

Sudip Chakravarty

List of Publications by Year in descending order

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77
papers

7,898
citations

87888

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82547

72
g-index

78
all docs

78
docs citations

78
times ranked

3591
citing authors

#	ARTICLE	IF	CITATIONS
1	Two-dimensional quantum Heisenberg antiferromagnet at low temperatures. Physical Review B, 1989, 39, 2344-2371.	3.2	1,276
2	Hidden order in the cuprates. Physical Review B, 2001, 63, .	3.2	1,021
3	Low-temperature behavior of two-dimensional quantum antiferromagnets. Physical Review Letters, 1988, 60, 1057-1060.	7.8	824
4	Weak localization: The quasiclassical theory of electrons in a random potential. Physics Reports, 1986, 140, 193-236.	25.6	439
5	Quantum Fluctuations in the Tunneling between Superconductors. Physical Review Letters, 1982, 49, 681-684.	7.8	338
6	Dynamics of the Two-State System with Ohmic Dissipation. Physical Review Letters, 1984, 52, 5-8.	7.8	335
7	Monte Carlo simulation of the classical two-dimensional one-component plasma. Physical Review B, 1979, 20, 326-344.	3.2	237
8	Onset of Global Phase Coherence in Josephson-Junction Arrays: A Dissipative Phase Transition. Physical Review Letters, 1986, 56, 2303-2306.	7.8	208
9	Quantum Criticality between Topological and Band Insulators in $3+1$ Dimensions. Physical Review Letters, 2011, 107, 196803.	7.8	200
10	Scaling Theory of Two-Dimensional Metal-Insulator Transitions. Physical Review Letters, 1997, 79, 455-458.	7.8	193
11	Critical Behavior of an Ising Spin-Glass. Physical Review Letters, 1986, 57, 245-248.	7.8	170
12	Majorana zero modes in a quantum Ising chain with longer-ranged interactions. Physical Review B, 2012, 85, .	3.2	153
13	Electron and nuclear magnetic relaxation in La_2CuO_4 and related cuprates. Physical Review Letters, 1990, 64, 224-227.	7.8	133
14	Effect of quasiparticle tunneling on quantum-phase fluctuations and the onset of superconductivity in granular films. Physical Review B, 1987, 35, 7256-7259.	3.2	123
15	An explanation for a universality of transition temperatures in families of copper oxide superconductors. Nature, 2004, 428, 53-55.	27.8	116
16	Quantum statistical mechanics of an array of resistively shunted Josephson junctions. Physical Review B, 1988, 37, 3283-3294.	3.2	106
17	Interlayer Josephson tunneling and breakdown of Fermi liquid theory. Physical Review Letters, 1994, 72, 3859-3862.	7.8	105
18	Dissipative dynamics of a two-state system coupled to a heat bath. Physical Review B, 1985, 31, 154-164.	3.2	103

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19	Criticality in correlated quantum matter. Nature Physics, 2005, 1, 53-56.	16.7	98
20	Wigner glass, spin liquids and the metal-insulator transition. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1999, 79, 859-868.	0.6	97
21	Fermi pockets and quantum oscillations of the Hall coefficient in high-temperature superconductors. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 8835-8839.	7.1	96
22	Effects of dissipation on quantum phase transitions. Physical Review B, 2001, 63, .	3.2	91
23	Phase Diagram and Critical Exponents of a Dissipative Ising Spin Chain in a Transverse Magnetic Field. Physical Review Letters, 2005, 94, 047201.	7.8	91
24	Quantum decay in a dissipative system. Physical Review B, 1984, 29, 130-137.	3.2	78
25	Frustrated Kinetic Energy, the Optical Sum Rule, and the Mechanism of Superconductivity. Physical Review Letters, 1999, 82, 2366-2369.	7.8	75
26	Photoinduced Macroscopic Quantum Tunneling in Superconducting Interference Devices. Physical Review Letters, 1983, 50, 1811-1814.	7.8	72
27	Dissipative Dynamics of a Two-State System, the Kondo Problem, and the Inverse-Square Ising Model. Physical Review Letters, 1995, 75, 501-504.	7.8	64
28	Dimensional Crossover in Quantum Antiferromagnets. Physical Review Letters, 1996, 77, 4446-4449.	7.8	59
29	Low-temperature behavior of the correlation length and the susceptibility of a quantum Heisenberg ferromagnet in two dimensions. Physical Review B, 1989, 40, 4858-4870.	3.2	56
30	Entanglement entropy and multifractality at localization transitions. Physical Review B, 2008, 77, .	3.2	54
31	Interactions and scaling in a disordered two-dimensional metal. Physical Review B, 1998, 58, R559-R562.	3.2	49
32	NEUTRON SCATTERING SIGNATURE OF d-DENSITY WAVE ORDER IN THE CUPRATES. International Journal of Modern Physics B, 2001, 15, 2901-2909.	2.0	49
33	Photoinduced macroscopic quantum tunneling. Physical Review B, 1985, 32, 76-87.	3.2	46
34	The Neutron Peak in the Interlayer Tunneling Model of High Temperature Superconductors. Physical Review Letters, 1997, 78, 3559-3562.	7.8	46
35	Competing order, Fermi surface reconstruction, and quantum oscillations in underdoped high-temperature superconductors. Physical Review B, 2008, 78, .	3.2	46
36	Sharp Signature of Quantum Critical Point in the Hall Coefficient of Cuprate Superconductors. Physical Review Letters, 2002, 89, 277003.	7.8	43

