Vladislav Demidov

List of Publications by Citations

60 papers	2,705 citations	26 h-index	51 g-index
63 ext. papers	3,178 ext. citations	6.1 avg, IF	4.78 L-index

#	Paper	IF	Citations
60	Bose-Einstein condensation of quasi-equilibrium magnons at room temperature under pumping. *Nature*, **2006**, 443, 430-3	50.4	598
59	Generation of coherent spin-wave modes in yttrium iron garnet microdiscs by spin-orbit torque. *Nature Communications*, **2016**, 7, 10377	17.4	173
58	Control of magnetic fluctuations by spin current. *Physical Review Letters*, **2011**, 107, 107204	7.4	124
57	Nanoconstriction-based spin-Hall nano-oscillator. *Applied Physics Letters*, **2014**, 105, 172410	3.4	117
56	Nanomagnonic devices based on the spin-transfer torque. *Nature Nanotechnology*, **2014**, 9, 509-13	28.7	112
55	Synchronization of spin Hall nano-oscillators to external microwave signals. *Nature Communications* , **2014**, 5, 3179	17.4	96
54	Observation of spontaneous coherence in Bose-Einstein condensate of magnons. *Physical Review Letters*, **2008**, 100, 047205	7.4	95
53	Excitation of short-wavelength spin waves in magnonic waveguides. *Applied Physics Letters*, **2011**, 99, 082507	3.4	82
52	Thermalization of a parametrically driven magnon gas leading to Bose-Einstein condensation. *Physical Review Letters*, **2007**, 99, 037205	7.4	76
51	Spin-current nano-oscillator based on nonlocal spin injection. *Scientific Reports*, **2015**, 5, 8578	4.9	73
50	The 2021 Magnonics Roadmap. *Journal of Physics Condensed Matter*, **2021**, 33,	1.8	69
49	Spatially non-uniform ground state and quantized vortices in a two-component Bose-Einstein condensate of magnons. *Scientific Reports*, **2012**, 2, 482	4.9	63
48	High-efficiency control of spin-wave propagation in ultra-thin yttrium iron garnet by the spin-orbit torque. *Applied Physics Letters*, **2016**, 108, 172406	3.4	63
47	Spin-wave propagation in ultra-thin YIG based waveguides. *Applied Physics Letters*, **2017**, 110, 092408	3.4	62
46	Nonlinear propagation of spin waves in microscopic magnetic stripes. *Physical Review Letters*, **2009**, 102, 177207	7.4	51
45	Magnon kinetics and Bose-Einstein condensation studied in phase space. *Physical Review Letters*, **2008**, 101, 257201	7.4	48
44	Wide-range control of ferromagnetic resonance by spin Hall effect. *Applied Physics Letters*, **2011**, 99, 172501	3.4	47

43	Mapping of localized spin-wave excitations by near-field Brillouin light scattering. *Applied Physics Letters*, **2010**, 97, 152502	3.4	46
42	Spin pumping by parametrically excited short-wavelength spin waves. *Applied Physics Letters*, **2011**, 99, 162502	3.4	44
41	Micromagnetic study of auto-oscillation modes in spin-Hall nano-oscillators. *Applied Physics Letters*, **2014**, 104, 042407	3.4	36
40	Spin Hall controlled magnonic microwaveguides. *Applied Physics Letters*, **2014**, 104, 152402	3.4	33
39	Optimization of Pt-based spin-Hall-effect spintronic devices. *Applied Physics Letters*, **2013**, 102, 132402	3.4	33
38	Bose-Einstein condensation of magnons under incoherent pumping. *Physical Review Letters*, **2009**, 102, 187205	7.4	32
37	Spin-torque nano-emitters for magnonic applications. *Applied Physics Letters*, **2012**, 100, 162406	3.4	31
36	Nonlinear hybridization of the fundamental eigenmodes of microscopic ferromagnetic ellipses. *Physical Review Letters*, **2010**, 104, 217203	7.4	29
35	Ginzburg-Landau model of Bose-Einstein condensation of magnons. *Physical Review B*, **2010**, 81,	3.3	29
34	Direct observation of dynamic modes excited in a magnetic insulator by pure spin current. *Scientific Reports*, **2016**, 6, 32781	4.9	26
33	Reconfigurable heat-induced spin wave lenses. *Applied Physics Letters*, **2016**, 109, 232407	3.4	26
32	Parametric excitation of magnetization oscillations controlled by pure spin current. *Physical Review B*, **2012**, 86,	3.3	25
31	Generation of the second harmonic by spin waves propagating in microscopic stripes. *Physical Review B*, **2011**, 83,	3.3	25
30	Spin Hall-induced auto-oscillations in ultrathin YIG grown on Pt. *Scientific Reports*, **2018**, 8, 1269	4.9	24
29	Chemical potential of quasi-equilibrium magnon gas driven by pure spin current. *Nature Communications*, **2017**, 8, 1579	17.4	24
28	Nonlinear spin conductance of yttrium iron garnet thin films driven by large spin-orbit torque. *Physical Review B*, **2018**, 97,	3.3	23
27	Quantum coherence due to Bose–Einstein condensation of parametrically driven magnons. *New Journal of Physics*, **2008**, 10, 045029	2.9	21
26	Direct observation of Bose–Einstein condensation in a parametrically driven gas of magnons. *New Journal of Physics*, **2007**, 9, 64-64	2.9	21

