

# Francesco Guerra

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/11493900/publications.pdf>

Version: 2024-02-01

70  
papers

2,389  
citations

304602

22  
h-index

206029

48  
g-index

75  
all docs

75  
docs citations

75  
times ranked

621  
citing authors

#	ARTICLE	IF	CITATIONS
1	Broken Replica Symmetry Bounds in the Mean Field Spin Glass Model. Communications in Mathematical Physics, 2003, 233, 1-12.	1.0	401
2	The Thermodynamic Limit in Mean Field Spin Glass Models. Communications in Mathematical Physics, 2002, 230, 71-79.	1.0	258
3	Structural aspects of stochastic mechanics and stochastic field theory. Physics Reports, 1981, 77, 263-312.	10.3	239
4	Quantization of dynamical systems and stochastic control theory. Physical Review D, 1983, 27, 1774-1786.	1.6	195
5	General properties of overlap probability distributions in disordered spin systems. Towards Parisi ultrametricity. Journal of Physics A, 1998, 31, 9149-9155.	1.6	150
6	ABOUT THE OVERLAP DISTRIBUTION IN MEAN FIELD SPIN GLASS MODELS. International Journal of Modern Physics B, 1996, 10, 1675-1684.	1.0	97
7	Multitasking Associative Networks. Physical Review Letters, 2012, 109, 268101.	2.9	90
8	The High Temperature Region of the Viana-Bray Diluted Spin Glass Model. Journal of Statistical Physics, 2004, 115, 531-555.	0.5	58
9	Quadratic replica coupling in the Sherrington-Kirkpatrick mean field spin glass model. Journal of Mathematical Physics, 2002, 43, 3704-3716.	0.5	56
10	Uniqueness of the Vacuum Energy Density and van Hove Phenomenon in the Infinite-Volume Limit for Two-Dimensional Self-Coupled Bose Fields. Physical Review Letters, 1972, 28, 1213-1215.	2.9	54
11	Equilibrium statistical mechanics of bipartite spin systems. Journal of Physics A: Mathematical and Theoretical, 2011, 44, 245002.	0.7	53
12	The Replica Symmetric Approximation of the Analogical Neural Network. Journal of Statistical Physics, 2010, 140, 784-796.	0.5	46
13	Retrieval Capabilities of Hierarchical Networks: From Dyson to Hopfield. Physical Review Letters, 2015, 114, 028103.	2.9	46
14	A thermodynamic perspective of immune capabilities. Journal of Theoretical Biology, 2011, 287, 48-63.	0.8	34
15	Note on the Abelian Higgs-Kibble model on a lattice: Absence of spontaneous magnetization. Physical Review D, 1978, 17, 1624-1628.	1.6	32
16	How glassy are neural networks?. Journal of Statistical Mechanics: Theory and Experiment, 2012, 2012, P07009.	0.9	32
17	Discrete stochastic variational principles and quantum mechanics. Physical Review D, 1984, 29, 1647-1655.	1.6	30
18	Origin of the quantum observable operator algebra in the frame of stochastic mechanics. Physical Review D, 1983, 28, 1916-1921.	1.6	29

