

Sergei I Mukhin

List of Publications by Year in descending order

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72
papers

417
citations

759233

12
h-index

839539

18
g-index

72
all docs

72
docs citations

72
times ranked

301
citing authors

#	ARTICLE	IF	CITATIONS
1	Duality in 2+1D quantum elasticity: superconductivity and quantum nematic order. <i>Annals of Physics</i> , 2004, 310, 181-260.	2.8	55
2	Analytical derivation of thermodynamic characteristics of lipid bilayer from a flexible string model. <i>Physical Review E</i> , 2005, 71, 061918.	2.1	29
3	Observing the fluctuating stripes in high-T _c superconductors. <i>Europhysics Letters</i> , 2008, 81, 27001.	2.0	27
4	Spin-glass with nonmagnetic defects. <i>Journal of Low Temperature Physics</i> , 1978, 33, 207-229.	1.4	22
5	Spectral properties of the t-J model in the presence of hole-phonon interaction. <i>Physical Review B</i> , 1996, 54, 13167-13174.	3.2	17
6	Dynamics of a small density of holes in a two-dimensional quantum antiferromagnet. <i>Physical Review B</i> , 1997, 55, 3886-3893.	3.2	16
7	Analytical Stripe Phase Solution for the Hubbard Model. <i>Physical Review Letters</i> , 2000, 84, 6066-6069.	7.8	16
8	Analytical approach to thermodynamics of bilipid membranes. <i>Physical Review E</i> , 2010, 82, 051901.	2.1	15
9	Generation of non-classical photon states in superconducting quantum metamaterials. <i>Superconductor Science and Technology</i> , 2013, 26, 084003.	3.5	15
10	Spontaneously Broken Matsubara's Time Invariance in Fermionic System: Macroscopic Quantum Ordered State of Matter. <i>Journal of Superconductivity and Novel Magnetism</i> , 2011, 24, 1165-1171.	1.8	14
11	Instanton Sector of Correlated Electron Systems as the Origin of Populated Pseudo-gap and Flat Band Behavior: Analytic Solution. <i>Journal of Superconductivity and Novel Magnetism</i> , 2009, 22, 75-80.	1.8	13
12	Analytical calculation of the lipid bilayer bending modulus. <i>Physical Review E</i> , 2016, 94, 042415.	2.1	13
13	Negative Energy Antiferromagnetic Instantons Forming Cooper-Pairing "Glue" and "Hidden Order" in High-T _c Cuprates. <i>Condensed Matter</i> , 2018, 3, 39.	1.8	9
14	Enhanced electronic polarizability of metallic stripes and the universality of the bond-stretching phonon anomaly in high-temperature cuprate superconductors. <i>Physical Review B</i> , 2007, 76, .	3.2	8
15	Polarizability of electrically induced magnetic vortex plasma. <i>Physical Review B</i> , 2017, 95, .	3.2	8
16	Stripe-phase ordering as a quantum interference phenomenon. <i>Physical Review B</i> , 2000, 62, 4332-4335.	3.2	7
17	Euclidean Q-Balls of Fluctuating SDW/CDW in the "Nested" Hubbard Model of High-T _c Superconductors as the Origin of Pseudogap and Superconducting Behaviors. <i>Condensed Matter</i> , 2022, 7, 31.	1.8	7
18	Specific heat of the local-pair superconductor. <i>Physica C: Superconductivity and Its Applications</i> , 1991, 174, 455-462.	1.2	6

