

Thomas Prokscha

List of Publications by Year in descending order

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131
papers

3,770
citations

136950

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144013

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134
all docs

134
docs citations

134
times ranked

4431
citing authors

#	ARTICLE	IF	CITATIONS
1	Dimensionality Control of Electronic Phase Transitions in Nickel-Oxide Superlattices. Science, 2011, 332, 937-940.	12.6	331
2	Direct measurement of the electronic spin diffusion length in a fully functional organic spin valve by low-energy muon spin rotation. Nature Materials, 2009, 8, 109-114.	27.5	251
3	The new beam at PSI: A hybrid-type large acceptance channel for the generation of a high intensity surface-muon beam. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2008, 595, 317-331.	1.6	176
4	Engineering spin propagation across a hybrid organic/inorganic interface using a polar layer. Nature Materials, 2011, 10, 39-44.	27.5	152
5	Beating the Stoner criterion using molecular interfaces. Nature, 2015, 524, 69-73.	27.8	151
6	Direct Observation of the Oxygen Isotope Effect on the In-Plane Magnetic Field Penetration Depth in Optimally Doped $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$. Physical Review Letters, 2004, 92, 057602.	7.8	127
7	Implantation studies of keV positive muons in thin metallic layers. Nuclear Instruments & Methods in Physics Research B, 2002, 192, 254-266.	1.4	118
8	Thermodynamic phase transitions in a frustrated magnetic metamaterial. Nature Communications, 2015, 6, 8278.	12.8	109
9	Interfacial dominated ferromagnetism in nanograined ZnO: a μSR and DFT study. Scientific Reports, 2015, 5, 8871.	3.3	97
10	Intrinsic Paramagnetic Meissner Effect Due to s -Wave Odd-Frequency Superconductivity. Physical Review X, 2015, 5, .	8.9	86
11	Nano-scale thin film investigations with slow polarized muons. Journal of Physics Condensed Matter, 2004, 16, S4583-S4601.	1.8	79
12	Spatially homogeneous ferromagnetism of (Ga, Mn)As. Nature Materials, 2010, 9, 299-303.	27.5	71
13	Low-energy μSR at PSI: present and future. Physica B: Condensed Matter, 2000, 289-290, 653-657.	2.7	68
14	Intrinsic Ferromagnetism in the Diluted Magnetic Semiconductor $\text{Co}_x\text{Ti}_{1-x}\text{O}$. Physical Review Letters, 2016, 117, 227202.	7.8	63
15	Depth-Resolved Profile of the Magnetic Field beneath the Surface of a Superconductor with a Few nm Resolution. Physical Review Letters, 2000, 84, 4958-4961.	7.8	61
16	Li-ion diffusion in Li_4O_{12} and Li_2O . Physical Review B, 2015, 92, .	5.4	55
17	Remotely induced magnetism in a normal metal using a superconducting spin-valve. Nature Physics, 2016, 12, 57-61.	16.7	55
18	Nature of antiferromagnetic order in epitaxially strained multiferroic SrMnO_3 films. Physical Review B, 2015, 92, .	7.2	54

