

# Alexei Sherman

## List of Publications by Year in descending order

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docs citations

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138  
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#	ARTICLE	IF	CITATIONS
1	Absence of superconductivity in the repulsive Hubbard model on a square lattice in the regime of strong coupling. <i>Physica Scripta</i> , 2021, 96, 095804.	1.2	4
2	Magnetic Properties and Superconductivity in the Two-Dimensional Repulsive Hubbard Model. <i>Journal of the Physical Society of Japan</i> , 2021, 90, 104707.	0.7	2
3	Negative electron compressibility in the Hubbard model. <i>Physica Scripta</i> , 2020, 95, 015806.	1.2	6
4	Spin and charge fluctuations in the two-band Hubbard model. <i>European Physical Journal B</i> , 2020, 93, 1.	0.6	4
5	Phase Separation and Pairing Fluctuations in Oxide Materials. <i>Condensed Matter</i> , 2020, 5, 65.	0.8	1
6	Hubbard-Kanamori model: spectral functions, negative electron compressibility, and susceptibilities. <i>Physica Scripta</i> , 2020, 95, 095804.	1.2	7
7	The $t$ - $\hat{a}^{\dagger}$ - $\hat{a}^2$ - $\hat{a}^{\dagger}$ - $U$ Hubbard model and Fermi-level peak. <i>Physica Scripta</i> , 2019, 94, 055802.	1.2	8
8	Magnetic properties and temperature variation of spectra in the Hubbard model. <i>European Physical Journal B</i> , 2019, 92, 1.	0.6	9
9	Influence of spin and charge fluctuations on spectra of the two-dimensional Hubbard model. <i>Journal of Physics Condensed Matter</i> , 2018, 30, 195601.	0.7	11
10	Manifestations of spin and charge fluctuations in spectra of the Hubbard model. <i>International Journal of Modern Physics B</i> , 2018, 32, 1840032.	1.0	1
11	Spin and charge fluctuations in the Hubbard model. <i>Journal of Magnetism and Magnetic Materials</i> , 2017, 440, 97-100.	1.0	3
12	Continuum of many-particle states near the metal-insulator transition in the Hubbard model. <i>European Physical Journal B</i> , 2017, 90, 1.	0.6	6
13	The spin-1 $J_1$ - $J_3$ Heisenberg model on a triangular lattice. <i>Journal of Physics: Conference Series</i> , 2017, 833, 012019.	0.3	0
14	Pseudogaps in the three-band Hubbard model. <i>European Physical Journal B</i> , 2016, 89, 1.	0.6	8
15	Strong coupling diagram technique for the three-band Hubbard model. <i>International Journal of Modern Physics B</i> , 2016, 30, 1642004.	1.0	0
16	The Hubbard model in the strong coupling theory at arbitrary filling. <i>Physica Status Solidi (B): Basic Research</i> , 2015, 252, 2006-2012.	0.7	6
17	Low-frequency quantum oscillations due to strong electron correlations. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2015, 379, 1912-1916.	0.9	4
18	The $t$ - $J$ Model in a Strong Magnetic Field. <i>Acta Physica Polonica A</i> , 2015, 127, 213-215.	0.2	0

