## 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	Enhanced Longitudinal Relaxation of Magnetic Solitons in Ultrathin Films. Physical Review Applied, 2022, 17, .	3.8	3
2	Ultrafast control of magnetic interactions via light-driven phonons. Nature Materials, 2021, 20, 607-611.	27.5	112
3	Controlling Magnon Interaction by a Nanoscale Switch. ACS Applied Materials & Samp; Interfaces, 2021, 13, 20288-20295.	8.0	13
4	Dynamics of Domain Walls in Chiral Magnets. Journal of Experimental and Theoretical Physics, 2021, 132, 572-585.	0.9	4
5	Controlling the anisotropy of a van der Waals antiferromagnet with light. Science Advances, 2021, 7, .	10.3	59
6	Coherent spin-wave transport in an antiferromagnet. Nature Physics, 2021, 17, 1001-1006.	16.7	61
7	Phenomenological description of spin dynamics in antiferromagnets: Short history and modern development. Low Temperature Physics, 2021, 47, 765-773.	0.6	2
8	Nonstationary forced motion of domain walls in ferrimagnets near the spin compensation point. Low Temperature Physics, 2020, 46, 841-850.	0.6	7
9	Spin-wave modes localized on isolated defects in a two-dimensional array of dipolarly coupled magnetic nanodots. Physical Review B, 2020, 102, .	3.2	2
10	In honor of Victor Grigorievich Bar'yakhtar's 90th birthday. Low Temperature Physics, 2020, 46, 751-753.	0.6	0
11	Spin Dynamics for Antiferromagnets and Ultrafast Spintronics. Journal of Experimental and Theoretical Physics, 2020, 131, 95-112.	0.9	11
12	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
13	Inversion of the Spin-Torque Effect in Mtjs Via Resonant Magnon Scattering. , 2020, , .		0
14	Spin Dynamics in Antiferromagnets with Domain Walls and Disclinations. Ukrainian Journal of Physics, 2020, 65, 924.	0.2	2
15	Route to form skyrmions in soft magnetic films. APL Materials, 2019, 7, .	5.1	15
16	Asteroid impact effects on Snowball Earth. Meteoritics and Planetary Science, 2019, 54, 2273-2285.	1.6	14
17	High-Frequency Current-Controlled Vortex Oscillations in Ferrimagnetic Disks. Physical Review Applied, 2019, 12, .	3.8	15
18	Victor Lyudvigovich Masaitis (July 21, 1927–July 21, 2019). Meteoritics and Planetary Science, 2019, 54, 2879-2883.	1.6	0

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19	Giant nonlinear damping in nanoscale ferromagnets. Science Advances, 2019, 5, eaav6943.	10.3	31
20	Subterahertz ferrimagnetic spin-transfer torque oscillator. Physical Review B, 2019, 100, .	<b>3.</b> 2	34
21	Ultrafast spin dynamics and spintronics for ferrimagnets close to the spin compensation point (Review). Low Temperature Physics, 2019, 45, 935-963.	0.6	44
22	Chaotic dynamics in spin-vortex pairs. Physical Review B, 2019, 99, .	3.2	12
23	Magnon Modes for a Magnetic Disc in a Cone Vortex State. Low Temperature Physics, 2019, 45, 92-97.	0.6	1
24	Dark halos produced by current impact cratering on Mars. Icarus, 2019, 328, 45-57.	2.5	6
25	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
26	Localized magnetic non-uniformities in an antiferromagnet with a system of dislocations. Low Temperature Physics, 2019, 45, 1256-1262.	0.6	3
27	Thermodynamics and Exchange Stiffness of Asymmetrically Sandwiched Ultrathin Ferromagnetic Films with Perpendicular Anisotropy. Physical Review Applied, 2019, 12, .	3.8	13
28	Acoustic Fluidization During Impact Crater's Formation. Springer Proceedings in Earth and Environmental Sciences, 2019, , 497-505.	0.4	0
29	Magnetic Chiral Solitons Stabilized by Oersted Field at a Thin-Film Nanocontact with Electric Current. Ukrainian Journal of Physics, 2019, 64, 933.	0.2	0
30	Stabilization of magnetic skyrmions by RKKY interactions. Physical Review B, 2018, 97, .	<b>3.</b> 2	19
31	Resonant pinning spectroscopy with spin-vortex pairs. Physical Review B, 2018, 97, .	3.2	7
32	Overcoming the Limits of Vortex Formation in Magnetic Nanodots by Coupling to Antidot Matrix. Physical Review Applied, 2018, 10, .	3.8	24
