

Alexandr V Sadovnikov

List of Publications by Year in descending order

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127
papers

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147726

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all docs

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docs citations

131
times ranked

1847
citing authors

#	ARTICLE	IF	CITATIONS
1	Tunable Fano Resonances in Irregular Magnonic Structure. IEEE Transactions on Magnetics, 2022, 58, 1-5.	1.2	2
2	Tunable Spin Wave Propagation in YIG/Fe-Rh Stripe. IEEE Transactions on Magnetics, 2022, 58, 1-4.	1.2	0
3	Surface Spin-Wave Propagation in the Orthogonal Transverse Junction of YIG-Based Magnonic Stripes. IEEE Transactions on Magnetics, 2022, 58, 1-4.	1.2	1
4	Spin wave filtration by resonances in the sidewalls of corrugated yttrium-iron garnet films. Journal of Magnetism and Magnetic Materials, 2022, 545, 168786.	1.0	3
5	Dzyaloshinskii-Moriya interaction determined from spin wave nonreciprocity and magnetic bubble asymmetry in Pt/Co/Ir/Co/Pt synthetic ferrimagnets. Journal of Physics Condensed Matter, 2022, 34, 085803.	0.7	2
6	Modulation of interfacial magnetic relaxation timeframes by partially uncoupled exchange bias. Journal Physics D: Applied Physics, 2022, 55, 105001.	1.3	5
7	Zigzag domains caused by strain-induced anisotropy of the Dzyaloshinskii-Moriya interaction. Physical Review B, 2022, 105, .	1.1	4
8	Nonlinear signal processing with magnonic superlattice with two periods. Applied Physics Letters, 2022, 120, 122407.	1.5	3
9	Strain-Tuned Spin-Wave Interference in Micro- and Nanoscale Magnonic Interferometers. Nanomaterials, 2022, 12, 1520.	1.9	5
10	Highly-magnetic mineral protein-tannin vehicles with anti-breast cancer activity. Materials Chemistry Frontiers, 2021, 5, 2007-2018.	3.2	13
11	Effect of Ion Irradiation on the Magnetic Properties of CoPt Films. Physics of the Solid State, 2021, 63, 386-394.	0.2	7
12	Voltage-controlled spin-wave intermodal coupling in lateral ensembles of magnetic stripes with patterned piezoelectric layer. AIP Advances, 2021, 11, 035316.	0.6	0
13	Multimode unidirectional spin-wave coupling in an array of non-identical magnonic crystals near band gap frequencies. Journal Physics D: Applied Physics, 2021, 54, 245001.	1.3	3
14	Spin waves transport in 3D magnonic waveguides. AIP Advances, 2021, 11, 035024.	0.6	1
15	Magnonic band structure in CoFeB/Ta/NiFe meander-shaped magnetic bilayers. Applied Physics Letters, 2021, 118, .	1.5	16
16	Investigation of self-nucleated skyrmion states in the ferromagnetic/nonmagnetic multilayer dot. Applied Physics Letters, 2021, 118, .	1.5	11
17	Application concepts for ultrafast laser-induced skyrmion creation and annihilation. Applied Physics Letters, 2021, 118, .	1.5	23
18	Ferromagnetic Resonance in Permalloy Metasurfaces. Applied Magnetic Resonance, 2021, 52, 749-758.	0.6	4

