Miguel Ortuno

List of Publications by Year
in descending order

136 papers	2,113 citations	218592 26 h-index	265120 42 g-index
137 all docs	137 docs citations	137 times ranked	1159 citing authors

#	Article	IF	Citations
1	Numerical Simulations of Variable‐Range Hopping. Physica Status Solidi (B): Basic Research, 2022, 259, 2100340.	0.7	2
2	Nanoscale Charge Density and Dynamics in Graphene Oxide. , 2021, 3, 1826-1831.		3
3	Overactivated transport in the localized phase of the superconductor-insulator transition. Nature Communications, 2021, 12, 6733.	5.8	6
4	Displacement Transformations as a Tool to Study Many-Body Localization. Frontiers in Physics, 2021, 9, .	1.0	1
5	Topological phase transition in superconductors with mirror symmetry. Journal of Physics Condensed Matter, 2020, 32, 035603.	0.7	1
6	Disordered hyperuniformity in superconducting vortex lattices. Physical Review Research, 2020, 2, .	1.3	6
7	Construction of many-body eigenstates with displacement transformations in disordered systems. Physical Review B, 2019, 100, .	1.1	3
8	Current-driven production of vortex-antivortex pairs in planar Josephson junction arrays and phase cracks in long-range order. Scientific Reports, 2018, 8, 15460.	1.6	4
9	Many‐body localization from the perspective of Integrals of Motion. Annalen Der Physik, 2017, 529, 1600322.	0.9	52
10	Localized charge imaging with scanning Kelvin probe microscopy. Nanotechnology, 2017, 28, 025703.	1.3	10
11	Charging of highly resistive granular metal films. Physical Review B, 2017, 95, .	1.1	3
12	Explicit Local Integrals of Motion for the Many-Body Localized State. Physical Review Letters, 2016, 116, 010404.	2.9	125
13	Conducting polymers as electron glasses: surface charge domains and slow relaxation. Scientific Reports, 2016, 6, 21647.	1.6	10
14	Unbinding transition in semi-infinite two-dimensional localized systems. Physical Review B, 2015, 91, .	1.1	17
15	Density of states of two-dimensional systems with long-range logarithmic interactions. Physical Review B, 2015, 92, .	1.1	4
16	Emergent SO(5) Symmetry at the Néel to Valence-Bond-Solid Transition. Physical Review Letters, 2015, 115, 267203.	2.9	117
17	Deconfined Quantum Criticality, Scaling Violations, and Classical Loop Models. Physical Review X, 2015, 5, .	2.8	129
18	Electronic transport in two-dimensional high dielectric constant nanosystems. Scientific Reports, 2015, 5, 9667.	1.6	9

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19	Green functions of interacting systems in the strongly localized regime. Journal of Physics Condensed Matter, 2015, 27, 335503.	0.7	2
20	Locating the Many-Body transition via the von Neumann entropy. , 2014, , .		0
21	Length Distributions in Loop Soups. Physical Review Letters, 2013, 111, 100601.	2.9	21
22	Loop models with crossings. Physical Review B, 2013, 87, .	1.1	41
23	Phase transitions in three-dimensional loop models and the CP^{n-1} model. Physical Review B, 2013, 88, .	1.1	42
24	Quantum Coulomb gap in low dimensions. Physical Review B, 2012, 86, .	1.1	6
25	Numerical studies of relaxation in Electron Glasses. Journal of Physics: Conference Series, 2012, 376, 012007.	0.3	2
26	Quantum Coulomb gap. Journal of Physics: Conference Series, 2012, 376, 012006.	0.3	0
27	Localization length of nearly periodic layered metamaterials. Physical Review A, 2012, 86, .	1.0	9
28	Spin quantum Hall effect and plateau transitions in multilayer network models. Physical Review B, 2011, 83, .	1.1	6
29	3D Loop Models and the CP^{n-1} Model. Physical Review Letters, 2011, 107, 110601.	2.9	39
30	Effects of many-electron jumps in the relaxation and conductivity of Coulomb glasses. Physical Review B, 2011, 84, .	1.1	12
31	Phase diagram of the weak-magnetic-field quantum Hall transition quantified from classical percolation. Physical Review B, 2011, 84, .	1.1	5
32	Slow-light transmission in one-dimensional periodic structures. Physical Review A, 2010, 81, .	1.0	4
33	Many-body Effects in Conductivity of Disordered Semiconductors. AIP Conference Proceedings, 2010, , .	0.3	1
34	Nonlinear conductivity of two-dimensional Coulomb glasses. Physical Review B, 2010, 82, .	1.1	10
35	Effective temperature in Coulomb glasses. , 2009, , .		0
36	Crossover from diffusive to strongly localized regime in two-dimensional systems. Physical Review B, 2009, 80, .	1.1	7