#	ARTICLE	IF	CITATIONS
19	Energy in self-directed B lymphocytes: A statistical mechanics perspective. <i>Journal of Theoretical Biology</i> , 2015, 375, 21-31.	0.8	28
20	Replica symmetry breaking in mean-field spin glasses through the Hamiltonian-Jacobi technique. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2010, 2010, P09006.	0.9	26
21	Mean Field Dilute Ferromagnet: High Temperature and Zero Temperature Behavior. <i>Journal of Statistical Physics</i> , 2008, 132, 759.	0.5	24
22	Central limit theorem for fluctuations in the high temperature region of the Sherrington-Kirkpatrick spin glass model. <i>Journal of Mathematical Physics</i> , 2002, 43, 6224-6237.	0.5	23
23	Mean field bipartite spin models treated with mechanical techniques. <i>European Physical Journal B</i> , 2014, 87, 1.	0.6	21
24	Compatibility between the Brownian metric and the kinetic metric in Nelson stochastic quantization. <i>Physical Review D</i> , 1985, 31, 2521-2524.	1.6	20
25	Course 5 An introduction to mean field spin glass theory: Methods and results. <i>Les Houches Summer School Proceedings</i> , 2006, , 243-271.	0.2	20
26	About the ergodic regime in the analogical Hopfield neural networks: Moments of the partition function. <i>Journal of Mathematical Physics</i> , 2008, 49, 125217.	0.5	18
27	Hierarchical neural networks perform both serial and parallel processing. <i>Neural Networks</i> , 2015, 66, 22-35.	3.3	17
28	Interpolating the Sherrington-Kirkpatrick replica trick. <i>Philosophical Magazine</i> , 2012, 92, 78-97.	0.7	15
29	About a solvable mean field model of a Gaussian spin glass. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2014, 47, 155002.	0.7	15
30	Quantum mechanical states as attractors for Nelson processes. <i>Foundations of Physics</i> , 1995, 25, 297-315.	0.6	14
31	The lagrangian approach to stochastic variational principles on curved manifolds. <i>Acta Applicandae Mathematicae</i> , 1992, 26, 219-236.	0.5	13
32	On quantum and relativistic mechanical analogues in mean-field spin models. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2014, 470, 20140589.	1.0	13
33	Metastable states in the hierarchical Dyson model drive parallel processing in the hierarchical Hopfield network. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2015, 48, 015001.	0.7	13
34	Probabilistic ideas in the theory of Fermi fields: Stochastic quantization of the Fermi oscillator. <i>Physical Review D</i> , 1981, 23, 1747-1751.	1.6	12
35	Can persistent Epstein-Barr virus infection induce chronic fatigue syndrome as a Pavlov reflex of the immune response?. <i>Journal of Biological Dynamics</i> , 2012, 6, 740-762.	0.8	12
36	Parallel processing in immune networks. <i>Physical Review E</i> , 2013, 87, 042701.	0.8	12

#	ARTICLE	IF	CITATIONS
37	Some comments on the connection between disordered long range spin glass models and their mean field version. <i>Journal of Physics A</i> , 2003, 36, 10987-10995.	1.6	11
38	Enrico Fermi's Discovery of Neutron-Induced Artificial Radioactivity: Neutrons and Neutron Sources. <i>Physics in Perspective</i> , 2006, 8, 255-281.	0.2	10
39	The Discovery of Artificial Radioactivity. <i>Physics in Perspective</i> , 2012, 14, 33-58.	0.2	10
40	Stochastic quantization of the vector-meson field. <i>Physical Review D</i> , 1983, 27, 2912-2915.	1.6	9
41	Free-Energy Bounds for Hierarchical Spin Models. <i>Journal of Statistical Physics</i> , 2014, 155, 211-222.	0.5	9
42	Topological properties of hierarchical networks. <i>Physical Review E</i> , 2015, 91, 062807.	0.8	9
43	Enrico Fermi's Discovery of Neutron-Induced Artificial Radioactivity: The Recovery of His First Laboratory Notebook. <i>Physics in Perspective</i> , 2004, 6, 29-41.	0.2	8
44	Enrico Fermi's Discovery of Neutron-Induced Artificial Radioactivity: The Influence of His Theory of Beta Decay. <i>Physics in Perspective</i> , 2009, 11, 379-404.	0.2	8
45	Scalar quantum electrodynamics on lattice correlation inequalities and infinite volume limit. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1977, 68, 255-257.	1.5	7
46	Stochastic mechanics of spin- $\frac{1}{2}$ particles. <i>Physical Review D</i> , 1984, 30, 2579-2584.	1.6	7
47	When Energy Conservation Seems to Fail: The Prediction of the Neutrino. <i>Science and Education</i> , 2014, 23, 1339-1359.	1.7	7
48	On the local structure of the Euclidean Dirac field. <i>Journal of Mathematical Physics</i> , 1980, 21, 1111-1114.	0.5	6
49	Strong Disorder for a Certain Class of Directed Polymers in a Random Environment. <i>Journal of Theoretical Probability</i> , 2006, 19, 134-151.	0.4	6
50	Stochastic action of dynamical systems on curved manifolds. The geodesic interpolation. <i>Journal of Mathematical Physics</i> , 1990, 31, 639-648.	0.5	5
51	Configuration Spaces for Quantum Spinning Particles. <i>Physical Review Letters</i> , 1983, 50, 1715-1718.	2.9	4
52	The phenomenon of spontaneous replica symmetry breaking in complex statistical mechanics systems. <i>Journal of Physics: Conference Series</i> , 2013, 442, 012013.	0.3	4
53	Probability and quantum mechanics the conceptual foundations of stochastic mechanics. <i>Lecture Notes in Mathematics</i> , 1984, , 134-145.	0.1	3
54	Infinite Volume Limit and Spontaneous Replica Symmetry Breaking in Mean Field Spin Glass Models. <i>Annales Henri Poincare</i> , 2003, 4, 441-444.	0.8	3

