MÃ¡rio J De Oliveira

List of Publications by Year
in descending order

160	2,507	318942	263392
papers	citations	23 h-index	45 g-index

161	161	161	1410
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Parametric Invariance. Brazilian Journal of Physics, 2022, 52, 1.	0.7	1
2	Landau theory for isotropic, nematic, smectic-A, and smectic-C phases. Liquid Crystals, 2020, 47, 99-105.	0.9	3
3	Molecular model for nematic, smectic- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>A</mml:mi></mml:math> , and smectic- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>C</mml:mi></mml:math> liquid crystals. Physical Review E, 2020, 102, 052701.	0.8	1
4	Stochastic Approach to Epidemic Spreading. Brazilian Journal of Physics, 2020, 50, 832-843.	0.7	9
5	Stochastic thermodynamics of systems with a continuous space of states. Physical Review E, 2020, 102, 032114.	0.8	2
6	Analysis of earlier times and flux of entropy on the majority voter model with diffusion. Physical Review E, 2020, 101, 012130.	0.8	5
7	Positive heat capacity in the microcanonical ensemble. Physica A: Statistical Mechanics and Its Applications, 2020, 554, 124698.	1.2	0
8	Quantum Langevin equation. Journal of Statistical Mechanics: Theory and Experiment, 2020, 2020, 023106.	0.9	3
9	Entropy production and heat transport in harmonic chains under time-dependent periodic drivings. Physical Review E, 2020, 101, 012132.	0.8	8
10	Complex heat capacity and entropy production of temperature modulated systems. Journal of Statistical Mechanics: Theory and Experiment, 2019, 2019, 073204.	0.9	2
11	Entropy production and heat capacity of systems under time-dependent oscillating temperature. Physical Review E, 2019, 99, 052131.	0.8	8
12	Boltzmann stochastic thermodynamics. Physical Review E, 2019, 99, 052138.	0.8	4
13	The two parts of the second law of thermodynamics. Revista Brasileira De Ensino De Fisica, 2019, 41, .	0.2	0
14	Equipartition of energy, Avogadro law and ratio of specific heats. Revista Brasileira De Ensino De Fisica, 2019, 41, .	0.2	1
15	Stochastic quantum thermodynamics, entropy production, and transport properties of a bosonic system. Physical Review E, 2018, 97, 012105.	0.8	7
16	Elementary Concepts and Fundamental Laws of the Theory of Heat. Brazilian Journal of Physics, 2018, 48, 299-313.	0.7	1
17	Ordering of rods near planar and curved surfaces. AIP Advances, 2018, 8, 015216.	0.6	1
18	Stochastic thermodynamics and entropy production of chemical reaction systems. Journal of Chemical Physics, 2018, 148, 224104.	1.2	9

