

# Giovanni Finocchio

## List of Publications by Year in descending order

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211  
papers

6,728  
citations

71061

41  
h-index

79644

73  
g-index

221  
all docs

221  
docs citations

221  
times ranked

4424  
citing authors

#	ARTICLE	IF	CITATIONS
1	A strategy for the design of skyrmion racetrack memories. <i>Scientific Reports</i> , 2014, 4, 6784.	1.6	689
2	Opportunities and challenges for spintronics in the microelectronics industry. <i>Nature Electronics</i> , 2020, 3, 446-459.	13.1	471
3	Magnetic skyrmions: from fundamental to applications. <i>Journal Physics D: Applied Physics</i> , 2016, 49, 423001.	1.3	318
4	Experimental Evidence of Self-Localized and Propagating Spin Wave Modes in Obliquely Magnetized Current-Driven Nanocontacts. <i>Physical Review Letters</i> , 2010, 105, 217204.	2.9	176
5	Spin transfer nano-oscillators. <i>Nanoscale</i> , 2013, 5, 2219.	2.8	167
6	Ultralow-current-density and bias-field-free spin-transfer nano-oscillator. <i>Scientific Reports</i> , 2013, 3, 1426.	1.6	162
7	High-Power Coherent Microwave Emission from Magnetic Tunnel Junction Nano-oscillators with Perpendicular Anisotropy. <i>ACS Nano</i> , 2012, 6, 6115-6121.	7.3	125
8	Giant spin-torque diode sensitivity in the absence of bias magnetic field. <i>Nature Communications</i> , 2016, 7, 11259.	5.8	123
9	Micromagnetic simulations using Graphics Processing Units. <i>Journal Physics D: Applied Physics</i> , 2012, 45, 323001.	1.3	117
10	Field-free spin-orbit torque-induced switching of perpendicular magnetization in a ferrimagnetic layer with a vertical composition gradient. <i>Nature Communications</i> , 2021, 12, 4555.	5.8	105
11	Cortical and Subcortical Connections of the Human Claustrum Revealed In Vivo by Constrained Spherical Deconvolution Tractography. <i>Cerebral Cortex</i> , 2015, 25, 406-414.	1.6	88
12	Seismic metamaterials based on isochronous mechanical oscillators. <i>Applied Physics Letters</i> , 2014, 104, .	1.5	87
13	Skyrmion based microwave detectors and harvesting. <i>Applied Physics Letters</i> , 2015, 107, .	1.5	86
14	Performance of synthetic antiferromagnetic racetrack memory: domain wall versus skyrmion. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 325302.	1.3	86
15	Thermal generation, manipulation and thermoelectric detection of skyrmions. <i>Nature Electronics</i> , 2020, 3, 672-679.	13.1	86
16	Switching of a single ferromagnetic layer driven by spin Hall effect. <i>Applied Physics Letters</i> , 2013, 102, .	1.5	77
17	Origin of temperature and field dependence of magnetic skyrmion size in ultrathin nanodots. <i>Physical Review B</i> , 2018, 97, .	1.1	77
18	A framework for the damage evaluation of acoustic emission signals through Hilbert-Huang transform. <i>Mechanical Systems and Signal Processing</i> , 2016, 75, 109-122.	4.4	75

