

Matthias K Muntwiler

List of Publications by Year in descending order

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76
papers

3,663
citations

236833

25
h-index

128225

60
g-index

78
all docs

78
docs citations

78
times ranked

5280
citing authors

#	ARTICLE	IF	CITATIONS
1	Boron Nitride Nanomesh. <i>Science</i> , 2004, 303, 217-220.	6.0	864
2	Charge-Transfer Excitons at Organic Semiconductor Surfaces and Interfaces. <i>Accounts of Chemical Research</i> , 2009, 42, 1779-1787.	7.6	351
3	Spin structure of the Shockley surface state onAu(111). <i>Physical Review B</i> , 2004, 69, .	1.1	281
4	An Endohedral Single-Molecule Magnet with Long Relaxation Times: DySc ₂ N@C ₈₀ . <i>Journal of the American Chemical Society</i> , 2012, 134, 9840-9843.	6.6	188
5	Nearly room temperature ferromagnetism in a magnetic metal-rich van der Waals metal. <i>Science Advances</i> , 2020, 6, eaay8912.	4.7	172
6	Defect lines and two-domain structure of hexagonal boron nitride films on Ni(111). <i>Surface Science</i> , 2003, 545, L735-L740.	0.8	158
7	Coulomb Barrier for Charge Separation at an Organic Semiconductor Interface. <i>Physical Review Letters</i> , 2008, 101, 196403.	2.9	153
8	On-Surface Growth Dynamics of Graphene Nanoribbons: The Role of Halogen Functionalization. <i>ACS Nano</i> , 2018, 12, 74-81.	7.3	135
9	Spin-polarized Fermi surface mapping. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2002, 124, 263-279.	0.8	133
10	Tunneling, remanence, and frustration in dysprosium-based endohedral single-molecule magnets. <i>Physical Review B</i> , 2014, 89, .	1.1	91
11	Surface science at the PEARL beamline of the Swiss Light Source. <i>Journal of Synchrotron Radiation</i> , 2017, 24, 354-366.	1.0	66
12	Surface Aligned Magnetic Moments and Hysteresis of an Endohedral Single-Molecule Magnet on a Metal. <i>Physical Review Letters</i> , 2015, 114, 087201.	2.9	62
13	Heteroatom-Doped Perihexacene from a Double Helicene Precursor: On-Surface Synthesis and Properties. <i>Journal of the American Chemical Society</i> , 2017, 139, 4671-4674.	6.6	61
14	Determining adsorbate structures from substrate emission X-ray photoelectron diffraction. <i>Surface Science</i> , 2001, 472, 125-132.	0.8	56
15	Localization of Surface States in Disordered Step Lattices. <i>Physical Review Letters</i> , 2004, 92, 196805.	2.9	48
16	Co on h-BN/Ni(111): from island to island-chain formation and Co intercalation. <i>Surface Science</i> , 2002, 511, 379-386.	0.8	43
17	Step-Lattice-Induced Band-Gap Opening at the Fermi Level. <i>Physical Review Letters</i> , 2004, 92, 016803.	2.9	39
18	Electron Dynamics at the ZnO (101̄...0) Surface. <i>Journal of Physical Chemistry C</i> , 2008, 112, 14682-14692.	1.5	38