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37	Random Walks and Anderson Localization in a Three-Dimensional Class C Network Model. Physical Review Letters, 2009, 102, 070603.	2.9	22
38	Delocalization by Disorder in Layered Systems. Physical Review Letters, 2009, 102, 216601.	2.9	9
39	Study of two-electron jumps in relaxation of Coulomb glasses. Annalen Der Physik, 2009, 18, 877-881.	0.9	1
40	Non-linear conductivity in Coulomb glasses. Annalen Der Physik, 2009, 18, 873-876.	0.9	3
41	Conductance distribution in two-dimensional localized systems with and without magnetic fields. European Physical Journal B, 2009, 70, 513-521.	0.6	15
42	Numerical study of relaxation in Coulomb glasses. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 674-679.	0.8	3
43	Negative magnetoresistance in ultrananocrystalline diamond: Strong or weak localization?. Applied Physics Letters, 2008, 92, 012120.	1.5	14
44	Effective Temperature in Relaxation of Coulomb Glasses. Physical Review Letters, 2008, 101, 056601.	2.9	21
45	Universal Distribution Functions in Two-Dimensional Localized Systems. Physical Review Letters, 2007, 99, 116602.	2.9	53
46	Collective variable-range hopping in the Coulomb gap: Computer simulations. Physical Review B, 2006, 73, .	1.1	20
47	Conductance fluctuations and corrections to the localization length in two-dimensional localized systems. Physica Status Solidi (B): Basic Research, 2006, 243, 395-398.	0.7	4
48	Conductance fluctuations in the localized regime: Numerical study in disordered noninteracting systems. Physical Review B, 2006, 73, .	1.1	19
49	Tunneling-time calculations for general finite wave packets based on the presence-time formalism. Physical Review A, 2006, 74, .	1.0	13
50	Quantum fluctuations effects in hopping. Europhysics Letters, 2005, 70, 649-655.	0.7	3
51	Conductance fluctuations and single-parameter scaling in two-dimensional disordered systems. Physical Review B, 2005, 72, .	1.1	35
52	Charge pumping in one-dimensional Kronig-Penney models. Physical Review B, 2005, 72, .	1.1	9
53	Monte Carlo method for relaxation in electron glasses. Physical Review B, 2005, 72, .	1.1	13
54	Conductance fluctuations in one- and two-dimensional localized systems. Physica Status Solidi (B): Basic Research, 2004, 241, 2148-2156.	0.7	3

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55	Variable range hopping in the Coulomb gap. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 42-45.	0.8	3
56	Quantum effects in Mott's variable-range hopping. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 136-139.	0.8	0
57	Keyword detection in natural languages and DNA. Europhysics Letters, 2002, 57, 759-764.	0.7	94
58	Green's function formulation of the traversal time and nature of the complex time. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 2001, 81, 1191-1200.	0.6	0
59	Configuration space in electron glasses. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 2001, 81, 151-162.	0.6	2
60	Coulomb interactions in Anderson insulators. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 2001, 81, 1049-1064.	0.6	8
61	Anomalously Large Critical Regions in Power-Law Random Matrix Ensembles. Physical Review Letters, 2001, 87, 056601.	2.9	29
62	Fluctuations of the Correlation Dimension at Metal-Insulator Transitions. Physical Review Letters, 2001, 88, 016401.	2.9	67
63	Phase Transition in Coulomb Glasses. Physica Status Solidi (B): Basic Research, 2000, 218, 11-15.	0.7	11
64	Dynamic Model with Quenched Rotational Disorder in the Hexagonal Lattice. Physica Status Solidi (B): Basic Research, 2000, 218, 247-250.	0.7	0
65	Valleys in Configuration Space of Coulomb Glasses. Physica Status Solidi (B): Basic Research, 2000, 218, 25-29.	0.7	2
66	Nonergodic effects in the Coulomb glass: Specific heat. Physical Review B, 2000, 62, 8030-8037.	1.1	14
67	Localized to extended states transition for two interacting particles in a two-dimensional random potential. Europhysics Letters, 1999, 46, 224-230.	0.7	30
68	Numerical study of relaxation in electron glasses. Physical Review B, 1999, 59, 5328-5332.	1.1	22
69	Dielectric susceptibility of the Coulomb glass. Physical Review B, 1999, 59, 910-914.	1.1	14
70	Kramers-Kronig relations and the barrier interaction time problem. European Physical Journal B, 1999, 9, 283-287.	0.6	6
71	Number of bound states of a Kronig-Penney finite-periodic superlattice. European Physical Journal B, 1999, 8, 635-641.	0.6	7
72	Two Interacting articles in a Two-Dimensional Random Potential. , 1999, , 263-270.		0