#	ARTICLE	IF	CITATIONS
19	The phase diagram of electron-doped $\text{La}_{2-x}\text{Ce}_x\text{CuO}_4$. Nature Communications, 2015, 6, 6041.	12.8	49
20	Robust Magnetic Properties of a Sublimable Single-Molecule Magnet. ACS Nano, 2016, 10, 5663-5669.	14.6	46
21	Room-temperature helimagnetism in FeGe thin films. Scientific Reports, 2017, 7, 123.	3.3	44
22	Muon spin spectroscopy. Nature Reviews Methods Primers, 2022, 2, .	21.2	42
23	The Meissner effect in a strongly underdoped cuprate above its critical temperature. Nature Communications, 2011, 2, 272.	12.8	39
24	Observation of nonexponential magnetic penetration profiles in the Meissner state: A manifestation of nonlocal effects in superconductors. Physical Review B, 2005, 72, .	3.2	38
25	Depth-Dependent Spin Dynamics in Thin Films of TbPc_{2-x} Nanomagnets Explored by Low-Energy Implanted Muons. ACS Nano, 2012, 6, 8390-8396.	14.6	38
26	Direct measurement of the London penetration depth in $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ low-energy Physical Review B, 2010, 81, .	7.8	37
27	Muonium Emission into Vacuum from Mesoporous Thin Films at Cryogenic Temperatures. Physical Review Letters, 2012, 108, 143401.	7.8	37
28	Collective magnetism in an artificial 2D XY spin system. Nature Communications, 2018, 9, 2850.	12.8	37
29	Observation of the Conduction Electron Spin Polarization in the Ag Spacer of a Fe/Ag/Fe Trilayer. Physical Review Letters, 2003, 91, 017204.	7.8	36
30	Direct Observation of Nonlocal Effects in a Superconductor. Physical Review Letters, 2004, 92, 087001.	7.8	36
31	Observation of Anomalous Meissner Screening in Cu/Nb Thin Films. Physical Review Letters, 2018, 120, 247001.	7.8	34
32	Proximity-Induced Odd-Frequency Superconductivity in a Topological Insulator. Physical Review Letters, 2020, 125, 026802.	7.8	34
33	Strong Meissner screening change in superconducting radio frequency cavities due to mild baking. Applied Physics Letters, 2014, 104, .	3.3	33
34	Superparamagnetic relaxation in iron nanoclusters measured by low energy muon spin rotation. Journal of Physics Condensed Matter, 2000, 12, 1399-1411.	1.8	32
35	Moderator gratings for the generation of epithermal positive muons. Applied Surface Science, 2001, 172, 235-244.	6.1	32
36	Spectroscopic perspective on the interplay between electronic and magnetic properties of magnetically doped topological insulators. Physical Review B, 2017, 96, .	3.2	32

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37	Low energy muons as probes of thin films and near surface regions. Physica B: Condensed Matter, 2003, 326, 196-204.	2.7	28
38	Spatially Resolved Inhomogeneous Ferromagnetism in GaMnAs Tj ETQqO 0 0 rgBT /Overlock 10 Tl Microscopic Study by Muon Spin Relaxation. Physical Review Letters, 2008, 101, 027202.	7.9	28
39	Front passivation of Cu(In,Ga)Se ₂ solar cells using Al ₂ O ₃ : Culprits and benefits. Applied Materials Today, 2020, 21, 100867.	4.3	28
40	Magnetic phase diagram of low-doped La SrCu_2O_7 xlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn><mml:mn><mml:mo>â~</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub></mml:math>Sr<mml:mi>x</mml:mi></mml:msub></mml:math>CuO<mml:math xlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mi>x</mml:mi></mml:msub></mml:math>	3.2	27
41	Formation of Hydrogen Impurity States in Silicon and Insulators at Low Implantation Energies. Physical Review Letters, 2007, 98, 227401.	7.8	26
42	Intrinsic and spatially nonuniform ferromagnetism in Co-doped ZnO films. Physical Review B, 2017, 96, .	3.2	25
43	Direct Spectroscopic Observation of a Shallow Hydrogenlike Donor State in Insulating SrTiO_3 xlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>SrTiO</mml:mi></mml:mrow><mml:mrow><mml:mn>3</mml:mn></mml:msub></mml:math>	7.8	23
44	Intrinsic or Interface Clustering-Induced Ferromagnetism in Fe-Doped In_2O_3 -Diluted Magnetic Semiconductors. ACS Applied Materials & Interfaces, 2018, 10, 22372-22380.	8.0	23
45	Slow-muon study of quaternary solar-cell materials: Single layers and junctions. Physical Review Materials, 2018, 2, .	2.4	23
46	Microscopic effects of Dy doping in the topological insulator Bi_2Te_3 xlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Bi</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow><mml:mn>3</mml:mn></mml:math>	2.2	22
47	Do topology and ferromagnetism cooperate at the EuS surface? xlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>EuS</mml:mi></mml:mrow><mml:mn>2</mml:mn></mml:math> Absolute Value and Temperature Dependence of the magnetic penetration depth in Ba(Co _{1-x} Fe _x) ₂ As ₂ Tj ETQqO 0 0 rgBT /Overlock 10 Tl	3.2	22
48		3.2	21
49	Emergent magnetism at transition-metalâ€“nanocarbon interfaces. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 5583-5588.	7.1	20
50	Two-Dimensional Magnetic and Superconducting Phases in Metal-Insulator LaCuO_2 xlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>La</mml:mi></mml:msub><mml:mrow><mml:mn>2</mml:mn></mml:mrow><mml:mo>â~</mml:mo><mml:mi>x</mml:mi></mml:math> Measured by Muon-Spin Rotation. Physical Review Letters, 2011, 106, 237003.	7.8	19
51	A scintillating fiber detector for muon beam profile measurements in high magnetic fields. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 550, 212-216.	1.6	18
52	Superconductivity drives magnetism in LaFeAsO -doped LaFeAsO xlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>î</mml:mi></mml:math> xlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>La</mml:mi></mml:msub><mml:mn>2</mml:mn></mml:mrow></mml:math>	3.2	18
53	Manifestation of the electromagnetic proximity effect in superconductor-ferromagnet thin film structures. Applied Physics Letters, 2019, 115, .	3.3	18
54	Spatially Homogeneous Ferromagnetism below the Enhanced Curie Temperature in EuO Thin Films. Physical Review Letters, 2013, 110, 217208.	7.8	17

