

Thomas Herrmannsdörfer

List of Publications by Year in descending order

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127
papers

3,023
citations

136950

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128
all docs

128
docs citations

128
times ranked

3960
citing authors

#	ARTICLE	IF	CITATIONS
1	Laboratory formation of a scaled protostellar jet by coaligned poloidal magnetic field. <i>Science</i> , 2014, 346, 325-328.	12.6	173
2	Magnetic poly(μ -caprolactone)/iron-doped hydroxyapatite nanocomposite substrates for advanced bone tissue engineering. <i>Journal of the Royal Society Interface</i> , 2013, 10, 20120833.	3.4	168
3	Magnetic Bioinspired Hybrid Nanostructured Collagen-Hydroxyapatite Scaffolds Supporting Cell Proliferation and Tuning Regenerative Process. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 15697-15707.	8.0	119
4	Physical realization of a quantum spin liquid based on a complex frustration mechanism. <i>Nature Physics</i> , 2016, 12, 942-949.	16.7	115
5	Fe implanted ferromagnetic ZnO. <i>Applied Physics Letters</i> , 2006, 88, 052508.	3.3	110
6	Ferromagnetic Gd-implanted ZnO single crystals. <i>Journal of Applied Physics</i> , 2006, 99, 063906.	2.5	107
7	Crystal structure and paramagnetic behaviour of. <i>Journal of Physics Condensed Matter</i> , 1997, 9, 6563-6577.	1.8	100
8	A basic approach toward the development of nanocomposite magnetic scaffolds for advanced bone tissue engineering. <i>Journal of Applied Polymer Science</i> , 2011, 122, 3599-3605.	2.6	95
9	Superconducting State in a Gallium-Doped Germanium Layer at Low Temperatures. <i>Physical Review Letters</i> , 2009, 102, 217003.	7.8	76
10	Status of the Pulsed-Magnet-Development Program at the Dresden High Magnetic Field Laboratory. <i>IEEE Transactions on Applied Superconductivity</i> , 2012, 22, 4300603-4300603.	1.7	66
11	Magnetic order in the $S=1$ two-dimensional molecular antiferromagnet copper pyrazine perchlorate $\text{Cu}(\text{Pz})_2(\text{ClO}_4)_2$. <i>Physical Review B</i> , 2007, 75, .	3.2	59
12	Production of large volume, strongly magnetized laser-produced plasmas by use of pulsed external magnetic fields. <i>Review of Scientific Instruments</i> , 2013, 84, 043505.	1.3	57
13	Observation of long-range magnetic ordering in pyrochlore Nd_2O_7 : A neutron diffraction study. <i>Physical Review B</i> , 2015, 92, .	3.2	56
14	Terahertz-range free-electron laser electron spin resonance spectroscopy: Techniques and applications in high magnetic fields. <i>Review of Scientific Instruments</i> , 2009, 80, 073102.	1.3	55
15	Interplay of Nuclear Magnetism and Superconductivity in AuIn_2 . <i>Physical Review Letters</i> , 1997, 78, 1122-1125.	7.8	53
16	Nonmonotonic field dependence of the Néel temperature in the quasi-two-dimensional magnet Cu_2O . <i>Physical Review B</i> , 2009, 79, .	3.2	52
17	Structure-induced coexistence of ferromagnetic and superconducting states of single-phase Bi_2Ni seen via magnetization and resistance measurements. <i>Physical Review B</i> , 2011, 83, .	3.2	52
18	Biomimetic Magnetic Silk Scaffolds. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 6282-6292.	8.0	52

