

# Dieter Suess

## List of Publications by Year in descending order

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228  
papers

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229  
all docs

229  
docs citations

229  
times ranked

3891  
citing authors

#	ARTICLE	IF	CITATIONS
1	Exchange spring media for perpendicular recording. Applied Physics Letters, 2005, 87, 012504.	3.3	323
2	Scalable parallel micromagnetic solvers for magnetic nanostructures. Computational Materials Science, 2003, 28, 366-383.	3.0	256
3	Multilayer exchange spring media for magnetic recording. Applied Physics Letters, 2006, 89, 113105.	3.3	205
4	Advances in Magnetism Roadmap on Spin-Wave Computing. IEEE Transactions on Magnetism, 2022, 58, 1-72.	2.1	179
5	3D print of polymer bonded rare-earth magnets, and 3D magnetic field scanning with an end-user 3D printer. Applied Physics Letters, 2016, 109, .	3.3	168
6	Hierarchy of Stochastic Pure States for Open Quantum System Dynamics. Physical Review Letters, 2014, 113, 150403.	7.8	145
7	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
8	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
9	Time resolved micromagnetics using a preconditioned time integration method. Journal of Magnetism and Magnetic Materials, 2002, 248, 298-311.	2.3	113
10	Exchange-coupled perpendicular media. Journal of Magnetism and Magnetic Materials, 2009, 321, 545-554.	2.3	111
11	Micromagnetics of exchange spring media: Optimization and limits. Journal of Magnetism and Magnetic Materials, 2007, 308, 183-197.	2.3	103
12	Exchange spring recording media for areal densities up to 10Tbit/in <sup>2</sup> . Journal of Magnetism and Magnetic Materials, 2005, 290-291, 551-554.	2.3	101
13	Magnetization Reversal in a Novel Gradient Nanomaterial. Physical Review Letters, 2006, 96, 077202.	7.8	98
14	Exchange bias of polycrystalline antiferromagnets with perfectly compensated interfaces. Physical Review B, 2003, 67, .	3.2	85
15	Micromagnetic simulation of domain wall motion in magnetic nano-wires. Journal of Magnetism and Magnetic Materials, 2002, 249, 181-186.	2.3	83
16	3D Printing of Polymer-Bonded Rare-Earth Magnets With a Variable Magnetic Compound Fraction for a Predefined Stray Field. Scientific Reports, 2017, 7, 9419.	3.3	80
17	Domain wall motion in nanowires using moving grids (invited). Journal of Applied Physics, 2002, 91, 6914.	2.5	72
18	Thermal stability of metastable magnetic skyrmions: Entropic narrowing and significance of internal eigenmodes. Physical Review B, 2018, 98, .	3.2	66

#	ARTICLE	IF	CITATIONS
19	Co/Pt perpendicular antidot arrays with engineered feature size and magnetic properties fabricated on anodic aluminum oxide templates. <i>Physical Review B</i> , 2010, 81, .	3.2	64
20	Perpendicular FePt-based exchange-coupled composite media. <i>Applied Physics Letters</i> , 2010, 96, .	3.3	63
21	magnum.fe: A micromagnetic finite-element simulation code based on FEniCS. <i>Journal of Magnetism and Magnetic Materials</i> , 2013, 345, 29-35.	2.3	61
22	Topologically protected vortex structures for low-noise magnetic sensors with high linear range. <i>Nature Electronics</i> , 2018, 1, 362-370.	26.0	60
23	Reliability of Sharrocks equation for exchange spring bilayers. <i>Physical Review B</i> , 2007, 75, .	3.2	56
24	Magnetic characteristics of ferromagnetic nanotube. <i>Journal of Magnetism and Magnetic Materials</i> , 2007, 310, 2445-2447.	2.3	56
25	Microwave-assisted three-dimensional multilayer magnetic recording. <i>Applied Physics Letters</i> , 2009, 94, .	3.3	53
26	Heat-assisted magnetic recording of bit-patterned media beyond 10 <sup>10</sup> Tb/in <sup>2</sup> . <i>Applied Physics Letters</i> , 2016, 108, .	3.3	53
27	Coercivity enhancement of selective laser sintered NdFeB magnets by grain boundary infiltration. <i>Acta Materialia</i> , 2019, 172, 66-71.	7.9	53
28	A three-dimensional spin-diffusion model for micromagnetics. <i>Scientific Reports</i> , 2015, 5, 14855.	3.3	51
29	Topology optimized and 3D printed polymer-bonded permanent magnets for a predefined external field. <i>Journal of Applied Physics</i> , 2017, 122, .	2.5	51
30	Magnetic multilayers on porous anodized alumina for percolated perpendicular media. <i>Applied Physics Letters</i> , 2007, 91, 132505.	3.3	50
31	Impact of lattice dynamics on the phase stability of metamagnetic FeRh: Bulk and thin films. <i>Physical Review B</i> , 2016, 94, .	3.2	44
32	Nonlinear conjugate gradient methods in micromagnetics. <i>AIP Advances</i> , 2017, 7, .	1.3	42
33	Micromagnetic study of pinning behavior in percolated media. <i>Journal of Applied Physics</i> , 2006, 99, 08G905.	2.5	41
34	A self-consistent spin-diffusion model for micromagnetics. <i>Scientific Reports</i> , 2016, 6, 16.	3.3	40
35	Thermal stability of graded exchange spring media under the influence of external fields. <i>Applied Physics Letters</i> , 2008, 92, 173111.	3.3	39
36	Complex free-space magnetic field textures induced by three-dimensional magnetic nanostructures. <i>Nature Nanotechnology</i> , 2022, 17, 136-142.	31.5	39