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55	Photo-induced persistent inversion of germanium in a 200-nm-deep surface region. Scientific Reports, 2013, 3, 2569.	3.3	16
56	Precision Measurement of the Lamb Shift in Muonium. Physical Review Letters, 2022, 128, 011802.	7.8	16
57	Zero-field Spin Depolarization of Low-Energy Muons in Ferromagnetic Nickel and Silver Metal. Physics Procedia, 2012, 30, 164-167.	1.2	15
58	Controlling the electromagnetic proximity effect by tuning the mixing between superconducting and ferromagnetic order. Physical Review B, 2019, 100, .	3.2	15
59	Interaction of low-energy muons with defect profiles in proton-irradiated Si and H-SiC . Physical Review B, 2019, 100, .	3.2	15
60	Search for the Magnetic Monopole at a Magnetoelectric Surface. Physical Review X, 2019, 9, .	8.9	15
61	Coexistence and Coupling of Superconductivity and Magnetism in Thin Film Structures. Physical Review Letters, 2005, 95, 197201.	7.8	14
62	Design and Simulation of a Spin Rotator for Longitudinal Field Measurements in the Low Energy Muons Spectrometer. Physics Procedia, 2012, 30, 55-60.	1.2	14
63	Nonlocal effect and dimensions of Cooper pairs measured by low-energy muons and polarized neutrons in type-I superconductors. Physical Review B, 2013, 87, .	3.2	14
64	Measurement of the spatial extent of inverse proximity in a Py/Nb/Py superconducting trilayer using low-energy muon-spin rotation. Physical Review B, 2014, 89, .	3.2	14
65	Controlling the Electrical and Magnetoelectric Properties of Epitaxially Strained SrBaMnO_3 Thin Films. Advanced Materials Interfaces, 2017, 4, 1601040.	3.7	14
66	Suppression of magnetic excitations near the surface of the topological Kondo insulator SmB_6 . Physical Review B, 2017, 95, .	3.2	14
67	Direct evidence of superconductivity and determination of the superfluid density in buried ultrathin FeSe grown on SrTiO_3 . Physical Review B, 2018, 97, .	3.2	14
68	Intertwined magnetic, structural, and electronic transitions in V_2O_3 . Physical Review B, 2019, 100, .	3.2	14
69	Absence of spontaneous magnetism associated with a possible time-reversal symmetry breaking state beneath the surface of (110)-oriented $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ superconducting films. Physical Review B, 2013, 88, .	3.2	13
70	Distribution of glass transition temperatures T_g in polystyrene thin films as revealed by low-energy muon spin relaxation: A comparison with neutron reflectivity results. Physical Review E, 2015, 92, 022604.	2.1	13
71	Muon implantation experiments in films: Obtaining depth-resolved information. Review of Scientific Instruments, 2020, 91, 023906.	1.3	13
72	Transverse field muon-spin rotation measurement of the topological anomaly in a thin film of MnSi . Physical Review B, 2016, 93, .	3.2	12