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19	Anatomy of Skyrmionic Textures in Magnetic Multilayers. <i>Advanced Materials</i> , 2019, 31, e1807683.	11.1	75
20	Magnetic Radial Vortex Stabilization and Efficient Manipulation Driven by the Dzyaloshinskii-Moriya Interaction and Spin-Transfer Torque. <i>Physical Review Letters</i> , 2016, 117, 087204.	2.9	71
21	Basal ganglia network by constrained spherical deconvolution: A possible corticoâ€pallidal pathway?. <i>Movement Disorders</i> , 2015, 30, 342-349.	2.2	67
22	Seismic isolation of buildings using composite foundations based on metamaterials. <i>Journal of Applied Physics</i> , 2018, 123, .	1.1	67
23	The promise of spintronics for unconventional computing. <i>Journal of Magnetism and Magnetic Materials</i> , 2021, 521, 167506.	1.0	66
24	Electrical manipulation of the magnetic order in antiferromagnetic PtMn pillars. <i>Nature Electronics</i> , 2020, 3, 92-98.	13.1	65
25	Semi-implicit integration scheme for Landauâ€Lifshitzâ€Gilbert-Slonczewski equation. <i>Journal of Applied Physics</i> , 2012, 111, .	1.1	63
26	Single-Shot Time-Domain Studies of Spin-Torque-Driven Switching in Magnetic Tunnel Junctions. <i>Physical Review Letters</i> , 2010, 104, 097201.	2.9	62
27	Strong linewidth variation for spin-torque nano-oscillators as a function of in-plane magnetic field angle. <i>Physical Review B</i> , 2008, 78, .	1.1	61
28	Massively parallel probabilistic computing with sparse Ising machines. <i>Nature Electronics</i> , 2022, 5, 460-468.	13.1	59
29	A numerical solution of the magnetization reversal modeling in a permalloy thin film using fifth order Rungeâ€Kutta method with adaptive step size control. <i>Physica B: Condensed Matter</i> , 2008, 403, 464-468.	1.3	58
30	Spin-Hall nano-oscillator: A micromagnetic study. <i>Applied Physics Letters</i> , 2014, 105, .	1.5	55
31	In-plane rotation of magnetic stripe domains in $\text{Fe}/\text{MgO}/\text{Fe}$ films. <i>Physical Review B</i> , 2015, 92, .	1.5	55
32	Voltage-Controlled Spintronic Stochastic Neuron Based on a Magnetic Tunnel Junction. <i>Physical Review Applied</i> , 2019, 11, .	1.5	55
33	Micromagnetic computations of spin polarized current-driven magnetization processes. <i>Journal of Magnetism and Magnetic Materials</i> , 2005, 286, 381-385.	1.0	52
34	Experimental Demonstration of Spintronic Broadband Microwave Detectors and Their Capability for Powering Nanodevices. <i>Physical Review Applied</i> , 2019, 11, .	1.5	49
35	Micromagnetic modeling of terahertz oscillations in an antiferromagnetic material driven by the spin Hall effect. <i>Physical Review B</i> , 2019, 99, .	1.1	49
36	Excitation of propagating spin waves in ferromagnetic nanowires by microwave voltage-controlled magnetic anisotropy. <i>Scientific Reports</i> , 2016, 6, 25018.	1.6	45

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37	Effect of the classical ampere field in micromagnetic computations of spin polarized current-driven magnetization processes. <i>Journal of Applied Physics</i> , 2005, 97, 10C713.	1.1	44
38	Micromagnetic modeling of magnetization switching driven by spin-polarized current in magnetic tunnel junctions. <i>Journal of Applied Physics</i> , 2007, 101, 063914.	1.1	43
39	Micromagnetic understanding of stochastic resonance driven by spin-transfer-torque. <i>Physical Review B</i> , 2011, 83, .	1.1	43
40	Topological, non-topological and instanton droplets driven by spin-transfer torque in materials with perpendicular magnetic anisotropy and Dzyaloshinskii-Moriya Interaction. <i>Scientific Reports</i> , 2015, 5, 16184.	1.6	43
41	Ultrahigh detection sensitivity exceeding 105 V/W in spin-torque diode. <i>Applied Physics Letters</i> , 2018, 113, .	1.5	43
42	Spin-transfer-torque resonant switching and injection locking in the presence of a weak external microwave field for spin valves with perpendicular materials. <i>Physical Review B</i> , 2010, 82, .	1.1	42
43	Combined Frequency-Amplitude Nonlinear Modulation: Theory and Applications. <i>IEEE Transactions on Magnetics</i> , 2010, 46, 3629-3634.	1.2	41
44	A Variation-Aware Timing Modeling Approach for Write Operation in Hybrid CMOS/STT-MTJ Circuits. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2018, 65, 1086-1095.	3.5	41
45	A Compact Model with Spin-Polarization Asymmetry for Nanoscaled Perpendicular MTJs. <i>IEEE Transactions on Electron Devices</i> , 2017, 64, 4346-4353.	1.6	40
46	Phase locking and frequency doubling in spin-transfer-torque oscillators with two coupled free layers. <i>Physical Review B</i> , 2012, 86, .	1.1	39
47	Chiral skyrmions in an anisotropy gradient. <i>Physical Review B</i> , 2018, 98, .	1.1	39
48	Spin-Hall nano-oscillator with oblique magnetization and Dzyaloshinskii-Moriya interaction as generator of skyrmions and nonreciprocal spin-waves. <i>Scientific Reports</i> , 2016, 6, 36020.	1.6	38
49	Magnetization reversal driven by spin-polarized current in exchange-biased nanoscale spin valves. <i>Physical Review B</i> , 2007, 76, .	1.1	37
50	Spin-torque-induced rotational dynamics of a magnetic vortex dipole. <i>Physical Review B</i> , 2008, 78, .	1.1	37
51	High frequency spin-torque-oscillators with reduced perpendicular torque effect based on asymmetric vortex polarizer. <i>Journal of Applied Physics</i> , 2011, 110, .	1.1	37
52	Stabilizing zero-field skyrmions in Ir/Fe/Co/Pt thin film multilayers by magnetic history control. <i>Applied Physics Letters</i> , 2019, 114, .	1.5	37
53	Micromagnetic simulations of nanosecond magnetization reversal processes in magnetic nanopillar. <i>Journal of Applied Physics</i> , 2006, 99, 08G522.	1.1	36
54	Long-timescale fluctuations in zero-field magnetic vortex oscillations driven by dc spin-polarized current. <i>Physical Review B</i> , 2009, 80, .	1.1	36