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19	Fe-implanted ZnO: Magnetic precipitates versus dilution. Journal of Applied Physics, 2008, 103, .	2.5	49
20	Superconductivity of Compacted Platinum Powder at Very Low Temperatures. Physical Review Letters, 1999, 82, 4528-4531.	7.8	48
21	Magnetic and transport properties of TmB12, ErB12, HoB12 and DyB12. Journal of Magnetism and Magnetic Materials, 1999, 207, 131-136.	2.3	43
22	Heavily Ga-doped germanium layers produced by ion implantation and flash lamp annealing: Structure and electrical activation. Journal of Applied Physics, 2010, 107, 053508.	2.5	41
23	Magnetic properties of highly diluted PdFex and PtFex-alloys. Part I. Magnetization at kelvin temperatures. Journal of Low Temperature Physics, 1996, 104, 49-65.	1.4	40
24	Design and Performance of Non-Destructive Pulsed Magnets at the Dresden High Magnetic Field Laboratory. IEEE Transactions on Applied Superconductivity, 2010, 20, 672-675.	1.7	39
25	Implementation of specific-heat and NMR experiments in the 1500 ms long-pulse magnet at the Hochfeld-Magnetlabor Dresden. Measurement Science and Technology, 2012, 23, 105001.	2.6	39
26	Magnet-Technology Development at the Dresden High Magnetic Field Laboratory. Journal of Low Temperature Physics, 2013, 170, 447-451.	1.4	38
27	Physical properties of the candidate quantum spin-ice system Pr2Hf2O7. Physical Review B, 2016, 94, .	3.2	36
28	Magnetization anomalies in the superconducting state of RuSr2GdCu2O8 and the magnetic study of Sr2GdRuO6. Physica C: Superconductivity and Its Applications, 2002, 377, 383-392.	1.2	35
29	Dresden pulsed magnetic field facility. Journal of Magnetism and Magnetic Materials, 2007, 310, 2728-2730.	2.3	35
30	Spontaneous Nuclear Ferromagnetic Ordering of In Nuclei in AuIn2. Physical Review Letters, 1995, 74, 1665-1668.	7.8	34
31	Multilayered Magnetic Gelatin Membrane Scaffolds. ACS Applied Materials & Interfaces, 2015, 7, 23098-23109.	8.0	34
32	Strong Paramagnetism of Gold Nanoparticles Deposited on a <i>Sulfolobus acidocaldarius</i> Layer. Physical Review Letters, 2012, 109, 247203.	7.8	33
33	Biosynthesis of magnetic nanoparticles by human mesenchymal stem cells following transfection with the magnetotactic bacterial gene mms6. Scientific Reports, 2017, 7, 39755.	3.3	33
34	The High Energy Density Scientific Instrument at the European XFEL. Journal of Synchrotron Radiation, 2021, 28, 1393-1416.	2.4	33
35	Nanostructured thin manganite films in megagauss magnetic field. Applied Physics Letters, 2012, 101, 092407.	3.3	31
36	Full Access to Nanoscale Bismuth-Palladium Intermetallics by Low-Temperature Syntheses. Chemistry of Materials, 2014, 26, 5640-5646.	6.7	31

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37	NMR signal averaging in 62T pulsed fields. Journal of Magnetic Resonance, 2011, 210, 1-6.	2.1	28
38	Title is missing!. Journal of Low Temperature Physics, 2003, 133, 41-59.	1.4	27
39	Magnetic Structure of $\text{RuSr}_2\text{GdCu}_8\text{O}_{26}$ Determined by Resonant X-Ray Diffraction. Physical Review Letters, 2009, 102, 037205.	7.8	26
40	Electronic and nuclear magnetism in PtFex at milli-, and nanokelvin temperatures. Europhysics Letters, 1997, 38, 619-624.	2.0	25
41	On-chip superconductivity via gallium overdoping of silicon. Applied Physics Letters, 2010, 97, 192505.	3.3	24
42	Electron doping dependence of the anisotropic superconductivity in $\text{BaFe}_2\text{NiAs}_2$. Physical Review B, 2015, 92, 020407.	3.2	24
43	Semimetallic Paramagnetic Nano Bi_2Ir and Superconducting Ferromagnetic Nano Bi_3Ni by Microwave-Assisted Synthesis and Room Temperature Pseudomorphosis. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2012, 638, 2035-2043.	1.2	23
44	Design of Non-destructive Pulsed Magnets at the HLD. Journal of Low Temperature Physics, 2007, 146, 719-732.	1.4	22
45	Superconducting films fabricated by high-fluence Ga implantation in Si. Physical Review B, 2011, 83, .	3.2	20
46	CMR-B-Scalar Sensor Application for High Magnetic Field Measurement in Nondestructive Pulsed Magnets. IEEE Transactions on Magnetics, 2013, 49, 5480-5484.	2.1	19
47	Evolution of antiferromagnetic domains in the all-in-all-out ordered pyrochlore Nd_2O_7 . Physical Review B, 2017, 95, .	3.2	19
48	Magnetic properties of SmB_6 and $\text{Sm}_{1-x}\text{La}_x\text{B}_6$ solid solutions. European Physical Journal D, 2002, 52, A225-A228.	0.4	18
49	Successive magnetic ordering of the Tb sublattices in $\text{Tb}_3\text{Pd}_2\text{O}_{16}\text{Si}_6$. Journal of Physics Condensed Matter, 1999, 11, 2929-2936.	1.8	17
50	Optical Floating-Zone Growth of Large Single Crystal of Spin Half Dimer $\text{Sr}_3\text{Cr}_2\text{O}_8$. Crystal Growth and Design, 2010, 10, 465-468.	3.0	17
51	Superconductivity in thin-film germanium in the temperature regime around 1 K. Superconductor Science and Technology, 2010, 23, 034007.	3.5	16
52	The impact of heavy Ga doping on superconductivity in germanium. Low Temperature Physics, 2011, 37, 877-883.	0.6	16
53	Superconducting $\text{RuSr}_2\text{GdCu}_2\text{O}_8$ studied by SQUID magnetometry. Physical Review B, 2002, 66, .	3.2	15
54	Nuclear magnetic resonance apparatus for pulsed high magnetic fields. Review of Scientific Instruments, 2012, 83, 083113.	1.3	15

