Manuel Ignacio Marques

List of Publications by Year
in descending order

100	1,382	471509 17	361022 35
papers	citations	h-index	g-index

100	100	100	1273
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Active Motion Induced by Random Electromagnetic Fields. ACS Photonics, 2022, 9, 1008-1014.	6.6	1
2	A proposal to measure Belinfanteâ€™s curl of the spin optical force based on the Kerker conditions. European Physical Journal Plus, 2021, 136, 1.	2.6	2
3	Modulated flipping torque, spin-induced radiation pressure, and chiral sorting exerted by guided light. Optics Express, 2021, 29, 16969.	3.4	3
4	Multipole Engineering of Attractiveâ^'Repulsive and Bending Optical Forces. Advanced Photonics Research, 2021, 2, 2100082.	3.6	12
5	Nanojet Trapping of a Single Subâ€10Ânm Upconverting Nanoparticle in the Full Liquid Water Temperature Range. Small, 2021, 17, e2006764.	10.0	20
6	Magneto-optical binding in the near field. Scientific Reports, 2021, 11, 20820.	3.3	5
7	The effective field approach applied to ferroelectric phase transitions. Ferroelectrics, 2020, 569, 50-61.	0.6	1
8	Light Induced Inverse-Square Law Interactions between Nanoparticles: â€œMock Gravityâ€•at the Nanoscale. Physical Review Letters, 2019, 123, 143201.	7.8	7
9	Magneto-optical Stern-Gerlach forces and nonreciprocal torques on small particles. Physical Review Research, 2019, 1, .	3.6	9
10	Optical Forces at the Nanoscale: Size and Electrostatic Effects. Nano Letters, 2018, 18, 602-609.	9.1	35
11	On the change of paraelectric behavior of water at Tâ€‰=â€‰T*â€‰=â€‰60â€‰Â°C as a polar liquid. Ferroelectrics, 2018, 533, 108-114.	0.6	0
12	Emergence of collective dynamics of gold nanoparticles in an optical vortex lattice. Physical Review E, 2018, 98, .	2.1	13
13	Control of the electromagnetic drag using fluctuating light fields. Physical Review A, 2018, 97, .	2.5	0
14	Analysis of the dynamics of electric dipoles in fluctuating electromagnetic fields. , 2018, , .		1
15	Unveiling Molecular Changes in Water by Small Luminescent Nanoparticles. Small, 2017, 13, 1700968.	10.0	20
16	Microrheometric upconversion-based techniques for intracellular viscosity measurements. , 2017, , .		1
17	Simulation of the disorder effects in ferroelectric phase transitions using two-dimensional statistical models. Physica Status Solidi C: Current Topics in Solid State Physics, 2016, 14, 1600094.	0.8	0
18	Crossover from superdiffusive to diffusive dynamics in fluctuating light fields. Physical Review A, 2016, 93, .	2.5	1

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19	Optical Torques on Upconverting Particles for Intracellular Microrheometry. Nano Letters, 2016, 16, 8005-8014.	9.1	70
20	On the existence of two states in liquid water: impact on biological and nanoscopic systems. International Journal of Nanotechnology, 2016, 13, 667.	0.2	38
21	Arrested Dimerâ€™s Diffusion by Self-Induced Back-Action Optical Forces. ACS Photonics, 2016, 3, 1286-1293.	6.6	7
22	Dynamics of a small particle in a fluctuating random light field. Optics Letters, 2016, 41, 796.	3.3	2
23	Dielectric anomalous response of water at 60ÂÂ°C. Philosophical Magazine, 2015, 95, 683-690.	1.6	18
24	Paraelectric Response of Water in the RangeÂ0â€“100Â°C. Ferroelectrics, 2014, 466, 166-180.	0.6	10
25	Beam configuration proposal to verify that scattering forces come from the orbital part of the Poynting vector. Optics Letters, 2014, 39, 5122.	3.3	22
26	Effect of long-range spatial correlations on the lifetime statistics of an emitter in a two-dimensional disordered lattice. Physical Review A, 2014, 89, .	2.5	6
27	Identification of water content in nanocavities. Nanoscale Research Letters, 2013, 8, 171.	5.7	1
28	Optical image contrast enhancement in near-field optics induced by water condensation. Ultramicroscopy, 2013, 135, 50-55.	1.9	11
29	Low energy argon ion irradiation surface effects on triglycine sulfate. Applied Surface Science, 2013, 280, 858-861.	6.1	5
30	Non-conservative scattering forces on small particles. , 2013, , .		0
31	Effect of condensed water on scanning near-field optical microscope measurement. Physica Scripta, 2013, T157, 014060.	2.5	0
32	MarquÃ©s and SÃ¡enz Reply:. Physical Review Letters, 2013, 111, 059302.	7.8	18
33	Scattering forces on magneto-dielectric particles and the electromagnetic momentum density. Advanced Electromagnetics, 2013, 2, 26.	1.0	0
34	Scattering forces and electromagnetic momentum density in crossed circularly polarized standing waves: erratum. Optics Letters, 2012, 37, 4470.	3.3	3
35	Scattering forces and electromagnetic momentum density in crossed circularly polarized standing waves. Optics Letters, 2012, 37, 2787.	3.3	15
36	CHARACTERISTIC TEMPERATURES OF FIRST-ORDER FERROELECTRIC PHASE TRANSITION: EFFECTIVE FIELD APPROACH. Journal of Advanced Dielectrics, 2012, 02, 1241007.	2.4	1

