Matthias K Muntwiler

List of Publications by Year
in descending order

76 papers	3,663 citations	236925 25 h-index	128289 60 g-index
78 all docs	78 docs citations	78 times ranked	5280 citing authors

#	Article	IF	Citations
1	Break of symmetry at the surface of IrTe2 upon phase transition measured by x-ray photoelectron diffraction. Journal of Physics Condensed Matter, 2022, 34, 075001.	1.8	0
2	Electron-momentum dependence of electron-phonon coupling underlies dramatic phonon renormalization in YNi2B2C. Nature Communications, 2022, 13, 228.	12.8	3
3	Structural instability at the In-terminated surface of the heavy-fermion superconductor CeIrIn<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.svg"><mml:msub><mml:mrow /><mml:mn>5</mml:mn></mml:msub></mml:math>. Surfaces and Interfaces, 2022, , 102126.	3.0	3
4	Metamagnetic transition and a loss of magnetic hysteresis caused by electron trapping in monolayers of single-molecule magnet Tb₂@C₇₉N. Nanoscale, 2022, 14, 9877-9892.	5.6	6
5	Pressure induced superconducting state in ideal topological insulator BiSbTe₃. Physica Scripta, 2021, 96, 055802.	2.5	2
6	Uniaxial strain-induced phase transition in the 2D topological semimetal IrTe2. Communications Materials, 2021, 2, .	6.9	25
7	Determination of the preferred reaction pathway of acetophenone on Si(001) using photoelectron diffraction. Journal of Physics Condensed Matter, 2021, 33, 214002.	1.8	1
8	Photoelectron dispersion in metallic and insulating <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mi>VO</mml:mi></mml:mrow><mml:mn>2</mml:mn> thin films. Physical Review Research, 2021, 3, .	3.0	3
9	Rotation in an Enantiospecific Selfâ€Assembled Array of Molecular Raffle Wheels. Angewandte Chemie, 2021, 133, 27138-27144.	2.0	3
10	Rotation in an Enantiospecific Selfâ€Assembled Array of Molecular Raffle Wheels. Angewandte Chemie - International Edition, 2021, 60, 26932-26938.	13.8	5
11	Nitrogen-doped graphene on a curved nickel surface. Carbon, 2021, 183, 711-720.	10.3	2
12	Order from a Mess: The Growth of 5-Armchair Graphene Nanoribbons. ACS Nano, 2021, 15, 16552-16561.	14.6	11
13	Photoemission study of pristine and Ni-doped <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>SrTiO</mml:mi><mml:mn>3</mml:mn></mml:msub> thin films. Physical Review B, 2021, 104, .	3.2	4
14	The Flexible On-Surface Self-Assembly of a Low-Symmetry Mabiq Ligand: An Unconventional Metal-Assisted Phase Transformation on Ag(111). Journal of Physical Chemistry C, 2021, 125, 23178-23191.	3.1	2
15	Hybrid h-BNâ€“Graphene Monolayer with Bâ€“C Boundaries on a Lattice-Matched Surface. Chemistry of Materials, 2020, 32, 1172-1181.	6.7	7
16	Quasicrystals and their Approximants in 2D Ternary Oxides. Physica Status Solidi (B): Basic Research, 2020, 257, 1900624.	1.5	13
17	Kagome-like silicene: A novel exotic form of two-dimensional epitaxial silicon. Applied Surface Science, 2020, 530, 147195.	6.1	18
18	Atomic and Electronic Structure of a Multidomain GeTe Crystal. ACS Nano, 2020, 14, 16576-16589.	14.6	15

