

Romain Lebrun

List of Publications by Year in descending order

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1893
citing authors

#	ARTICLE	IF	CITATIONS
1	Magnon transport in the presence of antisymmetric exchange in a weak antiferromagnet. Journal of Magnetism and Magnetic Materials, 2022, 543, 168631.	1.0	1
2	Size-dependent enhancement of passive microwave rectification in magnetic tunnel junctions with perpendicular magnetic anisotropy. Applied Physics Letters, 2022, 120, 012406.	1.5	3
3	Advances in Magnetics Roadmap on Spin-Wave Computing. IEEE Transactions on Magnetics, 2022, 58, 1-72.	1.2	179
4	Ultrafast Spin-Charge Conversion at SnBi ₂ Te ₄ /Co Topological Insulator Interfaces Probed by Terahertz Emission Spectroscopy. Advanced Optical Materials, 2022, 10, .	3.6	13
5	Spintronic THz emitters based on transition metals and semi-metals/Pt multilayers. Applied Physics Letters, 2022, 120, .	1.5	10
6	Giant nonlinear self-phase modulation of large-amplitude spin waves in microscopic YIG waveguides. Scientific Reports, 2022, 12, 7246.	1.6	8
7	Magnetotransport Study of van der Waals CrPS_4 $\text{Tj ETQq1 1 0.784314 rg31}$		
8	Room-Temperature Anomalous Hall Effect. Physical Review Applied, 2022, 17, . Electrical detection of the spin reorientation transition in antiferromagnetic TmFeO ₃ thin films by spin Hall magnetoresistance. Physical Review B, 2021, 103, .	1.1	5
9	Beyond the gyrotropic motion: Dynamic C-state in vortex spin torque oscillators. Applied Physics Letters, 2021, 118, .	1.5	5
10	Flicker and random telegraph noise between gyrotropic and dynamic C-state of a vortex based spin torque nano oscillator. AIP Advances, 2021, 11, 035042.	0.6	1
11	Spin-torque dynamics for noise reduction in vortex-based sensors. Applied Physics Letters, 2021, 118, .	1.5	6
12	Effective strain manipulation of the antiferromagnetic state of polycrystalline NiO. Applied Physics Letters, 2021, 118, .	1.5	6
13	Room-Temperature Antiferromagnetic Resonance and Inverse Spin-Hall Voltage in Canted Antiferromagnets. Physical Review Letters, 2021, 126, 187201.	2.9	39
14	Voltage-Controlled Reconfigurable Magnonic Crystal at the Sub-micrometer Scale. ACS Nano, 2021, 15, 9775-9781.	7.3	15
15	Exceptional sign changes of the nonlocal spin Seebeck effect in antiferromagnetic hematite. Physical Review B, 2021, 103, .	1.1	14
16	Dispersionless Propagation of Ultrashort Spin-Wave Pulses in Ultrathin Yttrium Iron Garnet Waveguides. Physical Review Applied, 2021, 16, .	1.5	6
17	Efficiency of THz spintronic emitters: from spin-Hall effect in 3d/5d transition metals to surface states of topological insulators. , 2021, , .		0
18	Evidence for spin current driven Bose-Einstein condensation of magnons. Nature Communications, 2021, 12, 6541.	5.8	21