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37	Recording simulations on graded media for area densities of up to 1Tbit/in. <sup>2</sup> . Applied Physics Letters, 2007, 91, 222502.	3.3	38
38	Partitioning of the perpendicular write field into head and SUL contributions. IEEE Transactions on Magnetism, 2005, 41, 3064-3066.	2.1	37
39	Nanostructure calculation of CoAg core-shell clusters. Journal of Applied Physics, 2006, 99, 08G706.	2.5	37
40	Origin of perpendicular magnetic anisotropy in Co/Ni multilayers. Physical Review B, 2017, 96, .	3.2	37
41	Magnetic films on nanoporated templates: a route towards percolated perpendicular media. Nanotechnology, 2010, 21, 495701.	2.6	35
42	Landau-Lifshitz-Bloch equation for exchange-coupled grains. Physical Review B, 2014, 90, .	3.2	35
43	Direct calculation of the attempt frequency of magnetic structures using the finite element method. Journal of Applied Physics, 2012, 111, 093917.	2.5	33
44	Coercivity and remanence in self-assembled FePt nanoparticle arrays. Journal of Applied Physics, 2003, 93, 7041-7043.	2.5	32
45	Cell size corrections for nonzero-temperature micromagnetics. Journal of Applied Physics, 2005, 97, 10E301.	2.5	32
46	Breaking the thermally induced write error in heat assisted recording by using low and high T <sub>c</sub> materials. Applied Physics Letters, 2013, 102, .	3.3	32
47	Magnetic interactions and reversal behavior of Nd <sub>2</sub> Fe <sub>14</sub> B particles diluted in a Nd matrix. Physical Review B, 2002, 66, .	3.2	31
48	Optimization of exchange spring perpendicular recording media. IEEE Transactions on Magnetism, 2005, 41, 3166-3168.	2.1	31
49	Angular dependence of the switching field in patterned magnetic elements. Journal of Applied Physics, 2005, 97, 10J705.	2.5	31
50	3D FEM-BEM-coupling method to solve magnetostatic Maxwell equations. Journal of Magnetism and Magnetic Materials, 2012, 324, 1862-1866.	2.3	30
51	Multiscale modeling in micromagnetics: Existence of solutions and numerical integration. Mathematical Models and Methods in Applied Sciences, 2014, 24, 2627-2662.	3.3	30
52	3D-printed phase waveplates for THz beam shaping. Applied Physics Letters, 2018, 112, .	3.3	29
53	Micromagnetic simulation of antiferromagnetic/ferromagnetic structures. IEEE Transactions on Magnetism, 2002, 38, 2397-2399.	2.1	28
54	Three-dimensional micromagnetic finite element simulations including eddy currents. Journal of Applied Physics, 2005, 97, 10E311.	2.5	28

