

Igor V Lerner

List of Publications by Year in descending order

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84
papers

1,662
citations

304743

22
h-index

302126

39
g-index

84
all docs

84
docs citations

84
times ranked

959
citing authors

#	ARTICLE	IF	CITATIONS
1	Electron-phonon decoupling in two dimensions. Scientific Reports, 2021, 11, 24293.	3.3	2
2	Reply to "Comment on "How to observe and quantify quantum-discord states via correlations"â€™â€œ%â€œâ€œ. Physical Review A, 2020, 102, .	2.5	1
3	How to observe and quantify quantum-discord states via correlations. Physical Review A, 2019, 100, .	2.5	10
4	One-Dimensional Transport of Ultracold Bosons. Acta Physica Polonica A, 2019, 135, 1162-1170.	0.5	0
5	Instability of the sliding Luttinger liquid. Journal of Physics Condensed Matter, 2018, 30, 185602.	1.8	2
6	Local impurity in a multichannel Luttinger liquid. Physical Review B, 2017, 95, .	3.2	9
7	Berezinskii-Kosterlitz-Thouless transition in disordered multichannel Luttinger liquids. Physical Review B, 2017, 96, .	3.2	5
8	Fluctuation susceptibility of ultracold bosons in the vicinity of condensation in the presence of an artificial magnetic field. Physical Review A, 2016, 93, .	2.5	0
9	Hong-Ou-Mandel Interference with a Single Atom. Scientific Reports, 2015, 5, 13947.	3.3	3
10	One-Dimensional Transport of Bosons between Weakly Linked Reservoirs. Physical Review Letters, 2014, 112, 100601.	7.8	16
11	Duality of Weak and Strong Scatterer in a Luttinger Liquid Coupled to Massless Bosons. Physical Review Letters, 2013, 110, 136405.	7.8	15
12	Fluctuation-driven traffic congestion in a scale-free model of the Internet. , 2013, , .		1
13	Quantum corrections to the polarizability and dephasing in isolated disordered metals. Physical Review B, 2013, 88, .	3.2	0
14	Fluctuation-induced traffic congestion in heterogeneous networks. Europhysics Letters, 2012, 100, 36002.	2.0	3
15	Impurity Scattering in Luttinger Liquid with Electron-Phonon Coupling. Journal of Physics: Conference Series, 2011, 286, 012049.	0.4	0
16	Effect of electron-phonon coupling on transmission through Luttinger liquid hybridized with resonant level. Europhysics Letters, 2011, 93, 17009.	2.0	7
17	Interplay of charge and spin in quantum dots: The Ising case. Physical Review B, 2011, 84, .	3.2	8
18	Thermal noise and dephasing due to electron interactions in nontrivial geometries. Physical Review B, 2011, 84, .	3.2	10

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19	Impurity scattering in a Luttinger liquid with electron-phonon coupling. Physical Review B, 2011, 83, .	3.2	8
20	Decoherence of charge qubit coupled to interacting background charges. Physical Review B, 2010, 81, .	3.2	23
21	Asymptotically exact probability distribution for the Sinai model with finite drift. Physical Review E, 2010, 82, 030103.	2.1	1
22	Dimensional crossover of the dephasing time in disordered mesoscopic rings. Physical Review B, 2009, 80, .	3.2	10
23	Crossover from diffusive to strongly localized regime in two-dimensional systems. Physical Review B, 2009, 80, .	3.2	7
24	Quantum Transport Thermometry for Electrons in Graphene. Physical Review Letters, 2009, 102, 066801.	7.8	38
25	Mesoscopic conductance fluctuations in graphene. Solid State Communications, 2009, 149, 1041-1045.	1.9	47
26	Jumps in Current-Voltage Characteristics in Disordered Films. Physical Review Letters, 2009, 102, 176803.	7.8	70
27	Quantum Wire Hybridized With a Single-Level Impurity. Physical Review Letters, 2008, 100, 256805.	7.8	34
28	Temporal correlations of local network losses. Physical Review E, 2008, 77, 046115.	2.1	2
29	Fluctuation Spectroscopy of Granularity in Superconducting Structures. Physical Review Letters, 2008, 100, 117003.	7.8	19
30	PHYSICS: So Small Yet Still Giant. Science, 2007, 316, 63-64.	12.6	0
31	Low Temperature Decoherence and Relaxation in Charge Josephson Junction Qubits. Springer Series in Solid-state Sciences, 2007, , 77-101.	0.3	0
32	Tunnelling density of states at Coulomb-blockade peaks. Europhysics Letters, 2006, 76, 109-114.	2.0	18
33	Random walks in local dynamics of network losses. Physical Review E, 2006, 74, 046120.	2.1	3
34	Seminar 1 Impurity in the tomonaga-luttinger model: A functional integral approach. Les Houches Summer School Proceedings, 2005, 81, 109-127.	0.2	2
35	Low-temperature decoherence of qubit coupled to background charges. Physical Review B, 2005, 72, .	3.2	46
36	Functional integral bosonization for an impurity in a Luttinger liquid. Physical Review B, 2004, 69, .	3.2	43

