamond and Related Materials</i> , 2016, 63, 97-102.	3.9	74
10	Thermal control of sequential on-surface transformation of a hydrocarbon molecule on a copper surface. <i>Nature Communications</i> , 2016, 7, 12711.	12.8	71
11	Competing Annulene and Radialene Structures in a Single Anti-Aromatic Molecule Studied by High-Resolution Atomic Force Microscopy. <i>ACS Nano</i> , 2017, 11, 8122-8130.	14.6	64
12	Quantifying the atomic-level mechanics of single long physisorbed molecular chains. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 3968-3972.	7.1	59
13	Three-dimensional graphene nanoribbons as a framework for molecular assembly and local probe chemistry. <i>Science Advances</i> , 2020, 6, eaay8913.	10.3	58
14	Obtaining Detailed Structural Information about Supramolecular Systems on Surfaces by Combining High-Resolution Force Microscopy with <i>ab Initio</i> Calculations. <i>ACS Nano</i> , 2013, 7, 9098-9105.	14.6	56
15	Precise engineering of quantum dot array coupling through their barrier widths. <i>Nature Communications</i> , 2017, 8, 787.	12.8	55
16	Giant frictional dissipation peaks and charge-density-wave slips at the NbSe <sub>2</sub> surface. <i>Nature Materials</i> , 2014, 13, 173-177.	27.5	52
17	Organometallic Bonding in an Ullmann-Type On-Surface Chemical Reaction Studied by High-Resolution Atomic Force Microscopy. <i>Small</i> , 2016, 12, 5303-5311.	10.0	52
18	Supramolecular Assemblies of 1,4-Benzene Diboronic Acid on KCl(001). <i>Journal of Physical Chemistry C</i> , 2010, 114, 9290-9295.	3.1	46

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19	Directed Rotations of Single Porphyrin Molecules Controlled by Localized Force Spectroscopy. ACS Nano, 2012, 6, 6318-6324.	14.6	44
20	Design and Characterization of an Electrically Powered Single Molecule on Gold. ACS Nano, 2017, 11, 9930-9940.	14.6	44
21	Majorana fermions in magnetic chains. Progress in Particle and Nuclear Physics, 2019, 107, 1-19.	14.4	44
22	Diacetylene Linked Anthracene Oligomers Synthesized by One-Shot Homocoupling of Trimethylsilyl on Cu(111). ACS Nano, 2018, 12, 8791-8797.	14.6	41
23	Single-Molecule Tribology: Force Microscopy Manipulation of a Porphyrin Derivative on a Copper Surface. ACS Nano, 2016, 10, 713-722.	14.6	40
24	Self-assembling of Zn porphyrins on a (110) face of rutile TiO <sub>2</sub> —The anchoring role of carboxyl groups. Applied Surface Science, 2016, 379, 277-281.	6.1	36
25	Quantitative determination of atomic buckling of silicene by atomic force microscopy. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 228-237.	7.1	34
26	Robust Supramolecular Network on Ag(111): Hydrogen—Bond Enhancement through Partial Alcohol Dehydrogenation. ChemPhysChem, 2009, 10, 1032-1035.	2.1	30
27	Pure hydrogen low-temperature plasma exposure of HOPG and graphene: Graphane formation?. Beilstein Journal of Nanotechnology, 2012, 3, 852-859.	2.8	30
28	Donor—Acceptor Properties of a Single-Molecule Altered by On-Surface Complex Formation. ACS Nano, 2017, 11, 8413-8420.	14.6	30
29	Conformations and cryo-force spectroscopy of spray-deposited single-strand DNA on gold. Nature Communications, 2019, 10, 685.	12.8	30
30	High-resolution imaging of C <sub>60</sub> molecules using tuning-fork-based non-contact atomic force microscopy. Journal of Physics Condensed Matter, 2012, 24, 084005.	1.8	29
