Boris A Ivanov

List of Publications by Year in descending order

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267 papers 10,782 citations

41344 49 h-index 97 g-index

273 all docs

273 docs citations

times ranked

273

6491 citing authors

#	Article	IF	CITATIONS
1	Magnetic Solitons. Physics Reports, 1990, 194, 117-238.	25.6	735
2	Ultrafast heating as a sufficient stimulus for magnetization reversal in a ferrimagnet. Nature Communications, 2012, 3, 666.	12.8	588
3	Cratering Records in the Inner Solar System in Relation to the Lunar Reference System. Space Science Reviews, 2001, 96, 55-86.	8.1	520
4	Eigenfrequencies of vortex state excitations in magnetic submicron-size disks. Journal of Applied Physics, 2002, 91, 8037.	2.5	510
5	Recent and episodic volcanic and glacial activity on Mars revealed by the High Resolution Stereo Camera. Nature, 2004, 432, 971-979.	27.8	433
6	IMPACT CRATER COLLAPSE. Annual Review of Earth and Planetary Sciences, 1999, 27, 385-415.	11.0	428
7	Mars/Moon Cratering Rate Ratio Estimates. Space Science Reviews, 2001, 96, 87-104.	8.1	415
8	Inertia-driven spin switching in antiferromagnets. Nature Physics, 2009, 5, 727-731.	16.7	306
9	Directional control of spin-wave emission by spatially shaped light. Nature Photonics, 2012, 6, 662-666.	31.4	219
10	Spin Oscillations in Antiferromagnetic NiO Triggered by Circularly Polarized Light. Physical Review Letters, 2010, 105, 077402.	7.8	217
11	Ultrafast Spin Dynamics in Multisublattice Magnets. Physical Review Letters, 2012, 108, 057202.	7.8	217
12	Antiferromagnetic THz-frequency Josephson-like Oscillator Driven by Spin Current. Scientific Reports, 2017, 7, 43705.	3.3	207
13	Numerical Modeling of the Largest Terrestrial Meteorite Craters. Solar System Research, 2005, 39, 381-409.	0.7	162
14	Martian Meteorite Launch: High-Speed Ejecta from Small Craters. Science, 2002, 298, 1752-1756.	12.6	157
15	Launch of martian meteorites in oblique impacts. Icarus, 2004, 171, 84-101.	2.5	157
16	Impact winter and the Cretaceous/Tertiary extinctions: Results of a Chicxulub asteroid impact model. Earth and Planetary Science Letters, 1994, 128, 719-725.	4.4	149
17	Numerical modelling of the impact crater depth–diameter dependence in an acoustically fluidized target. Planetary and Space Science, 2003, 51, 831-845.	1.7	118
18	Dynamics of domain walls in weak ferromagnets. Uspekhi Fizicheskikh Nauk, 1985, 28, 563-588.	0.3	116

#	Article	IF	Citations
19	Ultrafast control of magnetic interactions via light-driven phonons. Nature Materials, 2021, 20, 607-611.	27.5	112
20	Impacts do not initiate volcanic eruptions: Eruptions close to the crater. Geology, 2003, 31, 869.	4.4	111
21	Magnon modes and magnon-vortex scattering in two-dimensional easy-plane ferromagnets. Physical Review B, 1998, 58, 8464-8474.	3.2	100
22	Magnon modes for thin circular vortex-state magnetic dots. Applied Physics Letters, 2002, 81, 1261-1263.	3.3	96
23	High Frequency Modes in Vortex-State Nanomagnets. Physical Review Letters, 2005, 94, 027205.	7.8	96
24	Spectral dependence of photoinduced spin precession in DyFeO <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mrow></mml:mrow> mml:mrow></mml:msub></mml:mrow></mml:math> . Physical	3.2	91
25	Review B, 2011, 84, . The phase diagram of CaCO3 in relation to shock compression and decomposition. Physics of the Earth and Planetary Interiors, 2002, 129, 131-143.	1.9	88
26	Transformation of spin current by antiferromagnetic insulators. Physical Review B, 2016, 93, .	3.2	88
27	Effective field theory for theS=1quantum nematic. Physical Review B, 2003, 68, .	3.2	85
28	Excitation of Spin Dynamics by Spin-Polarized Current in Vortex State Magnetic Disks. Physical Review Letters, 2007, 99, 247208.	7.8	83
29	Excitations in vortex-state permalloy dots. Physical Review B, 2005, 72, .	3.2	81
30	The cratering record, chronology and surface ages of (4) Vesta in comparison to smaller asteroids and the ages of HED meteorites. Planetary and Space Science, 2014, 103, 104-130.	1.7	80
31	Spin dynamics of antiferromagnets under action of femtosecond laser pulses (Review Article). Low Temperature Physics, 2014, 40, 91-105.	0.6	73
32	Theoretical analysis of secondary cratering on Mars and an image-based study on the Cerberus Plains. Icarus, 2009, 200, 406-417.	2.5	69
33	Geologic evolution and cratering history of Mercury. Planetary and Space Science, 2001, 49, 1507-1521.	1.7	68
34	Collective modes for an array of magnetic dots in the vortex state. Physical Review B, 2006, 74, .	3.2	65
35	Earth/Moon impact rate comparison: Searching constraints for lunar secondary/primary cratering proportion. Icarus, 2006, 183, 504-507.	2.5	63
	Control of the Ultrafast Photoinduced Magnetization across the Morin Transition in mml:math		

