

# Thomas Herrmannsdörfer

## List of Publications by Year in descending order

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127  
papers

3,023  
citations

136950

32  
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182427

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128  
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128  
docs citations

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times ranked

3960  
citing authors

#	ARTICLE	IF	CITATIONS
1	Magnetic anisotropy and spin dynamics in the kagome magnet $\text{Fe}_4\text{O}_{16}$ : NMR and magnetic susceptibility study on oriented powder. <i>Physical Review B</i> , 2021, 103, .	3.2	1
2	Contactless generation of cavitation in high temperature liquid metals and its impact on particle dispersion in solidified iron and steel samples. <i>Journal of Materials Processing Technology</i> , 2021, 291, 117041.	6.3	1
3	The High Energy Density Scientific Instrument at the European XFEL. <i>Journal of Synchrotron Radiation</i> , 2021, 28, 1393-1416.	2.4	33
4	Mode Conversion and Period Doubling in a Liquid Rubidium Alfvén-Wave Experiment with Coinciding Sound and Alfvén Speeds. <i>Physical Review Letters</i> , 2021, 127, 275001.	7.8	2
5	4f spin driven ferroelectric-ferromagnetic multiferroicity in $\text{PrMn}_2\text{O}_5$ under a magnetic field. <i>Physical Review B</i> , 2020, 102, .	3.2	1
6	Crystal Growth of Spin-frustrated $\text{Ba}_4\text{Nb}_{0.8}\text{Ir}_{3.2}\text{O}_{12}$ : A Possible Spin Liquid Material. <i>Crystal Growth and Design</i> , 2020, 20, 2871-2876.	3.0	5
7	Splitting of the magnetic monopole pair-creation energy in spin ice. <i>Journal of Physics Condensed Matter</i> , 2020, 32, 36LT01.	1.8	1
8	Tuning the interactions in the spin-ice materials $\text{Dy}_2\text{Ge}_2\text{S}_7$ by silicon substitution. <i>Physical Review B</i> , 2019, 100, .	3.2	3
9	magnetization plateau in a frustrated $\text{S}_3\text{O}_7$ isolated spin-triangle compound: Interplay between Heisenberg and biquadratic exchange interactions.	3.2	7
10	Magnetic interactions and spin dynamics in the bond-disordered pyrochlore fluoride $\text{NaCaCo}_2\text{F}_7$ . <i>Physical Review B</i> , 2019, 99, .	3.2	6
11	Magnetization beyond the Ising limit of $\text{Ho}_2\text{O}_7$ . <i>Physical Review B</i> , 2019, 99, .	3.2	3
12	High-field magnetoresistance of graphite revised. <i>Physical Review Materials</i> , 2019, 3, .	2.4	7
13	Evidence for a dynamical ground state in the frustrated pyrochlore $\text{Tb}_2\text{O}_7$ . <i>Physical Review B</i> , 2018, 97, .	3.2	13
14	Inverted hysteresis and negative remanence in a homogeneous antiferromagnet. <i>Physical Review B</i> , 2018, 98, .	3.2	12
15	Analytical balance-based Faraday magnetometer. <i>Journal of Applied Physics</i> , 2017, 121, .	2.5	9
16	Biosynthesis of magnetic nanoparticles by human mesenchymal stem cells following transfection with the magnetotactic bacterial gene <i>mms6</i> . <i>Scientific Reports</i> , 2017, 7, 39755.	3.3	33
17	Evolution of antiferromagnetic domains in the all-in-all-out ordered pyrochlore $\text{Nd}_2\text{O}_7$ . <i>Physical Review B</i> , 2017, 95, .	3.2	19
18	Synthesis of a $\text{Cu}_7\text{S}_{15}$ Framework: Microwave Polyol Process Versus High-Temperature Route. <i>Inorganic Chemistry</i> , 2017, 56, 11513-11523.	4.0	3