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55	Fundamental limits in heat-assisted magnetic recording and methods to overcome it with exchange spring structures. Journal of Applied Physics, 2015, 117, 163913.	2.5	28
56	3D printing of polymer-bonded anisotropic magnets in an external magnetic field and by a modified production process. Applied Physics Letters, 2020, 116, .	3.3	28
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	Micromagnetic simulation of magnetization reversal in small particles with surface anisotropy. Journal of Applied Physics, 2004, 95, 6807-6809.	2.5	27
59	Polymer-bonded anisotropic SrFe <sub>12</sub> O <sub>19</sub> filaments for fused filament fabrication. Journal of Applied Physics, 2020, 127, .	2.5	27
60	Contribution of the easy axis orientation, anisotropy distribution and dot size on the switching field distribution of bit patterned media. Applied Physics Letters, 2011, 99, .	3.3	26
61	Spin-polarized transport in ferromagnetic multilayers: An unconditionally convergent FEM integrator. Computers and Mathematics With Applications, 2014, 68, 639-654.	2.7	26
62	Spin Torque Efficiency and Analytic Error Rate Estimates of Skyrmion Racetrack Memory. Scientific Reports, 2019, 9, 4827.	3.3	26
63	Dynamic Micromagnetic Write Head Fields During Magnetic Recording in Granular Media. IEEE Transactions on Magnetics, 2004, 40, 2341-2343.	2.1	25
64	Path sampling for lifetimes of metastable magnetic skyrmions and direct comparison with Kramers' method. Physical Review B, 2020, 101, .	3.2	25
65	Microwave-Assisted Magnetization Reversal in Exchange Spring Media. IEEE Transactions on Magnetics, 2008, 44, 3519-3522.	2.1	24
66	Magnetoelastic resonance sensor for remote strain measurements. Applied Physics Letters, 2012, 101, 042402.	3.3	24
67	Simulating rare switching events of magnetic nanostructures with forward flux sampling. Physical Review B, 2013, 88, .	3.2	24
68	Dependence of coercivity on length ratios in sub-micron Nd <sub>2</sub> Fe <sub>14</sub> B particles with rectangular prism shape. Journal of Applied Physics, 2013, 114, .	2.5	24
69	Solving Large-Scale Inverse Magnetostatic Problems using the Adjoint Method. Scientific Reports, 2017, 7, 40816.	3.3	24
70	Additive Manufactured and Topology Optimized Passive Shimming Elements for Permanent Magnetic Systems. Scientific Reports, 2018, 8, 14651.	3.3	24
71	Reversal modes, thermal stability and exchange length in perpendicular recording media. IEEE Transactions on Magnetics, 2001, 37, 1664-1666.	2.1	23
72	Reduction of critical current density for out-of-plane mode oscillation in a mag-flip spin torque oscillator using highly spin-polarized Co <sub>2</sub> Fe(Ga <sub>0.5</sub> Ge <sub>0.5</sub> ) spin injection layer. Applied Physics Letters, 2016, 108, .	3.3	23

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73	Magnetization reversal in granular nanowires. IEEE Transactions on Magnetism, 2002, 38, 2580-2582.	2.1	22
74	Reversible magnetization processes and energy density product in Sm <sup>2</sup> Co <sub>1-x</sub> Fe <sub>x</sub> and Sm <sup>2</sup> Co <sub>1-x</sub> Co <sub>x</sub> bilayers. Journal of Applied Physics, 2003, 93, 6489-6491.	2.5	22
75	Calculation of coercivity of magnetic nanostructures at finite temperatures. Physical Review B, 2011, 84, .	3.2	22
76	Thermal switching field distribution of a single domain particle for field-dependent attempt frequency. Journal of Applied Physics, 2012, 112, 023903.	2.5	22
77	An Eddy-Current Model Describing the Frequency Dependence of the Coercivity of Polycrystalline Galfenol. IEEE Transactions on Magnetism, 2012, 48, 3076-3079.	2.1	22
78	Additive Manufactured Polymer-Bonded Isotropic NdFeB Magnets by Stereolithography and Their Comparison to Fused Filament Fabricated and Selective Laser Sintered Magnets. Materials, 2020, 13, 1916.	2.9	22
79	Micromagnetic modelling and magnetization processes. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 641-646.	2.3	21
80	Magnetostatics and micromagnetics with physics informed neural networks. Journal of Magnetism and Magnetic Materials, 2022, 548, 168951.	2.3	21
81	Areal density optimizations for heat-assisted magnetic recording of high-density media. Journal of Applied Physics, 2016, 119, .	2.5	20
82	Fieldlike and Dampinglike Spin-Transfer Torque in Magnetic Multilayers. Physical Review Applied, 2017, 7, .	3.8	20
83	Comparison of Sensitivity and Low-Frequency Noise Contributions in Giant-Magnetoresistive and Tunneling-Magnetoresistive Spin-Valve Sensors with a Vortex-State Free Layer. Physical Review Applied, 2018, 10, .	3.8	19
84	Magnetization reversal processes of single nanomagnets and their energy barrier. Journal of Magnetism and Magnetic Materials, 2010, 322, 3771-3776.	2.3	18
85	Back-Hopping in Spin-Transfer-Torque Devices: Possible Origin and Countermeasures. Physical Review Applied, 2018, 9, .	3.8	18
86	Fast switching of small magnetic particles. Journal of Magnetism and Magnetic Materials, 2002, 242-245, 426-429.	2.3	17
87	Magnetostatic spin waves in nanoelements. Physica B: Condensed Matter, 2004, 343, 200-205.	2.7	17
88	CoCrPtO-Based Granular Composite Perpendicular Recording Media. IEEE Transactions on Magnetism, 2007, 43, 2088-2090.	2.1	17
89	Control of the noncollinear interlayer exchange coupling. Science Advances, 2020, 6, .	10.3	17
90	Micromagnetic three-dimensional simulation of the pinning field in high temperature Sm(Co,Fe,Cu,Zr) <sub>2</sub> magnets. Journal of Applied Physics, 2002, 91, 8492.	2.5	16

