

Olivier Boule

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6481489/publications.pdf>

Version: 2024-02-01

61
papers

5,620
citations

136950

32
h-index

149698

56
g-index

62
all docs

62
docs citations

62
times ranked

4155
citing authors

#	ARTICLE	IF	CITATIONS
1	Symmetry and magnitude of spin-orbit torques in ferromagnetic heterostructures. Nature Nanotechnology, 2013, 8, 587-593.	31.5	955
2	Room-temperature chiral magnetic skyrmions in ultrathin magnetic nanostructures. Nature Nanotechnology, 2016, 11, 449-454.	31.5	829
3	Ultrafast magnetization switching by spin-orbit torques. Applied Physics Letters, 2014, 105, .	3.3	379
4	Spin-orbit torque magnetization switching of a three-terminal perpendicular magnetic tunnel junction. Applied Physics Letters, 2014, 104, .	3.3	306
5	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
6	Large-Voltage Tuning of Dzyaloshinskii-Moriya Interactions: A Route toward Dynamic Control of Skyrmion Chirality. Nano Letters, 2018, 18, 4871-4877.	9.1	173
7	Current-induced domain wall motion in nanoscale ferromagnetic elements. Materials Science and Engineering Reports, 2011, 72, 159-187.	31.8	164
8	Fieldlike and antidamping spin-orbit torques in as-grown and annealed Ta/CoFeB/MgO layers. Physical Review B, 2014, 89, .	3.2	164
9	Chirality-Induced Asymmetric Magnetic Nucleation in Pt/Co Microstructures. Physical Review Letters, 2014, 113, 047203.	7.8	157
10	Controlling Dzyaloshinskii-Moriya Interaction via Chirality Dependent Atomic-Layer Stacking, Insulator Capping and Electric Field. Scientific Reports, 2018, 8, 12356.	3.3	153
11	Shaped angular dependence of the spin-transfer torque and microwave generation without magnetic field. Nature Physics, 2007, 3, 492-497.	16.7	147
12	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
13	Ultra-Fast Perpendicular Spin-Orbit Torque MRAM. IEEE Transactions on Magnetics, 2018, 54, 1-4.	2.1	134
14	Nonadiabatic Spin Transfer Torque in High Anisotropy Magnetic Nanowires with Narrow Domain Walls. Physical Review Letters, 2008, 101, 216601.	7.8	128
15	Spin-orbit torque magnetization switching controlled by geometry. Nature Nanotechnology, 2016, 11, 143-146.	31.5	111
16	Current-Driven Skyrmion Dynamics and Drive-Dependent Skyrmion Hall Effect in an Ultrathin Film. Physical Review Applied, 2019, 12, .	3.8	111
17	Creation of Magnetic Skyrmion Bubble Lattices by Ultrafast Laser in Ultrathin Films. Nano Letters, 2018, 18, 7362-7371.	9.1	103
18	Chiral damping of magnetic domain walls. Nature Materials, 2016, 15, 272-277.	27.5	99

#	ARTICLE	IF	CITATIONS
19	Magnetization switching of an MgO/Co/Pt layer by in-plane current injection. Applied Physics Letters, 2012, 100, .	3.3	85
20	Spin transfer experiments on (Ga,Mn)As/(In,Ga)As/(Ga,Mn)As tunnel junctions. Physical Review B, 2006, 73, .	3.2	80
21	Helium Ions Put Magnetic Skyrmions on the Track. Nano Letters, 2021, 21, 2989-2996.	9.1	79
22	Spin-orbit torque-induced switching in ferrimagnetic alloys: Experiments and modeling. Applied Physics Letters, 2018, 112, .	3.3	69
23	Spin-orbit torque driven chiral magnetization reversal in ultrathin nanostructures. Physical Review B, 2015, 92, .	3.2	68
24	Creation of unidirectional spin-wave emitters by utilizing interfacial Dzyaloshinskii-Moriya interaction. Physical Review B, 2017, 95, .	3.2	59
25	Direct Observation of Massless Domain Wall Dynamics in Nanostripes with Perpendicular Magnetic Anisotropy. Physical Review Letters, 2012, 108, 247202.	7.8	56
26	Electric-field control of domain wall nucleation and pinning in a metallic ferromagnet. Applied Physics Letters, 2013, 102, .	3.3	56
27	Thermal Contribution to the Spin-Orbit Torque in Metallic-Ferrimagnetic Systems. Physical Review Applied, 2018, 9, .	3.8	52
28	Tunable steady-state domain wall oscillator with perpendicular magnetic anisotropy. Applied Physics Letters, 2009, 95, .	3.3	49
29	Magnetic skyrmions in confined geometries: Effect of the magnetic field and the disorder. Journal of Magnetism and Magnetic Materials, 2018, 455, 3-8.	2.3	48
30	Current-induced domain wall motion in Co/Pt nanowires: Separating spin torque and Oersted-field effects. Applied Physics Letters, 2010, 96, .	3.3	47
31	Domain wall dynamics in ultrathin Pt/Co/AlO _x microstrips under large combined magnetic fields. Physical Review B, 2016, 93, .	3.2	44
32	Current-induced vortex dynamics and pinning potentials probed by homodyne detection. Physical Review B, 2010, 82, .	3.2	42
33	Beyond STT-MRAM, Spin Orbit Torque RAM SOT-MRAM for High Speed and High Reliability Applications. , 2015, , 145-157.		34
34	Current-induced domain wall motion in nanoscale ferromagnetic elements. Journal Physics D: Applied Physics, 2011, 44, 384005.	2.8	29
35	Room-Temperature Skyrmions at Zero Field in Exchange-Biased Ultrathin Films. Physical Review Applied, 2020, 13, .	3.8	29
36	Current induced domain wall dynamics in the presence of spin orbit torques. Journal of Applied Physics, 2014, 115, 17D502.	2.5	28