36 Control of the ditrarast Photoinduced Magnetization across the Morin Transition in Amml: math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:

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37	Magnetic vortices î—, The microscopic analogs of magnetic bubbles. Journal of Magnetism and Magnetic Materials, 1990, 88, 116-120.	2.3	62
38	Basin-forming impacts: Reconnaissance modeling. , 2010, , .		62
39	Sudbury impact event: Cratering mechanics and thermal history. , 1999, , .		61
40	Coherent spin-wave transport in an antiferromagnet. Nature Physics, 2021, 17, 1001-1006.	16.7	61
41	Controlling the anisotropy of a van der Waals antiferromagnet with light. Science Advances, 2021, 7, .	10.3	59
42	Soliton relaxation in magnets. Physical Review B, 1997, 56, 619-635.	3.2	55
43	Constraints on Vesta's interior structure using gravity and shape models from the Dawn mission. Icarus, 2014, 240, 146-160.	2.5	55
44	Dynamic solitons in antiferromagnets (Review Article). Low Temperature Physics, 2018, 44, 618-633.	0.6	54
45	Solitons with Internal Degrees of Freedom in 1D Heisenberg Antiferromagnets. Physical Review Letters, 1995, 74, 1859-1862.	7.8	53
46	Magnon modes for a circular two-dimensional easy-plane ferromagnet in the cone state. Physical Review B, 2002, 65, .	3.2	51
47	Phenomenological theory of Bloch point relaxation. Journal of Magnetism and Magnetic Materials, 1993, 118, 373-378.	2.3	50
48	Normal Modes and Soliton Resonance for Vortices in 2D Classical Antiferromagnets. Physical Review Letters, 1996, 76, 511-514.	7.8	50
49	Spin excitation frequencies in magnetostatically coupled arrays of vortex state circular Permalloy dots. Applied Physics Letters, 2010, 97, 132501.	3.3	50
50	Core-Core Dynamics in Spin Vortex Pairs. Physical Review Letters, 2012, 109, 097204.	7.8	50
51	Mesoscopic antiferromagnets: statics, dynamics, and quantum tunneling (Review). Low Temperature Physics, 2005, 31, 635-667.	0.6	49
52	Shock Metamorphism of Bosumtwi Impact Crater Rocks, Shock Attenuation, and Uplift Formation. Science, 2008, 322, 1678-1681.	12.6	49
53	Two-dimensional soliton dynamics in ferromagnets. Physics Letters, Section A: General, Atomic and Solid State Physics, 1989, 141, 89-94.	2.1	48
54	Numerical modeling of the formation of large impact craters. , 2002, , .		48