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55	Spin-orbit torque based physical unclonable function. Journal of Applied Physics, 2020, 128, .	1.1	35
56	Electrical detection of single magnetic skyrmion at room temperature. AIP Advances, 2017, 7, .	0.6	34
57	Controlling the deformation of antiferromagnetic skyrmions in the high-velocity regime. Physical Review B, 2020, 101, .	1.1	33
58	Dynamics of domain-wall motion driven by spin-orbit torque in antiferromagnets. Physical Review B, 2020, 101, .	1.1	33
59	Coupling of spin-transfer torque to microwave magnetic field: A micromagnetic modal analysis. Journal of Applied Physics, 2007, 101, 053914.	1.1	31
60	Electrically tunable detector of THz-frequency signals based on an antiferromagnet. Applied Physics Letters, 2020, 117, .	1.5	31
61	Coexistence of distinct skyrmion phases observed in hybrid ferromagnetic/ferrimagnetic multilayers. Nature Communications, 2020, 11, 6365.	5.8	31
62	Observation of current-induced switching in non-collinear antiferromagnetic IrMn3 by differential voltage measurements. Nature Communications, 2021, 12, 3828.	5.8	31
63	Magnetization dynamics driven by the combined action of ac magnetic field and dc spin-polarized current. Journal of Applied Physics, 2006, 99, 08G507.	1.1	28
64	Self-Modulated Soliton Modes Excited in a Nanocontact Spin-Torque Oscillator. IEEE Magnetics Letters, 2014, 5, 1-4.	0.6	28
65	Variability-Aware Analysis of Hybrid MTJ/CMOS Circuits by a Micromagnetic-Based Simulation Framework. IEEE Nanotechnology Magazine, 2017, 16, 160-168.	1.1	28
66	Observation of Magnetic Radial Vortex Nucleation in a Multilayer Stack with Tunable Anisotropy. Scientific Reports, 2018, 8, 7180.	1.6	28
67	Sparse neuromorphic computing based on spin-torque diodes. Applied Physics Letters, 2019, 114, .	1.5	28
68	Remarks about preisach function approximation using lorentzian function and its identification for nonoriented steels. IEEE Transactions on Magnetics, 2003, 39, 3028-3030.	1.2	27
69	Trends in spin-transfer-driven magnetization dynamics of CoFe/AlO <sub>2</sub> /Py and CoFe/MgO/Py magnetic tunnel junctions. Applied Physics Letters, 2006, 89, 262509.	1.5	27
70	Spin-torque driven magnetic vortex self-oscillations in perpendicular magnetic fields. Applied Physics Letters, 2010, 96, 102508.	1.5	27
71	Reversible magnetization and Lorentzian function approximation. Journal of Applied Physics, 2003, 93, 6635-6637.	1.1	26
72	About identification of Scalar Preisach functions of soft magnetic materials. IEEE Transactions on Magnetics, 2006, 42, 923-926.	1.2	26