33	Transient dynamics of strongly coupled spin vortex pairs: Effects of anharmonicity and resonant excitation on inertial switching. Applied Physics Letters, 2018, 112, 192405.	3.3	5
34	Dynamic solitons in antiferromagnets (Review Article). Low Temperature Physics, 2018, 44, 618-633.	0.6	54
35	Antiferromagnetic THz-frequency Josephson-like Oscillator Driven by Spin Current. Scientific Reports, 2017, 7, 43705.	3.3	207
36	Phase states of a magnetic material with the spin $S=2$ and the isotropic exchange interaction. JETP Letters, 2017, 105, 453-457.	1.4	4

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37	Non-Degeneracy and Effects of Pinning in Strongly Coupled Vortex Pairs. IEEE Transactions on Magnetics, $2017, 53, 1-5$ .	2.1	4
38	Stochastic dynamics of strongly-bound magnetic vortex pairs. AIP Advances, 2017, 7, .	1.3	4
39	Excitation of coupled spin–orbit dynamics in cobalt oxide by femtosecond laser pulses. Nature Communications, 2017, 8, 638.	12.8	39
40	Femtosecond single-shot imaging and control of a laser-induced first-order phase transition in HoFeO <sub>3</sub> . Journal of Physics Condensed Matter, 2017, 29, 224003.	1.8	9
41	Precessional one-dimensional solitons in antiferromagnets with low dynamic symmetry. Low Temperature Physics, 2017, 43, 1283-1289.	0.6	6
42	Magnon modes localized on defects in a two-dimensional array of magnetic microparticles with transverse anisotropy. JETP Letters, 2016, 104, 32-36.	1.4	6
43	Transformation of spin current by antiferromagnetic insulators. Physical Review B, 2016, 93, .	3.2	88
44	Control of the Ultrafast Photoinduced Magnetization across the Morin Transition in <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mrow><mml:mrow><mml:mi>DyFeO</mml:mi></mml:mrow><mml:mrow>&lt; Physical Review Letters, 2016, 116, 097401.</mml:mrow></mml:mrow></mml:msub></mml:mrow></mml:math>	< mml:mn>	3<
45	Static and dynamic properties of vortex pairs in asymmetric nanomagnets. AIP Advances, 2016, 6, .	1.3	4
46	Two-dimensional solitons in spin nematic states for magnets with an isotropic exchange interaction. Low Temperature Physics, 2015, 41, 382-389.	0.6	10
47	The Landau-Lifshitz equation: 80 years of history, advances, and prospects. Low Temperature Physics, 2015, 41, 663-669.	0.6	11
48	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
49	Excitation and Control of Spin Wave by Light Pulses. Springer Proceedings in Physics, 2015, , 80-82.	0.2	1
50	Spin dynamics of antiferromagnets under action of femtosecond laser pulses (Review Article). Low Temperature Physics, 2014, 40, 91-105.	0.6	73
51	Longitudinal spin dynamics in nickel fluorosilicate. Low Temperature Physics, 2014, 40, 635-640.	0.6	11
52	Nonlinear Dynamics in Spin Vortex Pairs With Strong Core–Core Coupling. IEEE Transactions on Magnetics, 2014, 50, 1-4.	2.1	2
53	Shock wave propagation in layered planetary embryos. Physics of the Earth and Planetary Interiors, 2014, 230, 45-59.	1.9	6
54	Spin-wave edge modes in finite arrays of dipolarly coupled magnetic nanopillars. Physical Review B, 2014, 90, .	3.2	47

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55	Theory of fast time evolution of nonequilibrium spin states in magnetic heterostructures. Physical Review B, 2014, 90, .	3.2	15
56	The age of Phobos and its largest crater, Stickney. Planetary and Space Science, 2014, 102, 152-163.	1.7	32
57	Constraints on Vesta's interior structure using gravity and shape models from the Dawn mission. Icarus, 2014, 240, 146-160.	2.5	55
58	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
59	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
60	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
61	Large-radius dynamic topological solitons in uniaxial ferromagnets. JETP Letters, 2013, 97, 253-257.	1.4	2
62	Longitudinal magnetization reversal in ferromagnets with Heisenberg exchange and strong single-ion anisotropy. Physical Review B, 2013, 88, .	3.2	18