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73	Spin-muon coupling in epitaxial $\text{Cu}_2\text{ZnSnS}_4$ solar cell material. Journal of Physics: Conference Series, 2014, 551, 012045.	3.2	12
74	Geant4 simulation of the PSI LEM beam line: energy loss and muonium formation in thin foils and the impact of unmoderated muons on the $\hat{1}/4$ SR spectrometer. Journal of Instrumentation, 2015, 10, P10025-P10025.	1.2	11
75	Controlling the near-surface superfluid density in underdoped $\text{YBa}_2\text{Cu}_3\text{O}_{6+x}$ by photo-illumination. Scientific Reports, 2014, 4, 6250.	3.3	11
76	Unveiling unconventional magnetism at the surface of Sr_2RuO_4 . Nature Communications, 2021, 12, 5792.	12.8	11
77	Unconventional Meissner screening induced by chiral molecules in a conventional superconductor. Physical Review Materials, 2021, 5, .	2.4	11
78	The new high-intensity surface muon beam for the generation of low-energy muons at PSI. Physica B: Condensed Matter, 2006, 374-375, 460-463.	2.7	10
79	Engineering the magnetic order in epitaxially strained $\text{Sr}_{1-x}\text{Ba}_x\text{MnO}_3$ perovskite thin films. APL Materials, 2019, 7, .	5.1	10
80	Reversible spin storage in metal oxide–fullerene heterojunctions. Science Advances, 2020, 6, eaax1085.	10.3	10
81	Spatial confinement of muonium atoms. Physical Review A, 2016, 94, .	2.5	9
82	Phase transition in the cuprates from a magnetic-field-free stiffness meter viewpoint. Nature Communications, 2019, 10, 2463.	12.8	9
83	Structural properties and anion dynamics of yttrium dihydride and photochromic oxyhydride thin films examined by <i>in situ</i> $\hat{1}/4$ SR. Physical Review B, 2021, 103, .	3.2	9
84	Intense beam of metastable Muonium. European Physical Journal C, 2020, 80, 804.	3.9	9
85	Characterization of a Continuous Muon Source for the Non-Destructive and Depth-Selective Elemental Composition Analysis by Muon Induced X- and Gamma-rays. Applied Sciences (Switzerland), 2022, 12, 2541.	2.5	9
86	Upgrading the PSI Muon Facility. Hyperfine Interactions, 2001, 138, 483-488.	0.5	8
87	A novel VME based SR data acquisition system at PSI. Physica B: Condensed Matter, 2009, 404, 1007-1009.	2.7	8
88	Muonium states in $\text{Cu}_2\text{ZnSnS}_4$ solar cell material. Journal of Physics: Conference Series, 2014, 551, 012045.	0.4	8
89	Measurement of the muon screening profile in $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$. Physical Review B, 2001, 64, 020407.	3.2	8
90	Depth dependence of the ionization energy of shallow hydrogen states in ZnO and CdS. Physical Review B, 2014, 90, .	3.2	8

