Leonardo S Lima

List of Publications by Year
in descending order

70	610	687220 13	752573 20
papers	citations	h-index	g-index

70	70	70	100
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Spin transport in antiferromagnets in one and two dimensions calculated using the Kubo formula. Physical Review B, 2009, 79, .	1.1	56
2	Lowâ€temperature spin transport in the Sâ€‰=â€‰1 oneâ€and twoâ€dimensional antiferromagnets with Dzyaloshinskiiâ€“Moriya interaction. Physica Status Solidi (B): Basic Research, 2012, 249, 1613-1623.	0.7	31
3	Spin transport in the two-dimensional quantum disordered anisotropic Heisenberg model. Journal of Magnetism and Magnetic Materials, 2014, 371, 89-93.	1.0	25
4	The phase diagram and critical properties of the two-dimensional anisotropicXYmodel. Journal of Physics Condensed Matter, 2008, 20, 015208.	0.7	24
5	Dynamics of the anisotropic two-dimensional XY model. European Physical Journal B, 2009, 70, 335-342.	0.6	24
6	Controlling the range of interactions in the classical inertial ferromagnetic Heisenberg model: analysis of metastable states. Journal of Statistical Mechanics: Theory and Experiment, 2015, 2015, P04012.	0.9	23
7	Effect of Dzyaloshinskiiâ€“Moriya interaction on quantum entanglement in superconductors models of high Tc. European Physical Journal D, 2019, 73, 1.	0.6	21
8	Low-temperature spin transport in aS= 1 one-dimensional antiferromagnet. Journal of Physics Condensed Matter, 2009, 21, 245502.	0.7	17
9	Spin transport in the anisotropic easy-plane two-dimensional Heisenberg antiferromagnet. Journal of Magnetism and Magnetic Materials, 2010, 322, 668-670.	1.0	16
10	Spin transport of the quantum integer spin S one-dimensional Heisenberg antiferromagnet coupled to phonons. European Physical Journal B, 2013, 86, 1.	0.6	16
11	Price dynamics of the financial markets using the stochastic differential equation for a potential double well. Physica A: Statistical Mechanics and Its Applications, 2018, 490, 828-833.	1.2	16
12	Entanglement in the quantum one-dimensional integer spin S Heisenberg antiferromagnet. Physica A: Statistical Mechanics and Its Applications, 2017, 483, 239-242.	1.2	15
13	Spin conductivity of the two-dimensional ferroquadrupolar Heisenberg model. Solid State Communications, 2016, 228, 6-9.	0.9	14
14	Modeling of the financial market using the two-dimensional anisotropic Ising model. Physica A: Statistical Mechanics and Its Applications, 2017, 482, 544-551.	1.2	14
15	Spin superfluidity in the anisotropic XY model in the triangular lattice. Solid State Communications, 2016, 239, 5-8.	0.9	13
16	Entanglement in site diluted quantum two-dimensional antiferromagnet. Physica A: Statistical Mechanics and Its Applications, 2018, 492, 1853-1858.	1.2	13
17	Influence of Dzyaloshinskii-Moriya interaction and external fields on quantum entanglement in half-integer spin one-dimensional antiferromagnets. European Physical Journal D, 2019, 73, 1.	0.6	13
18	Spin conductivity of the two-dimensional anisotropic frustrated Heisenberg model in the honeycomb lattice. Solid State Communications, 2016, 237-238, 19-23.	0.9	12