63	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
64	Vortex ground state for small arrays of magnetic particles with dipole coupling. Physical Review B, 2013, 87, .	3.2	3
65	Nonlinear dynamics and solitons of a chain with spherical magnetic nanoparticles. Low Temperature Physics, 2013, 39, 525-529.	0.6	2
66	Dynamics and relaxation in spin nematics. Physical Review B, 2013, 87, .	3.2	31
67	Twoâ€dimensional numerical modeling of the Rheasilvia impact formation. Journal of Geophysical Research E: Planets, 2013, 118, 1545-1557.	3.6	43
68	Phenomenological Theory of Relaxation in Two-Sublattice Ferrite. Ukrainian Journal of Physics, 2013, 58, 1149-1155.	0.2	2
69	Core-Core Dynamics in Spin Vortex Pairs. Physical Review Letters, 2012, 109, 097204.	7.8	50
70	Specific features of relaxation of magnons in an easy-plane antiferromagnet in the framework of the sigma-model. Low Temperature Physics, 2012, 38, 1112-1120.	0.6	1
71	Sublattice magnetization in a two-sublattice ferrimagnetic with single-ion anisotropy in one of the sublattices. Low Temperature Physics, 2012, 38, 395-398.	0.6	2
72	Directional control of spin-wave emission by spatially shaped light. Nature Photonics, 2012, 6, 662-666.	31.4	219

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73	Dynamics and stability of a linear cluster of spherical magnetic nanoparticles. Journal of Experimental and Theoretical Physics, 2012, 115, 854-865.	0.9	14
74	Ultrafast Spin Dynamics in Multisublattice Magnets. Physical Review Letters, 2012, 108, 057202.	7.8	217
75	Ultrafast heating as a sufficient stimulus for magnetization reversal in a ferrimagnet. Nature Communications, 2012, 3, 666.	12.8	588
76	Impact airblast triggers dust avalanches on Mars. Icarus, 2012, 217, 194-201.	2.5	25
77	Temperature dependence of static and dynamic properties of an anisotropic ferrimagnet. Physics of the Solid State, 2012, 54, 1363-1369.	0.6	2
78	Small radius solitons in magnets with a strong planar anisotropy. Low Temperature Physics, 2011, 37, 729-731.	0.6	2
79	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
80	Collective magnonic modes of pairs of closely spaced magnetic nano-elements. Journal of Applied Physics, 2011, 109, 078912.	2.5	37
81	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:mrow></mml:msub></mml:mrow></mml:math> . Physical	3.2	91
82	Impact cratering in H <sub>2</sub> 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
83	Dynamic spin reorientation in orthoferrites irradiated by a laser pulse. JETP Letters, 2011, 93, 711-715.	1.4	6
84	Magnetic vortices in small ferromagnetic particles with the strong dipolar interaction. JETP Letters, 2011, 94, 306-310.	1.4	8
85	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
86	Non-Newtonian dynamics of the fast motion of a magnetic vortex. JETP Letters, 2010, 91, 178-182.	1.4	35
87	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
88	Magnetic vortex as a ground state for micron-scale antiferromagnetic samples. Physical Review B, 2010, 81, .	3.2	24
89	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
90	Spin Oscillations in Antiferromagnetic NiO Triggered by Circularly Polarized Light. Physical Review Letters, 2010, 105, 077402.	7.8	217

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91	Quantum dynamics of vortices in small magnetic particles. Low Temperature Physics, 2010, 36, 747-751.	0.6	11
92	Basin-forming impacts: Reconnaissance modeling. , 2010, , .		62
93	Collective modes for an array of magnetic dots with perpendicular magnetization. Physical Review B, 2010, $81$ , .	3.2	32
94	3D structure of the Gusev Crater region. Earth and Planetary Science Letters, 2010, 294, 411-423.	4.4	29
95	Spin excitation frequencies in magnetostatically coupled arrays of vortex state circular Permalloy dots. Applied Physics Letters, 2010, 97, 132501.	3.3	50
96	Stable topological textures in a classical two-dimensional Heisenberg model. Physical Review B, 2009, 79, .	3.2	13