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91	Micromagnetic simulation of domain wall pinning and domain wall motion. Computational Materials Science, 2002, 25, 540-546.	3.0	16
92	FePt L10/A1 graded media with a rough interphase boundary. Applied Physics Letters, 2011, 98, 222501.	3.3	16
93	A repulsive skyrmion chain as a guiding track for a racetrack memory. AIP Advances, 2018, 8, .	1.3	16
94	Large scale finite-element simulation of micromagnetic thermal noise. Journal of Magnetism and Magnetic Materials, 2019, 475, 408-414.	2.3	16
95	Micromagnetic analysis of remanence and coercivity of nanocrystalline Pr-Fe-B magnets. Journal of Applied Physics, 2000, 87, 6573-6575.	2.5	15
96	Micromagnetic simulation of the pinning and depinning process in permanent magnets. IEEE Transactions on Magnetics, 2003, 39, 2920-2922.	2.1	15
97	Thermally induced vortex nucleation in permalloy elements. IEEE Transactions on Magnetics, 2005, 41, 3592-3594.	2.1	15
98	Multiscale micromagnetic simulation of giant magnetoresistance read heads. Journal of Applied Physics, 2006, 99, 08S303.	2.5	15
99	Probing the energy barriers and magnetization reversal processes of nanoporous membrane based percolated media. Nanotechnology, 2013, 24, 145702.	2.6	15
100	Combining micromagnetism and magnetostatic Maxwell equations for multiscale magnetic simulations. Journal of Magnetism and Magnetic Materials, 2013, 343, 163-168.	2.3	15
101	A fast finite-difference algorithm for topology optimization of permanent magnets. Journal of Applied Physics, 2017, 122, .	2.5	15
102	Thermally superactive artificial kagome spin ice structures obtained with the interfacial Dzyaloshinskii-Moriya interaction. Physical Review B, 2020, 102, .	3.2	15
103	Influence of eddy current on magnetization processes in submicrometer permalloy structures. IEEE Transactions on Magnetics, 2005, 41, 3097-3099.	2.1	14
104	Effect of Intergranular Exchange on the Thermal Stability and Coercive Field of Perpendicular, Single Phase, Exchange Spring, and Coupled Granular Continuous (CGC) Perpendicular Recording Media. IEEE Transactions on Magnetics, 2009, 45, 88-99.	2.1	14
105	Validation of the transition state theory with Langevin-dynamics simulations. Journal of Applied Physics, 2010, 108, 033915.	2.5	14
106	Learning magnetization dynamics. Journal of Magnetism and Magnetic Materials, 2019, 491, 165548.	2.3	14
107	Thermally induced adjacent track erasure in exchange spring media. Applied Physics Letters, 2008, 92, .	3.3	13
108	Basic noise mechanisms of heat-assisted-magnetic recording. Journal of Applied Physics, 2016, 120, .	2.5	13