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19	Optimized Synthesis of the Bismuth Subiodides Bi <sub>m</sub> I <sub>4</sub> (m = 4, 14, 16, 18) and the Electronic Properties of Bi <sub>14</sub> I <sub>4</sub> and Bi <sub>18</sub> I <sub>4</sub> . European Journal of Inorganic Chemistry, 2017, 2017, 5609-5615.	2.0	6
20	High power laser-driven particle acceleration for radiotherapy. , 2017, , .		0
21	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
22	Downscaling Effect on the Superconductivity of Pd <sub>3</sub> Bi <sub>2</sub> X <sub>2</sub> (X = S or Se) Nanoparticles Prepared by Microwave-Assisted Polyol Synthesis. Inorganic Chemistry, 2016, 55, 8808-8815.	4.0	9
23	Field-stepped broadband NMR in pulsed magnets and application to SrCu <sub>2</sub> (BO <sub>3</sub> ) <sub>2</sub> at 54 T. Journal of Magnetic Resonance, 2016, 271, 52-59.	2.1	7
24	Physical realization of a quantum spin liquid based on a complex frustration mechanism. Nature Physics, 2016, 12, 942-949.	16.7	115
25	Physical properties of the candidate quantum spin-ice system Pr <sub>2</sub> Hf <sub>2</sub> O <sub>7</sub> . Physical Review B, 2016, 94, .	3.2	36
26	Electron doping dependence of the anisotropic superconductivity in $\text{BaFe}_{1-x}\text{Ni}_x\text{As}_2$ . Physical Review B, 2015, 92, .	3.2	24
27	Observation of long-range magnetic ordering in pyrochafenate $\text{Nd}_2\text{O}_7$ : A neutron diffraction study. Physical Review B, 2015, 92, .	3.2	56
28	Biomimetic Magnetic Silk Scaffolds. ACS Applied Materials & Interfaces, 2015, 7, 6282-6292.	8.0	52
29	Critical exponents and intrinsic broadening of the field-induced transition in $\text{NiCl}_2\text{SC}_2$ . Physical Review B, 2015, 91, .	3.2	15
30	Multilayered Magnetic Gelatin Membrane Scaffolds. ACS Applied Materials & Interfaces, 2015, 7, 23098-23109.	8.0	34
31	On the low-field Hall coefficient of graphite. AIP Advances, 2014, 4, .	1.3	13
32	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
33	Depth-resolved transport measurements and atom-probe tomography of heterogeneous, superconducting Ge:Ga films. Superconductor Science and Technology, 2014, 27, 055025.	3.5	8
34	Laboratory formation of a scaled protostellar jet by coaligned poloidal magnetic field. Science, 2014, 346, 325-328.	12.6	173
35	Full Access to Nanoscale Bismuth-Palladium Intermetallics by Low-Temperature Syntheses. Chemistry of Materials, 2014, 26, 5640-5646.	6.7	31
36	Magnetic Bioinspired Hybrid Nanostructured Collagen-Hydroxyapatite Scaffolds Supporting Cell Proliferation and Tuning Regenerative Process. ACS Applied Materials & Interfaces, 2014, 6, 15697-15707.	8.0	119

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37	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
38	Optical study of superconducting Ga-rich layers in silicon. Physical Review B, 2013, 87, .	3.2	8
39	Magnet-Technology Development at the Dresden High Magnetic Field Laboratory. Journal of Low Temperature Physics, 2013, 170, 447-451.	1.4	38
40	Production of large volume, strongly magnetized laser-produced plasmas by use of pulsed external magnetic fields. Review of Scientific Instruments, 2013, 84, 043505.	1.3	57
41	Magnetic poly( $\mu$ -caprolactone)/iron-doped hydroxyapatite nanocomposite substrates for advanced bone tissue engineering. Journal of the Royal Society Interface, 2013, 10, 20120833.	3.4	168
42	Silicon films with gallium-rich nanoinclusions: from superconductor to insulator. New Journal of Physics, 2013, 15, 083022.	2.9	15
43	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
44	Superconductor-insulator transition controlled by annealing in Ga implanted Si. Applied Physics Letters, 2012, 100, 262602.	3.3	12
45	Superconducting Ga-overdoped Ge layers capped with SiO $_2$ : Structural and transport investigations. Physical Review B, 2012, 85, .	3.2	14
46	Strong Paramagnetism of Gold Nanoparticles Deposited on a <i>Sulfolobus acidocaldarius</i> Layer. Physical Review Letters, 2012, 109, 247203.	7.8	33
47	Nuclear magnetic resonance apparatus for pulsed high magnetic fields. Review of Scientific Instruments, 2012, 83, 083113.	1.3	15
48	Status of the Pulsed-Magnet-Development Program at the Dresden High Magnetic Field Laboratory. IEEE Transactions on Applied Superconductivity, 2012, 22, 4300603-4300603.	1.7	66
49	Nanostructured thin manganite films in megagauss magnetic field. Applied Physics Letters, 2012, 101, 092407.	3.3	31
50	Semimetallic Paramagnetic Nano-Bi $_2$ Ir and Superconducting Ferromagnetic Nano-Bi $_3$ Ni by Microwave-Assisted Synthesis and Room Temperature Pseudomorphosis. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2012, 638, 2035-2043.	1.2	23
51	Structure-induced coexistence of ferromagnetic and superconducting states of single-phase Bi $_3$ Ni seen via magnetization and resistance measurements. Physical Review B, 2011, 83, .	3.2	52
52	A basic approach toward the development of nanocomposite magnetic scaffolds for advanced bone tissue engineering. Journal of Applied Polymer Science, 2011, 122, 3599-3605.	2.6	95
53	NMR signal averaging in 62T pulsed fields. Journal of Magnetic Resonance, 2011, 210, 1-6.	2.1	28
54	Superconducting films fabricated by high-fluence Ga implantation in Si. Physical Review B, 2011, 83, .	3.2	20

