Werner Scholz

List of Publications by Year
in descending order

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73 papers	1,901 citations	361413 20 h-index	265206 42 g-index
73 all docs	73 docs citations	73 times ranked	1670 citing authors

#	Article	IF	Citations
1	Far-field headâ€“media optical interaction in heat-assisted magnetic recording. Applied Optics, 2016, 55, 1241.	2.1	0
2	Heat assisted magnetic recording performance and integration challenges. Proceedings of SPIE, 2014, , .	0.8	2
3	Plasmonic near-field transducer for heat-assisted magnetic recording. Nanophotonics, 2014, 3, 141-155.	6.0	128
4	Media Roughness and Head-Media Spacing in Heat-Assisted Magnetic Recording. IEEE Transactions on Magnetics, 2014, 50, 132-136.	2.1	14
5	Vortex state formation and stability in single and double layer nanorings and nanodisks. Journal of Applied Physics, 2013, 113, 17B905.	2.5	2
6	Cluster size and exchange dispersion in perpendicular magnetic media. Journal of Applied Physics, 2011, 109, 123907.	2.5	16
7	Role of Media Parameters in Switching Granular Perpendicular Media Using Microwave Assisted Magnetic Recording. IEEE Transactions on Magnetics, 2009, 45, 889-892.	2.1	7
8	The Role of Media Damping in a Perpendicular Recording System. IEEE Transactions on Magnetics, 2008, 44, 207-210.	2.1	2
9	Fast Magnetization Switching With Circularly Polarized Fields and Short Pulses. IEEE Transactions on Magnetics, 2008, 44, 3134-3136.	2.1	6
10	Reduction in Switching Field for a Granular Perpendicular Medium Using Microwave Assisted Magnetic Recording. IEEE Transactions on Magnetics, 2008, 44, 3392-3395.	2.1	16
11	Micromagnetic modeling of ferromagnetic resonance assisted switching. Journal of Applied Physics, 2008, 103, 07F539.	2.5	36
12	Magnetic Configurations and Phase Diagrams of Sub-100-nm NiFe Nanorings. IEEE Transactions on Magnetics, 2007, 43, 2884-2886.	2.1	9
13	Computational Aspects of Micromagnetics. , 2006, , 383-433.		0
14	Effect of Write Current Waveform on Magnetization and Head-Field Dynamics of Perpendicular Recording Heads. IEEE Transactions on Magnetics, 2006, 42, 2264-2266.	2.1	18
15	Effect of thermal fluctuation field on the noise performance of a perpendicular recording system. Journal of Applied Physics, 2006, 99, 08E706.	2.5	8
16	Micromagnetic analysis of fast precessional switching. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 510-513.	2.3	6
17	Micromagnetic modeling of head field rise time for high data-rate recording. IEEE Transactions on Magnetics, 2005, 41, 702-706.	2.1	36
18	Micromagnetic Simulation of head-field and write bubble dynamics in perpendicular recording. IEEE Transactions on Magnetics, 2005, 41, 2839-2844.	2.1	15

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19	Vortex-state oscillations in soft magnetic cylindrical dots. Physical Review B, 2005, 71, .	3.2	121
20	Micromagnetic simulation of magnetization reversal in small particles with surface anisotropy. Journal of Applied Physics, 2004, 95, 6807-6809.	2.5	27
21	Micromagnetic modelling and magnetization processes. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 641-646.	2.3	21
22	Implementation of a high performance parallel finite element micromagnetics package. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 693-694.	2.3	2
23	Numerical micromagnetic simulation of Feâ€“Pt nanoparticles with multiple easy axes. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 1524-1525.	2.3	12
24	Magnetostatic spin waves in nanoelements. Physica B: Condensed Matter, 2004, 343, 200-205.	2.7	17
25	Nonuniform Thermal Reversal in Single-Domain Patterned Media. IEEE Transactions on Magnetics, 2004, 40, 2507-2509.	2.1	7
26	Numerical and analytical study of fast precessional switching. Journal of Applied Physics, 2004, 95, 7055-7057.	2.5	24
27	Transition from single-domain to vortex state in soft magnetic cylindrical nanodots. Journal of Magnetism and Magnetic Materials, 2003, 266, 155-163.	2.3	117
28	Thermal fluctuations in magnetic sensor elements. Sensors and Actuators A: Physical, 2003, 106, 134-136.	4.1	3
29	Micromagnetic calculations of bias field and coercivity of compensated ferromagnetic antiferromagnetic bilayers. Journal of Applied Physics, 2003, 93, 8618-8620.	2.5	9
30	Fast boundary methods for magnetostatic interactions in micromagnetics. IEEE Transactions on Magnetics, 2003, 39, 2513-2515.	2.1	31
31	Scalable parallel micromagnetic solvers for magnetic nanostructures. Computational Materials Science, 2003, 28, 366-383.	3.0	256
32	Reversible magnetization processes and energy density product in Smâ€“CoFe and Smâ€“Co/Co bilayers. Journal of Applied Physics, 2003, 93, 6489-6491.	2.5	22
33	Coercivity and remanence in self-assembled FePt nanoparticle arrays. Journal of Applied Physics, 2003, 93, 7041-7043.	2.5	32
34	Micromagnetic simulation of the pinning and depinning process in permanent magnets. IEEE Transactions on Magnetics, 2003, 39, 2920-2922.	2.1	15
35	Thermally induced magnetization reversal in antiferromagnetically coupled media. Journal of Applied Physics, 2003, 93, 7405-7407.	2.5	4
36	Thermally activated magnetization rotation in small nanoparticles. IEEE Transactions on Magnetics, 2003, 39, 2507-2509.	2.1	7

