AndrÃ© Thiaville

List of Publications by Year
in descending order

96 papers	10,892 citations	81900 39 h-index	58581 82 g-index
97 all docs	97 docs citations	97 times ranked	6254 citing authors

#	Article	IF	Citations
1	Lattice-compliant simulations of antiferromagnetic textures and their response to spin-orbit torques. Physical Review B, 2022, 105, .	3.2	0
2	Spatial extent of the Dzyaloshinskii-Moriya interaction at metallic interfaces. Physical Review Materials, 2022, 6, .	2.4	10
3	Quantitative analysis of spin wave dynamics in ferrimagnets across compensation points. Physical Review B, 2022, 105, .	3.2	3
4	Interfacial potential gradient modulates Dzyaloshinskii-Moriya interaction in Pt/Co/metal multilayers. Physical Review Materials, 2022, 6, .	2.4	11
5	Magnetism and topology. , 2021, , 1-30.		2
6	Chiral magnetic domain walls under transverse fields: A semi-analytical model. Journal of Magnetism and Magnetic Materials, 2021, 530, 167916.	2.3	0
7	Magnetic domain wall dynamics in the precessional regime: Influence of the Dzyaloshinskii-Moriya interaction. Physical Review B, 2021, 104, .	3.2	11
8	Spin-Orbit Coupling in Single-Layer Ferrimagnets: Direct Observation of Spin-Orbit Torques and Chiral Spin Textures. Physical Review Applied, 2021, 16, .	3.8	23
9	Domain wall propagation by spin-orbit torques in in-plane magnetized systems. Physical Review B, 2020, 102, .	3.2	3
10	Current distribution in metallic multilayers from resistance measurements. Physical Review B, 2020, 101, .	3.2	6
11	The role of uniaxial magnetic anisotropy distribution on domain wall tilting in amorphous glass-coated microwires. Journal of Applied Physics, 2020, 127, .	2.5	8
12	Strength and length scale of the interaction between domain walls and pinning disorder in thin ferromagnetic films. Physical Review Research, 2020, 2, .	3.6	9
13	Current-induced spin-orbit torques in ferromagnetic and antiferromagnetic systems. Reviews of Modern Physics, 2019, 91, .	45.6	899
14	Current-Induced Nucleation and Dynamics of Skyrmions in a <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mi>Co</mml:mi></mml:math> -based HeuslerÂAlloy. Physical Review Applied, 2019, 11, .	3.8	26
15	Study of the velocity plateau of Dzyaloshinskii domain walls. Physical Review B, 2019, 100, .	3.2	14
16	Topology and Magnetic Domain Walls. Springer Series in Solid-state Sciences, 2018, , 41-73.	0.3	4
17	Velocity Enhancement by Synchronization of Magnetic Domain Walls. Physical Review Letters, 2018, 120, 227204.	7.8	35
18	Brownian motion of magnetic domain walls and skyrmions, and their diffusion constants. Physical Review B, 2018, 97, .	3.2	53

#	Article	IF	Citations
19	Skyrmion morphology in ultrathin magnetic films. Physical Review Materials, 2018, 2, .	2.4	52
20	Making the Dzyaloshinskii-Moriya interaction visible. Applied Physics Letters, 2017, 110, .	3.3	19
21	Reply to â€œComment on â€˜Path to collapse for an isolated NÃ©el skyrmion' â€• Physical Review B, 2017, 95, .	3.2	9
22	Interface-induced phenomena in magnetism. Reviews of Modern Physics, 2017, 89, .	45.6	672
23	The interfacial nature of proximity-induced magnetism and the Dzyaloshinskii-Moriya interaction at the Pt/Co interface. Scientific Reports, 2017, 7, 16835.	3.3	62
24	Analytical calculation and observation of the magnetic contrast in magneto-optical studies of magnetic cylinders. Physical Review B, 2017, 96, .	3.2	9
25	Very large domain wall velocities in Pt/Co/GdOx and Pt/Co/Gd trilayers with Dzyaloshinskii-Moriya interaction. Europhysics Letters, 2016, 113, 67001.	2.0	75
26	Direct measurement of interfacial Dzyaloshinskii-Moriya interaction in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>X</mml:mi><mml:mo>|</mml:mo></mml:mrow><mml:m with a scanning NV magnetometer<mml:math		