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19	Using Mandelstamâ€“Brillouin Spectroscopy to Study Energy-Efficient Devices for Processing Information Signals on the Basis of Magnon Straintronics. Bulletin of the Russian Academy of Sciences: Physics, 2021, 85, 595-598.	0.1	2
20	Strain-mediated tunability of spin-wave spectra in the adjacent magnonic crystal stripes with piezoelectric layer. Applied Physics Letters, 2021, 118, .	1.5	11
21	The 2021 Magnonics Roadmap. Journal of Physics Condensed Matter, 2021, 33, 413001.	0.7	287
22	Magnonic Band Structure in Vertical Meander-Shaped $\text{Co}_{40}\text{Fe}_{60}$ Nanodisks. Applied Physics Letters, 2021, 118, .	1.5	17
23	Skyrmion Formation in Nanodisks Using Magnetic Force Microscopy Tip. Nanomaterials, 2021, 11, 2627.	1.9	3
24	Space-Quasiperiodic and Time-Chaotic Parametric Patterns in a Magnonic Quasicrystal Active Ring Resonator. Physical Review Applied, 2021, 16, .	1.5	3
25	Modification of the Interfacial Dzyaloshinskiiâ€“Moriya Interaction in Cobalt/Heavy Metal Films Irradiated with Helium Ions. Physics of the Solid State, 2021, 63, 1373-1377.	0.2	0
26	Electric-Field-Controlled Spin-Wave Coupling in Lateral Ensembles of Magnetic Microstructures. Physics of the Solid State, 2021, 63, 1356-1360.	0.2	0
27	Lateral Spin-Wave Transport in a System of Nonidentical Magnonic-Crystal Microwave Guides. Physics of the Solid State, 2021, 63, 1361-1365.	0.2	0
28	Magnonâ€“Phonon Interaction in the Transition Layer of an Epitaxial YIG Film. Physics of the Solid State, 2021, 63, 1569-1573.	0.2	0
29	Intensity and magnetization angle reconfigurable lateral spin-wave coupling and transport. Journal of Magnetism and Magnetic Materials, 2020, 500, 166344.	1.0	4
30	Spin waves in meander shaped YIG film: Toward 3D magnonics. Applied Physics Letters, 2020, 117, .	1.5	21
31	Enhancement of perpendicular magnetic anisotropy and Dzyaloshinskiiâ€“Moriya interaction in thin ferromagnetic films by atomic-scale modulation of interfaces. NPG Asia Materials, 2020, 12, .	3.8	28
32	Spin-waves generation at the thickness step of yttrium iron garnet film. Applied Physics Letters, 2020, 117, .	1.5	6
33	Excitation of Terahertz Magnons in Antiferromagnetic Nanostructures: Theory and Experiment. Journal of Experimental and Theoretical Physics, 2020, 131, 71-82.	0.2	6
34	Magnetic Direct-Write Skyrmion Nanolithography. ACS Nano, 2020, 14, 14960-14970.	7.3	17
35	Band structure formation in magnonic Bragg gratings superlattice. Journal Physics D: Applied Physics, 2020, 53, 395002.	1.3	3
36	All-Dielectric Nanophotonics Enables Tunable Excitation of the Exchange Spin Waves. Nano Letters, 2020, 20, 5259-5266.	4.5	38

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55	Dynamic testing equipment for evaluation of time consumption for the forms of reasoning of a human-operator. AIP Conference Proceedings, 2019, , .	0.3	0
56	Dynamic Imaging of the Delay- and Tilt-Free Motion of Néel Domain Walls in Perpendicularly Magnetized Superlattices. Nano Letters, 2019, 19, 375-380.	4.5	13
57	Spin-wave intermodal coupling in the interconnection of magnonic units. Applied Physics Letters, 2018, 112, .	1.5	47
58	Spin wave steering in three-dimensional magnonic networks. Applied Physics Letters, 2018, 112, 122404.	1.5	40
59	Nonlinear Spin Wave Effects in the System of Lateral Magnonic Structures. JETP Letters, 2018, 107, 25-29.	0.4	38
60	Integrated magnonic networks based on the lateral magnonic stripes and magnonic crystals.. , 2018, , .		0
61	Interface roughness driven magnetic anisotropy and Dzyaloshinskii-Moriya interaction in thin films with broken structural inversion symmetry. , 2018, , .		0
62	Neuromorphic Calculations Using Lateral Arrays of Magnetic Microstructures with Broken Translational Symmetry. JETP Letters, 2018, 108, 312-317.	0.4	24
63	Abrasive wear of Hilong BoTN hardfacings. IOP Conference Series: Materials Science and Engineering, 2018, 307, 012038.	0.3	8
64	3D magnonic crystals.. , 2018, , .		0
65	Spin wave coupling in strain-tuned magnonic waveguide and reconfigurable magnonic crystals.. , 2018, , .		0
66	Volume Magnetostatic Spin Waves in 3D Ferromagnetic Structures. Journal of Communications Technology and Electronics, 2018, 63, 1431-1438.	0.2	5
67	Nonlinear Lateral Spin-Wave Transport in Planar Magnonic Networks. IEEE Magnetics Letters, 2018, 9, 1-5.	0.6	3
68	Spin-Wave Drop Filter Based on Asymmetric Side-Coupled Magnonic Crystals. Physical Review Applied, 2018, 9, .	1.5	55
69	Functional Magnetic Metamaterials for Spintronics. Nanoscience and Technology, 2018, , 221-245.	1.5	2
70	Enhanced interfacial Dzyaloshinskii-Moriya interaction and isolated skyrmions in the inversion-symmetry-broken Ru/Co/W/Ru films. Applied Physics Letters, 2018, 112, . Role of the Heavy Metal's Crystal Phase in Oscillations of Perpendicular Magnetic Anisotropy and the	1.5	36
71	Interfacial Dzyaloshinskii-Moriya Interaction in $W_{1-x}Co_x$ Perpendicularly Magnetized $Fe_{1-x}MgO_x$ Films. Physical Review Applied, 2018, 9, .	1.5	29
72	Magnon Straintronics: Reconfigurable Spin-Wave Routing in Strain-Controlled Bilateral Magnetic Stripes. Physical Review Letters, 2018, 120, 257203.	2.9	131

