Sergei I Mukhin

List of Publications by Year
in descending order

72	417	759233 12	839539 18
papers	citations	h-index	g-index

72	72	72	301
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Euclidean Q-Balls of Fluctuating SDW/CDW in the â€˜Nestedâ€™ Hubbard Model of High-Tc Superconductors as the Origin of Pseudogap and Superconducting Behaviors. Condensed Matter, 2022, 7, 31.	1.8	7
2	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
3	Dicke Model Semiclassical Dynamics in Superradiant Dipolar Phase in the â€œBound Luminosityâ€•State. Journal of Experimental and Theoretical Physics, 2021, 132, 658-662.	0.9	3
4	Spontaneous symmetry breaking and Husimi Q-functions in extended Dicke model. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 505301.	2.1	2
5	Classes of metastable thermodynamic quantum time crystals. Physical Review B, 2019, 100, .	3.2	5
6	Lipid lateral self-diffusion drop at liquid-gel phase transition. Physical Review E, 2019, 99, 012414.	2.1	2
7	Origin of lipid tilt in flat monolayers and bilayers. Physical Review E, 2019, 100, 062405.	2.1	4
8	Negative Energy Antiferromagnetic Instantons Forming Cooper-Pairing â€˜Glueâ€™ and â€˜Hidden Orderâ€™ in High-Tc Cuprates. Condensed Matter, 2018, 3, 39.	1.8	9
9	First-order dipolar phase transition in the Dicke model with infinitely coordinated frustrating interaction. Physical Review A, 2018, 97, .	2.5	5
10	Bending Modulus of Bolalipids under the U-Shapes Diffusion. Biophysical Journal, 2017, 112, 384a.	0.5	0
11	Polarizability of electrically induced magnetic vortex plasma. Physical Review B, 2017, 95, .	3.2	8
12	Double-resonance response of a superconducting quantum metamaterial: Manifestation of nonclassical states of photons. Physical Review B, 2016, 94, .	3.2	5
13	Flexible String Model Analytical Description of Main Phase Transition in Lipid Bilayers. Biophysical Journal, 2016, 110, 73a.	0.5	0
14	Analytical calculation of the lipid bilayer bending modulus. Physical Review E, 2016, 94, 042415.	2.1	13
15	Microscopic Model and Analytic Derivation of Area Per Molecule for DPPC-Cholesterol Bilayers. Biophysical Journal, 2015, 108, 410a-411a.	0.5	0
16	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
17	Euclidean action of Fermi-system with â€œhidden orderâ€• Physica B: Condensed Matter, 2015, 460, 264-267.	2.7	3
18	Spin-charge ordering induced by magnetic field in superconducting state: Analytical self-consistent solution in the two-dimensional model. Europhysics Letters, 2015, 109, 57007.	2.0	1

#	Article	IF	Citations
19	Euclidian Crystals in Many-Body Systems: Breakdown of Goldstoneâ€™s Theorem. Journal of Superconductivity and Novel Magnetism, 2014, 27, 945-950.	1.8	3
20	Pore formation phase diagrams for lipid membranes. JETP Letters, 2014, 99, 358-362.	1.4	4
21	Critical Stretching and Pores in Bolalipid Membrane from Flexible String Model. Biophysical Journal, 2014, 106, 709a.	0.5	0
22	Opening Barrier Renormalization by Membrane Local Curvature Fluctuations around the Mechanosensitive Channel: Analytical Expression. Biophysical Journal, 2013, 104, 244a.	0.5	3
23	High Superconducting T c and Suppressed Isotope Effect in the Instantonic Condensate State of the Fermi-System: Analytic Solution. Journal of Superconductivity and Novel Magnetism, 2013, 26, 2679-2683.	1.8	0
24	Generation of non-classical photon states in superconducting quantum metamaterials. Superconductor Science and Technology, 2013, 26, 084003.	3.5	15
25	Lateral Pressure Profile in a Lipid Membrane with Curvature: Analytical Expression. Biophysical Journal, 2012, 102, 503a.	0.5	2
26	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
27	Single fermion Green's function in the quantum ordered Fermi-system: Analytic solution. Physica B: Condensed Matter, 2012, 407, 1882-1884.	2.7	2
28	Inter-Domain Line Tension Induced by Hydrophobic Lipid Tails in a Lipid Membrane. Biophysical Journal, 2011, 100, 493a.	0.5	0
29	Entropic part of the boundary energy in a lipid membrane. Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology, 2011, 5, 392-399.	0.6	0
30	Spontaneously Broken Matsubaraâ€™s Time Invariance in Fermionic System: Macroscopic Quantum Ordered State of Matter. Journal of Superconductivity and Novel Magnetism, 2011, 24, 1165-1171.	1.8	14
31	Oscillations of kinks on dislocation lines in crystals and low-temperature transport anomalies as a â€œpassportâ€•of newly-induced defects. Low Temperature Physics, 2011, 37, 806-811.	0.6	6
32	Analytical derivation of thermodynamic properties of bilayer membrane with interdigitation. Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology, 2010, 4, 309-318.	0.6	0
33	Analytical Derivation of Thermodynamic Properties of Bolalipid Membrabe. Biophysical Journal, 2010, 98, 285a.	0.5	0
34	Analytical approach to thermodynamics of bolalipid membranes. Physical Review E, 2010, 82, 051901.	2.1	15
35	Instanton Sector of Correlated Electron Systems as the Origin ofÂPopulated Pseudo-gap and Flat â€œBandâ€•Behavior: Analytic Solution. Journal of Superconductivity and Novel Magnetism, 2009, 22, 75-80.	1.8	13
36	Flexible-to-semiflexible chain crossover on the pressure-area isotherm of a lipid bilayer. Journal of Experimental and Theoretical Physics, 2008, 106, 135-142.	0.9	0

