

# Yigal Meir

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/7950342/yigal-meir-publications-by-citations.pdf>

**Version:** 2024-04-23

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

130  
papers

11,445  
citations

43  
h-index

106  
g-index

139  
ext. papers

12,287  
ext. citations

7  
avg, IF

6.21  
L-index

#	Paper	IF	Citations
130	Landauer formula for the current through an interacting electron region. <i>Physical Review Letters</i> , <b>1992</b> , 68, 2512-2515	7.4	2298
129	Time-dependent transport in interacting and noninteracting resonant-tunneling systems. <i>Physical Review B</i> , <b>1994</b> , 50, 5528-5544	3.3	1531
128	Low-temperature transport through a quantum dot: The Anderson model out of equilibrium. <i>Physical Review Letters</i> , <b>1993</b> , 70, 2601-2604	7.4	797
127	Transport through a strongly interacting electron system: Theory of periodic conductance oscillations. <i>Physical Review Letters</i> , <b>1991</b> , 66, 3048-3051	7.4	613
126	van der Waals Energies in Density Functional Theory. <i>Physical Review Letters</i> , <b>1998</b> , 80, 4153-4156	7.4	461
125	Anderson model out of equilibrium: Noncrossing-approximation approach to transport through a quantum dot. <i>Physical Review B</i> , <b>1994</b> , 49, 11040-11052	3.3	460
124	Transport spectroscopy of a Coulomb island in the quantum Hall regime. <i>Physical Review Letters</i> , <b>1991</b> , 66, 1926-1929	7.4	360
123	Time-dependent transport through a mesoscopic structure. <i>Physical Review B</i> , <b>1993</b> , 48, 8487-8490	3.3	283
122	Nature of the superconductor-insulator transition in disordered superconductors. <i>Nature</i> , <b>2007</b> , 449, 876-80	50.4	246
121	Dynamic structures in Escherichia coli: spontaneous formation of MinE rings and MinD polar zones. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2003</b> , 100, 12724-8	11.5	221
120	Kondo model for the "0.7 anomaly" in transport through a quantum point contact. <i>Physical Review Letters</i> , <b>2002</b> , 89, 196802	7.4	197
119	Effects of quantum levels on transport through a Coulomb island. <i>Physical Review B</i> , <b>1993</b> , 47, 10020-10023	3.3	197
118	Electronic Correlations in Transport through Coupled Quantum Dots. <i>Physical Review Letters</i> , <b>1999</b> , 82, 3508-3511	7.4	195
117	Geometric Implementation of Hypercubic Lattices with Noninteger Dimensionality by Use of Low Lacunarity Fractal Lattices. <i>Physical Review Letters</i> , <b>1983</b> , 50, 145-148	7.4	189
116	Universal effects of spin-orbit scattering in mesoscopic systems. <i>Physical Review Letters</i> , <b>1989</b> , 63, 798-801	7.4	167
115	Chemosensing in Escherichia coli: two regimes of two-state receptors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2006</b> , 103, 1786-91	11.5	160
114	Dephasing and the Orthogonality Catastrophe in Tunneling through a Quantum Dot: The Which Path? Interferometer. <i>Physical Review Letters</i> , <b>1997</b> , 79, 3740-3743	7.4	143