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19	Properties of the half-filled Hubbard model investigated by the strong coupling diagram technique. International Journal of Modern Physics B, 2015, 29, 1550088.	1.0	7
20	The Mott transition in the strong coupling perturbation theory. Physica B: Condensed Matter, 2015, 456, 35-40.	1.3	10
21	Magnetic Susceptibility of Optimally Doped $\text{Pr}_{1-x}\text{La}_x\text{Ce}_x\text{CuO}_4$ . Quantum Matter, 2015, 4, 339-341.	0.2	0
22	MAGNETIC RESPONSE OF $\text{Pr}_{1-x}\text{La}_x\text{Ce}_x\text{CuO}_4$ IN COMPARISON WITH HOLE-DOPED CUPRATES. Spin, 2014, 04, 1440006.	0.6	0
23	Magnetic Properties of the Spin-1 Two-Dimensional $J_1$ - $J_3$ Heisenberg Model on a Triangular Lattice. Acta Physica Polonica A, 2014, 126, 242-243.	0.2	1
24	Exact diagonalization study of the spin-1 two-dimensional $J_1$ - $J_3$ Heisenberg model on a triangular lattice. $\text{Pr}_{1-x}\text{La}_x\text{Ce}_x\text{CuO}_4$ . Journal of Superconductivity and Novel Magnetism, 2013, 26, 343-349.	0.9	1
25	Strongly correlated electron system in the magnetic field. Physics Letters, Section A: General, Atomic and Solid State Physics, 2013, 377, 2979-2985.	0.9	3
26	Magnetic Response of Optimally Doped $\text{Pr}_{1-x}\text{La}_x\text{Ce}_x\text{CuO}_4$ . Journal of Superconductivity and Novel Magnetism, 2013, 26, 343-349.	0.8	3
27	Mechanisms of the Magnetic Incommensurability in p-Type Cuprate Perovskites. Journal of Superconductivity and Novel Magnetism, 2013, 26, 1733-1736.	0.8	0
28	MAGNETIC INCOMMENSURABILITY IN p-TYPE CUPRATE PEROVSKITES. International Journal of Modern Physics B, 2012, 26, 1250061.	1.0	7
29	Excitations and spin correlations near the interface of two three-dimensional Heisenberg antiferromagnets. Physics Letters, Section A: General, Atomic and Solid State Physics, 2012, 376, 2725-2729.	0.9	0
30	Low-Frequency Magnetic Response in the Pseudogap Phase of Cuprate Perovskites. Journal of Superconductivity and Novel Magnetism, 2012, 25, 1833-1841.	0.8	3
31	Magnetic phase diagram of the spin-1 two-dimensional $J_1$ - $J_3$ Heisenberg model on a triangular lattice. Physics Letters, Section A: General, Atomic and Solid State Physics, 2012, 376, 1062-1066.	0.9	11
32	The spin-1 two-dimensional $J_1$ - $J_3$ Heisenberg antiferromagnet on a triangular lattice. Physics Letters, Section A: General, Atomic and Solid State Physics, 2010, 374, 3567-3571.	0.9	3
33	NEAR-BOUNDARY AND BULK REGIONS OF A SEMI-INFINITE TWO-DIMENSIONAL HEISENBERG ANTIFERROMAGNET. Modern Physics Letters B, 2010, 24, 2327-2334.	1.0	1
34	EXCITATIONS NEAR THE BOUNDARY BETWEEN A METAL AND A MOTT INSULATOR. International Journal of Modern Physics B, 2010, 24, 979-995.	1.0	8
35	The $J_1$ - $J_3$ model on a semi-infinite lattice. Journal of Physics Condensed Matter, 2010, 22, 375603.	0.7	0
36	Spin correlations near the surface of a three-dimensional Heisenberg antiferromagnet. Physics Letters, Section A: General, Atomic and Solid State Physics, 2009, 373, 3473-3476.	0.9	2