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55	Silicon films with gallium-rich nanoinclusions: from superconductor to insulator. New Journal of Physics, 2013, 15, 083022.	2.9	15
56	Critical exponents and intrinsic broadening of the field-induced transition in NiCl_2 . Physical Review B, 2015, 91, .	3.2	15
57	Superconducting Ga-overdoped Ge layers capped with SiO ₂ : Structural and transport investigations. Physical Review B, 2012, 85, .	3.2	14
58	Magnetic properties of highly diluted PdFe and PtFe-alloys. Part II. Susceptibility at micro- and milli-kelvin temperatures. Journal of Low Temperature Physics, 1996, 104, 67-94.	1.4	13
59	On the low-field Hall coefficient of graphite. AIP Advances, 2014, 4, .	1.3	13
60	Evidence for a dynamical ground state in the frustrated pyrochafnate O_7 . Physical Review B, 2018, 97, .	3.2	13
61	Nuclear ferromagnetic ordering of Pr ¹⁴¹ in the diluted Van Vleck paramagnets Pr ¹⁴¹ xYxNi ₅ . Physical Review Letters, 1994, 72, 148-151.	7.8	12
62	Title is missing!. Journal of Low Temperature Physics, 1998, 110, 363-368.	1.4	12
63	Inter- and intragranular effects in superconducting compacted platinum powders. Physical Review B, 2000, 62, 14350-14358.	3.2	12
64	Superconductor-insulator transition controlled by annealing in Ga implanted Si. Applied Physics Letters, 2012, 100, 262602.	3.3	12
65	Inverted hysteresis and negative remanence in a homogeneous antiferromagnet. Physical Review B, 2018, 98, .	3.2	12
66	Interplay of Nuclear Magnetism and Superconductivity. Journal of Low Temperature Physics, 1998, 110, 405-410.	1.4	11
67	Magnetoresistance and Resistance Relaxation of Nanostructured La-Ca-MnO Films in Pulsed Magnetic Fields. IEEE Transactions on Magnetics, 2014, 50, 1-4.	2.1	11
68	Title is missing!. Journal of Low Temperature Physics, 1998, 111, 99-118.	1.4	9
69	T _c -enhancement in superconducting granular platinum. Europhysics Letters, 2002, 58, 885-891.	2.0	9
70	Magnetization, vortex state and specific heat in the superconducting state of RuSr ₂ GdCu ₂ O ₈ . European Physical Journal B, 2006, 52, 383-388.	1.5	9
71	Magnetization of RuSr ₂ GdCu ₂ O ₈ in pulsed magnetic fields up to 47T. Physical Review B, 2007, 75, .	3.2	9
72	Finite-Element Simulation and Performance of Pulsed Magnets. IEEE Transactions on Applied Superconductivity, 2008, 18, 608-611.	1.7	9

