Gert-Ludwig Ingold

List of Publications by Year
in descending order

92 papers	21,659 citations	147566 31 h-index	49773 87 g-index
95 all docs	95 docs citations	95 times ranked	28898 citing authors

#	Article	IF	Citations
1	SciPy 1.0: fundamental algorithms for scientific computing in Python. Nature Methods, 2020, 17, 261-272.	9.0	17,539
2	Quantum Brownian motion: The functional integral approach. Physics Reports, 1988, 168, 115-207.	10.3	961
3	Effect of the electromagnetic environment on the Coulomb blockade in ultrasmall tunnel junctions. Physical Review Letters, 1990, 64, 1824-1827.	2.9	477
4	Fundamental aspects of quantum Brownian motion. Chaos, 2005, 15, 026105.	1.0	221
5	Onset of Global Phase Coherence in Josephson-Junction Arrays: A Dissipative Phase Transition. Physical Review Letters, 1986, 56, 2303-2306.	2.9	208
6	Charge Tunneling Rates in Ultrasmall Junctions. NATO ASI Series Series B: Physics, 1992, , 21-107.	0.2	190
7	Cooper-pair current through ultrasmall Josephson junctions. Physical Review B, 1994, 50, 395-402.	1.1	120
8	Finite quantum dissipation: the challenge of obtaining specific heat. New Journal of Physics, 2008, 10, 115008.	1.2	116
9	Quantum statistical mechanics of an array of resistively shunted Josephson junctions. Physical Review B, 1988, 37, 3283-3294.	1.1	106
10	Quantum Theory of Activated Events in Presence of Long-Time Memory. Physical Review Letters, 1985, 55, 761-764.	2.9	93
11	Specific heat anomalies of open quantum systems. Physical Review E, 2009, 79, 061105.	0.8	85
12	Phase-space visualization of a metalâ€“insulator transition. New Journal of Physics, 2004, 6, 70-70.	1.2	74
13	Surface plasmon in metallic nanoparticles: Renormalization effects due to electron-hole excitations. Physical Review B, 2006, 74, .	1.1	74
14	Single electron tunneling rates in multijunction circuits. European Physical Journal B, 1991, 84, 143-155.	0.6	73
15	Path Integrals and Their Application to Dissipative Quantum Systems. Lecture Notes in Physics, 2002, , 1-53.	0.3	61
16	Localization and anomalous diffusion of a damped quantum particle. Physical Review Letters, 1987, 58, 1285-1288.	2.9	60
17	Finite-Temperature Current-Voltage Characteristics of Ultrasmall Tunnel Junctions. Europhysics Letters, 1991, 14, 371-376.	0.7	56
18	Probing the Casimir force with optical tweezers. Europhysics Letters, 2015, 112, 44001.	0.7	56

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19	On the electrostatic potential profile in biased molecular wires. Journal of Chemical Physics, 2002, 117, 10837-10841.	1.2	54
20	Plasma versus Drude Modeling of the Casimir Force: Beyond the Proximity Force Approximation. Physical Review Letters, 2017, 119, 043901.	2.9	53
21	Phase diffusion and charging effects in Josephson junctions. Europhysics Letters, 1998, 44, 360-366.	0.7	52
22	Effect of the electromagnetic environment on the single electron transistor. European Physical Journal B, 1991, 85, 443-449.	0.6	50
23	Effect of Zero Point Phase Fluctuations on Josephson Tunneling. Physical Review Letters, 1999, 83, 3721-3724.	2.9	46
24	Incoherent charge transport through molecular wires: interplay of Coulomb interaction and wire population. Chemical Physics, 2002, 281, 199-209.	0.9	45
25	Quantum dissipative Brownian motion and the Casimir effect. Physical Review E, 2009, 80, 041113.	0.8	44
26	The electrostatic potential profile along a biased molecular wire: A model quantum-mechanical calculation. Journal of Chemical Physics, 2003, 118, 3756-3763.	1.2	42
27	Charge transport through a molecule driven by a high-frequency field. Chemical Physics, 2004, 296, 243-249.	0.9	39
28	Measurement of the Casimir Force between 0.2 and 8 Î¼m: Experimental Procedures and Comparison with Theory. Universe, 2021, 7, 93.	0.9	39
29	Conductance through a one-dimensional correlated system: Relation to persistent currents and the role of the contacts. Physical Review B, 2003, 67, .	1.1	38
30	Dissipative quantum systems with a potential barrier: General theory and the parabolic barrier. Physical Review E, 1995, 51, 4267-4281.	0.8	35
31	Delocalization and Heisenberg's uncertainty relation. European Physical Journal B, 2002, 30, 175-179.	0.6	34
32	Long-time tails in quantum Brownian motion. Physical Review A, 1985, 32, 2510-2512.	1.0	21
33	Classical Casimir interaction in the plane-sphere geometry. Physical Review A, 2012, 85, .	1.0	21
34	Proximity force approximation and specular reflection: Application of the WKB limit of Mie scattering to the Casimir effect. Physical Review A, 2018, 97, .	1.0	21
35	Thermodynamics of non-interacting bosons in low-dimensional potentials. European Physical Journal D, 1998, 1, 29-32.	0.6	20
36	Residual conductance of correlated one-dimensional nanosystems: A numerical approach. European Physical Journal B, 2004, 39, 107-120.	0.6	20