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37	From Complexity to Simplicity. Science, 2008, 319, 735-736.	12.6	42
38	Electronic mechanism of superconductivity in the cuprates, C60, and polyacenes. Physical Review B, 2001, 64, .	3.2	38
39	Spin-wave expansion of the staggered magnetization of a square-lattice Heisenberg antiferromagnet at $T=0$. Physical Review B, 1991, 43, 13687-13690.	3.2	36
40	Replacing energy by von Neumann entropy in quantum phase transitions. Annals of Physics, 2007, 322, 1466-1476.	2.8	36
41	High-temperature series expansion for spin glasses. II. Analysis of the series. Physical Review B, 1987, 36, 559-566.	3.2	35
42	High-temperature series expansion for spin glasses. I. Derivation of the series. Physical Review B, 1987, 36, 546-558.	3.2	33
43	Quasiparticle scattering and local density of states in the d-density-wave phase. Physical Review B, 2004, 69, .	3.2	33
44	Theory of nuclear relaxation in La_2CuO_4 . Physical Review B, 1991, 43, 2796-2808.	3.2	28
45	Scale-independent fluctuations of spin stiffness in the Heisenberg model and its relationship to universal conductance fluctuations. Physical Review Letters, 1991, 66, 481-483.	7.8	23
46	Correlation Lengths in Quantum Spin Ladders. Physical Review Letters, 1997, 78, 4115-4118.	7.8	22
47	Superuniversality of topological quantum phase transition and global phase diagram of dirty topological systems in three dimensions. Physical Review B, 2017, 95, .	3.2	19
48	Dissipation, topology, and quantum phase transition in a one-dimensional Josephson junction array. Physical Review B, 2006, 73, .	3.2	18
49	Higher angular momentum pairing from transverse gauge interactions. Physical Review B, 2013, 88, .	3.2	18
50	Is the phase transition in the Heisenberg model described by the $(2 + i\mu)$ expansion of the non-linear \tilde{f} -model?. Nuclear Physics B, 1997, 485, 613-645.	2.5	17
51	Floating phase in a dissipative Josephson junction array. Physical Review B, 2005, 72, .	3.2	17
52	Nature and boundary of the floating phase in a dissipative Josephson junction array. Physical Review B, 2006, 73, .	3.2	16
53	Resolution of two apparent paradoxes concerning quantum oscillations in underdoped high- T_c superconductors. Physical Review B, 2009, 80, .	3.2	16
54	Topological density wave states of nonzero angular momentum. Physical Review B, 2011, 84, .	3.2	16

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55	Condensation energy and the mechanism of superconductivity. Physical Review B, 2003, 67, .	3.2	15
56	Modulation of the local density of states within the density-wave theory of the underdoped cuprates. Physical Review B, 2005, 72, .	3.2	15
57	Photoinduced Macroscopic Quantum Tunneling in Superconducting Interference Devices. Physical Review Letters, 1983, 51, 1109-1109.	7.8	13
58	Charge-2eskyrmion condensate in a hidden-order state. Physical Review B, 2013, 87, .	3.2	13
59	Quasiparticle Nernst effect in the cuprate superconductors from the d -density-wave theory of the pseudogap phase. Physical Review B, 2010, 81, .	3.2	11
60	SCALING OF VON NEUMANN ENTROPY AT THE ANDERSON TRANSITION. International Journal of Modern Physics B, 2010, 24, 1823-1840.	2.0	11
61	Absence of crystalline order in two dimensions. Physical Review B, 1980, 22, 369-372.	3.2	10
62	Infrared Hall angle in the density-wave state: A comparison of theory and experiment. Physical Review B, 2004, 70, .	3.2	8
63	Magnetic breakdown and quantum oscillations in electron-doped high-temperature superconductor $Nd_{2-x}Ce_xCuO_4$. Physical Review B, 2011, 84, .	3.2	7
64	Critical exponents for Ising spin glasses through high-temperature series analysis. Journal of Applied Physics, 1987, 61, 4095-4096.	2.5	5
65	Glassy states in fermionic systems with strong disorder and interactions. Physical Review B, 2009, 79, .	3.2	5
66	Amplitude mode of the d -density-wave state and its relevance to high- T_c cuprates. Physical Review B, 2013, 87, .	3.2	5
67	Skyrmions in a density wave state: A mechanism for chiral superconductivity. Modern Physics Letters B, 2015, 29, 1540053.	1.9	5
68	Calculation for polar Kerr effect in high-temperature cuprate superconductors. Physical Review B, 2016, 93, .	3.2	5
69	Quantum coherence in dissipative systems. Physica B: Physics of Condensed Matter & C: Atomic, Molecular and Plasma Physics, Optics, 1984, 126, 385-391.	0.9	4
70	Quantum Mechanics on a Macroscopic Scale. Annals of the New York Academy of Sciences, 1986, 480, 25-35.	3.8	4
71	NMR relaxation rate of ^{17}O in $Sr_2CuO_2Cl_2$: Probing two-dimensional magnons at short distances. Physical Review B, 1997, 56, 3338-3346.	3.2	4
72	Universality of transition temperatures in families of copper-oxide superconductors: interlayer tunneling redux. , 2005, .		3

#	ARTICLE	IF	CITATIONS
73	ORBITAL MAGNETISM IN THE CUPRATES. International Journal of Modern Physics B, 2002, 16, 3140-3146.	2.0	2
74	An Explanation for a Universality of Transition Temperatures in Families of Copper Oxide Superconductors.. ChemInform, 2004, 35, no.	0.0	0
75	Skyrmions in a Density-Wave State: A Mechanism for Chiral Superconductivity. , 2016, , 481-507.		0
76	Can a quantum critical state represent a blackbody?. Annals of Physics, 2018, 388, 135-146.	2.8	0
77	ORBITAL MAGNETISM IN THE CUPRATES. , 2002, , .		0