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55	Dynamics of vortices and their contribution to the response functions of classical quasi-two-dimensional easy-plane antiferromagnet. Physical Review Letters, 1994, 72, 404-407.	7.8	47
56	Starting conditions for hydrothermal systems underneath Martian craters: Hydrocode modeling. , 2005, , .		47
57	Geologically recent tectonic, volcanic and fluvial activity on the eastern flank of the Olympus Mons volcano, Mars. Geophysical Research Letters, 2006, 33, .	4.0	47
58	Spin-wave edge modes in finite arrays of dipolarly coupled magnetic nanopillars. Physical Review B, 2014, 90, .	3.2	47
59	Internal modes and magnon scattering on topological solitons in two-dimensional easy-axis ferromagnets. Physical Review B, 2001, 64, .	3.2	45
60	Atmospheric entry of large meteoroids: implication to Titan. Planetary and Space Science, 1997, 45, 993-1007.	1.7	44
61	Ultrafast spin dynamics and spintronics for ferrimagnets close to the spin compensation point (Review). Low Temperature Physics, 2019, 45, 935-963.	0.6	44
62	Twoâ€dimensional numerical modeling of the Rheasilvia impact formation. Journal of Geophysical Research E: Planets, 2013, 118, 1545-1557.	3.6	43
63	Stabilization of Long-Range Magnetic Order in 2D Easy-Plane Antiferromagnets. Physical Review Letters, 1996, 77, 386-389.	7.8	40
64	Excitation of coupled spin–orbit dynamics in cobalt oxide by femtosecond laser pulses. Nature Communications, 2017, 8, 638.	12.8	39
65	Nonlinear waves in antiferromagnets. Solid State Communications, 1980, 34, 545-547.	1.9	38
66	Surface Josephson Plasma Waves in Layered Superconductors above the Plasma Frequency: Evidence for a Negative Index of Refraction. Physical Review Letters, 2010, 104, 187003.	7.8	37
67	Spin Nematic and Antinematic States in a Spin- <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mfrac><mml:mn>3</mml:mn><mml:mn>2</mml:mn></mml:mfrac></mml:math> Isotropic Non-Heisenberg Magnet, Physical Review Letters, 2011, 106, 097202.	7.8	37
68	Collective magnonic modes of pairs of closely spaced magnetic nano-elements. Journal of Applied Physics, 2011, 109, 07B912.	2.5	37
69	Dynamical and topological solitons in a ferromagnet. Physica D: Nonlinear Phenomena, 1981, 3, 363-373.	2.8	36
70	Exchange relaxation as a mechanism of the ultrafast reorientation of spins in a two-sublattice ferrimagnet. JETP Letters, 2013, 98, 289-293.	1.4	36
71	On the phenomenological description of the damping of the domain walls in ferrite-garnets. Solid State Communications, 1989, 72, 1117-1121.	1.9	35
72	Amplitudes for magnon scattering by vortices in two-dimensional weakly easy-plane ferromagnets. Physical Review B, 2004, 69, .	3.2	35

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73	Is Bedout an Impact Crater? Take 2. Science, 2004, 306, 610-612.	12.6	35
74	Non-Newtonian dynamics of the fast motion of a magnetic vortex. JETP Letters, 2010, 91, 178-182.	1.4	35
75	Subterahertz ferrimagnetic spin-transfer torque oscillator. Physical Review B, 2019, 100, .	3.2	34
76	Ground states of an array of magnetic dots with Ising-type anisotropy and subject to a normal magnetic field. Physical Review B, 2002, 65, .	3.2	32
77	Gyrotropic mode frequency of vortex-state permalloy disks. Journal of Applied Physics, 2004, 95, 7444-7446.	2.5	32
78	Collective modes for an array of magnetic dots with perpendicular magnetization. Physical Review B, 2010, 81, .	3.2	32
79	Impact cratering in H ₂ Oâ€bearing targets on Mars: Thermal field under craters as starting conditions for hydrothermal activity. Meteoritics and Planetary Science, 2011, 46, 601-619.	1,6	32
80	The age of Phobos and its largest crater, Stickney. Planetary and Space Science, 2014, 102, 152-163.	1.7	32
81	Dynamics and relaxation in spin nematics. Physical Review B, 2013, 87, .	3.2	31
82	Giant nonlinear damping in nanoscale ferromagnets. Science Advances, 2019, 5, eaav6943.	10.3	31
83	Structure and formation of a central uplift: A case study at the Upheaval Dome impact crater, Utah. , 2005, , .		29
84	3D structure of the Gusev Crater region. Earth and Planetary Science Letters, 2010, 294, 411-423.	4.4	29
85	How strong was impact-induced CO2 degassing in the Cretaceous-Tertiary event? Numerical modeling of shock recovery experiments. , 2002, , .		28
86	Oceanic impactsâ€"a growing field of fundamental geoscience. Deep-Sea Research Part II: Topical Studies in Oceanography, 2002, 49, 951-957.	1.4	28
87	Target delamination by spallation and ejecta dragging: An example from the Ries crater's periphery. Earth and Planetary Science Letters, 2006, 252, 15-29.	4.4	28
88	Morphology and geological structure of the western part of the Olympus Mons volcano on Mars from the analysis of the Mars Express HRSC imagery. Solar System Research, 2005, 39, 85-101.	0.7	26
89	Nonlinear dynamics and two-dimensional solitons for spin-1 ferromagnets with biquadratic exchange. Physical Review B, 2008, 77, .	3.2	26
90	Phase diagram of a two-dimensional square lattice of magnetic particles with perpendicular anisotropy. Journal of Experimental and Theoretical Physics, 2011, 112, 986-1003.	0.9	26