#	Article	IF	Citations
37	Observing the fluctuating stripes in high-T _c superconductors. Europhysics Letters, 2008, 81, 27001.	2.0	27
38	Enhanced electronic polarizability of metallic stripes and the universality of the bond-stretching phonon anomaly in high-temperature cuprate superconductors. Physical Review B, 2007, 76, .	3.2	8
39	Self-Organized Electronic Extended van Hove Singularity asÂLattice Dynamic Confinement Effect. Journal of Superconductivity and Novel Magnetism, 2007, 20, 599-602.	1.8	0
40	The ordered limit of superconductivity. European Physical Journal Special Topics, 2005, 131, 81-82.	0.2	0
41	Analytical derivation of thermodynamic characteristics of lipid bilayer from a flexible string model. Physical Review E, 2005, 71, 061918.	2.1	29
42	Bilayer membrane in confined geometry: Interlayer slide and entropic repulsion. Journal of Experimental and Theoretical Physics, 2004, 99, 875-888.	0.9	4
43	Duality in 2+1D quantum elasticity: superconductivity and quantum nematic order. Annals of Physics, 2004, 310, 181-260.	2.8	55
44	Stripe Phase: Analytical Results for Weakly Coupled Repulsive Hubbard Model. International Journal of Modern Physics B, 2003, 17, 3749-3783.	2.0	5
45	Orthogonal-to-unitary ensemble crossover in the electronic specific heat of metal nanoclusters. Low Temperature Physics, 2001, 27, 899-904.	0.6	2
46	Title is missing!. International Journal of Thermophysics, 2001, 22, 1411-1420.	2.1	1
47	Gas of elastic quantum strings in2+1dimensions: Finite temperatures. Physical Review B, 2001, 64, .	3.2	6
48	Dissipation and Phase Slip in Confined Superfluid 4He. Journal of Low Temperature Physics, 2000, 119, 277-281.	1.4	2
49	Stripe-phase ordering as a quantum interference phenomenon. Physical Review B, 2000, 62, 4332-4335.	3.2	7
50	Analytical Stripe Phase Solution for the Hubbard Model. Physical Review Letters, 2000, 84, 6066-6069.	7.8	16
51	SELF-MATCHING PROPERTY OF CORRELATED ELECTRONS: CHARGEâ€“DENSITY WAVE ENHANCES SPIN ORDERING. Journal of Physics and Chemistry of Solids, 1998, 59, 1846-1848.	4.0	2
52	Pseudo-gap behavior in the c-axis conductivity of the underdoped bilayer high Tc cuprates. Journal of Physics and Chemistry of Solids, 1998, 59, 1976-1978.	4.0	0
53	Theory for normal state critical Kapitza resistance of 4He. Low Temperature Physics, 1998, 24, 76-77.	0.6	4
54	Dynamics of a small density of holes in a two-dimensional quantum antiferromagnet. Physical Review B, 1997, 55, 3886-3893.	3.2	16

#	Article	IF	Citations
55	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
56	Analytical approach to the tâ€”tâ€²â€”J model: Quasi-particle dispersion, Fermi surface and optical conductivity. Physica A: Statistical Mechanics and Its Applications, 1996, 228, 115-125.	2.6	0
57	Spectral properties of thet-Jmodel in the presence of hole-phonon interaction. Physical Review B, 1996, 54, 13167-13174.	3.2	17
58	Small parameter for Migdal-type description of t-tâ€²-J model. Journal of Low Temperature Physics, 1995, 99, 473-475.	1.4	3
59	Mass enhancement without band-narrowing in tâ€“tâ€²â€“J and related models: predictions for Fermi-surface and optical conductivity. , 1995, , 334-352.		0
60	A real-space pair model for the NMR behaviour in high-Tc cuprates. Journal of Physics and Chemistry of Solids, 1993, 54, 1407-1410.	4.0	0
61	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
62	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
63	The nuclear contribution to the specific heat of single crystals of YBa2Cu3O7 and Bi2Sr2CaCu2O8. Physica C: Superconductivity and Its Applications, 1993, 210, 391-400.	1.2	6
64	Local-pair approach to high-Tc superconductivity. Physica Scripta, 1992, T45, 47-50.	2.5	4
65	Monte Carlo study of the local pair superconductor. Physica C: Superconductivity and Its Applications, 1992, 199, 403-413.	1.2	6
66	Specific heat of the local-pair superconductor. Physica C: Superconductivity and Its Applications, 1991, 174, 455-462.	1.2	6
67	Tunneling characteristics of the local-pair superconductor. Physica C: Superconductivity and Its Applications, 1990, 171, 42-50.	1.2	5
68	Scattering of Electrons by Kinks on the Dislocation Line in a Metal. Japanese Journal of Applied Physics, 1987, 26, 657.	1.5	2
69	AC losses in untwisted "in situ" superconductors above the percolation threshold. IEEE Transactions on Magnetics, 1985, 21, 408-410.	2.1	5
70	Fermi surface of quasi-one-dimensional incommensurate Hg3??AsF6. Journal of Low Temperature Physics, 1982, 48, 405-416.	1.4	3
71	Paramagnetic resonance in a ?dirty? spin-glass. Journal of Low Temperature Physics, 1979, 37, 219-230.	1.4	0
72	Spin-glass with nonmagnetic defects. Journal of Low Temperature Physics, 1978, 33, 207-229.	1.4	22