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19	Stochastic spatial structured model for vertically and horizontally transmitted infection. Physica A: Statistical Mechanics and Its Applications, 2017, 468, 131-138.	1.2	3
20	Equilibrium Thermodynamics. Graduate Texts in Physics, 2017, , .	0.1	6
21	Thermal conductance of a two-level atom coupled to two quantum harmonic oscillators. Physical Review E, 2017, 95, 042108.	0.8	2
22	Critical properties of the contact process with quenched dilution. Journal of Statistical Mechanics: Theory and Experiment, 2017, 2017, 043209.	0.9	6
23	Heat transport along a chain of coupled quantum harmonic oscillators. Physical Review E, 2017, 95, 042113.	0.8	5
24	Susceptibleâ€“infectedâ€“recovered model with recurrent infection. Physica A: Statistical Mechanics and Its Applications, 2017, 467, 21-29.	1.2	11
25	Nonequilibrium stationary state of a harmonic chain under a temperature gradient and energy conserving bulk noise. Journal of Physics A: Mathematical and Theoretical, 2017, 50, 335001.	0.7	3
26	Lattice model for biaxial and uniaxial nematic liquid crystals. Journal of Chemical Physics, 2016, 144, 194904.	1.2	8
27	Landau theory for uniaxial nematic, biaxial nematic, uniaxial smectic-A, and biaxial smectic-A phases. Liquid Crystals, 2016, 43, 1230-1236.	0.9	6
28	Nonequilibrium quantum chains under multisite Lindblad baths. Physical Review E, 2016, 94, 032139.	0.8	27
29	Quantum Fokker-Planck-Kramers equation and entropy production. Physical Review E, 2016, 94, 012128.	0.8	17
30	Thermal rectification in anharmonic chains under an energy-conserving noise. Physical Review E, 2015, 92, 062120.	0.8	13
31	Critical properties of the susceptible-exposed-infected model on a square lattice. Journal of Statistical Mechanics: Theory and Experiment, 2015, 2015, P04014.	0.9	5
32	Entropy production for asymmetric diffusion of particles. Journal of Statistical Mechanics: Theory and Experiment, 2015, 2015, P12004.	0.9	1
33	Critical behavior in lattice models with two symmetric absorbing states. Journal of Statistical Mechanics: Theory and Experiment, 2015, 2015, P01035.	0.9	4
34	Stochastic approach to equilibrium and nonequilibrium thermodynamics. Physical Review E, 2015, 91, 042140.	0.8	66
35	Type-dependent irreversible stochastic spin models for genetic regulatory networks at the level of promotionâ€“inhibition circuitry. Physica A: Statistical Mechanics and Its Applications, 2015, 440, 33-41.	1.2	1
36	Stochastic Dynamics and Irreversibility. Graduate Texts in Physics, 2015, , .	0.1	60

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37	Fourier's law from a chain of coupled planar harmonic oscillators under energy-conserving noise. Physical Review E, 2014, 89, 022105.	0.8	20
38	Flux rectification in the quantum<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>X</mml:mi><mml:mi>X</mml:mi><mml:mi>Z</mml:mi><mml:mi> Physical Review E, 2014, 90, 042142.	0.8	9
39	Equilibrium Thermodynamics. Graduate Texts in Physics, 2013, , .	0.1	17
40	Stochastic dynamics of dengue epidemics. Physical Review E, 2013, 87, 012709.	0.8	12
41	Robustness of first-order phase transitions in one-dimensional long-range contact processes. Physical Review E, 2013, 87, 042101.	0.8	6
42	Entropy production in linear Langevin systems. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 395001.	0.7	32
43	Fourier's law from a chain of coupled anharmonic oscillators under energy-conserving noise. Physical Review E, 2013, 87, 052126.	0.8	27
44	Irreversible spherical model and its stationary entropy production rate. Journal of Physics A: Mathematical and Theoretical, 2012, 45, 165003.	0.7	1
45	Exact correlation functions in particle-reaction models with immobile particles. Journal of Statistical Mechanics: Theory and Experiment, 2012, 2012, P11006.	0.9	2
46	Two versions of the threshold contact model in two dimensions. Computer Physics Communications, 2012, 183, 2001-2005.	3.0	10
47	Entropy Production in Nonequilibrium Systems at Stationary States. Physical Review Letters, 2012, 108, 020601.	2.9	118
48	Susceptible-infected-recovered and susceptible-exposed-infected models. Journal of Physics A: Mathematical and Theoretical, 2011, 44, 095005.	0.7	29
49	Critical discontinuous phase transition in the threshold contact process. Journal of Physics A: Mathematical and Theoretical, 2011, 44, 135002.	0.7	12
50	Irreversible models with Boltzmannâ€“Gibbs probability distribution and entropy production. Journal of Statistical Mechanics: Theory and Experiment, 2011, 2011, P12012.	0.9	17
51	Aging and stationary properties of non-equilibrium symmetrical three-state models. Journal of Statistical Mechanics: Theory and Experiment, 2011, 2011, P02018.	0.9	2
52	An extinction-survival-type phase transition in the probabilistic cellular automatonp182â€“q200. Journal of Physics A: Mathematical and Theoretical, 2011, 44, 155001.	0.7	9
53	Entropy production in irreversible systems described by a Fokker-Planck equation. Physical Review E, 2010, 82, 021120.	0.8	105
54	Aging and fluctuation-dissipation ratio in a nonequilibrium<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>q</mml:mi></mml:math>-state lattice model. Physical Review E, 2010, 82, 011133.	0.8	4

