

Yuriy M Bunkov

List of Publications by Year in descending order

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142
papers

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146
all docs

146
docs citations

146
times ranked

926
citing authors

#	ARTICLE	IF	CITATIONS
1	Micromagnetic modeling of magnon coherent states in a nonuniform magnetic field. Journal of Physics Condensed Matter, 2022, 34, 035802.	0.7	0
2	Magneto-optical imaging of coherent spin dynamics in ferrites. Optics Express, 2022, 30, 1737-1744.	1.7	4
3	Identification of a new source of magnon relaxation in interface between epitaxial iron garnet ferrite films and GGG substrate. Materials Research Bulletin, 2022, 149, 111691.	2.7	2
4	Quantum paradigm of the foldover magnetic resonance. Scientific Reports, 2021, 11, 7673.	1.6	10
5	Magnon Quantization in the Magnetic Field Gradient. Applied Magnetic Resonance, 2021, 52, 1749-1756.	0.6	0
6	Spin superfluid state at room temperature. AIP Conference Proceedings, 2020, , .	0.3	2
7	Quantum Magnonics. Journal of Experimental and Theoretical Physics, 2020, 131, 18-28.	0.2	15
8	Direct observation of the specific heat of Majorana quasiparticles in superfluid $^3\text{He-B}$. Scientific Reports, 2020, 10, 20120.	1.6	4
9	Magnonic Superfluidity Versus Bose Condensation. Applied Magnetic Resonance, 2020, 51, 1711-1721.	0.6	8
10	Long-Lived Induction Signal in Yttrium Iron Garnet. JETP Letters, 2020, 111, 62-66.	0.4	12
11	Features of the Coupled Nuclear-Electron Spin Precession in the Bose-Einstein Condensate of Magnons. JETP Letters, 2020, 112, 95-100.	0.4	5
12	Bose-Einstein Condensation and Spin Superfluidity of Magnons in a Perpendicularly Magnetized Yttrium Iron Garnet Film. JETP Letters, 2020, 112, 299-304.	0.4	11
13	Features of the Interaction of a Magnon Bose-Einstein Condensate with Acoustic Modes in Yttrium Iron Garnet Films. JETP Letters, 2020, 112, 710-714.	0.4	7
14	Magnonics and Supermagnonics. Spin, 2019, 09, 1940005.	0.6	8
15	Magnon condensation and spin superfluidity. Journal of Magnetism and Magnetic Materials, 2018, 452, 30-34.	1.0	27
16	The magnon BEC observation by switch off method. Low Temperature Physics, 2017, 43, 930-935.	0.2	2
17	Magnon BEC Versus Atomic BEC. Journal of Low Temperature Physics, 2016, 185, 399-408.	0.6	15
18	Critical parameters of nuclear magnon Bose-Einstein condensation in systems with dynamic frequency shift. JETP Letters, 2015, 102, 766-770.	0.4	7

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19	Normal-Mode Splitting in the Coupled System of Hybridized Nuclear Magnons and Microwave Photons. <i>Physical Review Letters</i> , 2015, 114, 226402.	2.9	36
20	Evolution of a neutron-initiated micro big bang in superfluid ^3He . <i>Physical Review B</i> , 2014, 90, .	1.1	9
21	3D-XY critical behavior of CsMnF_3 from static and dynamic thermal properties. <i>Journal of Physics Condensed Matter</i> , 2014, 26, 096001.	0.7	11
22	Magnon BEC in Antiferromagnets with Suhl–Nakamura Interaction. <i>Journal of Low Temperature Physics</i> , 2014, 175, 167-176.	0.6	11
23	Direct Observation of a Majorana Quasiparticle Heat Capacity in ^3He . <i>Journal of Low Temperature Physics</i> , 2014, 175, 385-394.	0.6	15
24	Observation of Majorana Quasiparticles' Edge States in Superfluid ^3He . <i>Applied Magnetic Resonance</i> , 2014, 45, 1219-1224.	0.6	2
25	Bose-Einstein condensation in antiferromagnets at low temperatures. <i>Journal of Physics: Conference Series</i> , 2014, 568, 042001.	0.3	4
26	The multiuniverse transition in superfluid ^3He . <i>Journal of Physics Condensed Matter</i> , 2013, 25, 404205.	0.7	4
27	Experimental Setup for Observation the Bose–Einstein Condensation of Magnons in Solid Antiferromagnets CsMnF_3 and MnCO_3 . <i>Applied Magnetic Resonance</i> , 2013, 44, 595-603.	0.6	7
28	Magnon Bose-Einstein condensation at inhomogeneous conditions. <i>Journal of Physics: Conference Series</i> , 2013, 478, 012004.	0.3	1
29	High- T_c Spin Superfluidity in Antiferromagnets. <i>Physical Review Letters</i> , 2012, 108, 177002.	2.9	49
30	Self-Trapping of Magnon Bose-Einstein Condensates in the Ground State and on Excited Levels: From Harmonic to Box Confinement. <i>Physical Review Letters</i> , 2012, 108, 145303.	2.9	39
31	Superfluid transition in superfluid ^3He in radially compressed aerogel. <i>Journal of Physics: Conference Series</i> , 2012, 400, 012019.	0.3	4
32	Atomic type magnon Bose-Einstein condensation in antiferromagnet.. <i>Journal of Physics: Conference Series</i> , 2012, 400, 032001.	0.3	3
33	In-situ comprehensive calibration of a tri-port nano-electro-mechanical device. <i>Review of Scientific Instruments</i> , 2012, 83, 045005.	0.6	12
34	Nonlinear parametric amplification in a triport nanoelectromechanical device. <i>Physical Review B</i> , 2011, 84, .	1.1	12
35	Magnon Bose-Einstein condensation in CsMnF_3 and MnCO_3 . <i>Journal of Physics: Conference Series</i> , 2011, 324, 012006.	0.3	10
36	Discovery of the classical Bose-Einstein condensation of magnons in solid antiferromagnets. <i>JETP Letters</i> , 2011, 94, 68-72.	0.4	27