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55	The impact of heavy Ga doping on superconductivity in germanium. Low Temperature Physics, 2011, 37, 877-883.	0.6	16
56	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
57	Superconductivity in thin-film germanium in the temperature regime around 1 K. Superconductor Science and Technology, 2010, 23, 034007.	3.5	16
58	On-chip superconductivity via gallium overdoping of silicon. Applied Physics Letters, 2010, 97, 192505.	3.3	24
59	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
60	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
61	Optical Floating-Zone Growth of Large Single Crystal of Spin Half Dimer Sr <sub>3</sub> Cr <sub>2</sub> O <sub>8</sub> . Crystal Growth and Design, 2010, 10, 465-468.	3.0	17
62	Superconducting State in a Gallium-Doped Germanium Layer at Low Temperatures. Physical Review Letters, 2009, 102, 217003.	7.8	76
63	Terahertz-range free-electron laser electron spin resonance spectroscopy: Techniques and applications in high magnetic fields. Review of Scientific Instruments, 2009, 80, 073102.	1.3	55
64	Nonmonotonic field dependence of the Néel temperature in the quasi-two-dimensional magnet $\text{Cu}_2\text{RuSr}_2\text{O}_{10}$ . Physical Review B, 2009, 79, .	3.2	52
65	Pulsed magnetic field study of the spin gap in intermediate valence compound SmB <sub>6</sub> . Physica B: Condensed Matter, 2009, 404, 2985-2987.	2.7	8
66	Magnetic Structure of $\text{RuSr}_2\text{GdCu}_2\text{O}_{10}$ Determined by Resonant X-Ray Diffraction. Physical Review Letters, 2009, 102, 037205.	7.8	26
67	Fe-implanted ZnO: Magnetic precipitates versus dilution. Journal of Applied Physics, 2008, 103, .	2.5	49
68	Finite-Element Simulation and Performance of Pulsed Magnets. IEEE Transactions on Applied Superconductivity, 2008, 18, 608-611.	1.7	9
69	Science at the Dresden High Magnetic Field Laboratory. AIP Conference Proceedings, 2008, , .	0.4	9
70	Magnetization of $\text{RuSr}_2\text{GdCu}_2\text{O}_{10}$ in pulsed magnetic fields up to 47T. Physical Review B, 2007, 75, .	3.2	9
71	Magnetic order in the $S=1/2$ two-dimensional molecular antiferromagnet copper pyrazine perchlorate $\text{Cu}(\text{Pz})_2(\text{ClO}_4)_2$ . Physical Review B, 2007, 75, .	3.2	59
72	49 MJ pulsed power facility to produce high magnetic fields. , 2007, , .		2