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73	Magnetization dynamics driven by spin-polarized current in nanomagnets. Journal of Magnetism and Magnetic Materials, 2007, 316, 488-491.	1.0	26
74	Switching Properties in Magnetic Tunnel Junctions With Interfacial Perpendicular Anisotropy: Micromagnetic Study. IEEE Transactions on Magnetics, 2014, 50, 1-5.	1.2	26
75	Mathematical Modelling of Magnetic Hysteresis in Exchange-Bias Spin Valves. IEEE Transactions on Magnetics, 2012, 48, 3367-3370.	1.2	25
76	Compact Modeling of Perpendicular STT-MTJs With Double Reference Layers. IEEE Nanotechnology Magazine, 2019, 18, 1063-1070.	1.1	25
77	Rate of entropy model for irreversible processes in living systems. Scientific Reports, 2017, 7, 9134.	1.6	24
78	Nonlinear dispersion relation in anharmonic periodic mass-spring and mass-in-mass systems. Journal of Sound and Vibration, 2019, 462, 114929.	2.1	24
79	Perspectives on spintronic diodes. Applied Physics Letters, 2021, 118, .	1.5	24
80	Excitation of Spin Waves in an In-Plane-Magnetized Ferromagnetic Nanowire Using Voltage-Controlled Magnetic Anisotropy. Physical Review Applied, 2017, 7, .	1.5	23
81	State-independent hypothesis to model the behavior of magnetic materials. Journal of Magnetism and Magnetic Materials, 2004, 280, 158-163.	1.0	22
82	Micromagnetic modal analysis of spin-transfer-driven ferromagnetic resonance of individual nanomagnets. Journal of Applied Physics, 2007, 101, 09A502.	1.1	22
83	Time-domain study of frequency-power correlation in spin-torque oscillators. Physical Review B, 2010, 81, .	1.1	22
84	Nanoscale spintronic oscillators based on the excitation of confined soliton modes. Journal of Applied Physics, 2013, 114, 163908.	1.1	22
85	Influence of the Dzyaloshinskii-Moriya interaction on the spin-torque diode effect. Journal of Applied Physics, 2014, 115, 17C730.	1.1	22
86	Assessment of STT-MRAMs based on double-barrier MTJs for cache applications by means of a device-to-system level simulation framework. The Integration VLSI Journal, 2020, 71, 56-69.	1.3	22
87	Spin-polarized current-driven switching in permalloy nanostructures. Journal of Applied Physics, 2005, 97, 10E302.	1.1	21
88	Nonstationary magnetization dynamics driven by spin transfer torque. Physical Review B, 2009, 79, .	1.1	21
89	Non-Adlerian phase slip and nonstationary synchronization of spin-torque oscillators to a microwave source. Physical Review B, 2012, 86, .	1.1	21
90	Amplification and stabilization of large-amplitude propagating spin waves by parametric pumping. Applied Physics Letters, 2018, 112, .	1.5	21

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91	Nanocontact spin-transfer oscillators based on perpendicular anisotropy in the free layer. Applied Physics Letters, 2007, 91, .	1.5	19
92	Modeling of hysteresis in magnetic multidomains. Physica B: Condensed Matter, 2014, 435, 62-65.	1.3	19
93	Intrinsic synchronization of an array of spin-torque oscillators driven by the spin-Hall effect. Journal of Applied Physics, 2015, 117, 17E504.	1.1	19
94	A comparative study of Preisach scalar hysteresis models. Physica B: Condensed Matter, 2004, 343, 164-170.	1.3	18
95	Magnetization switching driven by spin-transfer-torque in high-TMR magnetic tunnel junctions. Journal of Magnetism and Magnetic Materials, 2009, 321, 3913-3920.	1.0	18
96	Dynamical properties of three terminal magnetic tunnel junctions: Spintronics meets spin-orbitronics. Applied Physics Letters, 2013, 103, .	1.5	18
97	Scalable synchronization of spin-Hall oscillators in out-of-plane field. Applied Physics Letters, 2016, 109, .	1.5	18
98	Current-driven domain wall dynamics in ferromagnetic layers synthetically exchange-coupled by a spacer: A micromagnetic study. Journal of Applied Physics, 2018, 123, .	1.1	18
99	Description of Statistical Switching in Perpendicular STT-MRAM Within an Analytical and Numerical Micromagnetic Framework. IEEE Transactions on Magnetics, 2018, 54, 1-10.	1.2	18
100	Noise-Like Sequences to Resonant Excite the Writing of a Universal Memory Based on Spin-Transfer-Torque MRAM. IEEE Transactions on Magnetics, 2012, 48, 2407-2414.	1.2	17
101	A generalized tool for accurate time-domain separation of excited modes in spin-torque oscillators. Journal of Applied Physics, 2014, 115, 17D108.	1.1	17
102	Enhanced Broad-band Radio Frequency Detection in Nanoscale Magnetic Tunnel Junction by Interface Engineering. ACS Applied Materials & Interfaces, 2019, 11, 29382-29387.	4.0	17
103	Configurational entropy of magnetic skyrmions as an ideal gas. Physical Review B, 2019, 99, .	1.1	17
104	Analytical solution of Everett integral using Lorentzian Preisach function approximation. Journal of Magnetism and Magnetic Materials, 2006, 300, 451-470.	1.0	16
105	Non-stationary excitation of two localized spin-wave modes in a nano-contact spin torque oscillator. Journal of Applied Physics, 2013, 114, 153906.	1.1	16
106	Micromagnetic understanding of the skyrmion Hall angle current dependence in perpendicularly magnetized ferromagnets. Physical Review B, 2018, 98, .	1.1	16
107	Identification of Néel Vector Orientation in Antiferromagnetic Domains Switched by Currents in $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll" \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \text{Ni} \langle \text{mml:mi} \rangle \langle \text{mml:mi} \rangle \text{mathvariant="normal"} \rangle \text{O} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mo} \rangle / \langle \text{mml:mo} \rangle \langle \text{mml:mi} \rangle \text{Pt} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$	1.5	16
108	Imaging the spin chirality of ferrimagnetic Néel skyrmions stabilized on topological antiferromagnetic $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle \text{Mn} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 3 \langle \text{mml:mn} \rangle \langle \text{mml:math} \rangle$	0.9	16

