

Olivier Boule

List of Publications by Year in descending order

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61
papers

5,620
citations

136950

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149698

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62
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62
docs citations

62
times ranked

4155
citing authors

#	ARTICLE	IF	CITATIONS
1	Programmable Skyrmion Logic Gates Based on Skyrmion Tunneling. <i>Physical Review Applied</i> , 2022, 17, .	3.8	8
2	Robust and Programmable Logic-In-Memory Devices Exploiting Skyrmion Confinement and Channeling Using Local Energy Barriers. <i>Physical Review Applied</i> , 2022, 18, .	3.8	4
3	Helium Ions Put Magnetic Skyrmions on the Track. <i>Nano Letters</i> , 2021, 21, 2989-2996.	9.1	79
4	Evidence of interfacial asymmetric spin scattering at ferromagnet-Pt interfaces. <i>Physical Review B</i> , 2021, 103, .	3.2	9
5	Imprint from ferromagnetic skyrmions in an antiferromagnet via exchange bias. <i>Applied Physics Letters</i> , 2021, 119, 192407.	3.3	4
6	Static and dynamic properties of 1-kink skyrmion in Pt/Co/MgO trilayer. <i>Physical Review B</i> , 2021, 104, .	3.2	2
7	Room-Temperature Skyrmions at Zero Field in Exchange-Biased Ultrathin Films. <i>Physical Review Applied</i> , 2020, 13, .	3.8	29
8	Effect of surface roughness on the anomalous Hall effect in Fe thin films. <i>Physical Review B</i> , 2020, 101, .	3.2	12
9	Impact of Dzyaloshinskii-Moriya interactions on the thermal stability factor of heavy metal/magnetic metal/oxide based nano-pillars. <i>Journal of Applied Physics</i> , 2019, 126, 103905.	2.5	6
10	Current-Driven Skyrmion Dynamics and Drive-Dependent Skyrmion Hall Effect in an Ultrathin Film. <i>Physical Review Applied</i> , 2019, 12, .	3.8	111
11	Ultra-Fast Perpendicular Spin-Orbit Torque MRAM. <i>IEEE Transactions on Magnetics</i> , 2018, 54, 1-4.	2.1	134
12	Spin-orbit torque-induced switching in ferrimagnetic alloys: Experiments and modeling. <i>Applied Physics Letters</i> , 2018, 112, .	3.3	69
13	Magnetic skyrmions in confined geometries: Effect of the magnetic field and the disorder. <i>Journal of Magnetism and Magnetic Materials</i> , 2018, 455, 3-8.	2.3	48
14	Creation of Magnetic Skyrmion Bubble Lattices by Ultrafast Laser in Ultrathin Films. <i>Nano Letters</i> , 2018, 18, 7362-7371.	9.1	103
15	Thermal Contribution to the Spin-Orbit Torque in Metallic-Ferrimagnetic Systems. <i>Physical Review Applied</i> , 2018, 9, .	3.8	52
16	Controlling Dzyaloshinskii-Moriya Interaction via Chirality Dependent Atomic-Layer Stacking, Insulator Capping and Electric Field. <i>Scientific Reports</i> , 2018, 8, 12356.	3.3	153
17	Large-Voltage Tuning of Dzyaloshinskii-Moriya Interactions: A Route toward Dynamic Control of Skyrmion Chirality. <i>Nano Letters</i> , 2018, 18, 4871-4877.	9.1	173
18	Creation of unidirectional spin-wave emitters by utilizing interfacial Dzyaloshinskii-Moriya interaction. <i>Physical Review B</i> , 2017, 95, .	3.2	59

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19	Detection of Short-Waved Spin Waves in Individual Microscopic Spin-Wave Waveguides Using the Inverse Spin Hall Effect. Nano Letters, 2017, 17, 7234-7241.	9.1	21
20	Domain wall dynamics in ultrathin Pt/Co/AlOx microstrips under large combined magnetic fields. Physical Review B, 2016, 93, .	3.2	44
21	Room-temperature chiral magnetic skyrmions in ultrathin magnetic nanostructures. Nature Nanotechnology, 2016, 11, 449-454.	31.5	829
22	Chiral damping of magnetic domain walls. Nature Materials, 2016, 15, 272-277.	27.5	99
23	Ultra-Fast and High-Reliability SOT-MRAM: From Cache Replacement to Normally-Off Computing. IEEE Transactions on Multi-Scale Computing Systems, 2016, 2, 49-60.	2.4	135
24	Spin-orbit torque magnetization switching controlled by geometry. Nature Nanotechnology, 2016, 11, 143-146.	31.5	111
25	Domain Wall Memory Device. , 2016, , 1387-1441.		2
26	Spin-orbit torque driven chiral magnetization reversal in ultrathin nanostructures. Physical Review B, 2015, 92, .	3.2	68
27	Magnetization reversal by spin orbit torque in a perpendicularly magnetized nanomagnet: A micromagnetic study. , 2015, , .		0
28	Beyond STT-MRAM, Spin Orbit Torque RAM SOT-MRAM for High Speed and High Reliability Applications. , 2015, , 145-157.		34
29	Domain Wall Memory Device. , 2015, , 1-46.		0
30	Chirality-Induced Asymmetric Magnetic Nucleation in $\text{Pt}/\text{Co}/\text{MgO}$ Microstructures. Physical Review Letters, 2014, 113, 047203.	7.8	157
31	Ultrafast magnetization switching by spin-orbit torques. Applied Physics Letters, 2014, 105, .	3.3	379
32	Spin-orbit torque magnetization switching of a three-terminal perpendicular magnetic tunnel junction. Applied Physics Letters, 2014, 104, .	3.3	306
33	Fieldlike and antidamping spin-orbit torques in as-grown and annealed Ta/CoFeB/MgO layers. Physical Review B, 2014, 89, .	3.2	164
34	Current induced domain wall dynamics in the presence of spin orbit torques. Journal of Applied Physics, 2014, 115, 17D502.	2.5	28
35	Symmetry and magnitude of spin-orbit torques in ferromagnetic heterostructures. Nature Nanotechnology, 2013, 8, 587-593.	31.5	955
36	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