97	Drastic change of the Casimir force at the metal-insulator transition. Physical Review B, 2009, 80, .	3.2	20
98	Theoretical analysis of secondary cratering on Mars and an image-based study on the Cerberus Plains. Icarus, 2009, 200, 406-417.	2.5	69
99	Inertia-driven spin switching in antiferromagnets. Nature Physics, 2009, 5, 727-731.	16.7	306
100	Topological defects and magnetization processes for the triangular lattice of ising particles with an antiferromagnetic interaction. JETP Letters, 2009, 90, 750-753.	1.4	3
101	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
102	Frequencies of radially symmetric excitations in vortex state disks. Physical Review B, 2009, 80, .	3.2	12
103	Frequencies of Radially Symmetric Excitations in Vortex State Disks. IEEE Transactions on Magnetics, 2009, 45, 661-662.	2.1	1
104	Size-Frequency Distribution Of Asteroids And Impact Craters: Estimates Of Impact Rate., 2008, , 91-116.		4
105	Geologic Effects of Large Terrestrial Impact Crater Formation. , 2008, , 163-205.		1
106	Instanton paths and coherent quantum tunneling in antiferromagnetic spin clusters subject to a strong magnetic field. Journal of Experimental and Theoretical Physics, 2008, 107, 445-461.	0.9	0
107	Dynamics of antiferromagnets exposed to ultrashort magnetic field pulses. JETP Letters, 2008, 88, 249-253.	1.4	22
108	Solitons in isotropic antiferromagnets: beyond the sigma model. Low Temperature Physics, 2008, 34, 522-527.	0.6	7

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109	Shock Metamorphism of Bosumtwi Impact Crater Rocks, Shock Attenuation, and Uplift Formation. Science, 2008, 322, 1678-1681.	12.6	49
110	Nonlinear dynamics and two-dimensional solitons for spin-1 ferromagnets with biquadratic exchange. Physical Review B, 2008, 77, .	3.2	26
111	Chirality tunneling and quantum dynamics for domain walls in mesoscopic ferromagnets. Physical Review B, 2008, 77, .	3.2	19
112	Magnon relaxation in a spin nematic. Low Temperature Physics, 2008, 34, 997-1004.	0.6	12
113	Dynamical solitons in a spin S=1 ferromagnet. Low Temperature Physics, 2008, 34, 182-191.	0.6	1
114	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
115	Cometary Hazards. , 2008, , 117-130.		0
116	Exogenic Dynamics, Cratering and Surface Ages. , 2007, , 207-242.		7
117	On the dispersion relation of kink-type solitons in one-dimensional ferromagnets. Low Temperature Physics, 2007, 33, 451-464.	0.6	2
118	Quantum effects for the two-dimensional soliton in isotropic ferromagnets. Physical Review B, 2007, 75, .	3.2	13
119	Excitation of Spin Dynamics by Spin-Polarized Current in Vortex State Magnetic Disks. Physical Review Letters, 2007, 99, 247208.	7.8	83
120	Prediction of the threshold fracture energy in impact cratering mechanics. Doklady Physics, 2007, 52, 41-43.	0.7	2
121	Soliton dynamics in a spin nematic. Journal of Experimental and Theoretical Physics, 2007, 104, 307-318.	0.9	15
122	Semiclassical dynamics of vortices in 2D easy-plane ferromagnets. Journal of Experimental and Theoretical Physics, 2007, 104, 775-791.	0.9	4
123	Fine structure of the spectra of magnetic particles in the vortex state and their ordered arrays. Bulletin of the Russian Academy of Sciences: Physics, 2007, 71, 1494-1496.	0.6	1
124	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
125	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
126	Magnon excitations in vortex-state nanorings. Low Temperature Physics, 2006, 32, 1135-1139.	0.6	0

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127	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
128	Disclinations in the nematic phase of a magnet with spin 1. JETP Letters, 2006, 84, 84-88.	1.4	7
129	Dynamics of topological solitons in two-dimensional ferromagnets. European Physical Journal B, 2006, 50, 393-402.	1.5	9
130	Earth/Moon impact rate comparison: Searching constraints for lunar secondary/primary cratering proportion. Icarus, 2006, 183, 504-507.	2.5	63