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109	Influence of the Oersted field in the dynamics of spin-transfer microwave oscillators. Journal of Applied Physics, 2007, 101, 09C108.	1.1	15
110	Wideband microwave signal to trigger fast switching processes in magnetic tunnel junctions. Journal of Applied Physics, 2012, 111, 07C909.	1.1	15
111	Micromagnetic analysis of dynamical bubble-like solitons based on the time domain evolution of the topological density. Journal of Applied Physics, 2014, 115, 17D139.	1.1	15
112	Hysteretic Synchronization in Spin-Torque Nanocontact Oscillators: A Micromagnetic Study. IEEE Nanotechnology Magazine, 2014, 13, 532-536.	1.1	15
113	Micromagnetic Modeling of Nanocontact Spin-Torque Oscillators With Perpendicular Anisotropy at Zero Bias Field. IEEE Transactions on Magnetics, 2008, 44, 2512-2515.	1.2	14
114	Stochastic resonance of a domain wall in a stripe with two pinning sites. Applied Physics Letters, 2011, 98, 072507.	1.5	14
115	Coherent and incoherent spin torque oscillations in a nanopillar magnetic spin-valve. Applied Physics Letters, 2013, 102, 252402.	1.5	14
116	Micromagnetic Analysis of Statistical Switching in Perpendicular Magnetic Tunnel Junctions With Double Reference Layers. IEEE Magnetics Letters, 2018, 9, 1-5.	0.6	14
117	Wave amplitude decay driven by anharmonic potential in nonlinear mass-in-mass systems. Applied Physics Letters, 2020, 117, 124101.	1.5	14
118	Pipeline for Advanced Contrast Enhancement (PACE) of Chest X-ray in Evaluating COVID-19 Patients by Combining Bidimensional Empirical Mode Decomposition and Contrast Limited Adaptive Histogram Equalization (CLAHE). Sustainability, 2020, 12, 8573.	1.6	14
119	Spintronics-compatible Approach to Solving Maximum-Satisfiability Problems with Probabilistic Computing, Invertible Logic, and Parallel Tempering. Physical Review Applied, 2022, 17, .	1.5	14
120	Micromagnetic simulations of persistent oscillatory modes excited by spin-polarized current in nanoscale exchange-biased spin valves. Journal of Applied Physics, 2009, 105, 07D107.	1.1	13
121	Automatic Crack Classification by Exploiting Statistical Event Descriptors for Deep Learning. Applied Sciences (Switzerland), 2021, 11, 12059.	1.3	13
122	Spin-torque switching in Py/Cu/Py and Py/Cu/CoPt spin-valve nanopillars. Journal of Magnetism and Magnetic Materials, 2007, 316, 492-495.	1.0	12
123	Micromagnetic Modeling of Magnetization Reversal in Nano-Scale Point Contact Devices. IEEE Transactions on Magnetics, 2007, 43, 2938-2940.	1.2	12
124	The influence of the spin-orbit torques on the current-driven domain wall motion. AIP Advances, 2013, 3, .	0.6	12
125	Magnetic switching driven by nanosecond scale heat and magnetic field pulses: An application of macrospin Landau-Lifshitz-Bloch model. Applied Physics Letters, 2012, 101, .	1.5	11
126	Nanomagnetic logic with non-uniform states of clocking. Journal Physics D: Applied Physics, 2016, 49, 145001.	1.3	11