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91	Analogue of a spin flop phase transition for an array of magnetic moments with dipole interaction. JETP Letters, 2006, 83, 383-387.	1.4	25
92	Impact airblast triggers dust avalanches on Mars. Icarus, 2012, 217, 194-201.	2.5	25
93	Pairing of Solitons in Two-Dimensional <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>S</mml:mi><mml:mo>=</mml:mo><mml:mn>1</mml:mn></mml:math> Magnets. Physical Review Letters, 2008, 100, 047203.	7.8	25
94	Magnetic vortex as a ground state for micron-scale antiferromagnetic samples. Physical Review B, 2010, 81, .	3.2	24
95	Overcoming the Limits of Vortex Formation in Magnetic Nanodots by Coupling to Antidot Matrix. Physical Review Applied, 2018, 10, .	3.8	24
96	Degassing of sedimentary rocks due to Chicxulub impact: Hydrocode and physical simulations. , 1996, , .		23
97	Dynamics of antiferromagnets exposed to ultrashort magnetic field pulses. JETP Letters, 2008, 88, 249-253.	1.4	22
98	Three-dimensional solitons in ferrites and their stability. Solid State Communications, 1984, 50, 523-527.	1.9	21
99	Inhomogeneous states in a small magnetic disk with single-ion surface anisotropy. Physical Review B, 2003, 68, .	3.2	21
100	Heating of the Lithosphere during Meteorite Cratering. Solar System Research, 2004, 38, 266-279.	0.7	21
101	Finite energy solitons in highly anisotropic two dimensional ferromagnets. Physical Review B, 2006, 74, .	3.2	20
102	Drastic change of the Casimir force at the metal-insulator transition. Physical Review B, 2009, 80, .	3.2	20
103	Local magnon modes and the dynamics of a small-radius two-dimensional magnetic soliton in an easy-axis ferromagnet. JETP Letters, 2005, 82, 436-440.	1.4	19
104	Chirality tunneling and quantum dynamics for domain walls in mesoscopic ferromagnets. Physical Review B, 2008, 77, .	3.2	19
105	Stabilization of magnetic skyrmions by RKKY interactions. Physical Review B, 2018, 97, .	3.2	19
106	Longitudinal magnetization reversal in ferromagnets with Heisenberg exchange and strong single-ion anisotropy. Physical Review B, 2013, 88, .	3.2	18
107	Soliton-magnon scattering in a two-dimensional isotropic magnetic material. Journal of Experimental and Theoretical Physics, 1999, 89, 583-595.	0.9	17
108	Dynamic properties of magnets with spin S = $3/2$ and non-Heisenberg isotropic interaction. Journal of Experimental and Theoretical Physics, 2015, 120, 281-295.	0.9	17

