

# Markus Morgenstern

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4307848/publications.pdf>

Version: 2024-02-01

77  
papers

4,349  
citations

109137

35  
h-index

102304

66  
g-index

78  
all docs

78  
docs citations

78  
times ranked

4973  
citing authors

#	ARTICLE	IF	CITATIONS
1	Raman imaging of twist angle variations in twisted bilayer graphene at intermediate angles. 2D Materials, 2022, 9, 045009.	2.0	8
2	Strong and Weak 3D Topological Insulators Probed by Surface Science Methods. Physica Status Solidi (B): Basic Research, 2021, 258, 2000060.	0.7	2
3	Experimental identification of two distinct skyrmion collapse mechanisms. Nature Physics, 2021, 17, 395-402.	6.5	32
4	Mn-Rich $\text{MnSb}_2\text{Te}_4$ : A Topological Insulator with Magnetic Gap Closing at High Curie Temperatures of 45–50 K. Advanced Materials, 2021, 33, e2102935.	11.1	70
5	Evidence for Local Spots of Viscous Electron Flow in Graphene at Moderate Mobility. Nano Letters, 2021, 21, 9365-9373.	4.5	11
6	Probing the pinning strength of magnetic vortex cores with sub-nanometer resolution. Nature Communications, 2020, 11, 2833.	5.8	19
7	Exfoliated hexagonal BN as gate dielectric for InSb nanowire quantum dots with improved gate hysteresis and charge noise. Applied Physics Letters, 2020, 116, 253101.	1.5	4
8	Large tunable valley splitting in edge-free graphene quantum dots on boron nitride. Nature Nanotechnology, 2018, 13, 392-397.	15.6	58
9	Tuning the Pseudospin Polarization of Graphene by a Pseudomagnetic Field. Nano Letters, 2017, 17, 2240-2245.	4.5	113
10	Chemical Tuning of Carrier Type and Concentration in a Homologous Series of Crystalline Chalcogenides. Chemistry of Materials, 2017, 29, 6749-6757.	3.2	18
11	Graphene Quantum Dots Probed by Scanning Tunneling Microscopy. Annalen Der Physik, 2017, 529, 1700018.	0.9	10
12	Giant Rashba-Type Spin Splitting in Ferroelectric GeTe(111). Advanced Materials, 2016, 28, 560-565.	11.1	155
13	Probing variations of the Rashba spin-orbit coupling at the nanometre scale. Nature Physics, 2016, 12, 920-925.	6.5	68
14	Electrostatically Confined Monolayer Graphene Quantum Dots with Orbital and Valley Splittings. Nano Letters, 2016, 16, 5798-5805.	4.5	93
15	Graphene quantum dots: wave function mapping by scanning tunneling spectroscopy and transport spectroscopy of quantum dots prepared by local anodic oxidation. Physica Status Solidi - Rapid Research Letters, 2016, 10, 24-38.	1.2	7
16	Apparent rippling with honeycomb symmetry and tunable periodicity observed by scanning tunneling microscopy on suspended graphene. Physical Review B, 2016, 94, .	1.1	2
17	Electronic Structure of the Dark Surface of the Weak Topological Insulator $\text{Bi}_{14}\text{Rh}_3\text{Te}_9$ . ACS Nano, 2016, 10, 3995-4003.	7.3	22
18	Tuning the Dirac point to the Fermi level in the ternary topological insulator $(\text{Bi}_{1-x}\text{Sb}_x)_2\text{Te}_3$ . Applied Physics Letters, 2015, 107, .	1.5	40