131	Collective modes for an array of magnetic dots in the vortex state. Physical Review B, 2006, 74, .	3.2	65
132	Finite energy solitons in highly anisotropic two dimensional ferromagnets. Physical Review B, 2006, 74, .	3.2	20
133	Collective magnon modes for magnetic dot arrays. Journal of Magnetism and Magnetic Materials, 2005, 286, 351-355.	2.3	12
134	Instability criteria for a motion of a vortex subject to a non-linear friction force. Physics Letters, Section A: General, Atomic and Solid State Physics, 2005, 342, 318-321.	2.1	1
135	Mesoscopic antiferromagnets: statics, dynamics, and quantum tunneling (Review). Low Temperature Physics, 2005, 31, 635-667.	0.6	49
136	Quantum analogue of the spin-flop transition for a spin pair. JETP Letters, 2005, 81, 321-325.	1.4	1
137	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
138	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
139	Magnon modes in permalloy nanorings. Journal of Magnetism and Magnetic Materials, 2005, 286, 366-369.	2.3	9
140	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
141	Numerical Modeling of the Largest Terrestrial Meteorite Craters. Solar System Research, 2005, 39, 381-409.	0.7	162
142	Structure and formation of a central uplift: A case study at the Upheaval Dome impact crater, Utah. , 2005, , .		29
143	Excitation of vortices using linear and nonlinear magnetostatic waves. Physical Review E, 2005, 71, 026614.	2.1	7
144	Starting conditions for hydrothermal systems underneath Martian craters: Hydrocode modeling. , 2005, , .		47

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145	Excitations in vortex-state permalloy dots. Physical Review B, 2005, 72, .	3.2	81
146	Impact demagnetization of the Martian crust: Primaries versus secondaries. Geophysical Research Letters, 2005, 32, n/a-n/a.	4.0	16
147	High Frequency Modes in Vortex-State Nanomagnets. Physical Review Letters, 2005, 94, 027205.	7.8	96
148	Impacts do not initiate volcanic eruptions: Eruptions close to the crater: Comment and Reply. Geology, 2004, 32, e48-e49.	4.4	0
149	Amplitudes for magnon scattering by vortices in two-dimensional weakly easy-plane ferromagnets. Physical Review B, 2004, 69, .	3.2	35
150	Semiclassical dynamics of domain walls in the one-dimensional Ising ferromagnet in a transverse field. Physical Review B, 2004, 70, .	3.2	16
151	Macroscopic quantum tunneling in small antiferromagnetic particles: Effects of a strong magnetic field. Physical Review B, 2004, 70, .	3.2	4
152	Gyrotropic mode frequency of vortex-state permalloy disks. Journal of Applied Physics, 2004, 95, 7444-7446.	2.5	32
153	Is Bedout an Impact Crater? Take 2. Science, 2004, 306, 610-612.	12.6	35
154	Recent and episodic volcanic and glacial activity on Mars revealed by the High Resolution Stereo Camera. Nature, 2004, 432, 971-979.	27.8	433
155	New micromagnetic states of magnetically soft nanoparticles with a nearly cubic shape. Journal of Experimental and Theoretical Physics, 2004, 98, 1015-1026.	0.9	2
156	Instanton paths for the problem of coherent quantum tunneling in small ferromagnetic particles. Journal of Experimental and Theoretical Physics, 2004, 99, 1291-1306.	0.9	5
157	Heating of the Lithosphere during Meteorite Cratering. Solar System Research, 2004, 38, 266-279.	0.7	21
158	Launch of martian meteorites in oblique impacts. Icarus, 2004, 171, 84-101.	2.5	157
159	New micromagnetic states in non-ellipsoidal nanoparticles. Journal of Magnetism and Magnetic Materials, 2004, 272-276, E1165-E1166.	2.3	2
160	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
161	Effective field theory for the S=1 quantum nematic. Physical Review B, 2003, 68, .	3.2	85
162	Generalized Levinson theorem for singular potentials in two dimensions. Physical Review A, 2003, 68, .	2.5	6

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163	Inhomogeneous states in a small magnetic disk with single-ion surface anisotropy. Physical Review B, 2003, 68, .	3.2	21