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55	Role of noise in population dynamics cycles. Physical Review E, 2009, 79, 061128.	0.8	19
56	An asymmetric sandpile model with height restriction. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 385003.	0.7	0
57	The stochastic nature of predatorâ€“prey cycles. Computer Physics Communications, 2009, 180, 536-539.	3.0	3
58	Glassy states in the stochastic Potts model. Computer Physics Communications, 2009, 180, 480-484.	3.0	5
59	Extending the use of canonical and microcanonical Monte Carlo algorithms to spin models. Computer Physics Communications, 2009, 180, 1434-1441.	3.0	3
60	Conservative ensembles for nonequilibrium lattice-gas systems. European Physical Journal B, 2008, 64, 409-414.	0.6	2
61	Soluble one-dimensional particle conservation models with infinitely many absorbing states. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 385004.	0.7	4
62	Numerical study of a model for nonequilibrium wetting. Physical Review E, 2008, 77, 011101.	0.8	5
63	Time correlation function in systems with two coexisting biological species. Physical Review E, 2008, 77, 061909.	0.8	12
64	Dependence of the crossover exponent with the diffusion rate in the generalized contact process model. Brazilian Journal of Physics, 2008, 38, 94-97.	0.7	1
65	Mean-field approximations for the restricted solid-on-solid growth models. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 8205-8217.	0.7	7
66	A comparative study for the pair-creation contact process using series expansions. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 4305-4315.	0.7	0
67	Revisiting the one-dimensional diffusive contact process. Journal of Statistical Mechanics: Theory and Experiment, 2007, 2007, P08009-P08009.	0.9	1
68	Contact process with long-range interactions: A study in the ensemble of constant particle number. Physical Review E, 2007, 76, 041103.	0.8	14
69	Asymptotic behavior of the entropy of chains placed on cylinders. Physical Review E, 2007, 76, 031133.	0.8	3
70	Fluctuation-dissipation relation for stochastic dynamics without detailed balance. Physical Review E, 2007, 76, 011114.	0.8	5
71	One-dimensional lattice gas models with infinitely many absorbing states. Brazilian Journal of Physics, 2006, 36, 218-221.	0.7	4
72	Perturbative series expansion for the subcritical stationary properties of the contact process. Journal of Physics A, 2006, 39, 11131-11144.	1.6	5