113	Percolation-Type Description of the Metal-Insulator Transition in Two Dimensions. <i>Physical Review Letters</i> , <b>1999</b> , 83, 3506-3509	7.4	140
112	Magnetic impurity formation in quantum point contacts. <i>Nature</i> , <b>2006</b> , 442, 900-3	50.4	132
111	Local moment formation in quantum point contacts. <i>Physical Review Letters</i> , <b>2003</b> , 90, 026804	7.4	118
110	How Long Does It Take for the Kondo Effect to Develop?. <i>Physical Review Letters</i> , <b>1999</b> , 83, 808-811	7.4	116
109	Series study of percolation moments in general dimension. <i>Physical Review B</i> , <b>1990</b> , 41, 9183-9206	3.3	103
108	Many-body coherence effects in conduction through a quantum dot in the fractional quantum Hall regime. <i>Physical Review B</i> , <b>1992</b> , 46, 4681-4692	3.3	100
107	Probing the Kondo density of states in a three-terminal quantum ring. <i>Physical Review Letters</i> , <b>2005</b> , 95, 126603	7.4	75
106	Resistance fluctuations in randomly diluted networks. <i>Physical Review B</i> , <b>1987</b> , 35, 3524-3535	3.3	72
105	Shot noise through a quantum dot in the Kondo regime. <i>Physical Review Letters</i> , <b>2002</b> , 88, 116802	7.4	71
104	Condensation and localization of the partitioning protein ParB on the bacterial chromosome. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2014</b> , 111, 8809-14	11.5	70
103	Self-avoiding walks on diluted networks. <i>Physical Review Letters</i> , <b>1989</b> , 63, 2819-2822	7.4	66
102	Thermal robustness of signaling in bacterial chemotaxis. <i>Cell</i> , <b>2011</b> , 145, 312-21	56.2	61
101	Variable sizes of Escherichia coli chemoreceptor signaling teams. <i>Molecular Systems Biology</i> , <b>2008</b> , 4, 211	12.2	58
100	Kondo physics in the single-electron transistor with ac driving. <i>Physical Review B</i> , <b>2000</b> , 61, 2146-2150	3.3	57
99	Low-concentration series in general dimension. <i>Journal of Statistical Physics</i> , <b>1990</b> , 58, 511-538	1.5	57
98	Odd and even Kondo effects from emergent localization in quantum point contacts. <i>Nature</i> , <b>2013</b> , 501, 79-83	50.4	56
97	Coulomb interactions and energy-level spectrum of a small electron gas. <i>Physica B: Condensed Matter</i> , <b>1993</b> , 189, 70-79	2.8	55
96	Verticalization of bacterial biofilms. <i>Nature Physics</i> , <b>2018</b> , 14, 954-960	16.2	52

95	Series expansions for the Ising spin glass in general dimension. <i>Physical Review B</i> , <b>1991</b> , 43, 11249-11273	3.3	52
94	Series analysis of randomly diluted nonlinear resistor networks. <i>Physical Review B</i> , <b>1986</b> , 34, 3424-3428	3.3	52
93	Universal Crossover between Efros-Shklovskii and Mott Variable-Range-Hopping Regimes. <i>Physical Review Letters</i> , <b>1996</b> , 77, 5265-5267	7.4	51
92	Composite edge states in the $\nu = 2/3$ fractional quantum Hall regime. <i>Physical Review Letters</i> , <b>1994</b> , 72, 2624-2627	7.4	51
91	Delocalization Transition in Two-Dimensional Quantum Percolation. <i>Europhysics Letters</i> , <b>1989</b> , 10, 275-278	7.4	49
90	Spin-orbit scattering for localized electrons: Absence of negative magnetoconductance. <i>Physical Review Letters</i> , <b>1991</b> , 66, 1517-1520	7.4	46
89	Edge reconstruction in the $\nu = 2/3$ fractional quantum Hall state. <i>Physical Review Letters</i> , <b>2013</b> , 111, 246803	7.4	44
88	Theory of the magnetoresistance of disordered superconducting films. <i>Physical Review B</i> , <b>2006</b> , 73, 040401	3.3	44
87	Magnetic-field and spin-orbit interaction in restricted geometries: Solvable models. <i>Physical Review B</i> , <b>1990</b> , 42, 8351-8360	3.3	41
86	Spontaneous Breakdown of Topological Protection in Two Dimensions. <i>Physical Review Letters</i> , <b>2017</b> , 118, 046801	7.4	39
85	Conductance through a quantum dot in the fractional quantum Hall regime. <i>Physical Review B</i> , <b>1992</b> , 45, 9489-9492	3.3	39
84	Dynamics of cooperativity in chemical sensing among cell-surface receptors. <i>Physical Review Letters</i> , <b>2011</b> , 107, 178101	7.4	38
83	Mechanism of bidirectional thermotaxis in <i>E. coli</i> . <i>ELife</i> , <b>2017</b> , 6, e25211	8.9	34
82	Spin-orbit scattering and the Kondo effect. <i>Physical Review B</i> , <b>1994</b> , 50, 4947-4950	3.3	34
81	Microbial consortia at steady supply. <i>ELife</i> , <b>2017</b> , 6, e25211	8.9	32
80	Comment on "2-channel Kondo scaling in conductance signals from 2-level tunneling systems". <i>Physical Review Letters</i> , <b>1995</b> , 75, 769	7.4	31
79	Chemical sensing by nonequilibrium cooperative receptors. <i>Physical Review Letters</i> , <b>2013</b> , 110, 248102	7.4	30
78	Two-species percolation and scaling theory of the metal-insulator transition in two dimensions. <i>Physical Review B</i> , <b>2000</b> , 61, 16470-16476	3.3	29

