Leonhard Grill

List of Publications by Year
in descending order

57 papers	5,000 citations	136950 32 h-index	144013 57 g-index
61 all docs	61 docs citations	61 times ranked	4856 citing authors

#	Article	IF	Citations
1	Inverted Conformation Stability of a Motor Molecule on a Metal Surface. Journal of Physical Chemistry C, 2022, 126, 9034-9040.	3.1	5
2	Thermal- vs Light-Induced On-Surface Polymerization. Journal of Physical Chemistry C, 2021, 125, 22554-22561.	3.1	9
3	Control of long-distance motion of single molecules on a surface. Science, 2020, 370, 957-960.	12.6	21
4	Adsorption and Motion of Single Molecular Motors on TiO2(110). Journal of Physical Chemistry C, 2020, 124, 24776-24785.	3.1	5
5	Covalent on-surface polymerization. Nature Chemistry, 2020, 12, 115-130.	13.6	217
6	How to control single-molecule rotation. Nature Communications, 2019, 10, 4631.	12.8	61
7	Quantum tunneling in real space: Tautomerization of single porphycene molecules on the (111) surface of Cu, Ag, and Au. Journal of Chemical Physics, 2018, 148, 102330.	3.0	29
8	Reversible and Efficient Light-Induced Molecular Switching on an Insulator Surface. ACS Nano, 2018, 12, 1821-1828.	14.6	33
9	Reversible Photoswitching and Isomerâ€Dependent Diffusion of Single Azobenzene Tetramers on a Metal Surface. Angewandte Chemie, 2018, 130, 15254-15259.	2.0	13
10	Reversible Photoswitching and Isomerâ€Dependent Diffusion of Single Azobenzene Tetramers on a Metal Surface. Angewandte Chemie - International Edition, 2018, 57, 15034-15039.	13.8	42
11	Steering a cycloaddition reaction via the surface structure. Surface Science, 2018, 678, 194-200.	1.9	24
12	How Structural Defects Affect the Mechanical and Electrical Properties of Single Molecular Wires. Physical Review Letters, 2018, 121, 047701.	7.8	24
13	How to build and race a fast nanocar. Nature Nanotechnology, 2017, 12, 604-606.	31.5	56
14	On-Surface Polymerization: From Polyarylenes to Graphene Nanoribbons and Two-Dimensional Networks. Advances in Polymer Science, 2017, , 99-125.	0.8	7
15	Toward printing molecular nanostructures from microstructured samples in ultrahigh vacuum. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2016, 34, 011801.	1.2	1
16	Observing single-atom diffusion at a molecule-metal interface. Physical Review B, 2016, 94, .	3.2	8
17	Covalent Assembly and Characterization of Nonsymmetrical Singleâ€Molecule Nodes. Angewandte Chemie - International Edition, 2016, 55, 13724-13728.	13.8	18
18	Covalent Assembly and Characterization of Nonsymmetrical Singleâ€Molecule Nodes. Angewandte Chemie, 2016, 128, 13928-13932.	2.0	0

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19	The Emergence of Covalent On-Surface Polymerization. Advances in Atom and Single Molecule Machines, 2016, , 1-21.	0.0	8
20	Hot Carrier-Induced Tautomerization within a Single Porphycene Molecule on Cu(111). ACS Nano, 2015, 9, 7287-7295.	14.6	72
21	Adatoms underneath Single Porphyrin Molecules on Au(111). Journal of the American Chemical Society, 2015, 137, 1844-1849.	13.7	56
22	Surface-Assisted Reactions toward Formation of Graphene Nanoribbons on Au(110) Surface. Journal of Physical Chemistry C, 2015, 119, 2427-2437.	3.1	57
23	Conductance of a single flexible molecular wire composed of alternating donor and acceptor units. Nature Communications, 2015, 6, 7397.	12.8	83
24	Local Characterization of Ultrathin ZnO Layers on Ag(111) by Scanning Tunneling Microscopy and Atomic Force Microscopy. Journal of Physical Chemistry C, 2014, 118, 27428-27435.	3.1	37
25	Quantifying the atomic-level mechanics of single long physisorbed molecular chains. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 3968-3972.	7.1	59
26	Controlling intramolecular hydrogen transfer in a porphycene molecule with single atoms or molecules located nearby. Nature Chemistry, 2014, 6, 41-46.	13.6	204
27	Manipulating the Conformation of Single Organometallic Chains on Au(111). Journal of Physical Chemistry C, 2014, 118, 1719-1728.	3.1	54
28	Substrate-controlled linking of molecular building blocks: Au(111) vs. Cu(111). Surface Science, 2014, 627, 70-74.	1.9	37
29	Thermally and Vibrationally Induced Tautomerization of Single Porphycene Molecules on a Cu(110) Surface. Physical Review Letters, 2013, 111, 246101.	7.8	93
30	Coverage- and Temperature-Controlled Isomerization of an Imine Derivative on Au(111). Journal of the American Chemical Society, 2013, 135, 4273-4281.	13.7	25
31	Electronic Structure and Properties of Graphen Nanoribbons: Zigzag and Armchair Edges. Advances in Atom and Single Molecule Machines, 2013, , 81-90.	0.0	0
32	Island formation and manipulation of prochiral azobenzene derivatives on Au(111). Journal of Physics Condensed Matter, 2012, 24, 354013.	1.8	2
33	Molecules with multiple switching units on a Au(111) surface: self-organization and single-molecule manipulation. Journal of Physics Condensed Matter, 2012, 24, 394013.	1.8	13
34	Voltage-dependent conductance of a single graphene nanoribbon. Nature Nanotechnology, 2012, 7, 713-717.	31.5	298
35	Toward a Light-Driven Motorized Nanocar: Synthesis and Initial Imaging of Single Molecules. ACS Nano, 2012, 6, 592-597.	14.6	110
36	Polymerization on Stepped Surfaces: Alignment of Polymers and Identification of Catalytic Sites. Angewandte Chemie - International Edition, 2012, 51, 5096-5100.	13.8	71