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73	Canonical and microcanonical Monte Carlo simulations of lattice-gas mixtures. Journal of Chemical Physics, 2006, 125, 164509.	1.2	12
74	Calcium dynamics on a stochastic reaction-diffusion lattice model. Physical Review E, 2006, 74, 061905.	0.8	8
75	Fluctuation-dissipation theorem and the linear Glauber model. Physical Review E, 2006, 73, 056117.	0.8	10
76	Perturbative series expansion for the gap of the evolution operator associated with the contact process. Physical Review E, 2006, 74, 041121.	0.8	2
77	TEMPERATURE OF NONEQUILIBRIUM LATTICE SYSTEMS. International Journal of Modern Physics C, 2006, 17, 1703-1715.	0.8	6
78	Lattice model for calcium dynamics. Physical Review E, 2005, 71, 061910.	0.8	6
79	Stationary distribution of finite-size systems with absorbing states. Physical Review E, 2005, 72, 026130.	0.8	12
80	Creation-annihilation processes in the ensemble of constant particle number. Physical Review E, 2005, 72, 046137.	0.8	7
81	Conserved lattice gas model with infinitely many absorbing states in one dimension. Physical Review E, 2005, 71, 016112.	0.8	26
82	Continuous time stochastic models for vehicular traffic on highways. Brazilian Journal of Physics, 2004, 34, 373.	0.7	0
83	Glassy states in lattice models with many coexisting crystalline phases. Europhysics Letters, 2004, 65, 20-26.	0.7	16
84	Crystal vs. glass formation in lattice models with many coexisting ordered phases. Physica A: Statistical Mechanics and Its Applications, 2004, 342, 97-103.	1.2	11
85	Phase transition in conservative diffusive contact processes. Physical Review E, 2004, 70, 046131.	0.8	20
86	Microcanonical Monte Carlo simulation of lattice gas models. Physical Review E, 2003, 68, 066125.	0.8	9
87	Linear Glauber model. Physical Review E, 2003, 67, 066101.	0.8	18
88	Equivalence of ensembles in creation-annihilation nonequilibrium models. Physical Review E, 2003, 67, 027104.	0.8	15
89	Stochastic dynamics of coupled systems and damage spreading. Brazilian Journal of Physics, 2003, 33, 458-463.	0.7	2
90	Conserved contact process in one to five dimensions. Physical Review E, 2002, 66, 036115.	0.8	16

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91	Sandpiles with height restrictions. Physical Review E, 2002, 66, 016111.	0.8	45
92	Glassy behaviour in short-range lattice models without quenched disorder. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 2002, 82, 617-623.	0.6	6
93	Thermodynamic behavior of a polymer with interacting bonds on a square lattice. Physical Review E, 2001, 64, 051810.	0.8	16
94	Nonequilibrium Model for the Contact Process in an Ensemble of Constant Particle Number. Physical Review Letters, 2001, 86, 5643-5646.	2.9	37
95	Symmetry and universality in nonequilibrium models. Physica A: Statistical Mechanics and Its Applications, 2000, 283, 107-112.	1.2	3
96	Exact density profile of a stochastic reaction-diffusion process. Physical Review E, 1999, 60, 2563-2567.	0.8	8
97	Emergence of cooperation among interacting individuals. Physical Review E, 1999, 59, 6419-6421.	0.8	21
98	Kosterlitz-Thouless transition in a quantum spin-1 Heisenberg chain. Physical Review B, 1999, 59, 3303-3305.	1.1	2
99	THE TRANSVERSE ISING MODEL UNDER A TIME OSCILLATING FIELD. International Journal of Modern Physics B, 1999, 13, 207-214.	1.0	6
100	Stationary Coverage of a Stochastic Adsorptionâ€“Desorption Process with Diffusional Relaxation. Journal of Statistical Physics, 1998, 92, 651-658.	0.5	8
101	Stochastic resonance in interacting systems. Physica A: Statistical Mechanics and Its Applications, 1998, 259, 43-48.	1.2	0
102	Inferring statistical complexity in the dripping faucet experiment. Physica A: Statistical Mechanics and Its Applications, 1998, 257, 385-389.	1.2	24
103	Nonclassical critical exponents out of mean-field results. Physica A: Statistical Mechanics and Its Applications, 1998, 260, 99-105.	1.2	2
104	Granular compaction, random sequential adsorption and diffusional relaxation. Journal of Physics A, 1998, 31, L425-L433.	1.6	6
105	Short-time dynamics of critical nonequilibrium spin models. Physical Review E, 1998, 58, 4242-4245.	0.8	52
106	Lattice boson systems with a finite maximum number of bosons in a site. Physical Review B, 1998, 57, 116-119.	1.1	0
107	Renormalization group of probabilistic cellular automata with one absorbing state. Physical Review E, 1997, 55, 6377-6383.	0.8	11
108	Renormalization group of the Domany-Kinzel cellular automaton. Physical Review E, 1997, 55, 4000-4004.	0.8	14