#	ARTICLE	IF	CITATIONS
55	The Ising-Sherrington-Kirpatrick Model in a Magnetic Field at High Temperature. <i>Journal of Statistical Physics</i> , 2005, 120, 147-165.	0.5	3
56	Ettore Majorana's Forgotten Publication on the Thomas-Fermi Model. <i>Physics in Perspective</i> , 2008, 10, 56-76.	0.2	3
57	Legendre Structures in Statistical Mechanics for Ordered and Disordered Systems. , 0, , 142-165.		3
58	Carlen processes: A new class of diffusions with singular drifts. <i>Lecture Notes in Mathematics</i> , 1985, , 259-267.	0.1	2
59	COUPLED SELF-OSCILLATING SYSTEMS: THEORY AND APPLICATIONS. <i>International Journal of Modern Physics B</i> , 2009, 23, 5505-5514.	1.0	2
60	Interpolation and Comparison Methods in the Mean Field Spin Glass Model. <i>Springer INdAM Series</i> , 2014, , 1-12.	0.4	2
61	Spontaneous Replica Symmetry Breaking and Interpolation Methods for Complex Statistical Mechanics Systems. <i>Lecture Notes in Mathematics</i> , 2015, , 45-70.	0.1	2
62	External Field Dependence of Magnetization and Long Range Order in Quantum Field Theory. , 1976, , 125-146.		2
63	Enrico Fermi's Discovery of Neutron-Induced Artificial Radioactivity: A Case of "Emanation" from "Divine Providence". <i>Physics in Perspective</i> , 2020, 22, 129-161.	0.2	1
64	Spontaneous Replica Symmetry Breaking in the Mean Field Spin Glass Model. , 2009, , 299-311.		1
65	Infinite Volume Limit and Spontaneous Replica Symmetry Breaking in Mean Field Spin Glass Models. , 2003, , 441-444.		1
66	Bose field theory as classical statistical mechanics. I. The variational principle and the equilibrium equations. , 1973, , 243-264.		0
67	On the connection between the stochastic quantization of the vector-meson field and the Euclidean theory. <i>Physical Review D</i> , 1986, 33, 2498-2499.	1.6	0
68	The Disappearance and Death of Ettore Majorana. <i>Physics in Perspective</i> , 2013, 15, 160-177.	0.2	0
69	Enrico Fermi and Ettore Majorana: So Strong, So Different. <i>Springer Proceedings in Physics</i> , 2014, , 29-39.	0.1	0
70	Nelson's Symmetry at Work: the Infinite Volume Behavior of the Vacuum for Two-Dimensional Self-Coupled Bose Fields. , 1974, , 45-59.		0