Vladislav Demidov

List of Publications by Year
in descending order

63 papers	3,577 citations	147566 31 h-index	128067 60 g-index
63 all docs	63 docs citations	63 times ranked	2449 citing authors

#	Article	IF	Citations
1	Interplay Between Nonlinear Spectral Shift and Nonlinear Damping of Spin Waves in Ultrathin Yttrium Iron Garnet Waveguides. Physical Review Applied, 2022, 17, .	1.5	6
2	Giant nonlinear self-phase modulation of large-amplitude spin waves in microscopic YIG waveguides. Scientific Reports, 2022, 12, 7246.	1.6	8
3	The 2021 Magnonics Roadmap. Journal of Physics Condensed Matter, 2021, 33, 413001.	0.7	287
4	Efficient geometrical control of spin waves in microscopic YIG waveguides. Applied Physics Letters, 2021, 119, .	1.5	3
5	Evidence for spin current driven Bose-Einstein condensation of magnons. Nature Communications, 2021, 12, 6541.	5.8	21
6	Spatial separation of degenerate components of magnon Boseâ€“Einstein condensate by using a local acceleration potential. Scientific Reports, 2020, 10, 14881.	1.6	9
7	Spinâ€“orbit-torque magnonics. Journal of Applied Physics, 2020, 127, .	1.1	41
8	Sub-micrometer near-field focusing of spin waves in ultrathin YIG films. Applied Physics Letters, 2020, 116, .	1.5	8
9	Direct evidence of spatial stability of Bose-Einstein condensate of magnons. Nature Communications, 2020, 11, 1691.	5.8	23
10	Excitation of coherent second sound waves in a dense magnon gas. Scientific Reports, 2019, 9, 9063.	1.6	12
11	Controllable excitation of quasi-linear and bullet modes in a spin-Hall nano-oscillator. Applied Physics Letters, 2019, 114, .	1.5	5
12	Nonlinear spin conductance of yttrium iron garnet thin films driven by large spin-orbit torque. Physical Review B, 2018, 97, .	1.1	35
13	Electrical properties of epitaxial yttrium iron garnet ultrathin films at high temperatures. Physical Review B, 2018, 97, .	1.1	39
14	Spin Hall-induced auto-oscillations in ultrathin YIG grown on Pt. Scientific Reports, 2018, 8, 1269.	1.6	36
15	Effects of spin-orbit torque on the magnon gas. , 2018, , .		0
16	Relation between unidirectional spin Hall magnetoresistance and spin current-driven magnon generation. Applied Physics Letters, 2018, 113, .	1.5	16
17	Spin-wave propagation in ultra-thin YIG based waveguides. Applied Physics Letters, 2017, 110, .	1.5	91
18	Nanoconstriction spin-Hall oscillator with perpendicular magnetic anisotropy. Applied Physics Letters, 2017, 111, .	1.5	20

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19	Magnetic droplet solitons generated by pure spin currents. Physical Review B, 2017, 96, .	1.1	22
20	Chemical potential of quasi-equilibrium magnon gas driven by pure spin current. Nature Communications, 2017, 8, 1579.	5.8	31
21	Direct observation of dynamic modes excited in a magnetic insulator by pure spin current. Scientific Reports, 2016, 6, 32781.	1.6	30
22	Reconfigurable heat-induced spin wave lenses. Applied Physics Letters, 2016, 109, 232407.	1.5	37
23	Route toward high-speed nano-magnonics provided by pure spin currents. Applied Physics Letters, 2016, 109, .	1.5	16
24	High-efficiency control of spin-wave propagation in ultra-thin yttrium iron garnet by the spin-orbit torque. Applied Physics Letters, 2016, 108, .	1.5	79
25	Mutual synchronization of nano-oscillators driven by pure spin current. Applied Physics Letters, 2016, 109, .	1.5	11
26	Generation of coherent spin-wave modes in yttrium iron garnet microdiscs by spinâ€“orbit torque. Nature Communications, 2016, 7, 10377.	5.8	206
27	Nanoconstriction-based spin-Hall oscillators. , 2015, , .		0
28	Spectral linewidth of spin-current nano-oscillators driven by nonlocal spin injection. Applied Physics Letters, 2015, 107, .	1.5	8
29	Excitation of magnetization dynamics by pure spin currents. , 2015, , .		0
30	Spin-current nano-oscillator based on nonlocal spin injection. Scientific Reports, 2015, 5, 8578.	1.6	82
31	Spin Hall controlled magnonic microwaveguides. Applied Physics Letters, 2014, 104, .	1.5	38
32	Nanoconstriction-based spin-Hall nano-oscillator. Applied Physics Letters, 2014, 105, .	1.5	165
33	Dynamic behavior of Ni80Fe20 nanowires with controlled defects. Applied Physics Letters, 2014, 104, 143105.	1.5	7
34	Micromagnetic study of auto-oscillation modes in spin-Hall nano-oscillators. Applied Physics Letters, 2014, 104, 042407.	1.5	42
35	Nanomagnonic devices based on the spin-transfer torque. Nature Nanotechnology, 2014, 9, 509-513.	15.6	130
36	Synchronization of spin Hall nano-oscillators to external microwave signals. Nature Communications, 2014, 5, 3179.	5.8	116