#	ARTICLE	IF	CITATIONS
19	Propagation Length of Antiferromagnetic Magnons Governed by Domain Configurations. Nano Letters, 2020, 20, 306-313.	4.5	48
20	Ultrafast spin-currents and charge conversion at 3d-5d interfaces probed by time-domain terahertz spectroscopy. Applied Physics Reviews, 2020, 7, .	5.5	57
21	Efficient Spin Torques in Antiferromagnetic CoO/Pt Quantified by Comparing Field- and Current-Induced Switching. Physical Review Letters, 2020, 125, 077201.	2.9	40
22	Concurrent magneto-optical imaging and magneto-transport readout of electrical switching of insulating antiferromagnetic thin films. Applied Physics Letters, 2020, 117, .	1.5	26
23	Structural sensitivity of the spin Hall magnetoresistance in antiferromagnetic thin films. Physical Review B, 2020, 102, .	1.1	19
24	Long-distance spin-transport across the Morin phase transition up to room temperature in ultra-low damping single crystals of the antiferromagnet $\text{Ir-Fe}_2\text{O}_3$. Nature Communications, 2020, 11, 6332.	5.8	65
25	An insulating doped antiferromagnet with low magnetic symmetry as a room temperature spin conduit. Applied Physics Letters, 2020, 117, .	1.5	12
26	Control of the coupling strength and linewidth of a cavity magnon-polariton. Physical Review Research, 2020, 2, .	1.3	43
27	Ultrafast Spin-Charge Conversion in Rashba states probed by Terahertz time-domain emission spectroscopy. , 2020, , .		0
28	Spin structure and spin Hall magnetoresistance of epitaxial thin films of the insulating non-collinear antiferromagnet SmFeO_3 . Journal of Physics Condensed Matter, 2019, 31, 445804.	0.7	13
29	Interfacial Dzyaloshinskii-Moriya interaction and chiral magnetic textures in a ferrimagnetic insulator. Physical Review B, 2019, 100, .	1.1	73
30	Mechanism of Néel Order Switching in Antiferromagnetic Thin Films Revealed by Magnetotransport and Direct Imaging. Physical Review Letters, 2019, 123, 177201.	2.9	119
31	Impact of electromagnetic fields and heat on spin transport signals in $\text{Y}_3\text{Fe}_5\text{O}_{12}$. Physical Review B, 2019, 100, .		
32	Anisotropies and magnetic phase transitions in insulating antiferromagnets determined by a Spin-Hall magnetoresistance probe. Communications Physics, 2019, 2, .	2.0	54
33	Gilbert damping of CoFe-alloys. Journal Physics D: Applied Physics, 2019, 52, 325001.	1.3	10
34	Orientation-dependent direct and inverse spin Hall effects in $\text{Co}_{60}\text{Fe}_{20}\text{B}_{20}$. Physical Review B, 2019, 99, .	1.1	19
35	Tunable long-distance spin transport in a crystalline antiferromagnetic iron oxide. Nature, 2018, 561, 222-225.	13.7	364
36	Scaling up electrically synchronized spin torque oscillator networks. Scientific Reports, 2018, 8, 13475.	1.6	49

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37	Vortex spin-torque oscillator stabilized by phase locked loop using integrated circuits. AIP Advances, 2017, 7, 056653.	0.6	19
38	Mutual synchronization of spin torque nano-oscillators through a long-range and tunable electrical coupling scheme. Nature Communications, 2017, 8, 15825.	5.8	85
39	Driven energy transfer between coupled modes in spin-torque oscillators. Physical Review B, 2017, 95, .	1.1	3
40	Spintronic based RF components. , 2017, , .		3
41	Hybrid PLL system for spin torque oscillators utilizing custom ICs in 0.18 μ m BiCMOS. , 2017, , .		6
42	Stabilization of phase noise in vortex spin torque nano-oscillators by a Phase Locked Loop. , 2017, , .		0
43	Self-Injection Locking of a Vortex Spin Torque Oscillator by Delayed Feedback. Scientific Reports, 2016, 6, 26849.	1.6	40
44	Enhancing the injection locking range of spin torque oscillators through mutual coupling. Applied Physics Letters, 2016, 109, .	1.5	8
45	Controlling the phase locking of stochastic magnetic bits for ultra-low power computation. Scientific Reports, 2016, 6, 30535.	1.6	32
46	Spin-torque resonant expulsion of the vortex core for an efficient radiofrequency detection scheme. Nature Nanotechnology, 2016, 11, 360-364.	15.6	75
47	Understanding of Phase Noise Squeezing Under Fractional Synchronization of a Nonlinear Spin Transfer Vortex Oscillator. Physical Review Letters, 2015, 115, 017201.	2.9	50
48	Efficient Synchronization of Dipolarly Coupled Vortex-Based Spin Transfer Nano-Oscillators. Scientific Reports, 2015, 5, 17039.	1.6	97
49	Improved Spectral Stability in Spin-Transfer Nano-Oscillators: Single Vortex Versus Coupled Vortices Dynamics. IEEE Transactions on Magnetics, 2015, 51, 1-6.	1.2	11
50	Optimizing magnetodipolar interactions for synchronizing vortex based spin-torque nano-oscillators. Physical Review B, 2015, 92, .	1.1	25
51	Controlling the chirality and polarity of vortices in magnetic tunnel junctions. Applied Physics Letters, 2014, 105, .	1.5	28
52	Nonlinear Behavior and Mode Coupling in Spin-Transfer Nano-Oscillators. Physical Review Applied, 2014, 2, .	1.5	28
53	Perfect and robust phase-locking of a spin transfer vortex nano-oscillator to an external microwave source. Applied Physics Letters, 2014, 104, .	1.5	36
54	Spintronic nano-oscillators: Towards nanoscale and tunable frequency devices. , 2014, , .		9

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55	High emission power and Q factor in spin torque vortex oscillator consisting of FeB free layer. Applied Physics Express, 2014, 7, 063009.	1.1	58
56	Origin of Spectral Purity and Tuning Sensitivity in a Spin Transfer Vortex Nano-Oscillator. Physical Review Letters, 2014, 112, 257201.	2.9	35