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73	Magnetic and superconducting properties of RuSr <sub>2</sub> GdCu <sub>2</sub> O <sub>8</sub> . Physica C: Superconductivity and Its Applications, 2007, 460-462, 390-391.	1.2	5
74	Effect of the Ru content on the phase equilibria in the RuSr <sub>2</sub> GdCu <sub>2</sub> O <sub>8</sub> synthesis. Physica C: Superconductivity and Its Applications, 2007, 460-462, 401-402.	1.2	5
75	Superconducting properties of. Journal of Magnetism and Magnetic Materials, 2007, 310, 520-522.	2.3	4
76	Design of Non-destructive Pulsed Magnets at the HLD. Journal of Low Temperature Physics, 2007, 146, 719-732.	1.4	22
77	Dresden pulsed magnetic field facility. Journal of Magnetism and Magnetic Materials, 2007, 310, 2728-2730.	2.3	35
78	Ferromagnetic Gd-implanted ZnO single crystals. Journal of Applied Physics, 2006, 99, 063906.	2.5	107
79	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
80	The magnetic properties of the multi-functional intermetallic compound Pr <sub>1-x</sub> Y <sub>1-x</sub> La <sub>x</sub> Pb <sub>y</sub> Te in high magnetic fields. Journal of Physics: Conference Series, 2006, 51, 67-70.	0.4	0
81	High magnetic field study of RuSr <sub>2</sub> GdCu <sub>2</sub> O <sub>8</sub> . Journal of Physics: Conference Series, 2006, 51, 411-414.	0.4	1
82	Status quo of the Dresden High Magnetic Field Laboratory. Journal of Physics: Conference Series, 2006, 51, 619-622.	0.4	5
83	The Quantum-Functional Properties of Pr <sub>1-x</sub> Y <sub>1-x</sub> La <sub>x</sub> Pb <sub>y</sub> Te. AIP Conference Proceedings, 2006, , .	0.4	0
84	Magnetization, vortex state and specific heat in the superconducting state of RuSr <sub>2</sub> GdCu <sub>2</sub> O <sub>8</sub> . European Physical Journal B, 2006, 52, 383-388.	1.5	9
85	Fe implanted ferromagnetic ZnO. Applied Physics Letters, 2006, 88, 052508.	3.3	110
86	Recent Developments at the Dresden High Magnetic Field Laboratory. , 2006, , .		2
87	Title is missing!. Journal of Low Temperature Physics, 2003, 133, 41-59.	1.4	27
88	Superconductivity at 20 mK in compacted submicrometer platinum powders. Physica B: Condensed Matter, 2003, 329-333, 1427-1428.	2.7	7
89	Superconductivity in LaCu <sub>6</sub> and possible applications. Physica C: Superconductivity and Its Applications, 2003, 388-389, 565-566.	1.2	3
90	Magnetization of superconducting RuSr <sub>2</sub> GdCu <sub>2</sub> O <sub>8</sub> and of concurrent phases. Physica C: Superconductivity and Its Applications, 2003, 387, 26-32.	1.2	7

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91	T <sub>c</sub> -enhancement in superconducting granular platinum. Europhysics Letters, 2002, 58, 885-891.	2.0	9
92	Superconducting RuSr <sub>2</sub> GdCu <sub>2</sub> O <sub>8</sub> studied by SQUID magnetometry. Physical Review B, 2002, 66, .	3.2	15
93	Magnetic properties of SmB <sub>6</sub> and Sm <sub>1-x</sub> La <sub>x</sub> B <sub>6</sub> solid solutions. European Physical Journal D, 2002, 52, A225-A228.	0.4	18
94	Magnetization anomalies in the superconducting state of RuSr <sub>2</sub> GdCu <sub>2</sub> O <sub>8</sub> and the magnetic study of Sr <sub>2</sub> GdRuO <sub>6</sub> . Physica C: Superconductivity and Its Applications, 2002, 377, 383-392.	1.2	35
95	Flux Dynamics Effects in Superconducting Compacted Platinum Powders. Journal of Low Temperature Physics, 2001, 124, 245-255.	1.4	2
96	Title is missing!. Journal of Low Temperature Physics, 2001, 124, 257-269.	1.4	6
97	Superconductivity of compressed platinum powder at very low temperatures. Physica B: Condensed Matter, 2000, 280, 247-248.	2.7	1
98	The impact of nuclear magnetism on superconductivity. Physica B: Condensed Matter, 2000, 280, 368-369.	2.7	8
99	Low-temperature magnetic properties of SmB <sub>6</sub> . Physica B: Condensed Matter, 2000, 284-288, 1353-1354.	2.7	6
100	Magnetic ordering in CeCu <sub>6</sub> . Physica B: Condensed Matter, 2000, 284-288, 1263-1264.	2.7	2
101	Hyperfine enhanced nuclear antiferromagnetism in PrS. Physica B: Condensed Matter, 2000, 284-288, 1694-1695.	2.7	1
102	Hyperfine enhanced nuclear magnetism. Physica B: Condensed Matter, 2000, 284-288, 1696-1697.	2.7	0
103	Properties of Er-doped Au at ultralow temperatures. Physica B: Condensed Matter, 2000, 284-288, 1698-1699.	2.7	4
104	Magnetic Impurities in Glass and Silver Powder at Milli- and Microkelvin Temperatures. Journal of Low Temperature Physics, 2000, 118, 45-57.	1.4	5
105	Inter- and intragranular effects in superconducting compacted platinum powders. Physical Review B, 2000, 62, 14350-14358.	3.2	12
106	Low Temperature Transport and Magnetic Properties of SmB <sub>6</sub> . Acta Physica Polonica A, 2000, 97, 419-422.	0.5	1
107	Successive magnetic ordering of the Tb sublattices in Tb <sub>3</sub> Pd <sub>20</sub> Si <sub>6</sub> . Journal of Physics Condensed Matter, 1999, 11, 2929-2936.	1.8	17
108	Superconductivity of Compacted Platinum Powder at Very Low Temperatures. Physical Review Letters, 1999, 82, 4528-4531.	7.8	48