#	ARTICLE	IF	CITATIONS
19	Subnanometre-wide electron channels protected by topology. Nature Physics, 2015, 11, 338-343.	6.5	114
20	Analyzing multiple encounter as a possible origin of electron spin resonance signals in scanning tunneling microscopy on Si(111) featuring C and O defects. Surface Science, 2014, 623, 47-54.	0.8	10
21	Networks of ABA and ABC stacked graphene on mica observed by scanning tunneling microscopy. Surface Science, 2013, 610, 53-58.	0.8	66
22	Evidence for topological band inversion of the phase change material Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> . Applied Physics Letters, 2013, 103, .	1.5	28
23	Absence of Edge States in Covalently Bonded Zigzag Edges of Graphene on Ir(111). Advanced Materials, 2013, 25, 1967-1972.	11.1	42
24	Electronic and Magnetic Properties of Zigzag Graphene Nanoribbons on the (111) Surface of Cu, Ag, and Au. Physical Review Letters, 2013, 110, 216804.	2.9	66
25	Scanning tunneling microscopy with InAs nanowire tips. Applied Physics Letters, 2012, 101, .	1.5	5
26	Catalytic growth of N-doped MgO on Mo(001). Physical Review B, 2012, 86, .	1.1	7
27	Scanning tunneling microscopy of two-dimensional semiconductors: Spin properties and disorder. Physica E: Low-Dimensional Systems and Nanostructures, 2012, 44, 1795-1814.	1.3	25
28	Robust Nodal Structure of Landau Level Wave Functions Revealed by Fourier Transform Scanning Tunneling Spectroscopy. Physical Review Letters, 2012, 109, 116805.	2.9	27
29	Probing two topological surface bands of Sb <sub>2</sub> Te <sub>3</sub> by spin-polarized photoemission spectroscopy. Physical Review B, 2012, 86, .	1.1	78
30	H <sub>2</sub> O on Pt(111): structure and stability of the first wetting layer. Journal of Physics Condensed Matter, 2012, 24, 124103.	0.7	12
31	Manipulating InAs nanowires with submicrometer precision. Review of Scientific Instruments, 2011, 82, 113705.	0.6	30
32	Probing Electron-Electron Interaction in Quantum Hall Systems with Scanning Tunneling Spectroscopy. Physical Review Letters, 2011, 106, 156805.	2.9	22
33	Real-space mapping of a disordered two-dimensional electron system in the quantum Hall regime. Journal of Physics: Conference Series, 2011, 334, 012008.	0.3	1
34	Scanning tunneling microscopy and spectroscopy of graphene on insulating substrates. Physica Status Solidi (B): Basic Research, 2011, 248, 2423-2434.	0.7	35
35	Jenseits des Gleichgewichts. Physik in Unserer Zeit, 2011, 42, 168-175.	0.0	1
36	Gundlach oscillations and Coulomb blockade of Co nanoislands on MgO/Mo(100) investigated by scanning tunneling spectroscopy at 300 K. Physical Review B, 2010, 81, .	1.1	17

#	ARTICLE	IF	CITATIONS
37	STM Ready for the Time Domain. <i>Science</i> , 2010, 329, 1609-1610.	6.0	8
38	Bistability and Oscillatory Motion of Natural Nanomembranes Appearing within Monolayer Graphene on Silicon Dioxide. <i>Nano Letters</i> , 2010, 10, 461-465.	4.5	101
39	Scanning tunneling spectroscopy of a dilute two-dimensional electron system exhibiting Rashba spin splitting. <i>Physical Review B</i> , 2010, 81, .	1.1	24
40	Molecular structure of the $\text{Co}_2$ layer on Pt(111). <i>Physical Review B</i> , 2010, 82, .	1.1	64
41	Scanning tunneling microscopy and spectroscopy of the phase change alloy $\text{Ge}_1\text{Sb}_2\text{Te}_4$ . <i>Applied Physics Letters</i> , 2009, 95, .	1.5	15
42	Desorption of $\text{H}_2\text{O}$ from Flat and Stepped Pt(111). <i>Journal of Physical Chemistry C</i> , 2009, 113, 691-697.	1.5	35
43	Anisotropic superexchange in one-dimensional Fe-chains on InAs(110). <i>Surface Science</i> , 2008, 602, 3297-3302.	0.8	3
44	Metal-insulator transition in graphite: A comparison to heterostructures with high carrier mobility. <i>Technical Physics Letters</i> , 2008, 34, 30-33.	0.2	1
45	Quantum Hall Transition in Real Space: From Localized to Extended States. <i>Physical Review Letters</i> , 2008, 101, 256802.	2.9	132
46	Local Electronic Structure near Mn Acceptors in InAs: Surface-Induced Symmetry Breaking and Coupling to Host States. <i>Physical Review Letters</i> , 2007, 99, 157202.	2.9	70
47	High spin polarization at the interface between a Fe monolayer and InAs(110). <i>Physical Review B</i> , 2004, 69, .	1.1	7
48	Contributions of the escape depth to the photoelectron intensity of a well-defined initial state. <i>Physical Review B</i> , 2004, 70, .	1.1	2
49	Scanning tunneling spectroscopy on Co(0001): Spectroscopic signature of stacking faults and dislocation lines. <i>Physical Review B</i> , 2004, 70, .	1.1	25
50	Thickness dependent magnetization states of Fe islands on W(110): From single domain to vortex and diamond patterns. <i>Applied Physics Letters</i> , 2004, 84, 948-950.	1.5	65
51	A 300 mK ultra-high vacuum scanning tunneling microscope for spin-resolved spectroscopy at high energy resolution. <i>Review of Scientific Instruments</i> , 2004, 75, 4871-4879.	0.6	130
52	Comparing the local density of states of three- and two-dimensional electron systems by low-temperature scanning tunneling spectroscopy. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2003, 16, 121-128.	1.3	1
53	STM measurements on the InAs(110) surface directly compared with surface electronic structure calculations. <i>Physical Review B</i> , 2003, 68, .	1.1	33
54	From quantized states to percolation: Scanning tunneling spectroscopy of a strongly disordered two-dimensional electron system. <i>Physical Review B</i> , 2003, 68, .	1.1	18