31	Characterization of individual molecular adsorption geometries by atomic force microscopy: Cu-TCPP on rutile TiO <sub>2</sub> (110). Journal of Chemical Physics, 2015, 143, 094202.	3.0	28
32	Inhomogeneous Relaxation of a Molecular Layer on an Insulator due to Compressive Stress. Physical Review Letters, 2012, 108, 206103.	7.8	27
33	Recent highlights in nanoscale and mesoscale friction. Beilstein Journal of Nanotechnology, 2018, 9, 1995-2014.	2.8	27
34	Three-dimensional dynamic force spectroscopy measurements on KBr(001): atomic deformations at small tip—sample separations. Nanotechnology, 2012, 23, 055401.	2.6	26
35	On—Surface Synthesis of Nitrogen—Doped Kagome Graphene. Angewandte Chemie - International Edition, 2021, 60, 8370-8375.	13.8	26
36	Single-molecule manipulation experiments to explore friction and adhesion. Journal Physics D: Applied Physics, 2017, 50, 113003.	2.8	24

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37	Systematic measurement of pentacene assembled on Cu(111) by bimodal dynamic force microscopy at room temperature. <i>Physical Review B</i> , 2011, 84, .	3.2	23
38	Hydroxyl-Induced Partial Charge States of Single Porphyrins on Titania Rutile. <i>Journal of Physical Chemistry C</i> , 2017, 121, 3607-3614.	3.1	23
39	Electrospray deposition of structurally complex molecules revealed by atomic force microscopy. <i>Nanoscale</i> , 2018, 10, 1337-1344.	5.6	23
40	Local Detection of Nitrogen-Vacancy Centers in a Nanodiamond Monolayer. <i>Nano Letters</i> , 2013, 13, 5803-5807.	9.1	21
41	Noncontact Atomic Force Microscope Dissipation Reveals a Central Peak of SrTiO <sub>3</sub> Structural Phase Transition. <i>Physical Review Letters</i> , 2015, 115, 046101.	7.8	20
42	Altering the Properties of Graphene on Cu(111) by Intercalation of Potassium Bromide. <i>ACS Nano</i> , 2019, 13, 5485-5492.	14.6	20
43	Giant thermal expansion of a two-dimensional supramolecular network triggered by alkyl chain motion. <i>Communications Materials</i> , 2020, 1, 8.	6.9	20
44	Combined Photoemission Spectroscopy and Scanning Tunneling Microscopy Study of the Sequential Dehydrogenation of Hexahydroxytriphenylene on Ag(111). <i>Journal of Physical Chemistry C</i> , 2014, 118, 14899-14904.	3.1	19
45	Electrospray deposition of organic molecules on bulk insulator surfaces. <i>Beilstein Journal of Nanotechnology</i> , 2015, 6, 1927-1934.	2.8	17
46	Two-dimensional nanodiamond monolayers deposited by combined ultracentrifugation and electrophoresis techniques. <i>Applied Physics Letters</i> , 2012, 101, .	3.3	16
47	Mechanical dissipation from charge and spin transitions in oxygen-deficient SrTiO <sub>3</sub> surfaces. <i>Nature Communications</i> , 2018, 9, 2946.	12.8	16
48	Ordered heteromolecular overlayers formed by metal phthalocyanines and porphyrins on rutile titanium dioxide surface studied at room temperature. <i>Journal of Chemical Physics</i> , 2015, 143, 224702.	3.0	14
49	Detachment Dynamics of Graphene Nanoribbons on Gold. <i>ACS Nano</i> , 2019, 13, 689-697.	14.6	14
50	Thermally induced anchoring of a zinc-carboxyphenylporphyrin on rutile TiO <sub>2</sub> (110). <i>Journal of Chemical Physics</i> , 2017, 146, .	3.0	13
51	Fast and curious. <i>Nature Nanotechnology</i> , 2017, 12, 712-712.	31.5	12