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109	Magnetic and transport properties of TmB <sub>12</sub> , ErB <sub>12</sub> , HoB <sub>12</sub> and DyB <sub>12</sub> . Journal of Magnetism and Magnetic Materials, 1999, 207, 131-136.	2.3	43
110	Title is missing!. Journal of Low Temperature Physics, 1998, 111, 99-118.	1.4	9
111	Title is missing!. Journal of Low Temperature Physics, 1998, 110, 363-368.	1.4	12
112	Interplay of Nuclear Magnetism and Superconductivity. Journal of Low Temperature Physics, 1998, 110, 405-410.	1.4	11
113	Electronic and nuclear magnetism in PtFex at milli-, and nanokelvin temperatures. Europhysics Letters, 1997, 38, 619-624.	2.0	25
114	Interplay of Nuclear Magnetism and Superconductivity in AuIn <sub>2</sub> . Physical Review Letters, 1997, 78, 1122-1125.	7.8	53
115	Crystal structure and paramagnetic behaviour of. Journal of Physics Condensed Matter, 1997, 9, 6563-6577.	1.8	100
116	Magnetic properties of Ag sinters and their possible impact on the coupling to liquid <sup>3</sup> He at very low temperatures. Journal of Low Temperature Physics, 1997, 106, 581-590.	1.4	5
117	Van vleck paramagnetism of the diluted intermetallic compounds Pr <sup>1-x</sup> Y <sup>x</sup> Ni <sub>5</sub> at fields up to 15 T. Journal of Low Temperature Physics, 1997, 107, 209-224.	1.4	5
118	Interplay of nuclear magnetism with electronic magnetism and superconductivity. European Physical Journal D, 1996, 46, 3279-3285.	0.4	2
119	Low temperature magnetic properties of samarium hexaboride. European Physical Journal D, 1996, 46, 1983-1984.	0.4	1
120	Electronic and nuclear magnetism inPtFe at milli-, micro-, and nanokelvin temperatures. European Physical Journal D, 1996, 46, 2185-2186.	0.4	2
121	Nuclear susceptibility of protons in titanium hydride. European Physical Journal D, 1996, 46, 2187-2188.	0.4	0
122	Interplay between nuclear ferromagnetism and superconductivity in AuIn <sub>2</sub> . European Physical Journal D, 1996, 46, 2189-2190.	0.4	4
123	Magnetic properties of highly dilutedPdFex andPtFex-alloys. Part I. Magnetization at kelvin temperatures. Journal of Low Temperature Physics, 1996, 104, 49-65.	1.4	40
124	Magnetic properties of highly dilutedPdFex andPtFex-alloys. Part II. Susceptibility at micro- and milli-kelvin temperatures. Journal of Low Temperature Physics, 1996, 104, 67-94.	1.4	13
125	Magnetic impurities in glasses and gelatine. Cryogenics, 1995, 35, 665-667.	1.7	4
126	Spontaneous Nuclear Ferromagnetic Ordering of In Nuclei in AuIn <sub>2</sub> . Physical Review Letters, 1995, 74, 1665-1668.	7.8	34



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127	Nuclear ferromagnetic ordering of Pr <sup>141</sup> in the diluted Van Vleck paramagnets Pr <sup>1-x</sup> Y <sup>x</sup> Ni <sup>5</sup> . Physical Review Letters, 1994, 72, 148-151.	7.8	12