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37	Investigating the role of superdiffusive currents in laser induced demagnetization of ferromagnets with nanoscale magnetic domains. Scientific Reports, 2014, 4, 4658.	3.3	38
38	Nucleation, stability and current-induced motion of isolated magnetic skyrmions in nanostructures. Nature Nanotechnology, 2013, 8, 839-844.	31.5	1,387
39	Domain Wall Tilting in the Presence of the Dzyaloshinskii-Moriya Interaction in Out-of-Plane Magnetized Magnetic Nanotracks. Physical Review Letters, 2013, 111, 217203.	7.8	192
40	Skyrmion confinement in ultrathin film nanostructures in the presence of Dzyaloshinskii-Moriya interaction. Physical Review B, 2013, 88, .	3.2	767
41	Sum rule for the magnetic permeability of arbitrary textures. Physical Review B, 2012, 86, .	3.2	8
42	Domain Wall Dynamics under Nonlocal Spin-Transfer Torque. Physical Review Letters, 2012, 108, 227208.	7.8	39
43	Unidirectional Thermal Effects in Current-Induced Domain Wall Motion. Physical Review Letters, 2012, 109, 106601.	7.8	60
44	Current-induced magnetic domain wall motion below intrinsic threshold triggered by Walker breakdown. Nature Nanotechnology, 2012, 7, 635-639.	31.5	52
45	Dynamics of Dzyaloshinskii domain walls in ultrathin magnetic films. Europhysics Letters, 2012, 100, 57002.	2.0	880
46	Influence of Instabilities on High-Field Magnetic Domain Wall Velocity in (Co/Ni) Nanostrips. Applied Physics Express, 2011, 4, 113001.	2.4	31
47	Magnetization textures in NiPd nanostructures. Physical Review B, 2011, 84, .	3.2	12
48	Implementation of a self-consistent method using micromagnetics and semiclassical transport theory for studying the Spin Transfer Torque effect. Proceedings of SPIE, 2011, , .	0.8	0
49	Magnetic domain walls displacement: Automotion versus spin-transfer torque. Physical Review B, 2010, 82, .	3.2	59
50	Magnetization dynamics of soft films with thickness-dependent anisotropy. Physical Review B, 2009, 80, .	3.2	10
51	Transverse wall dynamics in a spin valve nanostrip. Journal of Applied Physics, 2009, 105, .	2.5	7
52	Micromagnetics of Domain-Wall Dynamics in Soft Nanostrips. , 2009, , 231-276.		7
53	Nucleation and dynamics of magnetic vortices under spin-polarized current. Physical Review B, 2008, 77, .	3.2	24
54	Electrical rectification effect in single domain magnetic microstrips: A micromagnetics-based analysis. Journal of Applied Physics, 2008, 104, 093701.	2.5	13

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55	Spin transfer torque in continuous textures: Semiclassical Boltzmann approach. Physical Review B, 2007, 75, .	3.2	47
56	Limits of the macrospin model in cobalt nanodots with enhanced edge magnetic anisotropy. Physical Review B, 2007, 76, .	3.2	23
57	Electrical switching of the vortex core in a magnetic disk. Nature Materials, 2007, 6, 270-273.	27.5	464
58	Transient domain wall displacement under spin-polarized current pulses. European Physical Journal B, 2007, 60, 15-27.	1.5	40
59	Head-to-head domain walls in soft nano-strips: a refined phase diagram. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 750-753.	2.3	315
60	Micromagnetic understanding of current-driven domain wall motion in patterned nanowires. Europhysics Letters, 2005, 69, 990-996.	2.0	988
61	Magnetism in reduced dimensions. Comptes Rendus Physique, 2005, 6, 921-933.	0.9	49
62	Spin wave instability by spin-polarized current injection. , 2005, , .		0
63	Comparison of Langevin dynamics and direct energy barrier computation. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 747-749.	2.3	10
64	Thermally activated switching of nanoparticles: a numerical study. Journal of Magnetism and Magnetic Materials, 2004, 272-276, E1237-E1238.	2.3	11
65	Domain wall motion by spin-polarized current: a micromagnetic study. Journal of Applied Physics, 2004, 95, 7049-7051.	2.5	181
66	Faster magnetic walls in rough wires. Nature Materials, 2003, 2, 521-523.	27.5	348
67	Micromagnetic study of Bloch-point-mediated vortex core reversal. Physical Review B, 2003, 67, .	3.2	213
68	Rigorous micromagnetic computation of configurational anisotropy energies in nanoelements. Journal of Applied Physics, 2003, 93, 7891-7893.	2.5	10
69	An Introduction to Micromagnetics in the Dynamic Regime. , 2002, , 1-33.		46
70	Domain wall dynamics in nanowires. Journal of Magnetism and Magnetic Materials, 2002, 242-245, 1061-1063.	2.3	135
71	Micromagnetics: Dynamical Aspects. Lecture Notes in Physics, 2001, , 129-156.	0.7	3
72	Magnetic Force Microscopy. , 2001, , 4772-4780.		1