77	Precision and kinetics of adaptation in bacterial chemotaxis. <i>Biophysical Journal</i> , <b>2010</b> , 99, 2766-74	2.9	28
76	Non-local interaction via diffusible resource prevents coexistence of cooperators and cheaters in a lattice model. <i>PLoS ONE</i> , <b>2013</b> , 8, e63304	3.7	27
75	Unifying model for several classes of two-dimensional phase transition. <i>Physical Review Letters</i> , <b>2005</b> , 94, 156406	7.4	27
74	Concerted 2-5A-Mediated mRNA Decay and Transcription Reprogram Protein Synthesis in the dsRNA Response. <i>Molecular Cell</i> , <b>2019</b> , 75, 1218-1228.e6	17.6	25
73	Diffusion on percolating clusters. <i>Physical Review B</i> , <b>1987</b> , 36, 8752-8764	3.3	25
72	Quantum percolation in magnetic fields. <i>Physical Review Letters</i> , <b>1986</b> , 56, 976-979	7.4	24
71	Effects of spin-orbit scattering in mesoscopic rings: Canonical- versus grand-canonical-ensemble averaging. <i>Physical Review B</i> , <b>1992</b> , 45, 11890-11895	3.3	23
70	Series study of random animals in general dimensions. <i>Physical Review B</i> , <b>1988</b> , 38, 4941-4954	3.3	22
69	Rigidity enhances a magic-number effect in polymer phase separation. <i>Nature Communications</i> , <b>2020</b> , 11, 1561	17.4	21
68	Evidence for localization and 0.7 anomaly in hole quantum point contacts. <i>Europhysics Letters</i> , <b>2010</b> , 91, 67010	1.6	21
67	Universal spin-induced magnetoresistance in the variable-range hopping regime. <i>Europhysics Letters</i> , <b>1996</b> , 33, 471-476	1.6	21
66	Island formation in disordered superconducting thin films at finite magnetic fields. <i>Physical Review B</i> , <b>2008</b> , 78,	3.3	20
65	How to measure the entropy of a mesoscopic system via thermoelectric transport. <i>Nature Communications</i> , <b>2019</b> , 10, 5801	17.4	20
64	Random matrix theory of transition strengths and universal magnetoconductance in the strongly localized regime. <i>Physical Review Letters</i> , <b>1993</b> , 70, 1988-1991	7.4	19
63	Thermal phase transition in two-dimensional disordered superconductors. <i>Europhysics Letters</i> , <b>2010</b> , 91, 47003	1.6	17
62	Recursive enumeration of clusters in general dimension on hypercubic lattices. <i>Physical Review A</i> , <b>1987</b> , 36, 1840-1848	2.6	17
61	Band of critical States in anderson localization in a strong magnetic field with random spin-orbit scattering. <i>Physical Review Letters</i> , <b>2015</b> , 114, 096803	7.4	16
60	Dynamic Structure Factor of a Deterministic Fractal. <i>Europhysics Letters</i> , <b>1988</b> , 7, 249-253	1.6	16