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73	Nonlinear spin-wave propagation in the nonidentical magnonic structures. Izvestiya Vysshikh Uchebnykh Zavedeniy Prikladnaya Nelineynaya Dinamika, 2018, 26, 59-67.	0.1	0
74	Spontaneous nucleation and topological stabilization of skyrmions in magnetic nanodisks with the interfacial Dzyaloshinskiiâ€Moriya interaction. Journal of Magnetism and Magnetic Materials, 2017, 429, 221-226.	1.0	13
75	Voltage-Controlled Spin-Wave Coupling in Adjacent Ferromagnetic-Ferroelectric Heterostructures. Physical Review Applied, 2017, 7, .	1.5	86
76	Spatial dynamics of hybrid electromagnetic spin waves in a lateral multiferroic microwaveguide. JETP Letters, 2017, 105, 364-369.	0.4	7
77	Splitting of Spin Waves in Strain Reconfigurable Magnonic Stripe. IEEE Transactions on Magnetics, 2017, 53, 1-4.	1.2	3
78	Spin-Wave Switching in the Side-Coupled Magnonic Stripes. IEEE Transactions on Magnetics, 2017, 53, 1-4.	1.2	5
79	Toward nonlinear magnonics: Intensity-dependent spin-wave switching in insulating side-coupled magnetic stripes. Physical Review B, 2017, 96, .	1.1	95
80	Spin wave propagation in a uniformly biased curved magnonic waveguide. Physical Review B, 2017, 96, .	1.1	70
81	Coupled spin waves in magnetic waveguides induced by elastic deformations in YIGâ€piezoelectric structures. JETP Letters, 2017, 106, 465-469.	0.4	3
82	Pinning and hysteresis in the field dependent diameter evolution of skyrmions in Pt/Co/Ir superlattice stacks. Scientific Reports, 2017, 7, 15125.	1.6	61
83	Spin-Wave Transport Along In-Plane Magnetized Laterally Coupled Magnonic Stripes. IEEE Magnetics Letters, 2017, 8, 1-4.	0.6	9
84	Coupled Spin Waves in Magnonic Waveguides. , 2017, , 47-76.		1
85	Influence of periodic ferroelectric layer on band gap's width in periodic ferrite â€” Periodic ferroelectric structure. , 2016, , .		0
86	Directional RF coupler with dual tunability based on laterally coupled multiferroic structure. , 2016, , .		0
87	Tunable RF coupler based on laterally coupled magnetic microwaveguides. , 2016, , .		0
88	Band gap formation and control in coupled periodic ferromagnetic structures. Journal of Applied Physics, 2016, 120, .	1.1	28
89	Frequency selective tunable spin wave channeling in the magnonic network. Applied Physics Letters, 2016, 108, .	1.5	46
90	Spatialâ€frequency selection of magnetostatic waves in a two-dimensional magnonic crystal lattice. JETP Letters, 2016, 104, 563-567.	0.4	32

