Christoph Vogler

List of Publications by Year
in descending order

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54	1,077	394421	434195
papers	citations	19	31
		h-index	g-index

54	54	54	1300
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Dipolar-stabilized first and second-order antiskyrmions in ferrimagnetic multilayers. Nature Communications, 2021, 12, 2611.	12.8	29
2	Spin-Canting Effects in GMR Sensors With Wide Dynamic Field Range. IEEE Sensors Journal, 2021, 21, 13176-13183.	4.7	6
3	Hysteresis-free magnetization reversal of exchange-coupled bilayers with finite magnetic anisotropy. Physical Review B, 2020, 102, .	3.2	4
4	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
5	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
6	Thermally superactive artificial kagome spin ice structures obtained with the interfacial Dzyaloshinskii-Moriya interaction. Physical Review B, 2020, 102, .	3.2	15
7	Statistical analysis of read-back signals in magnetic recording on granular media. AIP Advances, 2020, 10, 015307.	1.3	3
8	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
9	Stochastic ferrimagnetic Landau-Lifshitz-Bloch equation for finite magnetic structures. Physical Review B, 2019, 100, .	3.2	10
10	Spin Torque Efficiency and Analytic Error Rate Estimates of Skyrmion Racetrack Memory. Scientific Reports, 2019, 9, 4827.	3.3	26
11	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
12	Curie temperature modulated structure to improve the performance in heat-assisted magnetic recording. Journal of Magnetism and Magnetic Materials, 2019, 474, 442-447.	2.3	4
13	Large scale finite-element simulation of micromagnetic thermal noise. Journal of Magnetism and Magnetic Materials, 2019, 475, 408-414.	2.3	16
14	Efficient micromagnetic modelling of spin-transfer torque and spin-orbit torque. AIP Advances, 2018, 8, .	1.3	7
15	A repulsive skyrmion chain as a guiding track for a racetrack memory. AIP Advances, 2018, 8, .	1.3	16
16	GPU-Accelerated Atomistic Energy Barrier Calculations of Skyrmion Annihilations. IEEE Transactions on Magnetics, 2018, 54, 1-5.	2.1	7
17	Back-Hopping in Spin-Transfer-Torque Devices: Possible Origin and Countermeasures. Physical Review Applied, 2018, 9, .	3.8	18
18	Topologically protected vortex structures for low-noise magnetic sensors with high linear range. Nature Electronics, 2018, 1, 362-370.	26.0	60

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19	Solving Large-Scale Inverse Magnetostatic Problems using the Adjoint Method. Scientific Reports, 2017, 7, 40816.	3.3	24
20	A fast finite-difference algorithm for topology optimization of permanent magnets. Journal of Applied Physics, 2017, 122, .	2.5	15
21	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
22	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
23	Topology optimized and 3D printed polymer-bonded permanent magnets for a predefined external field. Journal of Applied Physics, 2017, 122, .	2.5	51
24	Fieldlike and Dampinglike Spin-Transfer Torque in Magnetic Multilayers. Physical Review Applied, 2017, 7, .	3.8	20
25	Noise Reduction Based on an Feâ˜Rh Interlayer in Exchange-Coupled Heat-Assisted Recording Media. Physical Review Applied, 2017, 8, .	3.8	9
26	Noise reduction in heat-assisted magnetic recording of bit-patterned media by optimizing a high/low Tc bilayer structure. Journal of Applied Physics, 2017, 122, .	2.5	6
27	Contactless and absolute linear displacement detection based upon 3D printed magnets combined with passive radio-frequency identification. AIP Advances, 2017, 7, .	1.3	7
28	Efficiently reducing transition curvature in heat-assisted magnetic recording with state-of-the-art write heads. Applied Physics Letters, 2017, 110, 182406.	3.3	4
29	Areal density optimizations for heat-assisted magnetic recording of high-density media. Journal of Applied Physics, 2016, 119, .	2.5	20
30	Basic noise mechanisms of heat-assisted-magnetic recording. Journal of Applied Physics, 2016, 120, .	2.5	13
31	Passive wireless strain measurement based upon the Villari effect and giant magnetoresistance. Applied Physics Letters, 2016, 109, .	3.3	7
32	Heat-assisted magnetic recording of bit-patterned media beyond 10â€‰Tb/in2. Applied Physics Letters, 2016, 108, .	3.3	53
33	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
34	Influence of grain size and exchange interaction on the LLB modeling procedure. Journal of Applied Physics, 2016, 120, 223903.	2.5	5
35	Superior bit error rate and jitter due to improved switching field distribution in exchange spring magnetic recording media. Scientific Reports, 2016, 6, 27048.	3.3	2
36	A self-consistent spin-diffusion model for micromagnetics. Scientific Reports, 2016, 6, 16.	3.3	40

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37	Macroscopic simulation of isotropic permanent magnets. Journal of Magnetism and Magnetic Materials, 2016, 401, 875-879.	2.3	6
38	A three-dimensional spin-diffusion model for micromagnetics. Scientific Reports, 2015, 5, 14855.	3.3	51
39	The influence of spin-diffusion effects on current driven domain-wall motion. , 2015, , .		0
40	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
41	Calculating thermal stability and attempt frequency of advanced recording structures without free parameters. Journal of Applied Physics, 2015, 117, 163907.	2.5	12
42	Reactivable passive radio-frequency identification temperature indicator. Journal of Applied Physics, 2015, 117, .	2.5	4
43	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
44	Landau-Lifshitz-Bloch equation for exchange-coupled grains. Physical Review B, 2014, 90, .	3.2	35
45	Fully coupled, dynamic model of a magnetostrictive amorphous ribbon and its validation. Journal of Applied Physics, 2014, 115, .	2.5	4
46	Ultra-Low-Cost RFID Based on Soft Magnetic Ribbons. IEEE Transactions on Magnetics, 2014, 50, 1-5.	2.1	2
47	Simulating rare switching events of magnetic nanostructures with forward flux sampling. Physical Review B, 2013, 88, .	3.2	24
48	Combining micromagnetism and magnetostatic Maxwell equations for multiscale magnetic simulations. Journal of Magnetism and Magnetic Materials, 2013, 343, 163-168.	2.3	15
49	Thermal switching field distribution of a single domain particle for field-dependent attempt frequency. Journal of Applied Physics, 2012, 112, 023903.	2.5	22
50	Removal of earth's magnetic field effect on magnetoelastic resonance sensors by an antisymmetric bias field. Sensors and Actuators A: Physical, 2012, 183, 11-15.	4.1	4
51	Magnetoelastic resonance sensor for remote strain measurements. Applied Physics Letters, 2012, 101, 042402.	3.3	24
52	3D FEMâ€“BEM-coupling method to solve magnetostatic Maxwell equations. Journal of Magnetism and Magnetic Materials, 2012, 324, 1862-1866.	2.3	30
53	Calculation of coercivity of magnetic nanostructures at finite temperatures. Physical Review B, 2011, 84, .	3.2	22
54	Three-dimensional magneto-resistive random access memory devices based on resonant spin-polarized alternating currents. Journal of Applied Physics, 2011, 109, 123901.	2.5	3