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109	Resistance statistics in one-dimensional systems with correlated disorder. Physical Review B, 1997, 56, 251-259.	1.1	8
110	Density of States and Localization Lengths in One-dimensional Linear Chains. International Journal of Modern Physics B, 1997, 11, 2195-2205.	1.0	0
111	Entropy and Pressure of Attractive Hard Squares by the Monte Carlo Method. Modern Physics Letters B, 1997, 11, 571-577.	1.0	2
112	Monte Carlo simulation of the quantum transverse Ising model. Physica A: Statistical Mechanics and Its Applications, 1997, 238, 307-316.	1.2	8
113	Stochastic mechanics of nonequilibrium systems. Brazilian Journal of Physics, 1997, 27, 525-532.	0.7	3
114	Generalized Lyapunov exponents for products of correlated random matrices. Physical Review E, 1996, 53, 2960-2963.	0.8	19
115	Spontaneous staggered magnetization in antiferromagnetic Heisenberg-Ising chains. Physical Review B, 1996, 54, 6351-6355.	1.1	4
116	Monte Carlo method for obtaining the ground-state properties of quantum spin systems. Physical Review B, 1996, 53, 668-673.	1.1	15
117	NUMERICAL STOCHASTIC METHODS IN STATISTICAL MECHANICS. International Journal of Modern Physics B, 1996, 10, 1313-1327.	1.0	2
118	Ground-state energy of a quantum chain with competing interactions. Journal of Statistical Physics, 1995, 79, 347-376.	0.5	5
119	Entropy of spin models by the Monte Carlo method. Physical Review B, 1995, 52, 3060-3062.	1.1	12
120	Hopf bifurcation in a leaky faucet experiment. Physical Review E, 1995, 52, 6896-6899.	0.8	26
121	GROUND-STATE PROPERTIES OF THE SPIN-1/2 ANTIFERROMAGNETIC HEISENBERG MODEL ON A CUBIC LATTICE BY A MONTE CARLO METHOD. Modern Physics Letters B, 1995, 09, 619-627.	1.0	6
122	Ground-state properties of the spin-1/2 antiferromagnetic Heisenberg model on a square lattice by a Monte Carlo method. Physical Review B, 1994, 49, 5983-5987.	1.1	16
123	Inhomogeneous random sequential adsorption on bipartite lattices. Physical Review E, 1994, 50, 4523-4527.	0.8	4
124	Coupling constants for stochastic spin systems. Physica A: Statistical Mechanics and Its Applications, 1994, 203, 13-23.	1.2	1
125	Ground-state properties of the spin-1/2 antiferromagnetic Heisenberg chain obtained by use of a Monte Carlo method. Physical Review B, 1993, 48, 6141-6143.	1.1	8
126	Equilibrium polymerization with a free surface. Journal of Physics A, 1992, 25, 561-575.	1.6	0