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19	Monte Carlo study of the local pair superconductor. Physica C: Superconductivity and Its Applications, 1992, 199, 403-413.	1.2	6
20	The nuclear contribution to the specific heat of single crystals of YBa ₂ Cu ₃ O ₇ and Bi ₂ Sr ₂ CaCu ₂ O ₈ . Physica C: Superconductivity and Its Applications, 1993, 210, 391-400.	1.2	6
21	Gas of elastic quantum strings in 2+1 dimensions: Finite temperatures. Physical Review B, 2001, 64, .	3.2	6
22	Oscillations of kinks on dislocation lines in crystals and low-temperature transport anomalies as a result of newly-induced defects. Low Temperature Physics, 2011, 37, 806-811.	0.6	6
23	AC losses in untwisted "in situ" superconductors above the percolation threshold. IEEE Transactions on Magnetics, 1985, 21, 408-410.	2.1	5
24	Tunneling characteristics of the local-pair superconductor. Physica C: Superconductivity and Its Applications, 1990, 171, 42-50.	1.2	5
25	Stripe Phase: Analytical Results for Weakly Coupled Repulsive Hubbard Model. International Journal of Modern Physics B, 2003, 17, 3749-3783.	2.0	5
26	Double-resonance response of a superconducting quantum metamaterial: Manifestation of nonclassical states of photons. Physical Review B, 2016, 94, .	3.2	5
27	First-order dipolar phase transition in the Dicke model with infinitely coordinated frustrating interaction. Physical Review A, 2018, 97, .	2.5	5
28	Classes of metastable thermodynamic quantum time crystals. Physical Review B, 2019, 100, .	3.2	5
29	Local-pair approach to high-T _c superconductivity. Physica Scripta, 1992, T45, 47-50.	2.5	4
30	Theory for normal state critical Kapitza resistance of 4He. Low Temperature Physics, 1998, 24, 76-77.	0.6	4
31	Bilayer membrane in confined geometry: Interlayer slide and entropic repulsion. Journal of Experimental and Theoretical Physics, 2004, 99, 875-888.	0.9	4
32	Pore formation phase diagrams for lipid membranes. JETP Letters, 2014, 99, 358-362.	1.4	4
33	Origin of lipid tilt in flat monolayers and bilayers. Physical Review E, 2019, 100, 062405.	2.1	4
34	Fermi surface of quasi-one-dimensional incommensurate Hg ₃ AsF ₆ . Journal of Low Temperature Physics, 1982, 48, 405-416.	1.4	3
35	Small parameter for Migdal-type description of t-t ² -J model. Journal of Low Temperature Physics, 1995, 99, 473-475.	1.4	3
36	Opening Barrier Renormalization by Membrane Local Curvature Fluctuations around the Mechanosensitive Channel: Analytical Expression. Biophysical Journal, 2013, 104, 244a.	0.5	3

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37	Euclidian Crystals in Many-Body Systems: Breakdown of Goldstone's Theorem. Journal of Superconductivity and Novel Magnetism, 2014, 27, 945-950.	1.8	3
38	Euclidean action of Fermi-system with "hidden order". Physica B: Condensed Matter, 2015, 460, 264-267.	2.7	3
39	Dicke Model Semiclassical Dynamics in Superradiant Dipolar Phase in the "Bound Luminosity" State. Journal of Experimental and Theoretical Physics, 2021, 132, 658-662.	0.9	3
40	Euclidean Q-balls of electronic spin/charge densities confining superconducting condensates as the origin of pseudogap and high-Tc superconducting behaviours. Annals of Physics, 2022, 447, 169000.	2.8	3
41	Monte Carlo study of the NMR properties of the quasi-2D Heisenberg antiferromagnet doped with real space pairs. Physica C: Superconductivity and Its Applications, 1993, 211, 93-112.	1.2	2
42	SELF-MATCHING PROPERTY OF CORRELATED ELECTRONS: CHARGE "DENSITY WAVE ENHANCES SPIN ORDERING. Journal of Physics and Chemistry of Solids, 1998, 59, 1846-1848.	4.0	2
43	Dissipation and Phase Slip in Confined Superfluid 4He. Journal of Low Temperature Physics, 2000, 119, 277-281.	1.4	2
44	Orthogonal-to-unitary ensemble crossover in the electronic specific heat of metal nanoclusters. Low Temperature Physics, 2001, 27, 899-904.	0.6	2
45	Lateral Pressure Profile in a Lipid Membrane with Curvature: Analytical Expression. Biophysical Journal, 2012, 102, 503a.	0.5	2
46	Low-temperature anomalies in the thermal conductivity of plastically deformed crystals caused by phonon-kink scattering. Low Temperature Physics, 2012, 38, 1055-1057.	0.6	2
47	Single fermion Green's function in the quantum ordered Fermi-system: Analytic solution. Physica B: Condensed Matter, 2012, 407, 1882-1884.	2.7	2
48	Lipid lateral self-diffusion drop at liquid-gel phase transition. Physical Review E, 2019, 99, 012414.	2.1	2
49	Scattering of Electrons by Kinks on the Dislocation Line in a Metal. Japanese Journal of Applied Physics, 1987, 26, 657.	1.5	2
50	Spontaneous symmetry breaking and Husimi Q-functions in extended Dicke model. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 505301.	2.1	2
51	A real space pair model for the NMR behavior in high-Tc cuprates. Physica C: Superconductivity and Its Applications, 1993, 211, 77-92.	1.2	1
52	Spin-fluctuation gating in the c-axis non-Drude conductivity of the high Tc cuprates. Annalen Der Physik, 1997, 509, 75-89.	2.4	1
53	Title is missing!. International Journal of Thermophysics, 2001, 22, 1411-1420.	2.1	1
54	Simple model of local ordering of DPPC lipids in contact with cholesterol. Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology, 2015, 9, 77-83.	0.6	1