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109	Semiclassical dynamics of domain walls in the one-dimensional Ising ferromagnet in a transverse field. Physical Review B, 2004, 70, .	3.2	16
110	Impact demagnetization of the Martian crust: Primaries versus secondaries. Geophysical Research Letters, 2005, 32, n/a-n/a.	4.0	16
111	Dispersion relation for kink-type solitons in one-dimensional ferromagnets. JETP Letters, 2000, 71, 259-261.	1.4	15
112	Soliton dynamics in a spin nematic. Journal of Experimental and Theoretical Physics, 2007, 104, 307-318.	0.9	15
113	Collective oscillations of the magnetic moments of a chain of spherical magnetic nanoparticles with uniaxial magnetic anisotropy. Journal of Experimental and Theoretical Physics, 2013, 116, 975-979.	0.9	15
114	Theory of fast time evolution of nonequilibrium spin states in magnetic heterostructures. Physical Review B, 2014, 90, .	3.2	15
115	Route to form skyrmions in soft magnetic films. APL Materials, 2019, 7, .	5.1	15
116	High-Frequency Current-Controlled Vortex Oscillations in Ferrimagnetic Disks. Physical Review Applied, 2019, 12, .	3.8	15
117	Self-consistent theory and simulation of quasiuniform states in thin rectangular magnetic nanoparticles. Journal of Applied Physics, 2001, 89, 8348-8350.	2.5	14
118	Dynamics and stability of a linear cluster of spherical magnetic nanoparticles. Journal of Experimental and Theoretical Physics, 2012, 115, 854-865.	0.9	14
119	Asteroid impact effects on Snowball Earth. Meteoritics and Planetary Science, 2019, 54, 2273-2285.	1.6	14
120	Geomechanical models of impact cratering: Puchezh-Katunki structure. Special Paper of the Geological Society of America, 1992, , 81-92.	0.5	13
121	Assessment of comet Shoemaker-Levy 9 fragment sizes using light curves measured by Galileo spacecraft instruments. Planetary and Space Science, 1997, 45, 311-326.	1.7	13
122	Chirality tunneling in mesoscopic antiferromagnetic domain walls. Physical Review B, 1998, 58, 11514-11518.	3.2	13
123	Quantum effects for the two-dimensional soliton in isotropic ferromagnets. Physical Review B, 2007, 75, .	3.2	13
124	Stable topological textures in a classical two-dimensional Heisenberg model. Physical Review B, 2009, 79, .	3.2	13
125	Thermodynamics and Exchange Stiffness of Asymmetrically Sandwiched Ultrathin Ferromagnetic Films with Perpendicular Anisotropy. Physical Review Applied, 2019, 12, .	3.8	13
126	Controlling Magnon Interaction by a Nanoscale Switch. ACS Applied Materials & Samp; Interfaces, 2021, 13, 20288-20295.	8.0	13

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127	Magnetoelastic stabilization of long-range magnetic order in two-dimensional easy-plane magnets. JETP Letters, 1996, 63, 835-840.	1.4	12
128	On the limiting velocity and forced motion of ferromagnetic domain walls in an external field perpendicular to the easy-magnetization axis. Journal of Experimental and Theoretical Physics, 1997, 85, 516-527.	0.9	12
129	Collective magnon modes for magnetic dot arrays. Journal of Magnetism and Magnetic Materials, 2005, 286, 351-355.	2.3	12
130	Magnon relaxation in a spin nematic. Low Temperature Physics, 2008, 34, 997-1004.	0.6	12
131	Frequencies of radially symmetric excitations in vortex state disks. Physical Review B, 2009, 80, .	3.2	12
132	Clarification of sources of material returned by Luna 24 spacecraft based on analysis of new images of the landing site taken by lunar reconnaissance orbiter. Geochemistry International, 2013, 51, 456-472.	0.7	12
133	Chaotic dynamics in spin-vortex pairs. Physical Review B, 2019, 99, .	3.2	12
134	Venusian impact craters on Magellan images: View from Venera 15/16. Earth, Moon and Planets, 1990, 50-51, 159-173.	0.6	11
135	Cleopatra Crater on Venus: Venera 15/16 data and impact/volcanic origin controversy. Geophysical Research Letters, 1990, 17, 175-178.	4.0	11
136	Small-amplitude mobile solitons in the two-dimensional ferromagnet. Physical Review B, 2001, 63, .	3.2	11
137	Nonlinear oscillations of magnetization for ferromagnetic particles in the vortex state and their ordered arrays. Journal of Experimental and Theoretical Physics, 2009, 109, 74-89.	0.9	11
138	Quantum dynamics of vortices in small magnetic particles. Low Temperature Physics, 2010, 36, 747-751.	0.6	11
139	Longitudinal spin dynamics in nickel fluorosilicate. Low Temperature Physics, 2014, 40, 635-640.	0.6	11
140	The Landau-Lifshitz equation: 80 years of history, advances, and prospects. Low Temperature Physics, 2015, 41, 663-669.	0.6	11
141	Spin Dynamics for Antiferromagnets and Ultrafast Spintronics. Journal of Experimental and Theoretical Physics, 2020, 131, 95-112.	0.9	11
142	Helicity of magnetic vortices and skyrmions in soft ferromagnetic nanodots and films biased by stray radial fields. Physical Review B, 2020, 101, .	3.2	11
143	Algebraic soliton in a ferromagnet in the presence of the magnetic field directed along the anisotropy axis. Solid State Communications, 1980, 34, 417-418.	1.9	10
144	Lunar craters evolution and meteoroidal flux in pre-mare and post-mare times. The Moon and the Planets, 1981, 24, 209-229.	0.5	10

