

Sebastian Loth

List of Publications by Year in descending order

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42
papers

2,714
citations

279487

23
h-index

264894

42
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42
all docs

42
docs citations

42
times ranked

2720
citing authors

#	ARTICLE	IF	CITATIONS
1	Bistability in Atomic-Scale Antiferromagnets. <i>Science</i> , 2012, 335, 196-199.	6.0	566
2	The role of magnetic anisotropy in the Kondo effect. <i>Nature Physics</i> , 2008, 4, 847-850.	6.5	309
3	Measurement of Fast Electron Spin Relaxation Times with Atomic Resolution. <i>Science</i> , 2010, 329, 1628-1630.	6.0	301
4	Controlling the state of quantum spins with electric currents. <i>Nature Physics</i> , 2010, 6, 340-344.	6.5	277
5	Controlled Charge Switching on a Single Donor with a Scanning Tunneling Microscope. <i>Physical Review Letters</i> , 2008, 101, 076103.	2.9	150
6	Spin Excitations of a Kondo-Screened Atom Coupled to a Second Magnetic Atom. <i>Physical Review Letters</i> , 2009, 103, 107203.	2.9	111
7	Control of quantum magnets by atomic exchange bias. <i>Nature Nanotechnology</i> , 2015, 10, 40-45.	15.6	108
8	Spin-polarized spin excitation spectroscopy. <i>New Journal of Physics</i> , 2010, 12, 125021.	1.2	80
9	Tunable Spin-Superconductor Coupling of Spin 1/2 Vanadyl Phthalocyanine Molecules. <i>Nano Letters</i> , 2018, 18, 7955-7961.	4.5	72
10	Quantum dynamics of a single molecule magnet on superconducting Pb(111). <i>Nature Materials</i> , 2020, 19, 546-551.	13.3	62
11	Enhanced Donor Binding Energy Close to a Semiconductor Surface. <i>Physical Review Letters</i> , 2009, 102, 166101.	2.9	57
12	Magnetic fingerprint of individual Fe ₄ molecular magnets under compression by a scanning tunnelling microscope. <i>Nature Communications</i> , 2015, 6, 8216.	5.8	56
13	Spin Polarization of the Split Kondo State. <i>Physical Review Letters</i> , 2015, 114, 076601.	2.9	44
14	Time-resolved single dopant charge dynamics in silicon. <i>Nature Communications</i> , 2016, 7, 13258.	5.8	43
15	Nonlocally sensing the magnetic states of nanoscale antiferromagnets with an atomic spin sensor. <i>Science Advances</i> , 2017, 3, e1603137.	4.7	38
16	Probing Semiconductor Gap States with Resonant Tunneling. <i>Physical Review Letters</i> , 2006, 96, 066403.	2.9	35
17	Measuring the Three-Dimensional Structure of Ultrathin Insulating Films at the Atomic Scale. <i>ACS Nano</i> , 2014, 8, 1739-1744.	7.3	35
18	Vanadyl phthalocyanines on graphene/SiC(0001): toward a hybrid architecture for molecular spin qubits. <i>Nanoscale Horizons</i> , 2019, 4, 1202-1210.	4.1	32

#	ARTICLE	IF	CITATIONS
19	The emergence of classical behaviour in magnetic adatoms. Europhysics Letters, 2015, 109, 57001.	0.7	31
20	Variable Repetition Rate THz Source for Ultrafast Scanning Tunneling Microscopy. ACS Photonics, 2021, 8, 702-708.	3.2	27
21	Quantitative mapping of fast voltage pulses in tunnel junctions by plasmonic luminescence. Applied Physics Letters, 2013, 103, .	1.5	25
22	Single Si dopants in GaAs studied by scanning tunneling microscopy and spectroscopy. Physical Review B, 2011, 84, .	1.1	24
23	Connection of anisotropic conductivity to tip-induced space-charge layers in scanning tunneling spectroscopy of N-doped GaAs . Physical Review B, 2007, 76, .	1.1	23
24	Building Complex Kondo Impurities by Manipulating Entangled Spin Chains. Nano Letters, 2017, 17, 6203-6209.	4.5	23
25	Three-Dimensional Mapping of Single-Atom Magnetic Anisotropy. Nano Letters, 2015, 15, 1938-1942.	4.5	22
26	Magnetism in Single Metalloorganic Complexes Formed by Atom Manipulation. Nano Letters, 2014, 14, 1196-1201.	4.5	21
27	Dynamical Negative Differential Resistance in Antiferromagnetically Coupled Few-Atom Spin Chains. Physical Review Letters, 2017, 119, 217201.	2.9	17
28	Comparing XMCD and DFT with STM spin excitation spectroscopy for Fe and Co adatoms on Cu_2N . Physical Review B, 2015, 92, .	1.1	15
29	Bistable Charge Configuration of Donor Systems near the GaAs(110) Surfaces. Nano Letters, 2011, 11, 3538-3542.	4.5	14
30	Structural and magnetic properties of FeMn_x on Cu_2N . Physical Review B, 2016, 94, .	1.1	14
31	Asymmetry of acceptor wave functions caused by surface-related strain and electric field in InAs. Physical Review B, 2008, 77, .	1.1	12
32	A Logical Use for Atoms. Science, 2011, 332, 1039-1040.	6.0	12
33	Depth Resolved Scanning Tunneling Spectroscopy of Shallow Acceptors in Gallium Arsenide. Japanese Journal of Applied Physics, 2006, 45, 2193-2196.	0.8	11
34	Band structure related wave-function symmetry of amphoteric Si dopants in GaAs. Solid State Communications, 2008, 145, 551-555.	0.9	10
35	Closing the superconducting gap in small Pb nanoislands with high magnetic fields. Physical Review B, 2016, 94, .	1.1	10
36	Reconstruction of the local density of states in Ag(111) surfaces using scanning tunneling potentiometry. Physical Review B, 2007, 76, .	1.1	8

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37	Quantum stochastic resonance of individual Fe atoms. <i>Science Advances</i> , 2021, 7, .	4.7	8
38	Mixed 4f population of Tm adatoms on insulating Cu ₂ N islands. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 196-202.	1.3	3
39	Minimally invasive spin sensing with scanning tunneling microscopy. <i>Nanoscale</i> , 2020, 12, 11619-11626.	2.8	3
40	Close-up on spin coherence. <i>Nature Nanotechnology</i> , 2014, 9, 574-575.	15.6	2
41	All-electronic Nanosecond-resolved Scanning Tunneling Microscopy: Facilitating the Investigation of Single Dopant Charge Dynamics. <i>Journal of Visualized Experiments</i> , 2018, , .	0.2	2
42	Jenseits des Gleichgewichts. <i>Physik in Unserer Zeit</i> , 2011, 42, 168-175.	0.0	1