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109	Magnetization Reversal of Strongly Exchange-Coupled Double Nanolayers for Spintronic Devices. ACS Applied Nano Materials, 2019, 2, 7478-7487.	5.0	13
110	Computational micromagnetics based on normal modes: Bridging the gap between macrospin and full spatial discretization. Journal of Magnetism and Magnetic Materials, 2022, 546, 168683.	2.3	13
111	Stiffness analysis for the micromagnetic standard problem No. 4. Journal of Applied Physics, 2001, 89, 7600-7602.	2.5	12
112	Energy barriers in magnetic random access memory elements. IEEE Transactions on Magnetism, 2003, 39, 2839-2841.	2.1	12
113	Numerical micromagnetic simulation of Fe/Pt nanoparticles with multiple easy axes. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 1524-1525.	2.3	12
114	Dynamic micromagnetic studies of anisotropy effects in perpendicular write heads. IEEE Transactions on Magnetism, 2005, 41, 3073-3075.	2.1	12
115	Micromagnetics of single and double point contact spin torque oscillators. Journal of Applied Physics, 2009, 105, 083923.	2.5	12
116	Calculating thermal stability and attempt frequency of advanced recording structures without free parameters. Journal of Applied Physics, 2015, 117, 163907.	2.5	12
117	Ultrafast switching of magnetic nanoelements using a rotating field. Journal of Applied Physics, 2002, 91, 7974.	2.5	11
118	Dependence of energy barrier reduction on collective excitations in square artificial spin ice: A comprehensive comparison of simulation techniques. Physical Review B, 2020, 102, .	3.2	11
119	Reversal dynamics of interacting circular nanomagnets. IEEE Transactions on Magnetism, 2001, 37, 1960-1962.	2.1	10
120	Micromagnetic simulation of the magnetic switching behaviour of mesoscopic and nanoscopic structures. Computational Materials Science, 2002, 24, 163-174.	3.0	10
121	Micromagnetic calculation of bias field and coercivity of polycrystalline ferromagnetic/antiferromagnetic layers. IEEE Transactions on Magnetism, 2003, 39, 2735-2737.	2.1	10
122	A full-fledged micromagnetic code in fewer than 70 lines of NumPy. Journal of Magnetism and Magnetic Materials, 2015, 387, 13-18.	2.3	10
123	Influence of antisite defects and stacking faults on the magnetocrystalline anisotropy of FePt. Physical Review B, 2017, 96, .	3.2	10
124	Stochastic ferrimagnetic Landau-Lifshitz-Bloch equation for finite magnetic structures. Physical Review B, 2019, 100, .	3.2	10
125	An electrodynamic energy harvester with a 3D printed magnet and optimized topology. Applied Physics Letters, 2019, 114, 013902.	3.3	10
126	Stability of skyrmion formation and its abnormal dynamic modes in magnetic nanotubes. Physical Review B, 2020, 102, .	3.2	10