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127	Field behaviour of the XY chiral model on a Cayley tree. Journal of Physics A, 1992, 25, 1405-1415.	1.6	6
128	Anisotropic random sequential adsorption of dimers on a square lattice. Physical Review A, 1992, 46, 6294-6299.	1.0	27
129	Dilute spin glass with finite connectivity. Physica A: Statistical Mechanics and Its Applications, 1992, 187, 112-125.	1.2	0
130	Non-equilibrium Ising model with competing Glauber dynamics. Journal of Physics A, 1991, 24, 3677-3686.	1.6	44
131	Phase diagram of the spin-1/2 Heisenberg antiferromagnet on a square lattice with nearest- and next-nearest-neighbor couplings. Physical Review B, 1991, 43, 6181-6183.	1.1	17
132	Hole spectrum in the two-dimensional Hubbard model. Physica C: Superconductivity and Its Applications, 1990, 166, 206-214.	0.6	4
133	Stability of the dilute Ising spin glass on a Bethe lattice. Physica A: Statistical Mechanics and Its Applications, 1990, 169, 317-323.	1.2	0
134	Entropy of flexible chains placed on Bethe and Husimi lattices. Physical Review A, 1990, 42, 5955-5963.	1.0	24
135	Dynamic phase transition in the kinetic Ising model under a time-dependent oscillating field. Physical Review A, 1990, 41, 4251-4254.	1.0	287
136	Self-organization in a kinetic Ising model. Physical Review A, 1989, 40, 6643-6646.	1.0	55
137	The Blume-Emery-Griffiths model on a Bethe lattice: bicritical line and re-entrant behaviour. Journal of Physics Condensed Matter, 1989, 1, 6887-6892.	0.7	20
138	Graph optimization problems on a Bethe lattice. Journal of Statistical Physics, 1989, 54, 477-493.	0.5	5
139	Ising spin glass in the Bethe approximation at zero temperature. Physica A: Statistical Mechanics and Its Applications, 1988, 148, 567-574.	1.2	11
140	Ising spin glass in a field zero temperature in the Bethe approximation. Physica A: Statistical Mechanics and Its Applications, 1988, 150, 614-626.	1.2	2
141	Potts glass on the Bethe lattice. Physical Review B, 1987, 35, 8744-8746.	1.1	2
142	Symmetry breaking of a spin glass on a Bethe lattice of infinite coordination. Physical Review B, 1987, 35, 2005-2007.	1.1	3
143	Reentrant isotropic-nematic transition in lyotropic liquid crystals. Physical Review A, 1986, 34, 3481-3482.	1.0	31
144	Strange Attractor in the Ising Model with Competing Interactions on the Cayley Tree. Physical Review Letters, 1985, 54, 163-166.	2.9	73

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145	Chiral Potts model on a Cayley tree with complete and incomplete devil's staircase. Journal of Physics A, 1985, 18, L153-L157.	1.6	8
146	Phenomenological renormalization-group calculations for 12- and 16-vertex models on a square lattice. Physical Review B, 1984, 30, 5326-5333.	1.1	1
147	The chimical potential as an ensemble average. Physics Letters, Section A: General, Atomic and Solid State Physics, 1982, 91, 234-236.	0.9	9
148	Extrapolated renormalization-group calculation of the surface tension in square-lattice Ising model. Physical Review B, 1981, 23, 1419-1430.	1.1	19
149	Lattice-gas model of multiple layer adsorption. Surface Science, 1978, 71, 687-694.	0.8	260
150	Ising-Model Surface Tension Using Real-Space Renormalization-Group Methods. Physical Review Letters, 1978, 40, 977-980.	2.9	19
151	On a variational procedure for obtaining the thermodynamic properties of statistical models. Physica Status Solidi (B): Basic Research, 1977, 83, 229-237.	0.7	44
152	A generalization of the augmented plane wave method: II. Journal of Physics C: Solid State Physics, 1975, 8, 992-999.	1.5	6
153	Structure of the Scientific Theories. Revista Brasileira De Ensino De Fisica, 0, 43, .	0.2	2
154	Structure of the analytical physical theories. Revista Brasileira De Ensino De Fisica, 0, 43, .	0.2	0
155	Effect of Immunization Through Vaccination on Deterministic Models for Epidemic Spreading. Brazilian Journal of Physics, 0, , 1.	0.7	3
156	Epidemic spreading. Revista Brasileira De Ensino De Fisica, 0, 42, .	0.2	5
157	Classical and quantum stochastic thermodynamics. Revista Brasileira De Ensino De Fisica, 0, 42, .	0.2	5
158	Exact and inexact differentials in the early development of mechanics and thermodynamics. Revista Brasileira De Ensino De Fisica, 0, 42, .	0.2	0
159	Structure of the analytical theories of heat. Revista Brasileira De Ensino De Fisica, 0, 44, .	0.2	0
160	Structure of the theories of probability. Revista Brasileira De Ensino De Fisica, 0, 44, .	0.2	0