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37	Optimization of Pt-based spin-Hall-effect spintronic devices. Applied Physics Letters, 2013, 102, .	1.5	38
38	Effect of the magnetic film thickness on the enhancement of the spin current by multi-magnon processes. Applied Physics Letters, 2013, 102, .	1.5	10
39	Parametric excitation of magnetization oscillations controlled by pure spin current. Physical Review B, 2012, 86, .	1.1	31
40	Spatially non-uniform ground state and quantized vortices in a two-component Bose-Einstein condensate of magnons. Scientific Reports, 2012, 2, 482.	1.6	75
41	Spin-torque nano-emitters for magnonic applications. Applied Physics Letters, 2012, 100, 162406.	1.5	33
42	Control of Magnetic Fluctuations by Spin Current. Physical Review Letters, 2011, 107, 107204.	2.9	145
43	Generation of the second harmonic by spin waves propagating in microscopic stripes. Physical Review B, 2011, 83, .	1.1	32
44	Resonant frequency multiplication in microscopic magnetic dots. Applied Physics Letters, 2011, 99, .	1.5	21
45	Spin pumping by parametrically excited short-wavelength spin waves. Applied Physics Letters, 2011, 99, .	1.5	49
46	Boseâ€“Einstein condensation of spin wave quanta at room temperature. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 3575-3587.	1.6	8
47	Wide-range control of ferromagnetic resonance by spin Hall effect. Applied Physics Letters, 2011, 99, .	1.5	51
48	Excitation of short-wavelength spin waves in magnonic waveguides. Applied Physics Letters, 2011, 99, 082507.	1.5	97
49	Ginzburg-Landau model of Bose-Einstein condensation of magnons. Physical Review B, 2010, 81, .	1.1	33
50	Mapping of localized spin-wave excitations by near-field Brillouin light scattering. Applied Physics Letters, 2010, 97, .	1.5	53
51	Nonlinear Hybridization of the Fundamental Eigenmodes of Microscopic Ferromagnetic Ellipses. Physical Review Letters, 2010, 104, 217203.	2.9	30
52	Bose-Einstein Condensation of Magnons under Incoherent Pumping. Physical Review Letters, 2009, 102, 187205.	2.9	38
53	Excitation of two spatially separated Bose-Einstein condensates of magnons. Physical Review B, 2009, 80, .	1.1	13
54	Nonlinear Propagation of Spin Waves in Microscopic Magnetic Stripes. Physical Review Letters, 2009, 102, 177207.	2.9	57

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55	Magnon Kinetics and Bose-Einstein Condensation Studied in Phase Space. Physical Review Letters, 2008, 101, 257201.	2.9	54
56	Monochromatic microwave radiation from the system of strongly excited magnons. Applied Physics Letters, 2008, 92, .	1.5	22
57	Quantum coherence due to Boseâ€“Einstein condensation of parametrically driven magnons. New Journal of Physics, 2008, 10, 045029.	1.2	25
58	Observation of Spontaneous Coherence in Bose-Einstein Condensate of Magnons. Physical Review Letters, 2008, 100, 047205.	2.9	111
59	Direct observation of Boseâ€“Einstein condensation in a parametrically driven gas of magnons. New Journal of Physics, 2007, 9, 64-64.	1.2	25
60	Thermalization of a Parametrically Driven Magnon Gas Leading to Bose-Einstein Condensation. Physical Review Letters, 2007, 99, 037205.	2.9	89
61	Boseâ€“Einstein condensation of quasi-equilibrium magnons at room temperature under pumping. Nature, 2006, 443, 430-433.	13.7	732
62	Formation of longitudinal patterns and dimensionality crossover of nonlinear spin waves in ferromagnetic stripes. Physical Review B, 2006, 74, .	1.1	12
63	Some special features of the transition to chaos in the self-modulation of surface spin waves. JETP Letters, 1997, 66, 261-265.	0.4	13