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127	Reproducible formation of single magnetic bubbles in an array of patterned dots. Journal Physics D: Applied Physics, 2016, 49, 245002.	1.3	11
128	Dual-band microwave detector based on magnetic tunnel junctions. Applied Physics Letters, 2020, 117, .	1.5	11
129	A fuzzy model of scalar hysteresis on soft magnetic materials. Physica B: Condensed Matter, 2004, 343, 132-136.	1.3	10
130	Hysteretic spin-wave excitation in spin-torque oscillators as a function of the in-plane field angle: A micromagnetic description. Journal of Applied Physics, 2011, 110, 123913.	1.1	10
131	Domain Wall Dynamics in Asymmetric Stacks: The Roles of Rashba Field and the Spin Hall Effect. IEEE Transactions on Magnetics, 2013, 49, 3105-3108.	1.2	10
132	Magnetization reversal signatures of hybrid and pure Néel skyrmions in thin film multilayers. APL Materials, 2020, 8, 111112.	2.2	10
133	Vector Hysteresis Model at Micromagnetic Scale. IEEE Transactions on Magnetics, 2006, 42, 3138-3140.	1.2	9
134	Reducing the Non-Linearities of a Spin-Torque Oscillator by Varying the Amplitude of the External Field Applied Along the In-Plane Hard-Axis. IEEE Transactions on Magnetics, 2010, 46, 1519-1522.	1.2	9
135	Computing with Injection-Locked Spintronic Diodes. Physical Review Applied, 2022, 17, .	1.5	9
136	Influence of the magnetostatic coupling in magnetization switching driven by spin-polarized current. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2006, 126, 190-193.	1.7	8
137	A simplified model for vector hysteresis computation. IEEE Transactions on Magnetics, 2006, 42, 955-958.	1.2	8
138	Injection locking at zero field in two free layer spin-valves. Applied Physics Letters, 2013, 102, .	1.5	8
139	Micromagnetic Study of Electrical-Field-Assisted Magnetization Switching in MTJ Devices. IEEE Transactions on Magnetics, 2014, 50, 1-4.	1.2	8
140	Micromagnetic Study of Spin-Transfer-Driven Vortex Dipole and Vortex Quadrupole Dynamics. IEEE Transactions on Magnetics, 2014, 50, 1-4.	1.2	8
141	Reliability of Neural Networks Based on Spintronic Neurons. IEEE Magnetics Letters, 2021, 12, 1-5.	0.6	8
142	Micromagnetic understanding of switching and self-oscillations in ferrimagnetic materials. Applied Physics Letters, 2021, 118, 052403.	1.5	8
143	Increasing the Accuracy of the Numerical Identification of the Modified Scalar Preisach Model. IEEE Transactions on Magnetics, 2004, 40, 892-895.	1.2	7
144	Domain Wall Dynamics Driven by a Localized Injection of a Spin-Polarized Current. IEEE Transactions on Magnetics, 2010, 46, 1523-1526.	1.2	7

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145	Spin hall nano-oscillators based on two-dimensional Fe <sub>3</sub> GeTe <sub>2</sub> magnetic materials. <i>Nanoscale</i> , 2020, 12, 22808-22816.	2.8	7
146	A Nonlinear and Non-Stationary Signal Analysis for Accurate Power Quality Monitoring in Smart Grids. , 2014, , .		6
147	Micro-focused Brillouin light scattering study of the magnetization dynamics driven by Spin Hall effect in a transversely magnetized NiFe nanowire. <i>Journal of Applied Physics</i> , 2015, 117, 17D504.	1.1	6
148	Exploiting Double-Barrier MTJs for Energy-Efficient Nanoscaled STT-MRAMs. , 2019, , .		6
149	Role of magnetic skyrmions for the solution of the shortest path problem. <i>Journal of Magnetism and Magnetic Materials</i> , 2021, 532, 167977.	1.0	6
150	Domain periodicity in an easy-plane antiferromagnet with Dzyaloshinskii-Moriya interaction. <i>Physical Review B</i> , 2020, 102, .	1.1	6
151	Antiferromagnetic Parametric Resonance Driven by Voltage-Controlled Magnetic Anisotropy. <i>Physical Review Applied</i> , 2022, 17, .	1.5	6
152	Modeling of fast switching processes in nanoscale spin valves. <i>Journal of Applied Physics</i> , 2008, 103, 07B117.	1.1	5
153	Micromagnetic study of full widths at half maximum in spin-transfer-driven self-oscillations of individual nanomagnets. <i>Journal of Applied Physics</i> , 2008, 103, 07B107.	1.1	5
154	Numerical Analysis of the Nonlinear Excitation of Subcritical Spin-Wave Modes Within a Micromagnetic Framework. <i>IEEE Transactions on Magnetics</i> , 2009, 45, 5220-5223.	1.2	5
155	Influence of the Second-Order Uniaxial Anisotropy on the Dynamical Properties of Magnetic Tunnel Junctions. <i>IEEE Transactions on Magnetics</i> , 2017, 53, 1-7.	1.2	5
156	Theory of nonreciprocal spin-wave excitations in spin Hall oscillators with Dzyaloshinskii-Moriya interaction. <i>Physical Review B</i> , 2018, 97, .	1.1	5
157	Unified Framework for Micromagnetic Modeling of Ferro-, Ferri-, and Antiferromagnetic Materials at Mesoscopic Scale: Domain Wall Dynamics as a Case Study. <i>IEEE Magnetics Letters</i> , 2020, 11, 1-5.	0.6	5
158	Low-Frequency Nonresonant Rectification in Spin Diodes. <i>Physical Review Applied</i> , 2020, 14, .	1.5	5
159	Computing with Invertible Logic: Combinatorial Optimization with Probabilistic Bits. , 2021, , .		5
160	Removing numerical instabilities in the Preisach model identification using genetic algorithms. <i>Physica B: Condensed Matter</i> , 2006, 372, 91-96.	1.3	4
161	A genetic approach to solve numerical problems in the Preisach model identification. <i>IEEE Transactions on Magnetics</i> , 2006, 42, 1526-1537.	1.2	4
162	Magnetization dynamics in CoFe <sub>2</sub> O <sub>4</sub> /Permalloy and CoFe <sub>2</sub> O <sub>4</sub> /MgO/Permalloy magnetic tunnel junctions. <i>Journal of Applied Physics</i> , 2007, 101, 09A508.	1.1	4