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73	On the application of the Kramers-Kronig relations to the interaction time problem. Annalen Der Physik, 1998, 7, 756-763.	0.9	2
74	Coulomb Glass Simulations: Creation of a Set of Low-Energy Many-Particle States, Non-Ergodic Effects in the Specific Heat. Physica Status Solidi (B): Basic Research, 1998, 205, 17-19.	0.7	7
75	Relaxation in Coulomb Glasses at Finite Temperature. Physica Status Solidi (B): Basic Research, 1998, 205, 31-34.	0.7	7
76	Transport regimes and critical energies in the two-dimensional Anderson model. Journal of Physics Condensed Matter, 1998, 10, 295-303.	0.7	7
77	Chaotic behavior induced by point contacts in quantum dots. Physical Review B, 1998, 58, R10143-R10146.	1.1	10
78	On the application of the Kramersâ€Kronig relations to the interaction time problem. Annalen Der Physik, 1998, 510, 756-763.	0.9	0
79	Electronic spectrum of quantum-Î³-wells superlattices in an electric field. Physical Review B, 1997, 56, 14929-14932.	1.1	6
80	Comment on ``Possible Global Minimum Lattice Configurations for Thomson's Problem of Charges on a Sphere''. Physical Review Letters, 1997, 79, 1417-1417.	2.9	16
81	Global quantum fluctuations in metallic particles. Physical Review B, 1997, 56, R7045-R7048.	1.1	2
82	Conductivity of the two-dimensional Coulomb glass. Physical Review B, 1997, 55, R8630-R8633.	1.1	69
83	Finite periodic and quasiperiodic systems in an electric field. Zeitschrift FÃ¼r Physik B-Condensed Matter, 1997, 102, 425-431.	1.1	15
84	Quantum fluctuations in granular metals. Physica B: Condensed Matter, 1997, 230-232, 803-805.	1.3	0
85	Tunneling and dwell time for one-dimensional generalized Kronig-Penney model. Physica B: Condensed Matter, 1997, 233, 72-77.	1.3	7
86	Traversal Time as a Function of the Size of the Wavepacket. Journal De Physique, I, 1997, 7, 653-661.	1.2	3
87	Traversal time in periodically loaded waveguides. Zeitschrift FÃ¼r Physik B-Condensed Matter, 1996, 100, 595-599.	1.1	5
88	A new model of quantum chaotic billiards: application to granular metals. Zeitschrift FÃ¼r Physik B-Condensed Matter, 1996, 103, 297-304.	1.1	1
89	Dwell time for an asymmetric one-dimensional barrier. Solid State Communications, 1996, 97, 791-793.	0.9	4
90	On the statistics of binary alloys in one-dimensional quasiperiodic lattices. Physica B: Condensed Matter, 1996, 217, 127-132.	1.3	2

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91	Many-particle jumps algorithm and Thomson's problem. Journal of Physics A, 1996, 29, 1973-1978.	1.6	17
92	Ferromagnetic interactions in nanostructured systems with two different Curie temperatures. Physical Review B, 1996, 53, 11656-11660.	1.1	47
93	Brewster Anomaly in Fibonacci and Thue-Morse Dielectric Multilayers. Electromagnetics, 1996, 16, 313-322.	0.3	2
94	Tunneling times for one-dimensional systems. Physical Review B, 1995, 51, 6743-6746.	1.1	24
95	Faraday Rotation and Complex-Valued Traversal Time for Classical Light Waves. Physical Review Letters, 1995, 75, 2312-2315.	2.9	57
96	Energy spectra and level statistics of Fibonacci and Thue-Morse chains. Physical Review B, 1995, 51, 12813-12816.	1.1	32
97	Monte Carlo simulation of hopping conduction in two-dimensional Coulomb glasses. Journal of Physics Condensed Matter, 1995, 7, 639-644.	0.7	3
98	LOW ENERGY EXCITATIONS AND NON-ERGODICITY IN THE COULOMB GLASS. International Journal of Modern Physics B, 1994, 08, 923-933.	1.0	2
99	Spatial disorder dependence of the conductance of a random resistor network. Physical Review B, 1994, 50, 12520-12523.	1.1	3
100	Electrode screening of the Coulomb gap. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1994, 70, 1231-1235.	0.6	9
101	Relaxation effects in the Coulomb glass. Journal of Non-Crystalline Solids, 1994, 172-174, 445-448.	1.5	3
102	Energy and dielectric relaxation in the Coulomb gap. Physica A: Statistical Mechanics and Its Applications, 1993, 201, 178-182.	1.2	4
103	Ground state of granular metals. Physical Review Letters, 1993, 71, 1871-1874.	2.9	39
104	Coulomb gap in granular metal wires. Physical Review B, 1992, 45, 11542-11545.	1.1	2
105	Reflection of electromagnetic waves from rough waveguides. IEEE Transactions on Microwave Theory and Techniques, 1990, 38, 445-448.	2.9	1
106	Percolative Treatment of the Verwey Transition in Cobalt–Iron and Nickel–Iron Ferrites. Physica Status Solidi (B): Basic Research, 1990, 157, 275-280.	0.7	3
107	Density of states for a disordered system of interacting dipoles. Physica B: Condensed Matter, 1989, 160, 293-296.	1.3	3
108	Clausius–Mossotti effects: Classical and quantum mechanical approaches. American Journal of Physics, 1989, 57, 818-821.	0.3	1