59	Quantum Hall criticality, superconductor-insulator transition, and quantum percolation. <i>Physical Review B</i> , <b>2005</b> , 71,	3.3	14
58	The theory of the 0.7 anomaly in quantum point contacts. <i>Journal of Physics Condensed Matter</i> , <b>2008</b> , 20, 164208	1.8	13
57	Suppression of shot noise in quantum point contacts in the "0.7 regime". <i>Physical Review Letters</i> , <b>2006</b> , 97, 186801	7.4	13
56	Decoding the physical principles of two-component biomolecular phase separation. <i>ELife</i> , <b>2021</b> , 10,	8.9	13
55	Breaking of phase symmetry in nonequilibrium Aharonov-Bohm oscillations through a quantum dot. <i>Physical Review B</i> , <b>2009</b> , 80,	3.3	12
54	Series analysis of randomly diluted nonlinear networks with negative nonlinearity exponent. <i>Physical Review B</i> , <b>1987</b> , 36, 3950-3952	3.3	12
53	Averaging of multifractals. <i>Physical Review A</i> , <b>1988</b> , 37, 596-600	2.6	12
52	Directed percolation in 3+1 dimensions. <i>Physical Review B</i> , <b>1988</b> , 37, 7529-7533	3.3	12
51	Nonmonotonic thermoelectric currents and energy harvesting in interacting double quantum dots. <i>Physical Review B</i> , <b>2019</b> , 99,	3.3	11
50	Dilute random-field Ising models and uniform-field antiferromagnets. <i>Physical Review B</i> , <b>1985</b> , 32, 3203-3213	3.3	11
49	Abrupt disappearance and re-emergence of the SU(4) and SU(2) Kondo effects due to population inversion. <i>Physical Review B</i> , <b>2017</b> , 96,	3.3	10
48	Proposed measurement of spatial correlations at the Berezinski-Kosterlitz-Thouless transition of superconducting thin films. <i>Physical Review Letters</i> , <b>2013</b> , 111, 187002	7.4	10
47	Charge rearrangement and screening in a quantum point contact. <i>Physical Review Letters</i> , <b>2007</b> , 98, 196805	7.4	10
46	From the zero-field metal-insulator transition in two dimensions to the quantum Hall transition: A percolation-effective-medium theory. <i>Physical Review B</i> , <b>2001</b> , 63,	3.3	10
45	Quantum Hall effect in three-dimensional layered systems. <i>Physical Review B</i> , <b>1998</b> , 58, R1762-R1765	3.3	10
44	How to measure the transmission phase through a quantum dot in a two-terminal interferometer. <i>Physical Review Letters</i> , <b>2010</b> , 104, 256801	7.4	9
43	Time-dependent transport in mesoscopic systems: general formalism and applications. <i>Semiconductor Science and Technology</i> , <b>1994</b> , 9, 926-929	1.8	9
42	An experimental test of the geodesic rule proposition for the noncyclic geometric phase. <i>Science Advances</i> , <b>2020</b> , 6, eaay8345	14.3	8

41	New spin-orbit-induced universality class in the integer quantum Hall regime. <i>Physical Review Letters</i> , <b>2002</b> , 89, 076602	7.4	8
40	Auger-spectroscopy in quantum Hall edge channels and the missing energy problem. <i>Nature Communications</i> , <b>2019</b> , 10, 3915	17.4	7
39	Anti-levitation in integer quantum Hall systems. <i>Physical Review B</i> , <b>2014</b> , 89,	3.3	7
38	Nutrient levels and trade-offs control diversity in a serial dilution ecosystem. <i>ELife</i> , <b>2020</b> , 9,	8.9	7
37	Mechanical Frustration of Phase Separation in the Cell Nucleus by Chromatin. <i>Physical Review Letters</i> , <b>2021</b> , 126, 258102	7.4	7
36	Absence of localization in disordered two-dimensional electron gas at weak magnetic field and strong spin-orbit coupling. <i>Scientific Reports</i> , <b>2016</b> , 6, 33304	4.9	7
35	Effect of amplitude fluctuations on the Berezinskii-Kosterlitz-Thouless transition. <i>Physical Review B</i> , <b>2013</b> , 88,	3.3	6
34	Local current distribution and hot spots in the integer quantum Hall regime. <i>Physical Review B</i> , <b>2006</b> , 74,	3.3	6
33	Dilute spin glass at zero temperature in general dimension. <i>Physical Review B</i> , <b>1989</b> , 40, 4824-4832	3.3	6
32	Resistance distributions of the random resistor network near the percolation threshold. <i>Physical Review B</i> , <b>1990</b> , 41, 4610-4618	3.3	6
31	Reanalysis of "Dilute random-field Ising models and uniform-field antiferromagnets". <i>Physical Review B</i> , <b>1986</b> , 34, 3469-3470	3.3	6
30	Vibration-Assisted and Vibration-Hampered Excitonic Quantum Transport. <i>Journal of Physical Chemistry Letters</i> , <b>2018</b> , 9, 3143-3148	6.4	6
29	Magnetoresistance anisotropy in amorphous superconducting thin films: Site-bond percolation approach. <i>Physical Review B</i> , <b>2015</b> , 92,	3.3	5
28	Continuous and reversible tuning of the disorder-driven superconductor-insulator transition in bilayer graphene. <i>Scientific Reports</i> , <b>2015</b> , 5, 13466	4.9	5
27	Phase switching in a voltage-biased Aharonov-Bohm interferometer. <i>Physical Review B</i> , <b>2008</b> , 77,	3.3	5
26	Percolation-type description of the metal-insulator transition in two dimensions. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>2001</b> , 302, 391-403	3.3	5
25	Distribution of the logarithms of currents in percolating resistor networks. II. Series expansions. <i>Physical Review B</i> , <b>1993</b> , 47, 5770-5782	3.3	5
24	Kondo effect and spin-orbit coupling in graphene quantum dots. <i>Nature Communications</i> , <b>2021</b> , 12, 6004	17.4	5