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37	Comment on "Anomalous Conductance Distribution in Quasi-One-Dimensional Gold Wires: Possible Violation of the One-Parameter Scaling Hypothesis". Physical Review Letters, 2004, 93, 159701; author reply 159702.	7.8	5
38	Concentration dependence of the transition temperature in metallic spin glasses. Europhysics Letters, 2004, 66, 419-422.	2.0	8
39	Applicability of the ergodicity hypothesis to mesoscopic fluctuations. Physical Review B, 2003, 68, .	3.2	11
40	Statistical properties of the first excited state of an interacting many-particle disordered system. Physical Review B, 2003, 68, .	3.2	7
41	Anderson orthogonality catastrophe in disordered systems. Physical Review B, 2002, 65, .	3.2	32
42	Nonlinear Sigma Model for Disordered Media: Replica Trick for Non-Perturbative Results and Interactions. , 2002, , 341-373.		1
43	Granular superconductors: "From the nonlinear" model to the Bose-Hubbard description. Physical Review B, 2001, 64, .	3.2	10
44	Nonlinear" model for disordered superconductors. Physical Review B, 2001, 63, .	3.2	16
45	Delocalization in an Open One-Dimensional Chain in an Imaginary Vector Potential. Physical Review Letters, 1999, 82, 5080-5083.	7.8	20
46	Nonperturbative results for level correlations from the replica nonlinear" model. Physical Review B, 1999, 60, 3955-3962.	3.2	37
47	Can the trace formula describe weak localization?. Waves in Random and Complex Media, 1999, 9, 179-200.	1.5	14
48	Effect of dephasing on mesoscopic conductance fluctuations in quantum dots with single-channel leads. Physical Review B, 1998, 57, 7219-7227.	3.2	8
49	Spectral statistics in disordered metals: A trajectories approach. Physical Review B, 1998, 58, 10343-10350.	3.2	23
50	Deviations from the Gaussian distribution of mesoscopic conductance fluctuations. Physical Review B, 1997, 55, 4710-4716.	3.2	22
51	Mesoscopic conductance fluctuations in dirty quantum dots with single channel leads. Journal of Physics Condensed Matter, 1996, 8, 6719-6728.	1.8	11
52	Spectral rigidity and eigenfunction correlations at the Anderson transition. JETP Letters, 1996, 64, 386-392.	1.4	100
53	Random Walks through the Ensemble: Linking Spectral Statistics with Wave-Function Correlations in Disordered Metals. Physical Review Letters, 1996, 77, 554-557.	7.8	73
54	Fictitious level dynamics: A novel approach to spectral statistics in disordered conductors. Journal of Mathematical Physics, 1996, 37, 5061-5086.	1.1	18