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163	Magnonics Crystal Composed by Magnetic Antivortices Confined in Antidots. IEEE Transactions on Magnetism, 2011, 47, 2498-2501.	1.2	4
164	Micromagnetic Analysis of Statistical Switching in Perpendicular STT-MRAM With Interfacial Dzyaloshinskii-Moriya Interaction. IEEE Transactions on Magnetism, 2017, 53, 1-5.	1.2	4
165	On the R <sup>2</sup> $\alpha$ relaxometry in complex multi-peak multi-Echo chemical shift-based water-fat quantification: Applications to the neuromuscular diseases. Magnetic Resonance Imaging, 2017, 35, 4-14.	1.0	4
166	Impact of Scaling on Physical Unclonable Function Based on Spin-Orbit Torque. IEEE Magnetism Letters, 2020, 11, 1-5.	0.6	4
167	Field-Free Magnetic Tunnel Junction for Logic Operations Based on Voltage-Controlled Magnetic Anisotropy. IEEE Magnetism Letters, 2021, 12, 1-4.	0.6	4
168	Tuning the Coexistence Regime of Incomplete and Tubular Skyrmions in Ferromagnetic/Ferrimagnetic/Ferromagnetic Trilayers. ACS Applied Materials & Interfaces, 2022, 14, 34002-34010.	4.0	4
169	Super-Lorentzian Preisach function and its applicability to model scalar hysteresis. Physica B: Condensed Matter, 2004, 343, 121-126.	1.3	3
170	Thermal effects on spin-torque-driven switching in high-tunneling-magnetoresistance magnetic tunnel junctions. Journal of Applied Physics, 2010, 108, 083911.	1.1	3
171	Micromagnetic Study of Synchronization of Nonlinear Spin-Torque Oscillators to Microwave Current and Field. Advances in Condensed Matter Physics, 2012, 2012, 1-5.	0.4	3
172	The Role of the Oersted Field on the Current-Driven Domain Wall Dynamics Along Wires With Square Cross Section. IEEE Transactions on Magnetism, 2013, 49, 3211-3214.	1.2	3
173	A data-oriented self-calibration and robust chemical-shift encoding by using clusterization (OSCAR): Theory, optimization and clinical validation in neuromuscular disorders. Magnetic Resonance Imaging, 2018, 45, 84-96.	1.0	3
174	Correction of Phase Errors in a Spin-Wave Transmission Line by Nonadiabatic Parametric Pumping. Physical Review Applied, 2019, 11, .	1.5	3
175	Three-Dimensional Magnetic Page Memory. Physical Review Applied, 2019, 11, .	1.5	3
176	Modulation, Injection Locking, and Pulling in an Antiferromagnetic Spin-Orbit Torque Oscillator. IEEE Transactions on Magnetism, 2021, 57, 1-6.	1.2	3
177	A comparison of spin-polarized current driven magnetization reversal in Co/Cu/Co magnetic multilayers. Physica B: Condensed Matter, 2006, 372, 294-298.	1.3	2
178	Spintronic Oscillators Based on Spin-Transfer Torque and Spin-Orbit Torque. Handbook of Surface Science, 2015, 5, 297-334.	0.3	2
179	Robustness of using degree of match in performing analog multiplication with spin-torque oscillators. Solid-State Electronics, 2021, 183, 108045.	0.8	2
180	Spin-orbit torque driven skyrmion motion under unconventional spin Hall effect. New Journal of Physics, 2022, 24, 053053.	1.2	2