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127	Micromagnetic modeling of magnetic domain walls in curved cylindrical nanotubes and nanowires. Applied Physics Letters, 2021, 118, .	3.3	10
128	Domain structures and domain wall pinning in arrays of elliptical NiFe nanoelements. Journal of Applied Physics, 2002, 91, 7047.	2.5	9
129	Micromagnetic calculations of bias field and coercivity of compensated ferromagnetic antiferromagnetic bilayers. Journal of Applied Physics, 2003, 93, 8618-8620.	2.5	9
130	Numerical micromagnetics of an assembly of (Fe,Co)Pt nanoparticles. Journal of Applied Physics, 2005, 97, 10E508.	2.5	9
131	Mutual phase locking in high-frequency microwave nano-oscillators as a function of field angle. Journal of Magnetism and Magnetic Materials, 2008, 320, L111-L115.	2.3	9
132	Exchange Coupled Bit Patterned Media Under the Influence of RF-Field Pulses. IEEE Transactions on Magnetics, 2009, 45, 3851-3854.	2.1	9
133	Scaling dependence and tailoring of the pinning field in FePt-based exchange coupled composite media. Nanotechnology, 2014, 25, 045604.	2.6	9
134	Coupling of dynamical micromagnetism and a stationary spin drift-diffusion equation: A step towards a fully self-consistent spintronics framework. Physica B: Condensed Matter, 2016, 486, 88-91.	2.7	9
135	Noise Reduction Based on an Fe <sup>2+</sup> /Rh Interlayer in Exchange-Coupled Heat-Assisted Recording Media. Physical Review Applied, 2017, 8, .	3.8	9
136	Influence of changes in electronic structure on magnetocrystalline anisotropy of $\text{YCo}_5$ and related compounds. Journal of Magnetism and Magnetic Materials, 2019, 485, 61-68.	2.3	9
137	Finite element simulation of discrete media with granular structure. IEEE Transactions on Magnetics, 2002, 38, 1967-1969.	2.1	8
138	Influence of the Gilbert damping constant on the flux rise time of write head fields. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 518-521.	2.3	8
139	Modeling of the write and read back performances of hexagonal Ba-ferrite particulate media for high density tape recording. Journal of Magnetism and Magnetic Materials, 2010, 322, 3869-3875.	2.3	8
140	Theory and micromagnetics of pinning mechanism at cylindrical defects in perpendicular magnetic films. Journal of Applied Physics, 2010, 107, 113926.	2.5	8
141	Fabrication and high-resolution electron microscopy study of FePt L1 <sub>0</sub> /A1 graded exchange spring media. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 1305-1310.	1.8	8
142	Highly parallel demagnetization field calculation using the fast multipole method on tetrahedral meshes with continuous sources. Journal of Magnetism and Magnetic Materials, 2017, 442, 409-416.	2.3	8
143	Roughness-induced domain structure in perpendicular Co/Ni multilayers. Journal of Magnetism and Magnetic Materials, 2017, 441, 283-289.	2.3	8
144	Design of spin-injection-layer in all-in-plane spin-torque-oscillator for microwave assisted magnetic recording. Journal of Magnetism and Magnetic Materials, 2019, 476, 361-370.	2.3	8

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145	Control of damping in perpendicularly magnetized thin films using spin-orbit torques. Physical Review B, 2020, 101, .	3.2	8
146	Hybrid FFT algorithm for fast demagnetization field calculations on non-equidistant magnetic layers. Journal of Magnetism and Magnetic Materials, 2020, 503, 166592.	2.3	8
147	Thermally activated magnetization rotation in small nanoparticles. IEEE Transactions on Magnetics, 2003, 39, 2507-2509.	2.1	7
148	Nonuniform Thermal Reversal in Single-Domain Patterned Media. IEEE Transactions on Magnetics, 2004, 40, 2507-2509.	2.1	7
149	Full micromagnetics of recording on patterned media. Physica B: Condensed Matter, 2006, 372, 312-315.	2.7	7
150	Head and bit patterned media optimization at areal densities of 2.5Tbit/in <sup>2</sup> and beyond. Journal of Magnetism and Magnetic Materials, 2012, 324, 269-275.	2.3	7
151	Efficient energy minimization in finite-difference micromagnetics: Speeding up hysteresis computations. Journal of Applied Physics, 2014, 116, 123908.	2.5	7
152	FFT-based Kronecker product approximation to micromagnetic long-range interactions. Mathematical Models and Methods in Applied Sciences, 2014, 24, 1877-1901.	3.3	7
153	Passive wireless strain measurement based upon the Villari effect and giant magnetoresistance. Applied Physics Letters, 2016, 109, .	3.3	7
154	Contactless and absolute linear displacement detection based upon 3D printed magnets combined with passive radio-frequency identification. AIP Advances, 2017, 7, .	1.3	7
155	Efficient micromagnetic modelling of spin-transfer torque and spin-orbit torque. AIP Advances, 2018, 8, .	1.3	7
156	GPU-Accelerated Atomistic Energy Barrier Calculations of Skyrmion Annihilations. IEEE Transactions on Magnetics, 2018, 54, 1-5.	2.1	7
157	Microscopic Origin of Magnetization Reversal in Nanoscale Exchange-Coupled Ferri/Ferromagnetic Bilayers: Implications for High Energy Density Permanent Magnets and Spintronic Devices. ACS Applied Nano Materials, 2020, 3, 9218-9225.	5.0	7
158	Magnetic Position System Design Method Applied to Three-Axis Joystick Motion Tracking. Sensors, 2020, 20, 6873.	3.8	7
159	Learning time-stepping by nonlinear dimensionality reduction to predict magnetization dynamics. Communications in Nonlinear Science and Numerical Simulation, 2020, 84, 105205.	3.3	7
160	Tension-free Dirac strings and steered magnetic charges in 3D artificial spin ice. Npj Computational Materials, 2021, 7, .	8.7	7
161	Micromagnetic simulation of magnetization reversal in rotational magnetic fields. Physica B: Condensed Matter, 2001, 306, 112-116.	2.7	6
162	Micromagnetic simulation of asymmetric magnetization reversal in exchange biased bilayers. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 754-757.	2.3	6