#	ARTICLE	IF	CITATIONS
37	Detection of Short-Waved Spin Waves in Individual Microscopic Spin-Wave Waveguides Using the Inverse Spin Hall Effect. <i>Nano Letters</i> , 2017, 17, 7234-7241.	9.1	21
38	Selective domain wall depinning by localized Oersted fields and Joule heating. <i>Applied Physics Letters</i> , 2008, 93, 132503.	3.3	20
39	Direct imaging of current-induced domain wall motion in CoFeB structures. <i>Journal of Applied Physics</i> , 2008, 103, .	2.5	18
40	Reversible switching between bidomain states by injection of current pulses in a magnetic wire with out-of-plane magnetization. <i>Journal of Applied Physics</i> , 2009, 105, 07C106.	2.5	18
41	Microwave excitations associated with a wavy angular dependence of the spin transfer torque: Model and experiments. <i>Physical Review B</i> , 2008, 77, .	3.2	17
42	Current induced domain wall dynamics in the presence of a transverse magnetic field in out-of-plane magnetized materials. <i>Journal of Applied Physics</i> , 2012, 112, .	2.5	16
43	Ferroelectric control of magnetic domains in ultra-thin cobalt layers. <i>Applied Physics Letters</i> , 2013, 103, 222902.	3.3	12
44	Effect of surface roughness on the anomalous Hall effect in Fe thin films. <i>Physical Review B</i> , 2020, 101, .	3.2	12
45	Spin Transfer Torque: a new method to excite or reverse a magnetization. <i>Comptes Rendus Physique</i> , 2005, 6, 956-965.	0.9	11
46	Determination of the spin torque non-adiabaticity in perpendicularly magnetized nanowires. <i>Journal of Physics Condensed Matter</i> , 2012, 24, 024220.	1.8	10
47	Current-induced domain wall motion in Ni80Fe20nanowires with low depinning fields. <i>Journal Physics D: Applied Physics</i> , 2010, 43, 045003.	2.8	9
48	Evidence of interfacial asymmetric spin scattering at ferromagnet-Pt interfaces. <i>Physical Review B</i> , 2021, 103, .	3.2	9
49	Concepts for Domain Wall Motion in Nanoscale Ferromagnetic Elements due to Spin Torque and in Particular Oersted Fields. <i>Journal of Magnetism</i> , 2009, 14, 53-61.	0.4	9
50	Programmable Skyrmion Logic Gates Based on Skyrmion Tunneling. <i>Physical Review Applied</i> , 2022, 17, .	3.8	8
51	Extraction of the spin torque non-adiabaticity from thermally activated domain wall hopping. <i>Applied Physics Letters</i> , 2011, 99, .	3.3	7
52	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
53	Imprint from ferromagnetic skyrmions in an antiferromagnet via exchange bias. <i>Applied Physics Letters</i> , 2021, 119, 192407.	3.3	4
54	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

#	ARTICLE	IF	CITATIONS
55	Current-driven differential resistance phase diagram in nanopillars of NiFe/Cu/NiFe. Physica B: Condensed Matter, 2006, 384, 33-35.	2.7	2
56	Visibility and Apparent Size of Néel-Type Magnetic Skyrmions in Fresnel Defocus Images of Multilayer Films. Microscopy and Microanalysis, 0, , 1-10.	0.4	2
57	Domain Wall Memory Device. , 2016, , 1387-1441.		2
58	Static and dynamic properties of 1-kink skyrmion in Pt/Co/MgO trilayer. Physical Review B, 2021, 104, .	3.2	2
59	Detection of vortex core polarities by a homodyne detection scheme. , 2009, , .		0
60	Magnetization reversal by spin orbit torque in a perpendicularly magnetized nanomagnet: A micromagnetic study. , 2015, , .		0
61	Domain Wall Memory Device. , 2015, , 1-46.		0