#	ARTICLE	IF	CITATIONS
55	Wave-Function Mapping of InAs Quantum Dots by Scanning Tunneling Spectroscopy. Physical Review Letters, 2003, 91, 196804.	2.9	125
56	Direct observation of confined states in metallic single-walled carbon nanotubes. Applied Physics Letters, 2003, 83, 1011-1013.	1.5	43
57	PROBING THE LOCAL DENSITY OF STATES OF DILUTE ELECTRON SYSTEMS IN DIFFERENT DIMENSIONS. Surface Review and Letters, 2003, 10, 933-962.	0.5	40
58	Direct Comparison between Potential Landscape and Local Density of States in a Disordered Two-Dimensional Electron System. Physical Review Letters, 2002, 89, 136806.	2.9	72
59	Co onp-InAs(110): An island-induced two-dimensional electron system consisting of electron droplets. Physical Review B, 2002, 65, .	1.1	12
60	Influence of potential fluctuations on Landau quantization and spin splitting studied by low temperature scanning tunneling spectroscopy on InAs(110). Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2002, 20, 2032.	1.6	1
61	Coulomb pseudogap caused by partial localization of a three-dimensional electron system in the extreme quantum limit. Physical Review B, 2002, 66, .	1.1	12
62	Direct Observation of Internal Spin Structure of Magnetic Vortex Cores. Science, 2002, 298, 577-580.	6.0	841
63	Local Density of States of a Three-Dimensional Conductor in the Extreme Quantum Limit. Physical Review Letters, 2001, 86, 1582-1585.	2.9	28
64	Low temperature scanning tunneling spectroscopy on InAs(110). Journal of Electron Spectroscopy and Related Phenomena, 2000, 109, 127-145.	0.8	36
65	Spatial Fluctuations of the Density of States in Magnetic Fields Observed with Scanning Tunneling Spectroscopy. Physical Review Letters, 2000, 84, 5588-5591.	2.9	30
66	Origin of Landau oscillations observed in scanning tunneling spectroscopy onn-InAs(110). Physical Review B, 2000, 62, 7257-7263.	1.1	31
67	Coverage dependence of the Fe-induced Fermi-level shift and the two-dimensional electron gas on InAs(110). Physical Review B, 2000, 61, 13805-13812.	1.1	38
68	Tip-induced band bending by scanning tunneling spectroscopy of the states of the tip-induced quantum dot on InAs(110). Physical Review B, 1999, 59, 8043-8048.	1.1	116
69	Collective effects in the adatom production by 4.5 keV rare-gas impacts on Pt(111): A low-temperature scanning tunnelling microscopy analysis. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1999, 79, 775-794.	0.8	42
70	Scattering States of Ionized Dopants Probed by Low Temperature Scanning Tunneling Spectroscopy. Physical Review Letters, 1998, 81, 5616-5619.	2.9	85
71	Effect of energetic particles on island formation in sputter deposition of Pt on Pt(111). Applied Physics Letters, 1997, 70, 182-184.	1.5	40
72	The Ice Bilayer on Pt(111): Nucleation, Structure and Melting. Zeitschrift Fur Physikalische Chemie, 1997, 198, 43-72.	1.4	120

#	ARTICLE	IF	CITATIONS
73	Onset of Interstitial Diffusion Determined by Scanning Tunneling Microscopy. Physical Review Letters, 1997, 79, 1305-1308.	2.9	23
74	Atomic Processes in Low Temperature Pt-Dendrite Growth on Pt(111). Physical Review Letters, 1996, 76, 2366-2369.	2.9	111
75	Nucleation and morphology of homoepitaxial Pt(111)-films grown with ion beam assisted deposition. Surface Science, 1996, 365, 187-204.	0.8	55
76	New Approach for Determination of Diffusion Parameters of Adatoms. Physical Review Letters, 1996, 76, 1304-1307.	2.9	208
77	Anisotropy in the Adsorption of H <sub>2</sub> O at Low Coordination Sites on Pt(111). Physical Review Letters, 1996, 77, 703-706.	2.9	191