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37	A Tunable Hybrid Electro-magnetomotive NEMS Device for Low Temperature Physics. Journal of Low Temperature Physics, 2011, 162, 653-660.	0.6	17
38	Publisher's Note: Nonlinear parametric amplification in a triport nanoelectromechanical device [Phys. Rev. B84, 054108 (2011)]. Physical Review B, 2011, 84, .	1.1	0
39	Metallic coatings of microelectromechanical structures at low temperatures: Stress, elasticity, and nonlinear dissipation. Journal of Applied Physics, 2010, 107, .	1.1	16
40	Novel "Vibrating Wire Like" NEMS and MEMS Structures for Low Temperature Physics. Journal of Low Temperature Physics, 2010, 158, 678-684.	0.6	8
41	Evidence for Magnon BEC in Superfluid 3He-A. Journal of Low Temperature Physics, 2010, 158, 129-134.	0.6	22
42	3He Experiments: Insights into Cosmology and Atomic Physics. Journal of Low Temperature Physics, 2010, 158, 118-128.	0.6	4
43	Magnon Bose-Einstein condensation and spin superfluidity. Journal of Physics Condensed Matter, 2010, 22, 164210.	0.7	44
44	Spin superfluidity and magnons Bose-Einstein condensation. Physics-Uspexhi, 2010, 53, 848-853.	0.8	28
45	Addressing geometric nonlinearities with cantilever microelectromechanical systems: Beyond the Duffing model. Physical Review B, 2010, 82, .	1.1	23
46	Fast-exchange model visualized with H^3e confined in aerogel: A Fermi liquid in contact with a ferromagnetic solid. Physical Review B, 2009, 80, .	1.1	18
47	Spin superfluidity and coherent spin precession. Journal of Physics Condensed Matter, 2009, 21, 164201.	0.7	32
48	Magnon BEC in superfluid 3He-A. JETP Letters, 2009, 89, 306-310.	0.4	11
49	Magnetic susceptibility of liquid 3He. Journal of Physics: Conference Series, 2009, 150, 032024.	0.3	2
50	Coherent precession of magnetization in superfluid 3He A-phase in aerogel. Journal of Physics: Conference Series, 2009, 150, 032052.	0.3	2
51	Quantum Fluid Dynamics of Rotating Superfluid 3He in Aerogel. Journal of Low Temperature Physics, 2008, 150, 435-444.	0.6	5
52	Electron-Nuclear Recoil Discrimination by Pulse Shape Analysis. Journal of Low Temperature Physics, 2008, 150, 536-543.	0.6	4
53	Silicon Vibrating Wires at Low Temperatures. Journal of Low Temperature Physics, 2008, 150, 739-790.	0.6	16
54	ULTIMA: Magnetic Field Dependence of the Calibration Factor. Journal of Low Temperature Physics, 2008, 151, 860-864.	0.6	1