52	Ordering of Zn-centered porphyrin and phthalocyanine on TiO <sub>2</sub> (011): STM studies. <i>Beilstein Journal of Nanotechnology</i> , 2017, 8, 99-107.	2.8	12
53	Sequential Bending and Twisting around C-C Single Bonds by Mechanical Lifting of a Pre-Adsorbed Polymer. <i>Nano Letters</i> , 2020, 20, 652-657.	9.1	12
54	Head-to-Tail Oligomerization by Silylene-Ethered Sonogashira Coupling on Ag(111). <i>Angewandte Chemie - International Edition</i> , 2021, 60, 19598-19603.	13.8	12

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55	Chain-like structure elements in Ni <sub>40</sub> Ta <sub>60</sub> metallic glasses observed by scanning tunneling microscopy. <i>Scientific Reports</i> , 2015, 5, 13143.	3.3	10
56	Stickâ€“Slip Motion of ssDNA over Graphene. <i>Journal of Physical Chemistry B</i> , 2018, 122, 840-846.	2.6	9
57	Onâ€“Surface Synthesis of Porphyrinâ€“Complex Multiâ€“Block Coâ€“Oligomers by Defluorinative Coupling. <i>Angewandte Chemie - International Edition</i> , 2021, , .	13.8	9
58	Hydrogen plasma microlithography of graphene supported on a Si/SiO <sub>2</sub> substrate. <i>Applied Physics Letters</i> , 2013, 102, .	3.3	7
59	Morphology Change of C <sub>60</sub> Islands on Organic Crystals Observed by Atomic Force Microscopy. <i>ACS Nano</i> , 2016, 10, 5782-5788.	14.6	7
60	Self-organised growth of molecular arrays at surfaces. <i>International Journal of Nanotechnology</i> , 2012, 9, 325.	0.2	6
61	Controlled switching of a single CuPc molecule on Cu(111) at low temperature. <i>Physical Review B</i> , 2019, 100, .	3.2	6
62	Onâ€“Surface Synthesis of Unsaturated Hydrocarbon Chains through Câ”S Activation. <i>Chemistry - A European Journal</i> , 2022, 28, .	3.3	6
63	Transoid-to-Cisoid Conformation Changes of Single Molecules on Surfaces Triggered by Metal Coordination. <i>ACS Omega</i> , 2018, 3, 12851-12856.	3.5	5
64	Flexible Superlubricity Unveiled in Sidewinding Motion of Individual Polymeric Chains. <i>Physical Review Letters</i> , 2022, 128, .	7.8	5
65	Atomic Scale Friction Phenomena. , 2017, , 519-548.		4
66	Headâ€“toâ€“Tail Oligomerization by Silyleneâ€“Ethered Sonogashira Coupling on Ag(111). <i>Angewandte Chemie</i> , 2021, 133, 19750-19755.	2.0	4
67	Onâ€“Surface Synthesis of Porphyrinâ€“Complex Multiâ€“Block Coâ€“Oligomers by Defluorinative Coupling. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	3
68	Onâ€“Surface Synthesis of Nitrogenâ€“Doped Kagome Graphene. <i>Angewandte Chemie</i> , 2021, 133, 8451-8456.	2.0	1
69	Atomic Scale Friction Phenomena. <i>Springer Handbooks</i> , 2017, , 987-1011.	0.6	0
70	Atomic-scale investigations of ultralow friction on crystal surfaces in ultrahigh vacuum. , 2021, , 71-84.		0
71	Frontispiz: Onâ€“Surface Synthesis of Nitrogenâ€“Doped Kagome Graphene. <i>Angewandte Chemie</i> , 2021, 133, .	2.0	0
72	Frontispiece: Onâ€“Surface Synthesis of Nitrogenâ€“Doped Kagome Graphene. <i>Angewandte Chemie - International Edition</i> , 2021, 60, .	13.8	0

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73	RÄ¼cktitelbild: Head-to-Tail Oligomerization by Silylene-Tethered Sonogashira Coupling on Ag(111) (Angew. Chem. 36/2021). Angewandte Chemie, 2021, 133, 20224-20224.	2.0	0
74	Topographic signatures and manipulations of Fe atoms, CO molecules and NaCl islands on superconducting Pb(111). Beilstein Journal of Nanotechnology, 2022, 13, 1-9.	2.8	0