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163	Relaxation times and cell size in nonzero-temperature micromagnetics. Physica B: Condensed Matter, 2006, 372, 277-281.	2.7	6
164	Transitions Between Vortex and Transverse Walls in NiFe Nano-Structures. IEEE Transactions on Magnetism, 2006, 42, 2966-2968.	2.1	6
165	Thermal stability of bubble domains in ferromagnetic discs. Journal Physics D: Applied Physics, 2007, 40, 2695-2698.	2.8	6
166	Micromagnetic study of recording on ion-irradiated granular-patterned media. Journal of Magnetism and Magnetic Materials, 2007, 319, 5-8.	2.3	6
167	Fluxgate Principle Applied to a Magnetic Tunnel Junction for Weak Magnetic Field Sensing. IEEE Transactions on Magnetism, 2011, 47, 1549-1553.	2.1	6
168	A device model framework for magnetoresistive sensors based on the Stoner-Wohlfarth model. Journal of Magnetism and Magnetic Materials, 2015, 381, 344-349.	2.3	6
169	Macroscopic simulation of isotropic permanent magnets. Journal of Magnetism and Magnetic Materials, 2016, 401, 875-879.	2.3	6
170	Effective uniaxial anisotropy in easy-plane materials through nanostructuring. Applied Physics Letters, 2017, 111, .	3.3	6
171	Noise reduction in heat-assisted magnetic recording of bit-patterned media by optimizing a high/low T <sub>c</sub> bilayer structure. Journal of Applied Physics, 2017, 122, .	2.5	6
172	Micromagnetic simulations of magnetization reversal in Co/Ni multilayers. Physica B: Condensed Matter, 2001, 306, 38-43.	2.7	5
173	FE-simulation of fast switching behavior of granular nanoelements. IEEE Transactions on Magnetism, 2002, 38, 2520-2522.	2.1	5
174	Nucleation in polycrystalline thin films using a preconditioned finite element method. Journal of Applied Physics, 2002, 91, 7977.	2.5	5
175	Influence of eddy currents on the effective damping parameter. Journal of Applied Physics, 2006, 99, 08B902.	2.5	5
176	Contribution of the shrunk interface and the convex surface of grains on magnetic behavior in granular film. Journal of Applied Physics, 2008, 103, 07F519.	2.5	5
177	Graded Media Design for Area Density of Up to 2.5 Tb/in <sup>2</sup> . IEEE Transactions on Magnetism, 2010, 46, 1866-1868.	2.1	5
178	Direct probing magnetization reversal of exchange-coupled-composite media by x-ray magnetic circular dichroism. Applied Physics Letters, 2011, 98, 262507.	3.3	5
179	Influence of grain size and exchange interaction on the LLB modeling procedure. Journal of Applied Physics, 2016, 120, 223903.	2.5	5
180	The extrapolated explicit midpoint scheme for variable order and step size controlled integration of the Landau-Lifschitz-Gilbert equation. Journal of Computational Physics, 2017, 346, 14-24.	3.8	5

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181	Significant reduction of critical currents in MRAM designs using dual free layer with perpendicular and in-plane anisotropy. Applied Physics Letters, 2017, 110, .	3.3	5
182	Systematic parameterization of heat-assisted magnetic recording switching probabilities and the consequences for the resulting SNR. Journal of Applied Physics, 2019, 126, .	2.5	5
183	Micromagnetic simulation of domain wall pinning in Sm(Co,Fe,Cu,Zr) <sub>z</sub> magnets. Journal of Magnetism and Magnetic Materials, 2002, 242-245, 1356-1358.	2.3	4
184	Thermally induced magnetization reversal in antiferromagnetically coupled media. Journal of Applied Physics, 2003, 93, 7405-7407.	2.5	4
185	Analysis of fast switching in tilted media. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 506-509.	2.3	4
186	Increases in effective head field gradients in exchange spring media. Applied Physics Letters, 2009, 95, 172509.	3.3	4
187	Micromagnetic study of exchange spring media with a rough interface on an example of FePt films. Journal Physics D: Applied Physics, 2012, 45, 495001.	2.8	4
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