164	Discommensurate and inhomogeneous states induced by a strong magnetic field in low-dimensional antiferromagnets. Physical Review B, 2003, 68, .	3.2	1
165	Impacts do not initiate volcanic eruptions: Eruptions close to the crater. Geology, 2003, 31, 869.	4.4	111
166	Effective equations of motion for solitons in two-sublattice isotropic magnets. Low Temperature Physics, 2003, 29, 65-71.	0.6	2
167	Magnon modes for thin circular vortex-state magnetic dots. Applied Physics Letters, 2002, 81, 1261-1263.	3.3	96
168	Nonlinear dynamics and stability of the Abrikosov vortex lattice in the presence of weak defects. Physical Review B, 2002, 66, .	3.2	2
169	Inhomogeneous states for small magnetic particles with exchange anisotropy. Low Temperature Physics, 2002, 28, 25-29.	0.6	1
170	How strong was impact-induced CO2 degassing in the Cretaceous-Tertiary event? Numerical modeling of shock recovery experiments. , 2002, , .		28
171	Numerical modeling of the formation of large impact craters. , 2002, , .		48
172	Martian Meteorite Launch: High-Speed Ejecta from Small Craters. Science, 2002, 298, 1752-1756.	12.6	157
173	Magnon modes for a circular two-dimensional easy-plane ferromagnet in the cone state. Physical Review B, 2002, 65, .	3.2	51
174	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
175	Eigenfrequencies of vortex state excitations in magnetic submicron-size disks. Journal of Applied Physics, 2002, 91, 8037.	2.5	510
176	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
177	Oceanic impactsâ€"a growing field of fundamental geoscience. Deep-Sea Research Part II: Topical Studies in Oceanography, 2002, 49, 951-957.	1.4	28
178	Interference of instanton trajectories during quantum tunneling in small particles of real antiferromagnets. Journal of Experimental and Theoretical Physics, 2002, 94, 270-282.	0.9	3
179	Small-amplitude mobile solitons in the two-dimensional ferromagnet. Physical Review B, 2001, 63, .	3.2	11
180	Localized spin flop transition in a ladder structure with nonmagnetic impurities. Journal of Applied Physics, 2001, 89, 7198-7200.	2.5	4

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181	Self-consistent theory and simulation of quasiuniform states in thin rectangular magnetic nanoparticles. Journal of Applied Physics, 2001, 89, 8348-8350.	2.5	14
182	Nonlinear oscillations of the magnetization in small cylindrical ferromagnetic particles. Low Temperature Physics, 2001, 27, 552-558.	0.6	3
183	Geologic evolution and cratering history of Mercury. Planetary and Space Science, 2001, 49, 1507-1521.	1.7	68
184	Mars/Moon Cratering Rate Ratio Estimates. Space Science Reviews, 2001, 96, 87-104.	8.1	415
185	Cratering Records in the Inner Solar System in Relation to the Lunar Reference System. Space Science Reviews, 2001, 96, 55-86.	8.1	520
186	Spin disclination in a layered antiferromagnet with a screw dislocation. JETP Letters, 2001, 73, 188-191.	1.4	6
187	Spin Disclinations and other Inhomogeneous States for a Magnetic Particles: Classical Properties and Quantum Tunneling. Materials Science Forum, 2001, 373-376, 807-810.	0.3	1
188	Soliton-Magnon Scattering and Spin Wave Modes for a Small Magnetic Particle in the Vortex State. Materials Science Forum, 2001, 373-376, 803-806.	0.3	1
189	Theory of Quasi-Uniform States of Small Magnetic Particles. Materials Science Forum, 2001, 373-376, 213-216.	0.3	1
190	Internal modes and magnon scattering on topological solitons in two-dimensional easy-axis ferromagnets. Physical Review B, 2001, 64, .	3.2	45
191	Scattering of a radially symmetric spin wave on a magnetic vortex in a two-dimensional easy-plane ferromagnet. Low Temperature Physics, 2000, 26, 341-344.	0.6	4
192	Dispersion relation for kink-type solitons in one-dimensional ferromagnets. JETP Letters, 2000, 71, 259-261.	1.4	15
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