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19	Unraveling intrinsic correlation effects with angle-resolved photoemission spectroscopy. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 28596-28602.	7.1	18
20	Photoelectron diffraction for probing valency and magnetism of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>4</mml:mn><mml:mi>f</mml:mi></mml:mrow></mml:m -based materials: A view on valence-fluctuating <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>EuIr</mml:mi><mml:mn>2</mml:mn></mml Physical Review B, 2020, 102, .	3.2	13
21	Examining the surface phase diagram of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>IrTe</mml:mi><mml:mn>2</mml:mn></mml:msub></m with photoemission. Physical Review B, 2020, 101, .	3.2	8
22	Nearly room temperature ferromagnetism in a magnetic metal-rich van der Waals metal. Science Advances, 2020, 6, eaay8912.	10.3	172
23	The true corrugation of a h-BN nanomesh layer. 2D Materials, 2020, 7, 035006.	4.4	9
24	Dynamics of excited interlayer states in hexagonal boron nitride monolayers. Journal Physics D: Applied Physics, 2020, 53, 203001.	2.8	4
25	Catalyst Proximity-Induced Functionalization of h-BN with Quat Derivatives. Nano Letters, 2019, 19, 5998-6004.	9.1	7
26	Investigation of the surface species during temperature dependent dehydrogenation of naphthalene on Ni(111). Journal of Chemical Physics, 2019, 150, 244704.	3.0	3
27	Decoding the structure of interfaces and impurities in 2D materials by photoelectron holography. 2D Materials, 2019, 6, 045046.	4.4	5
28	Structural and electronic characterization of Cu/Au(111) near-surface alloys. Japanese Journal of Applied Physics, 2019, 58, SIIB09.	1.5	5
29	Controlled Oxidation and Self-Passivation of Bimetallic Magnetic FeCr and FeMn Aerosol Nanoparticles. Journal of Physical Chemistry C, 2019, 123, 16083-16090.	3.1	19
30	Spin-resolved electronic structure of ferroelectric Î±-GeTe and multiferroic Ge1â^'Mn Te. Journal of Physics and Chemistry of Solids, 2019, 128, 237-244.	4.0	10
31	Circular dichroism and angular deviation in x-ray absorption spectra of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Dy</mml:mi><mml:mn>2</mml:mn></mml mathvariant="normal">C</mml:mi><mml:mn>80</mml:mn></mml:msub></mml:mrow></mml:math> single-molecule magnets on <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>h</mml:mi><mml:mtext>â^'</mml:mtext><mml:mi>BN Physical Review Materials, 2019, 3, .	2.4	12
32	Robustness of the charge-ordered phases in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>IrTe</mml:mi><mml:mn>2</mml:mn></mml:msub></mm against photoexcitation. Physical Review B, 2018, 97, .	3.2	19
33	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, .	3.2	4
34	The <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>4</mml:mn><mml:mi>Ï€</mml:mi><mml:mspace width="0.16em" /><mml:msub><mml:mi>k</mml:mi><mml:mi>z</mml:mi></mml:msub></mml:mrow></mml:math> periodicity in photoemission from graphite. Physical Review B, 2018, 97, .	3.2	23
35	Adsorbate-Induced Modification of the Confining Barriers in a Quantum Box Array. ACS Nano, 2018, 12, 768-778.	14.6	6
36	On-Surface Growth Dynamics of Graphene Nanoribbons: The Role of Halogen Functionalization. ACS Nano, 2018, 12, 74-81.	14.6	135

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37	Site- and spin-dependent coupling at the highly ordered <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>h</mml:mi></mml:math> -BN/Co(0001) interface. Physical Review B, 2018, 98, .	3.2	15
38	Electrostatic Interaction across a Single-Layer Carbon Shell. Journal of Physical Chemistry Letters, 2018, 9, 3586-3590.	4.6	6
39	Surface science at the PEARL beamline of the Swiss Light Source. Journal of Synchrotron Radiation, 2017, 24, 354-366.	2.4	66
40	Thermally induced anchoring of a zinc-carboxyphenylporphyrin on rutile TiO2 (110). Journal of Chemical Physics, 2017, 146, .	3.0	13
41	Heteroatom-Doped Perihexacene from a Double Helicene Precursor: On-Surface Synthesis and Properties. Journal of the American Chemical Society, 2017, 139, 4671-4674.	13.7	61
42	Circular Dichroism in Cu Resonant Auger Electron Diffraction. Zeitschrift Fur Physikalische Chemie, 2016, 230, 519-535.	2.8	5
43	Excited states at interfaces of a metal-supported ultrathin oxide film. Physical Review B, 2015, 91, .	3.2	8
44	Surface Aligned Magnetic Moments and Hysteresis of an Endohedral Single-Molecule Magnet on a Metal. Physical Review Letters, 2015, 114, 087201.	7.8	62
45	Probing the spatial and momentum distribution of confined surface states in a metal coordination network. Chemical Communications, 2014, 50, 12289-12292.	4.1	36
46	Tunneling, remanence, and frustration in dysprosium-based endohedral single-molecule magnets. Physical Review B, 2014, 89, .	3.2	91
47	An Endohedral Single-Molecule Magnet with Long Relaxation Times: DySc₂N@C₈₀. Journal of the American Chemical Society, 2012, 134, 9840-9843.	13.7	188
48	Optical design study of the PEARL beamline at SLS. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 635, 116-120.	1.6	6
49	LUMO photoemission lineshape in quasi-one-dimensionalC60chains. Physical Review B, 2010, 81, .	3.2	0
50	Two- and three-dimensional band structure of ultrathin Ni on Cu(001). Physical Review B, 2009, 79, .	3.2	7
51	Charge transfer excitons and image potential states on organic semiconductor surfaces. Physical Review B, 2009, 80, .	3.2	35
52	Exchange splitting of the three<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mover accent="true"><mml:mi>Î“</mml:mi><mml:mo stretchy="false">Â¯</mml:mo></mml:mover></mml:math>surface states of Ni(111) from three-dimensional spin- and angle-resolved photoemission spectroscopy. Physical Review B, 2009, 80, .	3.2	19
53	Exciton dynamics at interfaces of organic semiconductors. Journal of Electron Spectroscopy and Related Phenomena, 2009, 174, 116-124.	1.7	23
54	Charge-Transfer Excitons at Organic Semiconductor Surfaces and Interfaces. Accounts of Chemical Research, 2009, 42, 1779-1787.	15.6	351