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37	Ferroelectric to Quantum Paraelectric Crossover in Mixed Crystals of Isotopic Strontium Titanate. Ferroelectrics, 2012, 427, 91-97.	0.6	0
38	Monte Carlo Study of Ising Critical Isotherms. Ferroelectrics, 2012, 426, 166-170.	0.6	0
39	Effect of the Depolarizing Field in a Model Relaxor. Ferroelectrics, 2012, 427, 52-55.	0.6	0
40	Scattering forces and electromagnetic momentum density in crossed circularly polarized standing waves. Optics Letters, 2012, 37, 2787-9.	3.3	2
41	Plasmonic Nanoparticle Chain in a Light Field: A Resonant Optical Sail. Nano Letters, 2011, 11, 4597-4600.	9.1	13
42	Light control of silver nanoparticleâ€™s diffusion. Optics Express, 2011, 19, 11471.	3.4	19
43	Attenuation of the depolarizing field in a thin film model relaxor. Physica A: Statistical Mechanics and Its Applications, 2011, 390, 3955-3961.	2.6	3
44	Microscopic model for the formation of nanodomains in relaxor materials. Physical Review B, 2010, 81, .	3.2	9
45	Monte Carlo Simulation of First Order Phase Transitions. Ferroelectrics, 2010, 401, 3-8.	0.6	5
46	Monte Carlo study of the competition between long-range and short-range correlated disorder in a second-order phase transition. Physical Review E, 2009, 79, 052103.	2.1	1
47	The capillarity of nanometric water menisci confined inside closed-geometry viral cages. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 5475-5480.	7.1	28
48	MC simulations of water meniscus in nanocontainers: explaining the collapse of viral particles due to capillary forces. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 2128-2132.	0.8	4
49	Scattering Forces from the Curl of the Spin Angular Momentum of a Light Field. Physical Review Letters, 2009, 102, 113602.	7.8	279
50	Quantum paraelectrics revisited under effective field approach. , 2009, , .		0
51	A microscopic model for charge disordered relaxor systems. , 2009, , .		0
52	Giant Enhanced Diffusion of Gold Nanoparticles in Optical Vortex Fields. Nano Letters, 2009, 9, 3527-3531.	9.1	54
53	Electric field induced phase transition in first order ferroelectrics with large zero point energy. Physica A: Statistical Mechanics and Its Applications, 2008, 387, 115-122.	2.6	11
54	Composition Dependence of the Transition Temperature for Non-Stochiometric Ferroelectric Lithium Niobate. Ferroelectrics, 2008, 369, 53-57.	0.6	0

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55	Monte Carlo Determination of Dâˆ— for Ising Strips. Ferroelectrics, Letters Section, 2008, 35, 62-65.	1.0	0
56	Redistribution of Random Nanoregions in Polarized Relaxor Ferroelectrics. Ferroelectrics, 2008, 369, 179-184.	0.6	0
57	Evolution of the Critical Behavior in Pure and Deuterated Ferroelectric Crystals of the TGS Family. Ferroelectrics, 2008, 369, 65-68.	0.6	0
58	Proposed high-pressure calorimetric experiment to probe theoretical predictions on the liquid-liquid critical point hypothesis. Physical Review E, 2007, 76, 021503.	2.1	5
59	Effective Field Approach to Metallic Superconductors. Ferroelectrics, 2007, 354, 115-119.	0.6	0
60	Is it realistic to assume the same cosmic equation of state prior to and after atom formation?. AIP Conference Proceedings, 2007, , .	0.4	0
61	Test of cold denaturation mechanism for proteins as a function of water's structure. Physica A: Statistical Mechanics and Its Applications, 2007, 375, 37-43.	2.6	2
62	Thermodynamic behavior of a water model with a liquidâ€“liquid critical point. Physica A: Statistical Mechanics and Its Applications, 2007, 386, 708-712.	2.6	2
63	Relaxor-based thin film memories and the depolarizing field problem. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 1962-1967.	1.8	1
64	Behavior of the Local Mode's Potential in BaTiO3Studied by Effective Hamiltonian Numerical Simulations. Ferroelectrics, 2006, 337, 51-57.	0.6	0
65	Monte Carlo Study of the Composition Dependence of the Curie Temperature in Mixed Ising Systems. Ferroelectrics, 2006, 337, 19-23.	0.6	0
66	Mechanism for proteins destabilization at low temperatures. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 1487-1490.	1.8	8
67	Composition Dependence of the Critical Temperature in Mixed Ferroâ€“Paraelectric Solid Solutions. Japanese Journal of Applied Physics, 2006, 45, 5892-5893.	1.5	4
68	Dilution Effects on the Transition Temperature of Ising Monolayers. Ferroelectrics, Letters Section, 2006, 33, 107-111.	1.0	0
69	Relationship between fragility, diffusive directions and energy barriers in a supercooled liquid. Physica A: Statistical Mechanics and Its Applications, 2005, 345, 395-403.	2.6	2
70	Relationship between fragility, diffusive directions and energy barriers in a supercooled liquid. Physica A: Statistical Mechanics and Its Applications, 2005, 345, 395-403.	2.6	6
71	Poling effect on distribution of quenched random fields in a uniaxial relaxor ferroelectric. Europhysics Letters, 2005, 71, 124-130.	2.0	7
72	First-principles study of instantaneous and averaged local potential inBaTiO3. Physical Review B, 2005, 71, .	3.2	15