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37	Energy barriers in magnetic random access memory elements. IEEE Transactions on Magnetics, 2003, 39, 2839-2841.	2.1	12
38	Fast Switching of Mesoscopic Magnets. , 2003, , 1-27.		2
39	Finite Element Micromagnetics. Lecture Notes in Computational Science and Engineering, 2003, , 165-181.	0.3	5
40	Thermal magnetization noise in submicrometer spin valve sensors. Journal of Applied Physics, 2003, 93, 8576-8578.	2.5	11
41	Ultrafast switching of magnetic nanoelements using a rotating field. Journal of Applied Physics, 2002, 91, 7974.	2.5	11
42	Sm(Co,Fe,Cu,Zr)/sub z/ magnets for high-temperature applications: microstructural and micromagnetic analysis. IEEE Transactions on Magnetics, 2002, 38, 2943-2945.	2.1	6
43	Micromagnetic Simulation of Thermal Effects in Magnetic Nanostructures. Materials Research Society Symposia Proceedings, 2002, 746, 1.	0.1	3
44	Micromagnetic three-dimensional simulation of the pinning field in high temperature Sm(Co,Fe,Cu,Zr)[sub z] magnets. Journal of Applied Physics, 2002, 91, 8492.	2.5	16
45	Finite element simulation of discrete media with granular structure. IEEE Transactions on Magnetics, 2002, 38, 1967-1969.	2.1	8
46	Domain wall motion in nanowires using moving grids (invited). Journal of Applied Physics, 2002, 91, 6914.	2.5	72
47	Micromagnetic simulation of antiferromagnetic/ferromagnetic structures. IEEE Transactions on Magnetics, 2002, 38, 2397-2399.	2.1	28
48	Magnetization reversal in granular nanowires. IEEE Transactions on Magnetics, 2002, 38, 2580-2582.	2.1	22
49	Nucleation in polycrystalline thin films using a preconditioned finite element method. Journal of Applied Physics, 2002, 91, 7977.	2.5	5
50	Domain structures and domain wall pinning in arrays of elliptical NiFe nanoelements. Journal of Applied Physics, 2002, 91, 7047.	2.5	9
51	Micromagnetic simulation of the magnetic switching behaviour of mesoscopic and nanoscopic structures. Computational Materials Science, 2002, 24, 163-174.	3.0	10
52	Micromagnetic simulation of domain wall pinning and domain wall motion. Computational Materials Science, 2002, 25, 540-546.	3.0	16
53	Fast switching behaviour of nanoscopic NiFe- and Co-elements. Computational Materials Science, 2002, 25, 554-561.	3.0	3
54	TEM-analysis of Sm(Co,Fe,Cu,Zr)z magnets for high-temperature applications. Journal of Magnetism and Magnetic Materials, 2002, 242-245, 1353-1355.	2.3	20

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55	Micromagnetic simulation of domain wall pinning in Sm(Co,Fe,Cu,Zr)z magnets. Journal of Magnetism and Magnetic Materials, 2002, 242-245, 1356-1358.	2.3	4
56	Eddy currents in pulsed field measurements. Journal of Magnetism and Magnetic Materials, 2002, 242-245, 911-914.	2.3	13
57	The effect of the cell size in Langevin micromagnetic simulations. Journal of Magnetism and Magnetic Materials, 2002, 242-245, 999-1001.	2.3	27
58	Fast switching of small magnetic particles. Journal of Magnetism and Magnetic Materials, 2002, 242-245, 426-429.	2.3	17
59	Time resolved micromagnetics using a preconditioned time integration method. Journal of Magnetism and Magnetic Materials, 2002, 248, 298-311.	2.3	113
60	A path method for finding energy barriers and minimum energy paths in complex micromagnetic systems. Journal of Magnetism and Magnetic Materials, 2002, 250, 12-19.	2.3	132
61	Micromagnetic simulation of domain wall motion in magnetic nano-wires. Journal of Magnetism and Magnetic Materials, 2002, 249, 181-186.	2.3	83
62	MICROMAGNETIC SIMULATIONS AND APPLICATIONS. , 2002, , .		0
63	Micromagnetic simulations of magnetization reversal in Co/Ni multilayers. Physica B: Condensed Matter, 2001, 306, 38-43.	2.7	5
64	Micromagnetic simulation of magnetization reversal in rotational magnetic fields. Physica B: Condensed Matter, 2001, 306, 112-116.	2.7	6
65	Computational micromagnetics:. Journal of Magnetism and Magnetic Materials, 2001, 226-230, 1213-1219.	2.3	7
66	Micromagnetic simulation of thermally activated switching in fine particles. Journal of Magnetism and Magnetic Materials, 2001, 233, 296-304.	2.3	119
67	Dynamic micromagnetic simulation of the configurational anisotropy of nanoelements. IEEE Transactions on Magnetics, 2001, 37, 2058-2060.	2.1	7
68	Micromagnetic Simulation of Switching Events. , 2001, , 623-635.		10
69	Hysteresis and switching dynamics of patterned magnetic elements. Physica B: Condensed Matter, 2000, 275, 55-58.	2.7	8
70	Langevin micromagnetics of recording media using subgrain discretization. IEEE Transactions on Magnetics, 2000, 36, 3189-3191.	2.1	7
71	Micromagnetic simulation of structureâ€“property relations in hard and soft magnets. Computational Materials Science, 2000, 18, 1-6.	3.0	12
72	Modeling and limits of advanced HT-magnets. IEEE Transactions on Magnetics, 2000, 36, 3394-3398.	2.1	10

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73	Mesh refinement in FE-micromagnetics for multi-domain Nd2Fe14B particles. Journal of Magnetism and Magnetic Materials, 1999, 196-197, 933-934.	2.3	14