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55	Spin-charge ordering induced by magnetic field in superconducting state: Analytical self-consistent solution in the two-dimensional model. <i>Europysics Letters</i> , 2015, 109, 57007.	2.0	1
56	Paramagnetic resonance in a "dirty" spin-glass. <i>Journal of Low Temperature Physics</i> , 1979, 37, 219-230.	1.4	0
57	A real-space pair model for the NMR behaviour in high-Tc cuprates. <i>Journal of Physics and Chemistry of Solids</i> , 1993, 54, 1407-1410.	4.0	0
58	Analytical approach to the "t ₂ " model: Quasi-particle dispersion, Fermi surface and optical conductivity. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1996, 228, 115-125.	2.6	0
59	Pseudo-gap behavior in the c-axis conductivity of the underdoped bilayer high Tc cuprates. <i>Journal of Physics and Chemistry of Solids</i> , 1998, 59, 1976-1978.	4.0	0
60	The ordered limit of superconductivity. <i>European Physical Journal Special Topics</i> , 2005, 131, 81-82.	0.2	0
61	Self-Organized Electronic Extended van Hove Singularity as Lattice Dynamic Confinement Effect. <i>Journal of Superconductivity and Novel Magnetism</i> , 2007, 20, 599-602.	1.8	0
62	Flexible-to-semiflexible chain crossover on the pressure-area isotherm of a lipid bilayer. <i>Journal of Experimental and Theoretical Physics</i> , 2008, 106, 135-142.	0.9	0
63	Analytical derivation of thermodynamic properties of bilayer membrane with interdigitation. <i>Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology</i> , 2010, 4, 309-318.	0.6	0
64	Analytical Derivation of Thermodynamic Properties of Bolalipid Membrane. <i>Biophysical Journal</i> , 2010, 98, 285a.	0.5	0
65	Inter-Domain Line Tension Induced by Hydrophobic Lipid Tails in a Lipid Membrane. <i>Biophysical Journal</i> , 2011, 100, 493a.	0.5	0
66	Entropic part of the boundary energy in a lipid membrane. <i>Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology</i> , 2011, 5, 392-399.	0.6	0
67	High Superconducting T _c and Suppressed Isotope Effect in the Instantonic Condensate State of the Fermi-System: Analytic Solution. <i>Journal of Superconductivity and Novel Magnetism</i> , 2013, 26, 2679-2683.	1.8	0
68	Critical Stretching and Pores in Bolalipid Membrane from Flexible String Model. <i>Biophysical Journal</i> , 2014, 106, 709a.	0.5	0
69	Microscopic Model and Analytic Derivation of Area Per Molecule for DPPC-Cholesterol Bilayers. <i>Biophysical Journal</i> , 2015, 108, 410a-411a.	0.5	0
70	Flexible String Model Analytical Description of Main Phase Transition in Lipid Bilayers. <i>Biophysical Journal</i> , 2016, 110, 73a.	0.5	0
71	Bending Modulus of Bolalipids under the U-Shapes Diffusion. <i>Biophysical Journal</i> , 2017, 112, 384a.	0.5	0
72	Mass enhancement without band-narrowing in "t ₂ " and related models: predictions for Fermi-surface and optical conductivity. , 1995, , 334-352.		0