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73	Equation of State for Ising Lattices. Ferroelectrics, 2005, 314, 73-78.	0.6	0
74	Quantum paraelectric behavior ofSrTiO3: Relevance of the structural phase transition temperature. Physical Review B, 2005, 72, .	3.2	21
75	Possible Mechanism for Cold Denaturation of Proteins at High Pressure. Physical Review Letters, 2003, 91, 138103.	7.8	95
76	Intramolecular coupling as a mechanism for a liquid-liquid phase transition. Physical Review E, 2003, 67, 011103.	2.1	105
77	THERMALLY DILUTED ISING SYSTEMS. Fractals, 2003, 11, 53-65.	3.7	11
78	Irrelevance of canonical or grand canonical constraints near a random fixed point in largeLsystems. Physical Review E, 2002, 65, 057104.	2.1	7
79	Monte Carlo simulation of quantum effects in ferroelectric phase transitions with increasing zero point energy. Physica A: Statistical Mechanics and Its Applications, 2002, 312, 181-186.	2.6	7
80	Scaling and Critical Behavior of Phase Transitions in Ising Strips and Nanotubes. Ferroelectrics, 2002, 268, 221-226.	0.6	0
81	Numerical approach to phase transitions in nanoscopic layered systems. Nanotechnology, 2001, 12, 143-146.	2.6	10
82	Field emission magnetic sensors based on focusing devices. Solid-State Electronics, 2001, 45, 977-986.	1.4	4
83	Dynamic scaling in diluted systems: Deactivation through thermal dilution. Physical Review E, 2001, 63, 056114.	2.1	0
84	Surface and Size Effects in TGS, NaNO2, and DKDP Nanocrystals. Materials Research Society Symposia Proceedings, 2000, 655, 42.	0.1	0
85	Evolution of the universality class in slightly diluted (1>p>0.8) Ising systems. Physica A: Statistical Mechanics and Its Applications, 2000, 284, 187-194.	2.6	6
86	Design of field emission based magnetic sensors. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2000, 18, 1068.	1.6	6
87	Composition dependence of the transition temperature in mixed ferroelectric-ferroelectric systems. Physical Review B, 2000, 62, 8561-8563.	3.2	12
88	Universality class of thermally diluted Ising systems at criticality. Physical Review E, 2000, 62, 191-196.	2.1	16
89	Monte Carlo simulations of grain size effects on the transition temperature of Ising systems: Comparison with mean field approximation in ferroelectrics. Ferroelectrics, 2000, 241, 35-41.	0.6	1
90	Analysis of a field-emission magnetic sensor with compensated electron-beam deviation. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1999, 17, 788.	1.6	3

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91	Self-averaging of random and thermally disordered diluted Ising systems. Physical Review E, 1999, 60, 2394-2397.	2.1	18
92	Extended scaling functions for Ising systems with dimensionality 1â©½dâ©½4. Physica A: Statistical Mechanics and Its Applications, 1999, 267, 165-172.	2.6	3
93	Modeling of a pressure sensor based on an array of wedge emitters. Applied Surface Science, 1999, 146, 239-244.	6.1	12
94	Transition temperature dependence in perovskite ceramics as a function of grain size. Ferroelectrics, Letters Section, 1999, 25, 103-107.	1.0	5
95	Experimental and theoretical characterization of integrated field emission nanotips. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1998, 16, 654.	1.6	10
96	Time evolution of nanocontact structure between macroscopic metallic wires leading to nanowire formation. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1997, 15, 548.	1.6	4
97	Revisiting the Beating Mercury Heart Systems:Â Steps in the Voltage Figures Due to Nanocontacts. Journal of Physical Chemistry B, 1997, 101, 2333-2338.	2.6	6
98	Conductance quantization in nanowires formed between micro and macroscopic metallic electrodes. Physical Review B, 1997, 55, 5416-5424.	3.2	178
99	Metallic Nanowires: Conductance Statistics, Stability, IV Curves, and Magnetism. , 1997, , 171-190.		3
100	Circular Dichroism in Magneto-Optical Forces. Optics Express, 0, , .	3.4	1