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109	Critical behaviour in deterministic motion in a random environment. European Physical Journal B, 1988, 70, 269-274.	0.6	3
110	Hardening of the Coulomb gap by electronic polarons. Physical Review B, 1988, 37, 10520-10525.	1.1	28
111	Computer studies of system densities of states and of correlations in the excitation spectra of interacting electrons in disordered insulators. Physical Review B, 1988, 37, 9006-9016.	1.1	8
112	Single-particle density of excitations and hard gaps in localized interacting systems. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1988, 58, 69-77.	0.6	12
113	Motion in a random gyrotropic environment in D dimensions. Journal of Physics A, 1987, 20, 4047-4051.	1.6	2
114	Low energy excitations of interacting Anderson localized electrons. Journal of Non-Crystalline Solids, 1987, 97-98, 233-236.	1.5	4
115	Hard gaps in localized interacting systems. Journal of Non-Crystalline Solids, 1987, 97-98, 237-240.	1.5	0
116	An algorithm for surface reconstruction in scanning tunneling microscopy. Surface Science, 1987, 181, 107-111.	0.8	47
117	The interpretation and reconstruction of images in scanning tunneling microscopy. Physica Status Solidi A, 1987, 101, 463-468.	1.7	4
118	The multistage character of the verwey transition in cobalt-iron ferrites. Physics Letters, Section A: General, Atomic and Solid State Physics, 1987, 120, 148-150.	0.9	1
119	The Verwey Transition in Polycrystalline Cobalt-Iron Ferrites. Physica Status Solidi A, 1986, 96, 581-586.	1.7	8
120	Calculations of the mean width of the Coulomb gap in disordered systems by two simple methods. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1985, 51, 533-541.	0.6	5
121	Clausius-Mosotti relation and excitonic effects for systems with extended wavefunctions. Solid State Communications, 1985, 55, 367-371.	0.9	3
122	Percolation and motion in a simple random environment. Journal of Physics A, 1985, 18, L1095-L1101.	1.6	47
123	The effect of Coulomb interactions on Anderson localization. Journal of Non-Crystalline Solids, 1985, 77-78, 33-36.	1.5	2
124	The Effect Of Coulomb Interactions On Electronic States And Transport In Disordered Insulators. Modern Problems in Condensed Matter Sciences, 1985, , 287-408.	0.1	28
125	Dielectric constant near the Anderson transition. Journal of Physics C: Solid State Physics, 1984, 17, L487-L491.	1.5	8
126	The activation energy of impurity conduction with sequentially correlated hopping. Physica B: Physics of Condensed Matter & C: Atomic, Molecular and Plasma Physics, Optics, 1983, 117-118, 254-256.	0.9	0

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127	Hopping transport in a-Ge and a-Si. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1983, 47, L93-L98.	0.6	32
128	An extended theory for hopping transport in a-Ge and a-Si. Journal of Non-Crystalline Solids, 1983, 59-60, 53-56.	1.5	27
129	The activation energy of hopping transport with sequential correlations of hops due to Coulomb interactions. Journal of Physics C: Solid State Physics, 1983, 16, 1459-1467.	1.5	15
130	Dielectric response at surfaces for semiconductors and insulators. Surface Science, 1982, 122, 161-174.	0.8	2
131	Coulomb interactions in Anderson localized disordered systems. Solar Energy Materials and Solar Cells, 1982, 8, 81-89.	0.4	65
132	Variable-range hopping including correlation between energies and positions. Journal of Physics C: Solid State Physics, 1981, 14, L421-L425.	1.5	2
133	Induced polarization charge density and microscopic local field for a covalent semiconductor. Solid State Communications, 1980, 33, 821-826.	0.9	5
134	The relevance and limitations of the Clausius-Mosotti relation in quantum systems. Journal of Physics C: Solid State Physics, 1980, 13, 1669-1678.	1.5	9
135	Polarisation catastrophe in P doped Si. Journal of Physics C: Solid State Physics, 1980, 13, 6279-6285.	1.5	6
136	Real-space dielectric response in semiconductors. Journal of Physics C: Solid State Physics, 1979, 12, 1065-1071.	1.5	27