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37	Carrier dispersion in the two-dimensional model on a triangular lattice. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 5229-5232.	0.9	0
38	Fluctuating charge-density waves in the Hubbard model. Physical Review B, 2008, 77, .	1.1	14
39	SPIN DYNAMICS IN STRONGLY CORRELATED ELECTRON SYSTEMS. International Journal of Modern Physics B, 2007, 21, 669-690.	1.0	3
40	Magnetic susceptibility of the two-dimensional Hubbard model using a power series for the hopping constant. Physical Review B, 2007, 76, .	1.1	12
41	Spin dynamics in cuprate perovskites. Low Temperature Physics, 2006, 32, 375-379.	0.2	1
42	Magnetic properties of the two-dimensional Heisenberg model on a triangular lattice. Physics Letters, Section A: General, Atomic and Solid State Physics, 2005, 334, 312-316.	0.9	4
43	Incommensurate magnetic response in cuprate perovskites. Physics Letters, Section A: General, Atomic and Solid State Physics, 2005, 337, 435-440.	0.9	6
44	INCOMMENSURATE SPIN DYNAMICS IN UNDERDOPED CUPRATE PEROVSKITES. International Journal of Modern Physics B, 2005, 19, 2145-2159.	1.0	8
45	Spectral and magnetic properties of the $t\hat{c}J$ model of cuprate perovskites. Physica Status Solidi (B): Basic Research, 2004, 241, 2097-2108.	0.7	1
46	Magnetic properties of the $t\hat{c}J$ model in the normal state. Physics Letters, Section A: General, Atomic and Solid State Physics, 2003, 309, 482-487.	0.9	3
47	Magnetic Properties of the Doped Two-Dimensional Antiferromagnet. Modern Physics Letters B, 2003, 17, 433-440.	1.0	1
48	Quantum interference of electrons in Ta <sub>4</sub> Te <sub>4</sub> Si. Physical Review B, 2000, 62, 10565-10568.	1.1	13
49	Temperature behavior of the magnon modes of the square-lattice antiferromagnet. Physical Review B, 1999, 60, 10180-10185.	1.1	5
50	Ferron-like states in YBa <sub>2</sub> Cu <sub>3</sub> O <sub>6+x</sub> . Physica C: Superconductivity and Its Applications, 1999, 316, 205-209.	0.6	1
51	Underdoped Region of the t-J Model. Journal of Low Temperature Physics, 1999, 117, 241-245.	0.6	0
52	Spectral and magnetic properties of the two-dimensional $t\hat{c}J$ model in the quantum disordered regime. Physica C: Superconductivity and Its Applications, 1998, 303, 257-272.	0.6	15
53	The t-J model in the quantum disordered regime. Physics Letters, Section A: General, Atomic and Solid State Physics, 1998, 238, 303-308.	0.9	1
54	Magnetoresistance study of a thin $\hat{c}$ -tungsten film. Physical Review B, 1998, 58, 11111-11114.	1.1	10

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55	Bound hole states and ferrons in $\text{La}_2\text{CuO}_4$ . Physical Review B, 1998, 57, 10299-10302.	1.1	3
56	Superconductivity and Magnetic Properties of the $t$ - $J$ Model of Cuprate Perovskites. International Journal of Modern Physics B, 1998, 12, 3039-3041.	1.0	1
57	Magnetic transitions and superconductivity in the $t$ - $J$ model. Physical Review B, 1997, 55, 582-590.	1.1	16
58	Normal-state pseudogap in the spectrum of strongly correlated fermions. Physical Review B, 1997, 55, R712-R715.	1.1	19
59	Anomalous Fermi liquid and strong-coupling superconductivity in cuprates. European Physical Journal D, 1996, 46, 939-940.	0.4	0
60	Localized hole states induced by excess oxygen in $\text{La}_2\text{CuO}_4$ . European Physical Journal D, 1996, 46, 969-970.	0.4	0
61	Magnetic transitions and superconductivity in the $t$ - $J$ model. Journal of Low Temperature Physics, 1996, 105, 615-620.	0.6	0
62	Bound-hole states induced by excess oxygen in $\text{La}_2\text{CuO}_4$ . Physical Review B, 1996, 53, 2221-2224.	1.1	3
63	Renormalization of elementary excitations of the 2D $t$ - $J$ model at moderate doping. Physics Letters, Section A: General, Atomic and Solid State Physics, 1995, 197, 247-252.	0.9	2
64	Anomalous Fermi liquid and strong-coupling superconductivity in cuprate perovskites. Physica C: Superconductivity and Its Applications, 1995, 253, 23-32.	0.6	6
65	Strong-coupling superconductivity in the two-dimensional $t$ - $J$ model supplemented by a hole-phonon interaction. Physical Review B, 1995, 52, 10621-10625.	1.1	6
66	Evolution of hole and magnon spectra of the two-dimensional $t$ - $J$ model with doping. Physical Review B, 1994, 50, 12887-12895.	1.1	23
67	Overdamped Magnons in a Doped Two-Dimensional Antiferromagnet. Physica Status Solidi (B): Basic Research, 1994, 186, 493-503.	0.7	0
68	Self-trapping transition in the ground state of the Holstein $t$ - $J$ model. Physics Letters, Section A: General, Atomic and Solid State Physics, 1994, 195, 231-235.	0.9	4
69	Localized hole states in the extended Hubbard model. Solid State Communications, 1993, 86, 23-26.	0.9	3
70	Coupling of holes in the $t$ - $J$ model on an infinite plane. Physica C: Superconductivity and Its Applications, 1993, 211, 329-337.	0.6	12
71	Formation of ferromagnetic clusters around holes in the two-dimensional $t$ - $J$ model. Physical Review B, 1993, 48, 543-549.	1.1	19
72	Magnetic excitations of a doped two-dimensional antiferromagnet. Physical Review B, 1993, 48, 7492-7498.	1.1	30