#	Article	IF	Citations
19	Effect of the site dilution on spin transport in the two-dimensional biquadratic Heisenberg model. Journal of Magnetism and Magnetic Materials, 2016, 405, 332-336.	1.0	11
20	Stochastic process with multiplicative structure for the dynamic behavior of the financial market. Physica A: Statistical Mechanics and Its Applications, 2018, 512, 222-229.	1.2	11
21	Spin dynamics in the one-dimensional antiferromagnet with Dzyaloshinskiiâ€“Moriya interaction. Journal of Magnetism and Magnetic Materials, 2008, 320, 2316-2318.	1.0	10
22	Spin transport in the two-dimensional anisotropic XY model coupled to phonons. Solid State Communications, 2009, 149, 269-272.	0.9	10
23	Critical behavior of the site diluted quantum anisotropic Heisenberg model in two dimensions. Physica A: Statistical Mechanics and Its Applications, 2015, 438, 579-585.	1.2	10
24	Effect of the phase transition to the ferroquadrupolar phase on spin transport in the biquadratic antiferromagnet of the triangular lattice. Journal of Magnetism and Magnetic Materials, 2017, 428, 448-451.	1.0	10
25	Influence of quantum phase transition on spin conductivity in the anisotropic three-dimensional ferromagnetic model. Solid State Communications, 2017, 250, 49-52.	0.9	10
26	Thermal Entanglement in the Quantum XXZ Model in Triangular and Bilayer Honeycomb Lattices. Journal of Low Temperature Physics, 2020, 198, 241-251.	0.6	10
27	Influence of dilution in the spin transport in the quantum anisotropic two-dimensional Heisenberg antiferromagnet. Journal of Magnetism and Magnetic Materials, 2016, 411, 108-112.	1.0	9
28	Three-magnon process in the one-dimensional integer spin antiferromagnetic Heisenberg chain. Solid State Communications, 2008, 148, 541-544.	0.9	8
29	Influence of Topological Phase Transition on Entanglement in the Spin-1 Antiferromagnetic XX Model in Two Dimensions. Journal of Low Temperature Physics, 2020, 201, 515-525.	0.6	8
30	Quantum Phase Transition and Quantum Correlation in the Two-dimensional Honeycomb-bilayer Lattice Antiferromagnet. Journal of Low Temperature Physics, 2021, 205, 112-125.	0.6	8
31	Spin transport of the frustrated quasi-two-dimensional XY-like antiferromagnet. Journal of Magnetism and Magnetic Materials, 2017, 422, 412-418.	1.0	7
32	Two-dimensional stochastic dynamics as model for time evolution of the financial market. Chaos, Solitons and Fractals, 2020, 136, 109792.	2.5	7
33	Spin transport of the frustrated integer spin S antiferromagnetic Heisenberg chain. Physica B: Condensed Matter, 2014, 437, 28-31.	1.3	6
34	Spin transport in the frustrated anisotropic three-dimensional XY model. Solid State Communications, 2016, 248, 115-119.	0.9	6
35	Influence of quantum phase transition on spin transport in the quantum antiferromagnet in the honeycomb lattice. Journal of Magnetism and Magnetic Materials, 2017, 432, 169-174.	1.0	6
36	Interplay between the Dzyaloshinskii-Moriya term and external fields on spin transport in the spin-1/2 one-dimensional antiferromagnet. Journal of Magnetism and Magnetic Materials, 2018, 454, 150-154.	1.0	6

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37	Influence of Dzyaloshinskiiâ€“Moriya interaction and ballistic spin transport in the two and three-dimensional Heisenberg model. Physica C: Superconductivity and its Applications, 2018, 549, 147-149.	0.6	6
38	Meissner mechanism for the spin supercurrent and interplay between quantum phase transition and spin transport in the frustrated Heisenberg model. Journal of Magnetism and Magnetic Materials, 2018, 451, 214-217.	1.0	6
39	Nonlinear Stochastic Equation within an ItÃ´ Prescription for Modelling of Financial Market. Entropy, 2019, 21, 530.	1.1	6
40	Magnon Hall conductivity and thermal transport in frustrated antiferromagnets. Physica C: Superconductivity and Its Applications, 2019, 559, 50-54.	0.6	6
41	Fractional Stochastic Differential Equation Approach for Spreading of Diseases. Entropy, 2022, 24, 719.	1.1	6
42	Effect of quantum phase transition on spin transport in the spatially frustrated Heisenberg model. Solid State Communications, 2017, 254, 10-14.	0.9	5
43	Spin superconductivity in the frustrated two-dimensional antiferromagnet in the square lattice. Journal of Magnetism and Magnetic Materials, 2017, 423, 51-56.	1.0	5
44	Superconductivity in the graphene monolayer calculated using the Kubo formulalism. Physica C: Superconductivity and Its Applications, 2018, 546, 71-75.	0.6	5
45	Superconductivity in the two-dimensional generalized Hubbard model. Physica C: Superconductivity and Its Applications, 2016, 527, 33-35.	0.6	4
46	A new representation for the nonlinear classical oscillator. European Physical Journal B, 2017, 90, 1.	0.6	4
47	Failure of the Schwinger boson approach in the description of the ground state in the spatially anisotropic Heisenberg model. European Physical Journal B, 2019, 92, 1.	0.6	4
48	Heat transport in low-dimensional Heisenberg antiferromagnets. Journal of Magnetism and Magnetic Materials, 2010, 322, 2157-2159.	1.0	3
49	Thermal transport in the one-dimensional spin-1/2 anisotropic antiferromagnet in a staggered magnetic field. Journal of Magnetism and Magnetic Materials, 2011, 323, 1064-1067.	1.0	3
50	Ladder approximation for the AC conductivity in the generalized two-dimensional Hubbard model. Solid State Communications, 2017, 258, 21-24.	0.9	3
51	Spin supercurrent and effect of quantum phase transition in the two-dimensional XY model. Physica C: Superconductivity and Its Applications, 2018, 547, 22-26.	0.6	3
52	Transition to disordered phase and spin dynamics in the two-dimensional ferrimagnetic model. Journal of Magnetism and Magnetic Materials, 2018, 468, 269-272.	1.0	3
53	Quantum correlation in the bilinearâ€“biquadratic model for iron-based superconductors. European Physical Journal Plus, 2021, 136, 1.	1.2	3
54	Dynamics of the quantum integer spinSone-dimensional Heisenberg antiferromagnet coupled to phonons. Journal of Physics Condensed Matter, 2007, 19, 436218.	0.7	2