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37	Ferroelectric control of magnetic domains in ultra-thin cobalt layers. Applied Physics Letters, 2013, 103, 222902.	3.3	12
38	Electric-field control of domain wall nucleation and pinning in a metallic ferromagnet. Applied Physics Letters, 2013, 102, .	3.3	56
39	Current induced domain wall dynamics in the presence of a transverse magnetic field in out-of-plane magnetized materials. Journal of Applied Physics, 2012, 112, .	2.5	16
40	Determination of the spin torque non-adiabaticity in perpendicularly magnetized nanowires. Journal of Physics Condensed Matter, 2012, 24, 024220.	1.8	10
41	Magnetization switching of an MgO/Co/Pt layer by in-plane current injection. Applied Physics Letters, 2012, 100, .	3.3	85
42	Direct Observation of Massless Domain Wall Dynamics in Nanostripes with Perpendicular Magnetic Anisotropy. Physical Review Letters, 2012, 108, 247202.	7.8	56
43	Current-induced domain wall motion in nanoscale ferromagnetic elements. Journal Physics D: Applied Physics, 2011, 44, 384005.	2.8	29
44	Current-induced domain wall motion in nanoscale ferromagnetic elements. Materials Science and Engineering Reports, 2011, 72, 159-187.	31.8	164
45	Extraction of the spin torque non-adiabaticity from thermally activated domain wall hopping. Applied Physics Letters, 2011, 99, .	3.3	7
46	Current-induced domain wall motion in Ni80Fe20nanowires with low depinning fields. Journal Physics D: Applied Physics, 2010, 43, 045003.	2.8	9
47	Current-induced domain wall motion in Co/Pt nanowires: Separating spin torque and Oersted-field effects. Applied Physics Letters, 2010, 96, .	3.3	47
48	Current-induced vortex dynamics and pinning potentials probed by homodyne detection. Physical Review B, 2010, 82, .	3.2	42
49	Detection of vortex core polarities by a homodyne detection scheme. , 2009, , .		0
50	Reversible switching between bidomain states by injection of current pulses in a magnetic wire with out-of-plane magnetization. Journal of Applied Physics, 2009, 105, 07C106.	2.5	18
51	Tunable steady-state domain wall oscillator with perpendicular magnetic anisotropy. Applied Physics Letters, 2009, 95, .	3.3	49
52	Concepts for Domain Wall Motion in Nanoscale Ferromagnetic Elements due to Spin Torque and in Particular Oersted Fields. Journal of Magnetism, 2009, 14, 53-61.	0.4	9
53	Microwave excitations associated with a wavy angular dependence of the spin transfer torque: Model and experiments. Physical Review B, 2008, 77, .	3.2	17
54	Selective domain wall depinning by localized Oersted fields and Joule heating. Applied Physics Letters, 2008, 93, 132503.	3.3	20

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55	Nonadiabatic Spin Transfer Torque in High Anisotropy Magnetic Nanowires with Narrow Domain Walls. <i>Physical Review Letters</i> , 2008, 101, 216601.	7.8	128
56	Direct imaging of current-induced domain wall motion in CoFeB structures. <i>Journal of Applied Physics</i> , 2008, 103, .	2.5	18
57	Shaped angular dependence of the spin-transfer torque and microwave generation without magnetic field. <i>Nature Physics</i> , 2007, 3, 492-497.	16.7	147
58	Current-driven differential resistance phase diagram in nanopillars of NiFe/Cu/NiFe. <i>Physica B: Condensed Matter</i> , 2006, 384, 33-35.	2.7	2
59	Spin transfer experiments on (Ga,Mn)As ⁺ /(In,Ga)As ⁺ /(Ga,Mn)As tunnel junctions. <i>Physical Review B</i> , 2006, 73, .	3.2	80
60	Spin Transfer Torque: a new method to excite or reverse a magnetization. <i>Comptes Rendus Physique</i> , 2005, 6, 956-965.	0.9	11
61	Visibility and Apparent Size of Néel-Type Magnetic Skyrmions in Fresnel Defocus Images of Multilayer Films. <i>Microscopy and Microanalysis</i> , 0, , 1-10.	0.4	2