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19	Probing the spatial and momentum distribution of confined surface states in a metal coordination network. <i>Chemical Communications</i> , 2014, 50, 12289-12292.	2.2	36
20	Charge transfer excitons and image potential states on organic semiconductor surfaces. <i>Physical Review B</i> , 2009, 80, .	1.1	35
21	Electron Dynamics at Polyacene/Au(111) Interfaces. <i>Journal of Physical Chemistry B</i> , 2007, 111, 6913-6920.	1.2	34
22	Rocking-motion-induced charging of C ₆₀ on h ⁺ BN/Ni(111). <i>Physical Review B</i> , 2005, 71, .	1.1	33
23	Electronic and atomic structure of the Cu/Si(111) $\sqrt{5}\times\sqrt{5}$ overlayer. <i>Surface Science</i> , 2001, 477, 179-190.	0.8	29
24	Electron Transport Across the Alkanethiol Self-assembled Monolayer/Au(111) Interface: A Role of the Chemical Anchor. <i>Journal of Physical Chemistry B</i> , 2005, 109, 21492-21495.	1.2	28
25	Delocalized electron resonance at the alkanethiolate self-assembled monolayer/Au(111) interface. <i>Journal of Chemical Physics</i> , 2006, 124, 081104.	1.2	28
26	Uniaxial strain-induced phase transition in the 2D topological semimetal IrTe ₂ . <i>Communications Materials</i> , 2021, 2, .	2.9	25
27	Exciton dynamics at interfaces of organic semiconductors. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2009, 174, 116-124.	0.8	23
28	The k_z periodicity in photoemission from graphite. <i>Physical Review B</i> , 2018, 97, .	1.1	23
29	Spin- and angle-resolved photoemission spectroscopy study of the Au(111) Shockley surface state. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2004, 137-140, 119-123.	0.8	21
30	Formation of Two-Dimensional Polarons that are Absent in Three-Dimensional Crystals. <i>Physical Review Letters</i> , 2007, 98, 246801.	2.9	21
31	The electronic structure of a surfactant layer: Pb/Cu(111). <i>Surface Science</i> , 2003, 532-535, 82-86.	0.8	19
32	Exchange splitting of the three d surface states of Ni(111) from three-dimensional spin- and angle-resolved photoemission spectroscopy. <i>Physical Review B</i> , 2009, 80, .	1.1	19
33	Robustness of the charge-ordered phases in IrTe ₂ against photoexcitation. <i>Physical Review B</i> , 2018, 97, .	1.9	19
34	Controlled Oxidation and Self-Passivation of Bimetallic Magnetic FeCr and FeMn Aerosol Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2019, 123, 16083-16090.	1.5	19
35	Kagome-like silicene: A novel exotic form of two-dimensional epitaxial silicon. <i>Applied Surface Science</i> , 2020, 530, 147195.	3.1	18
36	Unraveling intrinsic correlation effects with angle-resolved photoemission spectroscopy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 28596-28602.	3.3	18

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37	Energetics and dynamics of unoccupied electronic states at the $h\text{-BN}/\text{Ni}(111)$ interface. <i>Physical Review B</i> , 2007, 75, .	1.1	17
38	Image-potential states on the metallic (111) surface of bismuth. <i>New Journal of Physics</i> , 2008, 10, 113018.	1.2	17
39	Site- and spin-dependent coupling at the highly ordered $h\text{-BN}/\text{Co}(0001)$ interface. <i>Physical Review B</i> , 2018, 98, .	1.1	15
40	Atomic and Electronic Structure of a Multidomain GeTe Crystal. <i>ACS Nano</i> , 2020, 14, 16576-16589.	7.3	15
41	Growth Morphologies and Defect Structure in Hexagonal Boron Nitride Films on Ni(111): A Combined STM and XPD Study. <i>E-Journal of Surface Science and Nanotechnology</i> , 2003, 1, 124-129.	0.1	13
42	Thermally induced anchoring of a zinc-carboxyphenylporphyrin on rutile TiO_2 (110). <i>Journal of Chemical Physics</i> , 2017, 146, .	1.2	13
43	Quasicrystals and their Approximants in 2D Ternary Oxides. <i>Physica Status Solidi (B): Basic Research</i> , 2020, 257, 1900624.	0.7	13
44	Photoelectron diffraction for probing valency and magnetism of $4f$ -based materials: A view on valence-fluctuating EuR_2 . <i>Physical Review B</i> , 2020, 102, .	1.1	13
45	Single-molecule magnets on 80-C . <i>Physical Review Materials</i> , 2019, 3, .	0.9	12
46	Order from a Mess: The Growth of 5-Armchair Graphene Nanoribbons. <i>ACS Nano</i> , 2021, 15, 16552-16561.	7.3	11
47	Spin-resolved electronic structure of ferroelectric GeTe and multiferroic $\text{Ge}_{1-x}\text{Mn}_x\text{Te}$. <i>Journal of Physics and Chemistry of Solids</i> , 2019, 128, 237-244.	1.9	10
48	The true corrugation of a $h\text{-BN}$ nanomesh layer. <i>2D Materials</i> , 2020, 7, 035006.	2.0	9
49	Excited states at interfaces of a metal-supported ultrathin oxide film. <i>Physical Review B</i> , 2015, 91, .	1.1	8
50	Examining the surface phase diagram of 2-IrTe_2 with photoemission. <i>Physical Review B</i> , 2020, 101, .	1.1	8
51	Two- and three-dimensional band structure of ultrathin Ni on Cu(001). <i>Physical Review B</i> , 2009, 79, .	1.1	7
52	Catalyst Proximity-Induced Functionalization of $h\text{-BN}$ with Quat Derivatives. <i>Nano Letters</i> , 2019, 19, 5998-6004.	4.5	7
53	Hybrid $h\text{-BN}/\text{C}$ Graphene Monolayer with C Boundaries on a Lattice-Matched Surface. <i>Chemistry of Materials</i> , 2020, 32, 1172-1181.	3.2	7
54	Optical design study of the PEARL beamline at SLS. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2011, 635, 116-120.	0.7	6