#	ARTICLE	IF	CITATIONS
181	Remarks about a fuzzy approach to model scalar hysteresis. Journal of Applied Physics, 2005, 97, 10E507.	1.1	1
182	Fast computing vector hysteresis model. Physica B: Condensed Matter, 2006, 372, 128-132.	1.3	1
183	Micromagnetic Investigation of Precession Dynamics in Magnetic Nanopillars. IEEE Transactions on Magnetics, 2007, 43, 2935-2937.	1.2	1
184	Micromagnetic model of magnetization reversal driven by spin-polarized current in MgO-based magnetic tunnel junctions. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 2396-2399.	0.8	1
185	Numerical study of the magnetization reversal driven by spin-polarized current in MgO-based magnetic tunnel junctions. Physica B: Condensed Matter, 2008, 403, 364-367.	1.3	1
186	Time-frequency study of spintronic oscillators based on Hilbert-Huang Transform. , 2014, , .		1
187	Nanowire Spin-Torque Oscillator With Non-Uniform Polarizer: A Micromagnetic Study. IEEE Transactions on Magnetics, 2014, 50, 1-4.	1.2	1
188	Vector hysteresis model to describe micromagnetic structures. , 2016, , .		1
189	Description of statistical switching in perpendicular STT-MRAM within a numerical micromagnetic framework. , 2017, , .		1
190	Ultralow-current-density and bias-field-free spin-transfer nano-oscillator. , 0, .		1
191	A strategy for the design of skyrmion racetrack memories. , 0, .		1
192	10.1063/1.4795597.1. , 2013, , .		1
193	Applications of Magnetic Materials and Spintronics in Smart Systems. , 2022, , 95-103.		1
194	Influence of the cut angle and grain size on the behavior of non-oriented magnetic steels. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 3365-3368.	0.8	0
195	Thermal activation in spin-polarized current driven magnetization reversal process. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 3381-3384.	0.8	0
196	A general fuzzy model of the scalar hysteresis. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 3428-3431.	0.8	0
197	An isotropic analytical vector Preisach model based on the Lorentzian function. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 3740-3743.	0.8	0
198	Micromagnetic Modeling of Magnetization Dynamics in Magnetic Tunnel Junctions Driven by Spin-Polarized Current. , 0, , .		0

#	ARTICLE	IF	CITATIONS
199	Magnetization Reversal driven by Spin-Polarized Current in Exchanged Biased Samples. , 0, , .		0
200	Vector Hysteresis Model at Micromagnetic Scale. , 2006, , .		0
201	Magnetic vortex driven by non-uniform injection of spin-polarized current in nano-scale spin valves. Journal of Magnetism and Magnetic Materials, 2009, 321, 602-606.	1.0	0
202	Magnetic vortex chirality switching driven by a spin-polarized current. , 2010, , .		0
203	Intrinsic and Thermal Linewidths of Spin-Transfer-Driven Vortex Self-Oscillations. IEEE Transactions on Magnetics, 2013, 49, 3203-3206.	1.2	0
204	Spintronics meets spin-orbitronics: Micromagnetic modelling of three terminal magnetic tunnel junctions. , 2014, , .		0
205	Chirp Spectroscopy Applied to the Characterization of Ferromagnetic Resonance in Magnetic Tunnel Junctions. IEEE Transactions on Magnetics, 2014, 50, 1-5.	1.2	0
206	Micromagnetic study of skyrmion racetrack and microwave oscillator. , 2015, , .		0
207	Topological skyrmion dynamics driven by spin-transfer torque. , 2015, , .		0
208	Skyrmion motion induced by spin-Hall current in constrained geometries. , 2015, , .		0
209	Spin-hall nano-oscillator: A study based on the synchronization. , 2015, , .		0
210	Numerical methods to achieve robust relaxometry mapping in multi-echo chemical shift-based MRI. , 2016, , .		0
211	Micromagnetic simulations of spin-Hall driven dynamics in an antiferromagnet. , 2018, , .		0