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55	Electron Dynamics at the ZnO (101Ì…0) Surface. Journal of Physical Chemistry C, 2008, 112, 14682-14692.	3.1	38
56	Image-potential states on the metallic (111) surface of bismuth. New Journal of Physics, 2008, 10, 113018.	2.9	17
57	Coulomb Barrier for Charge Separation at an Organic Semiconductor Interface. Physical Review Letters, 2008, 101, 196403.	7.8	153
58	Energetics and dynamics of unoccupied electronic states at thehâ^'BNâ^•Ni(111)interface. Physical Review B, 2007, 75, .	3.2	17
59	Formation of Two-Dimensional Polarons that are Absent in Three-Dimensional Crystals. Physical Review Letters, 2007, 98, 246801.	7.8	21
60	Electron Dynamics at Polyacene/Au(111) Interfacesâ€. Journal of Physical Chemistry B, 2007, 111, 6913-6920.	2.6	34
61	Delocalized electron resonance at the alkanethiolate self-assembled monolayerâ^•Au(111) interface. Journal of Chemical Physics, 2006, 124, 081104.	3.0	28
62	Rocking-motion-induced charging ofC60onhâ^'BNâ^•Ni(111). Physical Review B, 2005, 71, .	3.2	33
63	Electron Transport Across the Alkanethiol Self-assembled Monolayer/Au(111) Interface:Â Role of the Chemical Anchor. Journal of Physical Chemistry B, 2005, 109, 21492-21495.	2.6	28
64	Step-Lattice-Induced Band-Gap Opening at the Fermi Level. Physical Review Letters, 2004, 92, 016803.	7.8	39
65	Boron Nitride Nanomesh.. ChemInform, 2004, 35, no.	0.0	2
66	Spin- and angle-resolved photoemission spectroscopy study of the Au(111) Shockley surface state. Journal of Electron Spectroscopy and Related Phenomena, 2004, 137-140, 119-123.	1.7	21
67	Boron Nitride Nanomesh. Science, 2004, 303, 217-220.	12.6	864
68	Localization of Surface States in Disordered Step Lattices. Physical Review Letters, 2004, 92, 196805.	7.8	48
69	Spin structure of the Shockley surface state onAu(111). Physical Review B, 2004, 69, .	3.2	281
70	Defect lines and two-domain structure of hexagonal boron nitride films on Ni(111). Surface Science, 2003, 545, L735-L740.	1.9	158
71	The electronic structure of a surfactant layer: Pb/Cu(111). Surface Science, 2003, 532-535, 82-86.	1.9	19
72	Growth Morphologies and Defect Structure in Hexagonal Boron Nitride Films on Ni(111): A Combined STM and XPD Study. E-Journal of Surface Science and Nanotechnology, 2003, 1, 124-129.	0.4	13

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73	Spin-polarized Fermi surface mapping. Journal of Electron Spectroscopy and Related Phenomena, 2002, 124, 263-279.	1.7	133
74	Co on h -BN/Ni(111): from island to island-chain formation and Co intercalation. Surface Science, 2002, 511, 379-386.	1.9	43
75	Determining adsorbate structures from substrate emission X-ray photoelectron diffraction. Surface Science, 2001, 472, 125-132.	1.9	56
76	Electronic and atomic structure of the Cu/Si(111) â€˜quasi-5Ã—5â€™ overlayer. Surface Science, 2001, 477, 179-190.	1.9	29