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55	Observation of vortex-creep in superfluid 3He B-like phase in aerogel by the HPD. Physica C: Superconductivity and Its Applications, 2008, 468, 605-608.	0.6	0
56	Spin vortex in magnon BEC of superfluid 3He-B. Physica C: Superconductivity and Its Applications, 2008, 468, 609-612.	0.6	9
57	Bose-Einstein Condensation of Magnons in Superfluid 3He. Journal of Low Temperature Physics, 2008, 150, 135-144.	0.6	63
58	Strong Orientational Effect of Stretched Aerogel on the He-3 Order Parameter. Physical Review Letters, 2008, 100, 215304.	2.9	49
59	Coherent Precession of Magnetization in the Superfluid ^3He Phase. Physical Review Letters, 2008, 101, 055301.	2.9	36
60	^3He : cosmological and atomic physics experiments. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2008, 366, 2821-2832.	1.6	5
61	Magnon Condensation into a QBall in ^3He -B. Physical Review Letters, 2007, 98, 265302.	2.9	80
62	Bolometric calibration of a superfluid 3He detector for Dark Matter search: Direct measurement of the scintillated energy fraction for neutron, electron and muon events. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 574, 264-271.	0.7	15
63	Spin supercurrent. Journal of Magnetism and Magnetic Materials, 2007, 310, 1476-1478.	1.0	8
64	Orientation effect on superfluid 3He in anisotropic aerogel. JETP Letters, 2007, 86, 216-220.	0.4	55
65	Catastrophic Relaxation, Two Decades of Controversy. Journal of Low Temperature Physics, 2007, 148, 475-482.	0.6	1
66	Heat Capacity of Adsorbed Helium-3 at Ultra-Low Temperatures. Journal of Low Temperature Physics, 2007, 148, 749-753.	0.6	7
67	Textures of Superfluid 3He A-like and B-like Phases in Aerogel under Rotation. Journal of Low Temperature Physics, 2007, 148, 591-596.	0.6	3
68	Ultra Low Temperature Instrumentation for Measurements in Astrophysics : ULTIMA. AIP Conference Proceedings, 2006, , .	0.3	0
69	Solution of the problem of catastrophic relaxation of homogeneous spin precession in superfluid 3He-B. JETP Letters, 2006, 83, 530-535.	0.4	14
70	On the problem of catastrophic relaxation in superfluid 3He-B. JETP Letters, 2006, 84, 289-293.	0.4	11
71	ULTIMA: A bolometric detector for dark matter search using superfluid 3He. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 559, 384-386.	0.7	11
72	Probing Cosmological Defects in Superfluid ^3He -B with a Vibrating-Wire Resonator. Physical Review Letters, 2006, 96, 205301.	2.9	12

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73	Ferromagnetic nanoclusters in two-dimensional ^3He . <i>Physical Review B</i> , 2006, 73, .	1.1	6
74	An analysis method for time ordered data processing of $\hat{\text{A}}\text{dark}\hat{\text{A}}$ matter experiments. <i>Astronomy and Astrophysics</i> , 2006, 453, 761-768.	2.1	2
75	^3He NMR in aerogel. <i>Journal of Physics and Chemistry of Solids</i> , 2005, 66, 1325-1329.	1.9	4
76	Low-energy conversion electron detection in superfluid ^3He at ultra-low temperature. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2005, 548, 411-417.	0.7	7
77	Persistent Signal; Coherent NMR state trapped by orbital texture. <i>Journal of Low Temperature Physics</i> , 2005, 138, 753-758.	0.6	12
78	Magnetization and spin diffusion of liquid ^3He in aerogel. <i>Physical Review B</i> , 2005, 72, .	1.1	39
79	Pinning of Texture and Vortices of the Rotating B-like Phase of Superfluid ^3He Confined in a 98% Aerogel. <i>Physical Review Letters</i> , 2005, 94, 075301.	2.9	15
80	On the spin-liquid phase of two-dimensional ^3He . <i>Journal of Physics Condensed Matter</i> , 2004, 16, S691-S699.	0.7	5
81	NMR in Superfluid Helium-3 in the Non-Hydrodynamic Regime. <i>Journal of Low Temperature Physics</i> , 2004, 135, 337-359.	0.6	17
82	Spin-Orbital Dynamics in the B-Phase of Superfluid Helium-3. <i>Journal of Low Temperature Physics</i> , 2004, 137, 625-654.	0.6	6
83	Topological defects and coherent magnetization precession of in aerogel. <i>Physica B: Condensed Matter</i> , 2003, 329-333, 305-306.	1.3	9
84	EU dissemination of the provisional ultra-low-temperature scale, PLTS-2000. <i>Physica B: Condensed Matter</i> , 2003, 329-333, 1564-1565.	1.3	1
85	Superfluid $\hat{\text{A}}\hat{\text{C}}$ from cosmology to particle detection. <i>Physica B: Condensed Matter</i> , 2003, 329-333, 70-74.	1.3	6
86	Search for supersymmetric Dark Matter with superfluid ^3He (MACH 3). <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2002, 538, 257-265.	1.5	23
87	Quantum Frustration in the $\hat{\text{A}}\hat{\text{C}}$ Spin Liquid $\hat{\text{A}}\hat{\text{C}}$ Phase of Two-Dimensional ^3He . <i>Physical Review Letters</i> , 2001, 86, 2447-2450.	2.9	46
88	New concepts on the $\hat{\text{A}}\hat{\text{C}}$ B transition in superfluid ^3He . <i>Physica B: Condensed Matter</i> , 2000, 284-288, 246-247.	1.3	1
89	Design optimization of MACH 3 , a project of superfluid ^3He detector for direct Dark Matter search. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2000, 455, 554-563.	0.7	10
90	Semisuperfluidity of ^3He in Aerogel?. <i>Physical Review Letters</i> , 2000, 85, 3456-3459.	2.9	32