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55	Adsorbate-Induced Modification of the Confining Barriers in a Quantum Box Array. ACS Nano, 2018, 12, 768-778.	7.3	6
56	Electrostatic Interaction across a Single-Layer Carbon Shell. Journal of Physical Chemistry Letters, 2018, 9, 3586-3590.	2.1	6
57	Metamagnetic transition and a loss of magnetic hysteresis caused by electron trapping in monolayers of single-molecule magnet Tb ₂ @C ₇₉ N. Nanoscale, 2022, 14, 9877-9892.	2.8	6
58	Circular Dichroism in Cu Resonant Auger Electron Diffraction. Zeitschrift Fur Physikalische Chemie, 2016, 230, 519-535.	1.4	5
59	Decoding the structure of interfaces and impurities in 2D materials by photoelectron holography. 2D Materials, 2019, 6, 045046.	2.0	5
60	Structural and electronic characterization of Cu/Au(111) near-surface alloys. Japanese Journal of Applied Physics, 2019, 58, SIIB09.	0.8	5
61	Rotation in an Enantiospecific Self-Assembled Array of Molecular Raffle Wheels. Angewandte Chemie - International Edition, 2021, 60, 26932-26938.	7.2	5
62	Parallel and antiparallel angular momentum transfer of circularly polarized light to photoelectrons and Auger electrons at the Ni L3 absorption threshold. Physical Review B, 2018, 97, .	1.1	4
63	Photoemission study of pristine and Ni-doped SrTiO_3 thin films. Physical Review B, 2021, 104, .		
64	Dynamics of excited interlayer states in hexagonal boron nitride monolayers. Journal Physics D: Applied Physics, 2020, 53, 203001.	1.3	4
65	Investigation of the surface species during temperature dependent dehydrogenation of naphthalene on Ni(111). Journal of Chemical Physics, 2019, 150, 244704.	1.2	3
66	Photoelectron dispersion in metallic and insulating VO_2 thin films. Physical Review Research, 2021, 3, .		
67	Rotation in an Enantiospecific Self-Assembled Array of Molecular Raffle Wheels. Angewandte Chemie, 2021, 133, 27138-27144.	1.6	3
68	Electron-momentum dependence of electron-phonon coupling underlies dramatic phonon renormalization in YNi ₂ B ₂ C. Nature Communications, 2022, 13, 228.	5.8	3
69	Structural instability at the In-terminated surface of the heavy-fermion superconductor CeIn ₅ . Surfaces and Interfaces, 2022, . 102126.	1.5	3
70	Boron Nitride Nanomesh.. ChemInform, 2004, 35, no.	0.1	2
71	Pressure induced superconducting state in ideal topological insulator BiSbTe ₃ . Physica Scripta, 2021, 96, 055802.	1.2	2
72	Nitrogen-doped graphene on a curved nickel surface. Carbon, 2021, 183, 711-720.	5.4	2

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73	The Flexible On-Surface Self-Assembly of a Low-Symmetry Mabiq Ligand: An Unconventional Metal-Assisted Phase Transformation on Ag(111). <i>Journal of Physical Chemistry C</i> , 2021, 125, 23178-23191.	1.5	2
74	Determination of the preferred reaction pathway of acetophenone on Si(001) using photoelectron diffraction. <i>Journal of Physics Condensed Matter</i> , 2021, 33, 214002.	0.7	1
75	LUMO photoemission lineshape in quasi-one-dimensional C60 chains. <i>Physical Review B</i> , 2010, 81, .	1.1	0
76	Break of symmetry at the surface of IrTe ₂ upon phase transition measured by x-ray photoelectron diffraction. <i>Journal of Physics Condensed Matter</i> , 2022, 34, 075001.	0.7	0