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109	Experimental Study of the Magnetic Field Distribution and Shape of Domains Near the Surface of a Type-I Superconductor in the Intermediate State. Journal of Superconductivity and Novel Magnetism, 2020, 33, 3361-3376.	1.8	4
110	Strain tuning of interorbital correlations in LaVO_3 thin films. Physical Review B, 2021, 103, .	3.2	4
111	Sulfur-induced magnetism in $\text{FeSe}_{1-x}\text{S}_x$ thin films on LaAlO_3 revealed by muon spin rotation/relaxation. Physical Review B, 2021, 103, .	3.2	4
112	Nonlocal Meissner screening. Physica B: Condensed Matter, 2006, 374-375, 243-246.	2.7	3
113	Low-energy muon [LEM] study of Zn-phthalocyanine and ZnO thin films. Physica B: Condensed Matter, 2009, 404, 870-872.	2.7	3
114	Low-energy μ^+ SR Investigations of Photo-induced Effects on a nm Scale. Physics Procedia, 2012, 30, 219-223.	1.2	3
115	Kubo spins in nanoscale aluminum grains: A muon spin relaxation study. Physical Review B, 2020, 101, .	3.2	3
116	Simulation studies for upgrading a high-intensity surface muon beamline at Paul Scherrer Institute. Physical Review Accelerators and Beams, 2022, 25, .	1.6	3
117	Thin Film, Near-Surface and Multi-Layer Investigations by Low-Energy μ^+ SR. Hyperfine Interactions, 2005, 159, 227-234.	0.5	2
118	Near-surface muonium states in germanium. Physica B: Condensed Matter, 2009, 404, 866-869.	2.7	2
119	Simulation of TF- μ^+ SR histograms in germanium in the presence of cyclic charge state transitions of muonium. Journal of Physics: Conference Series, 2014, 551, 012049.	0.4	2
120	Low-Energy Muons as a Tool for a Depth-Resolved Analysis of the $\text{SiO}_2/\text{4H-SiC}$ Interface. Materials Science Forum, 0, 1004, 581-586.	0.3	2
121	Magnetic order of tetragonal CuO ultrathin films. Physical Review B, 2021, 103, .	3.2	2
122	Strain-induced competition between ferromagnetism and emergent antiferromagnetism in $(\text{Eu,Sr})\text{MnO}_3$. Physical Review Materials, 2018, 2, .	2.4	2
123	Characterization of the Interfacial Defect Layer in Chalcopyrite Solar Cells by Depth-Resolved Muon Spin Spectroscopy. Advanced Materials Interfaces, 0, , 2200374.	3.7	2
124	Low energy studies of semiconductor interfaces. Physica B: Condensed Matter, 2009, 404, 873-875.	2.7	1
125	Probing current-induced magnetic fields in $\text{Au} \text{YIG}$ heterostructures with low-energy muon spin spectroscopy. Applied Physics Letters, 2017, 110, 062409.	3.3	1
126	LE- (μ^+) SR Study of Superconductivity in the Thin Film Battery Material LiTi_2O_4 . , 2018, , .		1

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127	Investigation of Hydrogen-Like Muonium States in Nb-Doped SnO ₂ Films. , 2018, , .		1
128	Low-Energy Muons at PSI: Examples of Investigations of Superconducting Properties in Near-Surface Regions and Heterostuctures. , 2014, , .		1
129	Observation of a molecular muonium polaron and its application to probing magnetic and electronic states. Physical Review B, 2021, 104, .	3.2	0
130	Li-Diffusion in Spinel Li[Ni _{1/2} Mn _{3/2}]O ₄ Powder and Film Studied with μ +SR. , 2018, , .		0
131	Depth-Resolved Study of the SiO ₂ - SiC Interface Using Low-Energy Muon Spin Rotation Spectroscopy. Materials Science Forum, 0, 1062, 315-319.	0.3	0