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91	Surface oscillations of homogeneously precessing domain with axial symmetry. Europhysics Letters, 1997, 40, 539-544.	0.7	6
92	Spin dynamics of superfluid ³ He in non-hydrodynamic regime. European Physical Journal D, 1996, 46, 3003-3010.	0.4	4
93	Simulated cosmic strings in a "big bang" in superfluid ³ He at 100 mK. European Physical Journal D, 1996, 46, 5-6.	0.4	4
94	Surface instability of coherent precession in the non-hydrodynamic regime. European Physical Journal D, 1996, 46, 213-214.	0.4	9
95	Temperature dependence of the Leggett-Takagi relaxation time and spin diffusion coefficient in ³ He-B for 6 bar. European Physical Journal D, 1996, 46, 223-224.	0.4	0
96	Coherent spin precession and texture in ³ He-B. European Physical Journal D, 1996, 46, 231-232.	0.4	2
97	Texture dependence of the persistent NMR signal in superfluid ³ He-B. European Physical Journal D, 1996, 46, 233-234.	0.4	1
98	Systematic study of ³ He adsorbed on graphite by NMR techniques. European Physical Journal D, 1996, 46, 399-400.	0.4	3
99	³ He/graphite commensurate bilayer films in the antiferromagnetic regime. European Physical Journal D, 1996, 46, 401-402.	0.4	5
100	Magnetic field dependence of the nuclear magnetization of ³ He films adsorbed on graphite in the ferromagnetic regime. European Physical Journal D, 1996, 46, 403-404.	0.4	6
101	The new grenoble 100 mK refrigerator. European Physical Journal D, 1996, 46, 2791-2792.	0.4	4
102	Laboratory simulation of cosmic string formation in the early Universe using superfluid ³ He. Nature, 1996, 382, 332-334.	13.7	451
103	Field dependence of the magnetization of adsorbed ³ He films at ultra low temperatures. Journal of Low Temperature Physics, 1995, 101, 457-462.	0.6	6
104	A highly sensitive nuclear recoil detector based on superfluid ³ He-B. Journal of Low Temperature Physics, 1995, 101, 9-16.	0.6	2
105	NMR in superfluid ³ He at very low temperatures. Journal of Low Temperature Physics, 1995, 101, 123-134.	0.6	4
106	2D liquid ³ He near solidification: a highly correlated Fermi liquid. Journal of Low Temperature Physics, 1995, 101, 161-166.	0.6	5
107	A geometry dependent thermal resistance between a saturated dilute ³ He- ⁴ He solution and sintered silver powder. Journal of Low Temperature Physics, 1995, 101, 259-264.	0.6	2
108	Potential Dark Matter Detector? The Detection of Low Energy Neutrons by Superfluid ³ He. Physical Review Letters, 1995, 75, 1887-1890.	2.9	130