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73	Self-consistency based control scheme for magnetization dynamics. Journal of Applied Physics, 2001, 89, 6719-6721.	2.5	22
74	Coherent rotation of magnetization in three dimensions: A geometrical approach. Physical Review B, 2000, 61, 12221-12232.	3.2	91
75	MAGNETISM: Magnets Fast and Small. Science, 2000, 290, 466-467.	12.6	17
76	MAGNETISM:Small Is Beautiful. Science, 1999, 284, 1939-1940.	12.6	73
77	Three-Dimensional Magnetization Reversal Measurements in Nanoparticles. Physical Review Letters, 1999, 83, 4188-4191.	7.8	80
78	Extensions of the geometric solution of the two dimensional coherent magnetization rotation model. Journal of Magnetism and Magnetic Materials, 1998, 182, 5-18.	2.3	87
79	Observing magnetic nanowires by means of magnetic force microscopy. Journal of Magnetism and Magnetic Materials, 1998, 190, 1-16.	2.3	60
80	On Corner Singularities in Micromagnetics. Physica Status Solidi A, 1998, 170, 125-135.	1.7	28
81	Measurement of the stray field emanating from magnetic force microscope tips by Hall effect microsensors. Journal of Applied Physics, 1997, 82, 3182-3191.	2.5	74
82	Controlled Injection of a Singular Point along a Linear Magnetic Structure. Europhysics Letters, 1994, 26, 57-62.	2.0	11
83	Horizontal Bloch lines and anisotropic-dark-field observations. Physical Review B, 1994, 49, 6678-6688.	3.2	23
84	A magnetic force microscopy analysis of soft thin film elements. IEEE Transactions on Magnetics, 1994, 30, 4473-4478.	2.1	42
85	Conical bubbles. Journal of Magnetism and Magnetic Materials, 1993, 124, 355-367.	2.3	6
86	Bloch-Line Storage Potential. , 1993, , 7-17.		0
87	Experimenting with Bloch points in bubble garnets. Journal of Magnetism and Magnetic Materials, 1992, 104-107, 335-336.	2.3	8
88	On the influence of wall microdeformations on Bloch line visibility in bubble garnets (invited). Journal of Applied Physics, 1991, 69, 6090-6095.	2.5	39
89	Direct optical observation of vertical Bloch lines in bubble garnets: new experimental evidences. IEEE Transactions on Magnetics, 1990, 26, 1530-1532.	2.1	3
90	Direct optical observation of vertical bloch lines in bubble garnets: New experimental evidences. , 1990, , .		0

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91	NÃ©el lines in the Bloch walls of bubble garnets and their darkâ€field observation. Journal of Applied Physics, 1990, 68, 2883-2891.	2.5	23
92	First direct optical observation of Bloch lines in bubble garnets. IEEE Transactions on Magnetics, 1988, 24, 1722-1724.	2.1	22
93	Fluctuation effects nearHc2in type-II superconductors. Physical Review B, 1985, 31, 7124-7132.	3.2	211
94	Magnetic Force Imaging Of Soft Materials. , 0, , .		1
95	Bloch point mediated vortex switching. , 0, , .		0
96	Domain-Wall Dynamics in Nanowiresand Nanostrips. , 0, , 161-205.		75