#	ARTICLE	IF	CITATIONS
91	Nonlinear spin wave coupling in adjacent magnonic crystals. Applied Physics Letters, 2016, 109, .	1.5	56
92	Brillouin spectroscopy of nonlinear magnetoacoustic resonances in a layered YIG/GGG structure. Bulletin of the Russian Academy of Sciences: Physics, 2016, 80, 1242-1247.	0.1	4
93	The influence of a metal on transverse characteristics of hybrid waves in a layered ferriteâ€“ferroelectric structure. Technical Physics Letters, 2016, 42, 486-490.	0.2	2
94	Nanoconstriction-based spin-Hall oscillators. , 2015, , .		0
95	Directional multimode coupler for planar magnonics: Side-coupled magnetic stripes. Applied Physics Letters, 2015, 107, .	1.5	82
96	Brillouin light scattering study of transverse mode coupling in confined yttrium iron garnet/barium strontium titanate multiferroic. Journal of Applied Physics, 2015, 118, .	1.1	39
97	Generation of propagating spin waves from regions of increased dynamic demagnetising field near magnetic antidots. Applied Physics Letters, 2015, 107, 162401.	1.5	39
98	Nonreciprocal propagation of hybrid electromagnetic waves in a layered ferriteâ€“ferroelectric structure with a finite width. JETP Letters, 2015, 102, 142-147.	0.4	16
99	Band gap control in a line-defect magnonic crystal waveguide. Applied Physics Letters, 2015, 107, .	1.5	16
100	Magnonic beam splitter: The building block of parallel magnonic circuitry. Applied Physics Letters, 2015, 106, .	1.5	81
101	Magnonics: a new research area in spintronics and spin wave electronics. Physics-Uspekhi, 2015, 58, 1002-1028.	0.8	174
102	Dipolar field-induced spin-wave waveguides for spin-torque magnonics. Applied Physics Letters, 2015, 106, .	1.5	52
103	Spin-current nano-oscillator based on nonlocal spin injection. Scientific Reports, 2015, 5, 8578.	1.6	82
104	Towards graded-index magnonics: Steering spin waves in magnonic networks. Physical Review B, 2015, 92, .	1.1	110
105	Field-Controlled Phase-Rectified Magnonic Multiplexer. IEEE Transactions on Magnetics, 2015, 51, 1-4.	1.2	43
106	Magnetostatic surface waves in a ferriteâ€“ferromagnetic metal layered medium based on yttrium iron garnet epitaxial films and TbCo ₂ /FeCo nanostructures. Journal of Communications Technology and Electronics, 2015, 60, 999-1005.	0.2	5
107	Brillouin Light Scattering Spectroscopy of Magneto-Acoustic Resonances In a Thin-Film Garnet Resonator. IEEE Magnetics Letters, 2015, 6, 1-4.	0.6	14
108	Application of color image processing and low-coherent optical computer tomography in evaluation of adhesive interfaces of dental restorations. , 2015, , .		0

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109	Tunable Bandgaps in Layered Structure Magnonic Crystal in Ferroelectric. IEEE Transactions on Magnetics, 2015, 51, 1-4.	1.2	19
110	Field-controlled phase-rectified magnonic multiplexor. , 2015, , .		1
111	Conversion of magnetostatic spin waves propagating through a junction of magnonic waveguides. , 2015, , .		0
112	Band gap control in periodic structure with magnonic crystal and ferroelectric. , 2015, , .		0
113	Spatial and Temporal Dynamics of Dissipative Parametric Solitons in a Ferromagnetic Film Active Ring Resonator. IEEE Transactions on Magnetics, 2014, 50, 1-4.	1.2	4
114	Nanoconstriction-based spin-Hall nano-oscillator. Applied Physics Letters, 2014, 105, .	1.5	165
115	Multimode Propagation of Magnetostatic Waves in a Width-Modulated Yttrium-Iron-Garnet Waveguide. IEEE Magnetics Letters, 2014, 5, 1-4.	0.6	46
116	Magnonic Bandgap Control in Coupled Magnonic Crystals. IEEE Transactions on Magnetics, 2014, 50, 1-4.	1.2	25
117	Nonlinear Magnetostatic Wave Propagation through One Dimensional Finite Magnonic Crystals. Solid State Phenomena, 2014, 215, 394-399.	0.3	3
118	The electrodynamic characteristics of a finite-width metal/dielectric/ferroelectric/dielectric/metal layer structure. Journal of Communications Technology and Electronics, 2014, 59, 914-919.	0.2	31
119	Electrodynamical properties and modes of finite-width planar ferrite waveguide. Journal of Physics: Conference Series, 2014, 572, 012064.	0.3	4
120	Studying the spectra of thermal magnons in composite materials with embedded magnetite nanoparticles using Brillouin light-scattering spectroscopy. Technical Physics Letters, 2013, 39, 715-718.	0.2	5
121	Spatiotemporal dynamics of magnetostatic and spin waves in a transversely confined ferrite waveguide. Bulletin of the Russian Academy of Sciences: Physics, 2013, 77, 1429-1431.	0.1	11
122	Nonreciprocity of surface magnetostatic waves in 1D magnonic crystals with non-symmetrical load. , 2012, , .		0
123	Self-Generation of Chaotic Dissipative Soliton Trains in Active Ring Resonator With 1-D Magnonic Crystal. IEEE Transactions on Magnetics, 2011, 47, 3716-3719.	1.2	27
124	Analysis of the electromagnetic wave propagation in the nonlinear Bragg grating structure. , 2010, , .		0
125	The dynamics of the electromagnetic wave propagation in the nonlinear Bragg grating structure. Proceedings of SPIE, 2010, , .	0.8	0
126	Dynamics of electromagnetic wave propagation near band gap in nonlinear Bragg grating structure. , 2010, , .		0

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127	Multimode Surface Magnetostatic Wave Propagation in Irregular Planar YIG Waveguide. Solid State Phenomena, 0, 215, 389-393.	0.3	17