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109	Single-Vortex Nucleation in Rotating Superfluid $^3\text{He-B}$. Europhysics Letters, 1995, 31, 449-454.	0.7	83
110	Nonwetting Conditions for Coherent Quantum Precession in Superfluid $^3\text{He-B}$. Physical Review Letters, 1994, 73, 1817-1820.	2.9	23
111	Exchange interactions in multilayer ^3He films adsorbed on graphite. Physica B: Condensed Matter, 1994, 194-196, 675-676.	1.3	13
112	The magnetic envelope of the propagating A-B boundary in ^3He . Physica B: Condensed Matter, 1994, 194-196, 759-760.	1.3	0
113	Studies with coherently precessing magnetization on counterflow and vortices in rotating $^3\text{He-B}$. Physica B: Condensed Matter, 1994, 194-196, 761-762.	1.3	1
114	Observation of a new relaxation mechanism in $^3\text{He-B}$. Physica B: Condensed Matter, 1994, 194-196, 803-804.	1.3	3
115	Persistent spin precession in superfluid ^3He . Physica B: Condensed Matter, 1994, 194-196, 827-828.	1.3	11
116	A chaotic regime of internal precession in $^3\text{He-B}$. Journal of Low Temperature Physics, 1993, 90, 167-179.	0.6	5
117	High-Field Magnetotransport in a Percolating Medium. Europhysics Letters, 1993, 21, 851-857.	0.7	21
118	Resonant observation of the Landau field in superfluid ^3He by NMR. Physical Review Letters, 1992, 68, 600-603.	2.9	22
119	Persistent spin precession in ^3He in the regime of vanishing quasiparticle density. Physical Review Letters, 1992, 69, 3092-3095.	2.9	74
120	Spin supercurrent solitons: The magnetic envelope of the propagating A-B boundary in ^3He . Physical Review Letters, 1992, 69, 3662-3665.	2.9	5
121	Homogeneous spin precession in rotating vortex-free $^3\text{He-B}$: Measurement of the superfluid density anisotropy. Physical Review B, 1992, 46, 13983-13990.	1.1	13
122	A new NMR mode in the Landau field in superfluid $^3\text{He-B}$. Journal of Low Temperature Physics, 1992, 89, 27-36.	0.6	4
123	Anomalous magnetic relaxation in normal ^3He at low temperatures. Physica B: Condensed Matter, 1992, 178, 181-186.	1.3	2
124	Principles of HPD NMR spectroscopy of $^3\text{He-B}$. Physica B: Condensed Matter, 1992, 178, 187-195.	1.3	2
125	Low frequency oscillations of the homogeneously precessing domain in $^3\text{He-B}$. Physica B: Condensed Matter, 1992, 178, 196-201.	1.3	31
126	NMR and magnetic supercurrent in $^3\text{He-B}$. Physica Scripta, 1991, T35, 136-140.	1.2	0

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127	A compact dilution refrigerator with vertical heat exchangers for operation to 2 mK. Journal of Low Temperature Physics, 1991, 83, 257-272.	0.6	26
128	Simultaneous spin and space rotation experiments in $^3\text{He-B}$. Journal of Low Temperature Physics, 1991, 83, 323-330.	0.6	11
129	Diffusion-welded laminar nuclear stage. Physica B: Condensed Matter, 1990, 165-166, 53-54.	1.3	6
130	Observation of vortex-like spin supercurrent in $^3\text{He-B}$. Physica B: Condensed Matter, 1990, 165-166, 649-650.	1.3	7
131	Instability of the homogeneous precession in $^3\text{He-B}$ (catastrophic relaxation). Physica B: Condensed Matter, 1990, 165-166, 675-676.	1.3	3
132	Magnetic relaxation in superfluid $^3\text{He-B}$. Physica B: Condensed Matter, 1990, 165-166, 681-682.	1.3	0
133	Nonhydrodynamic spin transport in superfluid ^3He . Physical Review Letters, 1990, 65, 867-870.	2.9	38
134	Investigation of spin supercurrents in ^3He . Physical Review Letters, 1989, 62, 1631-1634.	2.9	108
135	Catastrophic Relaxation in $^3\text{He-B}$ at 0.4 K . Europhysics Letters, 1989, 8, 645-649.	0.7	37
136	Superconducting aluminium heat switch prepared by diffusion welding. Cryogenics, 1989, 29, 938-939.	0.9	20
137	Spin Supercurrent in $^3\text{He-B}$. Japanese Journal of Applied Physics, 1987, 26, 1809.	0.8	13
138	Observation of Phase Slips in Spin Supercurrents in $^3\text{He-B}$. Japanese Journal of Applied Physics, 1987, 26, 175.	0.8	5
139	$^3\text{He-B}$ texture relaxation with parallel-plate geometry. Physics Letters, Section A: General, Atomic and Solid State Physics, 1984, 102, 194-196.	0.9	3
140	Magnetic Vortices in Rotating Superfluid $^3\text{He-B}$. Physical Review Letters, 1983, 51, 1362-1365.	2.9	177
141	Proton Zeeman relaxation in NH_4ClO_4 with natural and enriched deuteron concentrations. Journal of Physics C: Solid State Physics, 1977, 10, 4149-4154.	1.5	8
142	The new types of nuclear spin echo experiments in antiferromagnets. Physica B: Physics of Condensed Matter & C: Atomic, Molecular and Plasma Physics, Optics, 1977, 86-88, 1301-1302.	0.9	5