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55	Spatial correlations and multifractality in the local density of states in disordered mesoscopic systems. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1995, 205, 393-400.	2.1	2
56	Spectral Correlations in Disordered Electronic Systems: Crossover from Metal to Insulator Regime. <i>Physical Review Letters</i> , 1995, 74, 1174-1177.	7.8	68
57	Effective plasma model for the level correlations at the mobility edge. <i>Journal of Physics A</i> , 1995, 28, 3623-3640.	1.6	21
58	Magnetic-Field Dependence of the Localization Length in Anderson Insulators. <i>Europhysics Letters</i> , 1995, 29, 49-54.	2.0	30
59	Level Correlations Driven by Weak Localization in 2D Systems. <i>Physical Review Letters</i> , 1995, 74, 2563-2566.	7.8	45
60	Universal spectral correlations at the mobility edge. <i>Physical Review Letters</i> , 1994, 72, 888-891.	7.8	141
61	Distributions of the diffusion coefficient for the quantum and classical diffusion in disordered media. <i>Nuclear Physics A</i> , 1993, 560, 274-292.	1.5	11
62	Dependence of the Ruderman-Kittel-Kasuya-Yosida interaction on nonmagnetic disorder. <i>Physical Review B</i> , 1993, 48, 9462-9477.	3.2	21
63	Weak-localization effects in a resonant-tunneling junction. <i>Physical Review B</i> , 1992, 45, 14036-14041.	3.2	20
64	Influence of Nonmagnetic Disorder on the Indirect Interaction of Magnetic Impurities. <i>Europhysics Letters</i> , 1991, 16, 479-484.	2.0	6
65	High-gradient operators of the unitary matrix-model. <i>European Physical Journal B</i> , 1990, 81, 95-97.	1.5	12
66	Distribution functions of mesoscopic fluctuations and applicability of the one-parameter scaling. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1990, 167, 1-14.	2.6	7
67	Current relaxation in disordered conductors. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1990, 167, 15-27.	2.6	4
68	Anomalous dimensions of high gradient operators in the extended nonlinear \tilde{f} model and distribution of mesoscopic fluctuations. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1989, 134, 245-252.	2.1	41
69	Applicability of scaling description to the distribution of mesoscopic fluctuations. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1989, 134, 488-492.	2.1	67
70	Spectroscopy of energy gap in ceramics and oriented films of YBa ₂ Cu ₃ O ₇ in the regime of negative light fluxes. <i>Solid State Communications</i> , 1989, 69, 373-377.	1.9	0
71	Distribution functions of current density and local density of states in disordered quantum conductors. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1988, 133, 253-259.	2.1	65
72	On the possibility of photon localization in doped semiconductors near excitonic resonances. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1987, 125, 435-440.	2.1	15

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73	The Einstein relation and exact Gell-Mann-Low function for random walks in media with random drifts. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1986, 119, 203-206.	2.1	29
74	The effect of weak disorder on random walks in a magnetic field. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1986, 114, 58-60.	2.1	2
75	Random walks in media with constrained disorder. <i>Journal of Physics A</i> , 1985, 18, L703-L707.	1.6	74
76	Instability of the scaling theory of 2-d localization. <i>Solid State Communications</i> , 1984, 52, 593-598.	1.9	22
77	On existence of quantum diffusion of 2-D electrons at the surface. <i>Solid State Communications</i> , 1983, 47, 297-301.	1.9	1
78	Spatially separated electron-hole system in high magnetic fields. <i>Journal of Physics C: Solid State Physics</i> , 1981, 14, L311-L315.	1.5	8
79	Phase transitions in two-dimensional electron-hole systems in high magnetic fields. <i>Journal of Low Temperature Physics</i> , 1980, 38, 333-352.	1.4	32
80	Correlation energy and excitation spectra of two-dimensional electron-hole systems in high magnetic fields. <i>Solid State Communications</i> , 1980, 36, 7-13.	1.9	4
81	Electron-hole rearrangements in two-dimensional semimetals in high magnetic fields. <i>Journal of Physics C: Solid State Physics</i> , 1979, 12, L501-L505.	1.5	10
82	Electron-hole liquid near semiconductor-metal interface. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1978, 64, 483-484.	2.1	1
83	On the crystallization of two-dimensional electron system in strong magnetic field. <i>Solid State Communications</i> , 1978, 25, 205-208.	1.9	5
84	Two-dimensional electron-hole liquid in the strong magnetic field. <i>Solid State Communications</i> , 1977, 23, 453-458.	1.9	19