25	Electrical properties of epitaxial yttrium iron garnet ultrathin films at high temperatures. *Physical Review B*, **2018**, 97,	3.3	20
24	Resonant frequency multiplication in microscopic magnetic dots. *Applied Physics Letters*, **2011**, 99, 012505	3.4	18
23	Monochromatic microwave radiation from the system of strongly excited magnons. *Applied Physics Letters*, **2008**, 92, 162510	3.4	15
22	Spin-orbit-torque magnonics. *Journal of Applied Physics*, **2020**, 127, 170901	2.5	14
21	Magnetic droplet solitons generated by pure spin currents. *Physical Review B*, **2017**, 96,	3.3	14
20	Route toward high-speed nano-magnonics provided by pure spin currents. *Applied Physics Letters*, **2016**, 109, 252401	3.4	13
19	Direct evidence of spatial stability of Bose-Einstein condensate of magnons. *Nature Communications*, **2020**, 11, 1691	17.4	12
18	Nanoconstriction spin-Hall oscillator with perpendicular magnetic anisotropy. *Applied Physics Letters*, **2017**, 111, 032405	3.4	12
17	Excitation of two spatially separated Bose-Einstein condensates of magnons. *Physical Review B*, **2009**, 80,	3.3	12
16	Formation of longitudinal patterns and dimensionality crossover of nonlinear spin waves in ferromagnetic stripes. *Physical Review B*, **2006**, 74,	3.3	12
15	Some special features of the transition to chaos in the self-modulation of surface spin waves. *JETP Letters*, **1997**, 66, 261-265	1.2	11
14	Excitation of coherent second sound waves in a dense magnon gas. *Scientific Reports*, **2019**, 9, 9063	4.9	10
13	Relation between unidirectional spin Hall magnetoresistance and spin current-driven magnon generation. *Applied Physics Letters*, **2018**, 113, 062403	3.4	9
12	Effect of the magnetic film thickness on the enhancement of the spin current by multi-magnon processes. *Applied Physics Letters*, **2013**, 102, 252409	3.4	9
11	Mutual synchronization of nano-oscillators driven by pure spin current. *Applied Physics Letters*, **2016**, 109, 162402	3.4	9
10	Bose-Einstein condensation of spin wave quanta at room temperature. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2011**, 369, 3575-87	3	8
9	Sub-micrometer near-field focusing of spin waves in ultrathin YIG films. *Applied Physics Letters*, **2020**, 116, 062401	3.4	7
8	Spectral linewidth of spin-current nano-oscillators driven by nonlocal spin injection. *Applied Physics Letters*, **2015**, 107, 202402	3.4	5

7	Dynamic behavior of Ni80Fe20 nanowires with controlled defects. *Applied Physics Letters*, **2014**, 104, 143105	3.4	5
6	Controllable excitation of quasi-linear and bullet modes in a spin-Hall nano-oscillator. *Applied Physics Letters*, **2019**, 114, 042403	3.4	4
5	Spatial separation of degenerate components of magnon Bose-Einstein condensate by using a local acceleration potential. *Scientific Reports*, **2020**, 10, 14881	4.9	4
4	Evidence for spin current driven Bose-Einstein condensation of magnons. *Nature Communications*, **2021**, 12, 6541	17.4	3
3	Efficient geometrical control of spin waves in microscopic YIG waveguides. *Applied Physics Letters*, **2021**, 119, 182401	3.4	1
2	Interplay Between Nonlinear Spectral Shift and Nonlinear Damping of Spin Waves in Ultrathin Yttrium Iron Garnet Waveguides. *Physical Review Applied*, **2022**, 17,	4.3	1
1	Giant nonlinear self-phase modulation of large-amplitude spin waves in microscopic YIG waveguides.. *Scientific Reports*, **2022**, 12, 7246	4.9	0