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73	Science at the Dresden High Magnetic Field Laboratory. AIP Conference Proceedings, 2008, , .	0.4	9
74	Downscaling Effect on the Superconductivity of Pd ₃ Bi ₂ X ₂ (X = S or Se) Nanoparticles Prepared by Microwave-Assisted Polyol Synthesis. Inorganic Chemistry, 2016, 55, 8808-8815.	4.0	9
75	Analytical balance-based Faraday magnetometer. Journal of Applied Physics, 2017, 121, .	2.5	9
76	The impact of nuclear magnetism on superconductivity. Physica B: Condensed Matter, 2000, 280, 368-369.	2.7	8
77	Pulsed magnetic field study of the spin gap in intermediate valence compound SmB ₆ . Physica B: Condensed Matter, 2009, 404, 2985-2987.	2.7	8
78	Optical study of superconducting Ga-rich layers in silicon. Physical Review B, 2013, 87, .	3.2	8
79	Depth-resolved transport measurements and atom-probe tomography of heterogeneous, superconducting Ge:Ga films. Superconductor Science and Technology, 2014, 27, 055025.	3.5	8
80	Superconductivity at 20 mK in compacted submicrometer platinum powders. Physica B: Condensed Matter, 2003, 329-333, 1427-1428.	2.7	7
81	Magnetization of superconducting RuSr ₂ GdCu ₂ O ₈ and of concurrent phases. Physica C: Superconductivity and Its Applications, 2003, 387, 26-32.	1.2	7
82	Field-stepped broadband NMR in pulsed magnets and application to SrCu ₂ (BO ₃) ₂ at 54 T. Journal of Magnetic Resonance, 2016, 271, 52-59.	2.1	7
83	<p> $\frac{2 \times 3}{S} = 1$ </p> <p> $S \times 3.2 = 7$ </p> magnetization plateau in a frustrated \times isolated spin-triangle compound: Interplay between Heisenberg and biquadratic exchange interactions. Physical Review B, 2019, 100, .	3.2	7
84	High-field magnetoresistance of graphite revised. Physical Review Materials, 2019, 3, .	2.4	7
85	Low-temperature magnetic properties of SmB ₆ . Physica B: Condensed Matter, 2000, 284-288, 1353-1354.	2.7	6
86	Title is missing!. Journal of Low Temperature Physics, 2001, 124, 257-269.	1.4	6
87	Optimized Synthesis of the Bismuth Subiodides Bi _m I ₄ (m = 4, 14, 16, 18) and the Electronic Properties of Bi ₁₄ I ₄ and Bi ₁₈ I ₄ . European Journal of Inorganic Chemistry, 2017, 2017, 5609-5615.	2.0	6
88	<p> $NaCaCo_2 F_7$ </p> <p> 7 </p> Magnetic interactions and spin dynamics in the bond-disordered pyrochlore fluoride \times Physical Review B, 2019, 99, .	3.2	6
89	Magnetic properties of Ag sinters and their possible impact on the coupling to liquid ³ He at very low temperatures. Journal of Low Temperature Physics, 1997, 106, 581-590.	1.4	5
90	Van vleck paramagnetism of the diluted intermetallic compounds Pr ^x Y _{1-x} Ni ₅ at fields up to 15 T. Journal of Low Temperature Physics, 1997, 107, 209-224.	1.4	5

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91	Magnetic Impurities in Glass and Silver Powder at Milli- and Microkelvin Temperatures. Journal of Low Temperature Physics, 2000, 118, 45-57.	1.4	5
92	Status quo of the Dresden High Magnetic Field Laboratory. Journal of Physics: Conference Series, 2006, 51, 619-622.	0.4	5
93	Magnetic and superconducting properties of RuSr ₂ GdCu ₂ O ₈ . Physica C: Superconductivity and Its Applications, 2007, 460-462, 390-391.	1.2	5
94	Effect of the Ru content on the phase equilibria in the RuSr ₂ GdCu ₂ O ₈ synthesis. Physica C: Superconductivity and Its Applications, 2007, 460-462, 401-402.	1.2	5
95	Crystal Growth of Spin-frustrated Ba ₄ Nb _{0.8} Ir _{3.2} O ₁₂ : A Possible Spin Liquid Material. Crystal Growth and Design, 2020, 20, 2871-2876.	3.0	5
96	Magnetic impurities in glasses and gelatine. Cryogenics, 1995, 35, 665-667.	1.7	4
97	Interplay between nuclear ferromagnetism and superconductivity in AuIn ₂ . European Physical Journal D, 1996, 46, 2189-2190.	0.4	4
98	Properties of Er-doped Au at ultralow temperatures. Physica B: Condensed Matter, 2000, 284-288, 1698-1699.	2.7	4
99	Superconducting properties of. Journal of Magnetism and Magnetic Materials, 2007, 310, 520-522.	2.3	4
100	Superconductivity in LaCu ₆ and possible applications. Physica C: Superconductivity and Its Applications, 2003, 388-389, 565-566.	1.2	3
101	Synthesis of a Cu-Filled Rh ₁₇ S ₁₅ Framework: Microwave Polyol Process Versus High-Temperature Route. Inorganic Chemistry, 2017, 56, 11513-11523.	4.0	3
102	Tuning the interactions in the spin-ice materials Dy ₂ Ge ₂ xSi ₆ O ₇ by silicon substitution. Physical Review B, 2019, 100, .	3.2	3
103	Magnetization beyond the Ising limit of Ho_2O_7 . Physical Review B, 2019, 99, .	3.2	3
104	Interplay of nuclear magnetism with electronic magnetism and superconductivity. European Physical Journal D, 1996, 46, 3279-3285.	0.4	2
105	Electronic and nuclear magnetism in PtFe at milli-, micro-, and nanokelvin temperatures. European Physical Journal D, 1996, 46, 2185-2186.	0.4	2
106	Magnetic ordering in CeCu ₆ . Physica B: Condensed Matter, 2000, 284-288, 1263-1264.	2.7	2
107	Flux Dynamics Effects in Superconducting Compacted Platinum Powders. Journal of Low Temperature Physics, 2001, 124, 245-255.	1.4	2
108	Recent Developments at the Dresden High Magnetic Field Laboratory. , 2006, , .		2