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145	Phase Transition in a Kink and Dynamical Structure Factor of Quasi–One-Dimensional Antiferromagnets. Europhysics Letters, 1991, 14, 151-155.	2.0	10
146	Collision of the comet Shoemaker-Levy 9 with Jupiter: Interpretation of observed data. Earth, Moon and Planets, 1994, 66, 99-128.	0.6	10
147	Ground state of finite arrays of magnetic dots in the presence of an external magnetic field. Journal of Experimental and Theoretical Physics, 2005, 101, 1106-1121.	0.9	10
148	Critical dynamics and relaxation of elementary excitations of the nematic phase of a non-heisenberg magnet with spin $S = 1$. JETP Letters, 2010, 92, 151-155.	1.4	10
149	Two-dimensional solitons in spin nematic states for magnets with an isotropic exchange interaction. Low Temperature Physics, 2015, 41, 382-389.	0.6	10
150	Limiting Velocity and Dispersion Law of Domain Walls in Ferrimagnets Close to the Spin Compensation Point. JETP Letters, 2019, 110, 481-486.	1.4	10
151	Nonequilibrium thermodynamics of a gas of solitons of kink type in quasione-dimensional systems. Theoretical and Mathematical Physics(Russian Federation), 1988, 74, 32-42.	0.9	9
152	Magnon modes in permalloy nanorings. Journal of Magnetism and Magnetic Materials, 2005, 286, 366-369.	2.3	9
153	Dynamics of topological solitons in two-dimensional ferromagnets. European Physical Journal B, 2006, 50, 393-402.	1.5	9
154	Femtosecond single-shot imaging and control of a laser-induced first-order phase transition in HoFeO ₃ . Journal of Physics Condensed Matter, 2017, 29, 224003.	1.8	9
155	Soliton diffusion in one-dimensional systems close to integrable ones. Physics Letters, Section A: General, Atomic and Solid State Physics, 1990, 146, 190-194.	2.1	8
156	Dynamics of domain walls (solitons) in ferromagnets in a magnetic field perpendicular to the easy axis. Physica B: Condensed Matter, 1994, 202, 193-201.	2.7	8
157	Magnetic vortices in small ferromagnetic particles with the strong dipolar interaction. JETP Letters, 2011, 94, 306-310.	1.4	8
158	Disclinations and solitons in amorphous magnets. Solid State Communications, 1980, 34, 437-439.	1.9	7
159	Vector field dynamic solitons. Physics Letters, Section A: General, Atomic and Solid State Physics, 1983, 98, 222-226.	2.1	7
160	On magnetic relaxation in antiferromagnets. Journal of Magnetism and Magnetic Materials, 1992, 117, 102-118.	2.3	7
161	Dynamic topological solitons in a two-dimensional ferromagnet. Journal of Experimental and Theoretical Physics, 1999, 88, 833-843.	0.9	7
162	Excitation of vortices using linear and nonlinear magnetostatic waves. Physical Review E, 2005, 71, 026614.	2.1	7

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163	Disclinations in the nematic phase of a magnet with spin 1. JETP Letters, 2006, 84, 84-88.	1.4	7
164	Exogenic Dynamics, Cratering and Surface Ages., 2007,, 207-242.		7
165	Solitons in isotropic antiferromagnets: beyond the sigma model. Low Temperature Physics, 2008, 34, 522-527.	0.6	7
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