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37	Imine Derivatives on Au(111): Evidence for â€œInvertedâ€•Thermal Isomerization. ACS Nano, 2011, 5, 2090-2097.	14.6	53
38	Large molecules on surfaces: deposition and intramolecular STM manipulation by directional forces. Journal of Physics Condensed Matter, 2010, 22, 084023.	1.8	28
39	Bottom-up Assembly of Molecular Wagons on a Surface. Journal of the American Chemical Society, 2010, 132, 16848-16854.	13.7	80
40	Single Molecular Wires Connecting Metallic and Insulating Surface Areas. Angewandte Chemie - International Edition, 2009, 48, 9966-9970.	13.8	78
41	Strommessung an einzelnen molekularen DrÃhten. Physik in Unserer Zeit, 2009, 40, 172-173.	0.0	0
42	Conductance of a Single Conjugated Polymer as a Continuous Function of Its Length. Science, 2009, 323, 1193-1197.	12.6	478
43	Formation and manipulation of discrete supramolecular azobenzene assemblies. Applied Physics A: Materials Science and Processing, 2008, 93, 247-252.	2.3	22
44	Spatial periodicity in molecular switching. Nature Nanotechnology, 2008, 3, 649-653.	31.5	149
45	Adsorption and Switching Properties of Azobenzene Derivatives on Different Noble Metal Surfaces: Au(111), Cu(111), and Au(100). Journal of Physical Chemistry C, 2008, 112, 10509-10514.	3.1	116
46	Functionalized molecules studied by STM: motion, switching and reactivity. Journal of Physics Condensed Matter, 2008, 20, 053001.	1.8	54
47	The Molecular Orientation of para-Sexiphenyl on Cu(110) and Cu(110) p(2Ã—1)O. ChemPhysChem, 2007, 8, 1707-1712.	2.1	76
48	Nano-architectures by covalent assembly of molecular building blocks. Nature Nanotechnology, 2007, 2, 687-691.	31.5	1,187
49	Electric Field-Induced Isomerization of Azobenzene by STM. Journal of the American Chemical Society, 2006, 128, 14446-14447.	13.7	543
50	Exploring the Interatomic Forces between Tip and Single Molecules during STM Manipulation. Nano Letters, 2006, 6, 2685-2689.	9.1	60
51	Preparation of self-ordered molecular layers by pulse injection. Surface Science, 2006, 600, L143-L147.	1.9	22
52	Force induced and electron stimulated STM manipulations: routes to artificial nanostructures as well as to molecular contacts, engines and switches. Journal of Physics: Conference Series, 2005, 19, 175-181.	0.4	5
53	Imaging of a molecular wheelbarrow by scanning tunneling microscopy. Surface Science, 2005, 584, L153-L158.	1.9	74
54	Controlling the Electronic Interaction between a Molecular Wire and Its Atomic Scale Contacting Pad. Nano Letters, 2005, 5, 859-863.	9.1	34

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55	Controlled manipulation of a single molecular wire along a copper atomic nanostructure. Physical Review B, 2004, 69, .	3.2	49
56	Sn/Ge() Î±-phase: characterization of image resonances by specular electron reflection and selective electron scattering. Surface Science, 2003, 530, 161-169.	1.9	2
57	Image-potential resonances studied by selective electron scattering in thin Pb(111) films and clusters on Ge(). Surface Science, 2003, 537, 84-94.	1.9	1