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109	49 MJ pulsed power facility to produce high magnetic fields. , 2007, , .		2
110	Mode Conversion and Period Doubling in a Liquid Rubidium Alfvén-Wave Experiment with Coinciding Sound and Alfvén Speeds. Physical Review Letters, 2021, 127, 275001.	7.8	2
111	Low temperature magnetic properties of samarium hexaboride. European Physical Journal D, 1996, 46, 1983-1984.	0.4	1
112	Superconductivity of compressed platinum powder at very low temperatures. Physica B: Condensed Matter, 2000, 280, 247-248.	2.7	1
113	Hyperfine enhanced nuclear antiferromagnetism in PrS. Physica B: Condensed Matter, 2000, 284-288, 1694-1695.	2.7	1
114	The New High Magnetic Field Laboratory at Dresden: a Pulsed-Field Laboratory at an IR Free-Electron-Laser. AIP Conference Proceedings, 2006, , .	0.4	1
115	High magnetic field study of RuSr ₂ GdCu ₂ O ₈ . Journal of Physics: Conference Series, 2006, 51, 411-414.	0.4	1
116	4f spin driven ferroelectric-ferromagnetic multiferroicity in PrMn ₂ O ₅ under a magnetic field. Physical Review B, 2020, 102, .	3.2	1
117	Magnetic anisotropy and spin dynamics in the kagome magnet Fe_4O_{16} : NMR and magnetic susceptibility study on oriented powder. Physical Review B, 2021, 103, .	3.2	1
118	Contactless generation of cavitation in high temperature liquid metals and its impact on particle dispersion in solidified iron and steel samples. Journal of Materials Processing Technology, 2021, 291, 117041.	6.3	1
119	Splitting of the magnetic monopole pair-creation energy in spin ice. Journal of Physics Condensed Matter, 2020, 32, 36LT01.	1.8	1
120	Low Temperature Transport and Magnetic Properties of SmB ₆ . Acta Physica Polonica A, 2000, 97, 419-422.	0.5	1
121	Nuclear susceptibility of protons in titanium hydride. European Physical Journal D, 1996, 46, 2187-2188.	0.4	0
122	Hyperfine enhanced nuclear magnetism. Physica B: Condensed Matter, 2000, 284-288, 1696-1697.	2.7	0
123	The magnetic properties of the multi-functional intermetallic compound Pr _{1-x} Y _x LaxPbyTe in high magnetic fields. Journal of Physics: Conference Series, 2006, 51, 67-70.	0.4	0
124	The Quantum-Functional Properties of Pr _{1-x} Y _x LaxPbyTe. AIP Conference Proceedings, 2006, , .	0.4	0
125	The 9th International Conference on Research in High Magnetic Fields in Retrospective View. Journal of Low Temperature Physics, 2010, 159, 1-2.	1.4	0
126	Status of the Development of a Novel Compact Proton Therapy Gantry System Based on Pulsed Magnets for Laser-Driven Beams. International Journal of Radiation Oncology Biology Physics, 2016, 96, E612.	0.8	0

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127	High power laser-driven particle acceleration for radiotherapy., 2017, , .		0