23	Quasiparticle tunneling through a barrier in the fractional quantum hall regime. <i>Physical Review Letters</i> , <b>2005</b> , 95, 136803	7.4	4
22	Large Tunable Thermophase in Superconductor - Quantum Dot - Superconductor Josephson Junctions. <i>Scientific Reports</i> , <b>2016</b> , 6, 35116	4.9	4
21	Quantum phase transition in a realistic double-quantum-dot system. <i>Scientific Reports</i> , <b>2018</b> , 8, 10539	4.9	3
20	Viscous fingers on fractals. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>1989</b> , 157, 524-528	3.3	3
19	Electronic transport in graphene nanostructures on SiO <sub>2</sub> . <i>Solid State Communications</i> , <b>2012</b> , 152, 1306-1310	3.0	2
18	Time-dependent density functional theory of excitation energies of closed-shell quantum dots. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2004</b> , 22, 486-489	3	2
17	Luttinger-liquid behavior in tunneling through a quantum dot at zero magnetic field. <i>Physical Review Letters</i> , <b>2002</b> , 89, 256401	7.4	2
16	Percolation in negative field and lattice animals. <i>Physical Review B</i> , <b>1989</b> , 39, 649-656	3.3	2
15	Sequence dependence of biomolecular phase separation		2
14	Author response: Nutrient levels and trade-offs control diversity in a serial dilution ecosystem <b>2020</b>		2
13	Interaction-induced charge transfer in a mesoscopic electron spectrometer. <i>Physical Review B</i> , <b>2019</b> , 100,	3.3	1
12	Controlled breaking of phase symmetry in a "Which-Path?" interferometer. <i>Journal of Physics: Conference Series</i> , <b>2009</b> , 193, 012011	0.3	1
11	Superconducting islands, phase fluctuations and the superconductor-insulator transition. <i>Physica C: Superconductivity and Its Applications</i> , <b>2008</b> , 468, 354-357	1.3	1
10	Seminar 3 Transport through quantum point contacts. <i>Les Houches Summer School Proceedings</i> , <b>2005</b> , 479-493		1
9	Fractional Entropy of Multichannel Kondo Systems from Conductance-Charge Relations.. <i>Physical Review Letters</i> , <b>2022</b> , 128, 146803	7.4	1
8	Motif-pattern dependence of biomolecular phase separation driven by specific interactions.. <i>PLoS Computational Biology</i> , <b>2021</b> , 17, e1009748	5	1
7	Stern-Gerlach Interferometry with the Atom Chip <b>2021</b> , 263-301		0
6	Instability to Local Moment Formation in a Quantum Point Contact. <i>Journal of the Physical Society of Japan</i> , <b>2003</b> , 72, 85-86	1.5	



- 5 PERCOLATION APPROACH TO THE METALINSULATOR TRANSITION IN TWO DIMENSIONS. *International Journal of Modern Physics B*, **2001**, 15, 2641-2645 1.1
- 4 Enzyme regulation and mutation in a model serial-dilution ecosystem. *Physical Review E*, **2021**, 104, 044412
- 3 Diffusion on Percolation Clusters **1987**, 213-216
- 2 Spin-Orbit Effects in Disordered Systems. *NATO ASI Series Series B: Physics*, **1991**, 91-97
- 1 Phase-coherent Electron Transport through Double Dots **2010**, 305-315