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55	Kosterlitz-Thouless Transition: The Diluted XY model. Journal of Physics: Conference Series, 2014, 487, 012008.	0.3	2
56	Similarity between the superconductivity in the graphene with the spin transport in the two-dimensional antiferromagnet in the honeycomb lattice. Physica B: Condensed Matter, 2017, 507, 164-169.	1.3	2
57	Spin wave mediated interaction as a mechanism of pairs formation in iron-based superconductors. Physica C: Superconductivity and Its Applications, 2018, 546, 68-70.	0.6	2
58	Spin transport in the three-dimensional XY model with single-ion anisotropy. Solid State Communications, 2018, 278, 20-23.	0.9	2
59	Effect of spinâ€“phonon coupling on quantum correlation in the spin-1 XY model. Solid State Communications, 2021, 332, 114323.	0.9	2
60	Dynamics of stocks prices based in the Black & Scholes equation and nonlinear stochastic differentials equations. Physica A: Statistical Mechanics and Its Applications, 2021, 581, 126220.	1.2	2
61	Effect of magnon bands on quantum entanglement in two-dimensional ferromagnets in the checkerboard lattice. European Physical Journal Plus, 2022, 137, .	1.2	2
62	Spin transport in the frustrated anisotropic two-dimensional ferromagnet in the square lattice. Solid State Communications, 2016, 240, 28-32.	0.9	1
63	SU(2) Schwinger boson theory of the frustrated two-dimensional antiferromagnet. Physica B: Condensed Matter, 2017, 524, 149-153.	1.3	1
64	Transport in (4+1)-D-dimensional topological insulators models. Physics Letters, Section A: General, Atomic and Solid State Physics, 2020, 384, 126514.	0.9	1
65	Dynamics of the two-dimensional Heisenberg antiferromagnet in an external magnetic field. European Physical Journal B, 2011, 83, 191-195.	0.6	0
66	Influence of the site dilution on quantum phase transition of the biquadratic Heisenberg model at low dimension. Physica A: Statistical Mechanics and Its Applications, 2018, 492, 956-961.	1.2	0
67	Order and excitations in site diluted quantum antiferromagnet in the triangular lattice. Results in Physics, 2018, 10, 809-812.	2.0	0
68	Mapping of Critical Anisotropy on Spin Dynamics in a Frustrated Antiferromagnet. Brazilian Journal of Physics, 2019, 49, 623-627.	0.7	0
69	Self-organizing three-dimensional Ising model of financial markets. Physical Review E, 2021, 103, 062130.	0.8	0
70	Entanglement in (4Âï¼‹Â1)-D-Dirac-type lattice model time-reversal-invariant. Physica A: Statistical Mechanics and Its Applications, 2021, 578, 126111.	1.2	0