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73	Mechanism of hole attraction in the extended Hubbard model. <i>Physical Review B</i> , 1993, 47, 11521-11524.	1.1	21
74	Dynamics of holes in the extended Hubbard model. <i>Physical Review B</i> , 1992, 46, 6400-6408.	1.1	5
75	Energy spectrum and transport properties of the two-dimensional $t$ - $J$ model. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1992, 65, 881-885.	0.6	8
76	Localized Hole States in a Two-Dimensional Antiferromagnet. <i>Physica Status Solidi (B): Basic Research</i> , 1991, 166, 161-166.	0.7	6
77	Energy spectrum of a hole in a two-dimensional antiferromagnet. <i>Physica C: Superconductivity and Its Applications</i> , 1990, 171, 395-400.	0.6	21
78	A hole in a two-dimensional antiferromagnet. <i>Solid State Communications</i> , 1990, 76, 321-323.	0.9	11
79	Theoretical simulation of physical processes in a discharge XeCl laser. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1989, 22, 1489-1504.	0.6	16
80	Temperature Dependence of Exciton Absorption Spectra. A Calculation Based on the Recursion Method. <i>Physica Status Solidi (B): Basic Research</i> , 1988, 145, 319-332.	0.7	13
81	A Recursion Method for Calculating Many-Particle Green's Functions. Resonant Secondary Radiation and Excitation Spectra in the Exciton Region. <i>Physica Status Solidi (B): Basic Research</i> , 1988, 149, 725-737.	0.7	1
82	Energy and Absorption Spectra of One-Dimensional Exciton-Phonon System. <i>Physica Status Solidi (B): Basic Research</i> , 1987, 141, 151-161.	0.7	7
83	Exciton absorption spectrum (II). <i>Physica Status Solidi (B): Basic Research</i> , 1986, 135, 697-705.	0.7	11
84	Exciton Absorption Spectrum. <i>Physica Status Solidi (B): Basic Research</i> , 1985, 131, 225-233.	0.7	7
85	Molecule in a strong quasi-monochromatic light. <i>Optics Communications</i> , 1983, 48, 185-189.	1.0	0
86	Jahn-Teller effect at exciton self-trapping. <i>Solid State Communications</i> , 1982, 44, 1253-1256.	0.9	0
87	Self-Trapping of Polaritons. <i>Physica Status Solidi (B): Basic Research</i> , 1982, 113, 471-479.	0.7	2
88	Enhancement of Polaron Effect in Thin Dielectric Films. <i>Physica Status Solidi (B): Basic Research</i> , 1981, 108, 71-78.	0.7	1
89	Dependence of the polaron binding energy and effective mass in a crystal layer on its thickness. <i>Solid State Communications</i> , 1981, 39, 273-277.	0.9	15
90	Spectroscopic manifestations of the exciton self-trapping barrier. <i>Solid State Communications</i> , 1981, 37, 165-169.	0.9	2

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91	On the theory of resonant secondary radiation of excitons strongly interacting with phonons. Physica Status Solidi (B): Basic Research, 1979, 92, 177-183.	0.7	8
92	On the theory of resonant secondary radiation of excitons weakly interacting with phonons. Physica Status Solidi (B): Basic Research, 1978, 85, 51-61.	0.7	14
93	Magnetic Response of Pr <sub>1-x</sub> La <sub>x</sub> CuO <sub>4</sub> in Comparison with Hole-Doped Cuprates. Solid State Phenomena, 0, 215, 11-16.		0
94	Phonon-assisted phase separation in strongly correlated systems. International Journal of Modern Physics B, 0, , .	1.0	0