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37	Thermodynamic anomaly of the free damped quantum particle: the bath perspective. European Physical Journal B, 2012, 85, 1.	0.6	17
38	Negative entropies in Casimir and Casimirâ€Polder interactions. Fortschritte Der Physik, 2017, 65, 1600047.	1.5	16
39	Dissipative transport across a parabolic barrier. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1991, 264, 253-258.	1.5	15
40	Approaching infinite temperature upon repeated measurements of a quantum system. Physical Review A, 2011, 84, .	1.0	15
41	Disentangling geometric and dissipative origins of negative Casimir entropies. Physical Review E, 2015, 92, 042125.	0.8	15
42	Role of diffraction in the Casimir effect beyond the proximity force approximation. Journal of the Optical Society of America B: Optical Physics, 2019, 36, C77.	0.9	15
43	Phase-space signatures of the Anderson transition. Physical Review B, 2003, 68, .	1.1	14
44	Geometric origin of negative Casimir entropies: A scattering-channel analysis. Physical Review E, 2015, 91, 033203.	0.8	14
45	Advancing numerics for the Casimir effect to experimentally relevant aspect ratios. Physica Scripta, 2018, 93, 114003.	1.2	14
46	Nonclassical phase-space trajectories for the damped harmonic quantum oscillator. Chemical Physics, 2010, 375, 209-215.	0.9	13
47	Transport of flexible chiral objects in a uniform shear flow. New Journal of Physics, 2012, 14, 073006.	1.2	13
48	Casimir effect from a scattering approach. American Journal of Physics, 2015, 83, 156-162.	0.3	13
49	Plane-wave approach to the exact van der Waals interaction between colloid particles. Journal of Chemical Physics, 2020, 153, 024115.	1.2	13
50	Mesoscopic Josephson effect. Superlattices and Microstructures, 1999, 25, 915-923.	1.4	11
51	Identification of Coulomb blockade and macroscopic quantum tunneling by noise. Europhysics Letters, 2002, 58, 429-434.	0.7	11
52	Negative Casimir entropies in nanoparticle interactions. Journal of Physics Condensed Matter, 2015, 27, 214003.	0.7	11
53	Quantum revival patterns from classical phase-space trajectories. Physical Review A, 2019, 99, .	1.0	11
54	Fission decay rates from a quantal transport equation. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1993, 317, 489-494.	1.5	10

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55	The Casimir Interaction between Spheres Immersed in Electrolytes. Universe, 2021, 7, 156.	0.9	10
56	Sidebands in the light absorption of driven metallic nanoparticles. European Physical Journal D, 2007, 44, 359-366.	0.6	9
57	Thermodynamic anomalies in the presence of general linear dissipation: from the free particle to the harmonic oscillator. European Physical Journal B, 2014, 87, 1.	0.6	9
58	Probing the screening of the Casimir interaction with optical tweezers. Physical Review Research, 2021, 3, .	1.3	9
59	Influence of the environment on charge quantization in small superconducting islands. Physical Review B, 1994, 50, 12811-12819.	1.1	8
60	Detection of interaction-induced nonlocal effects using perfectly transmitting nanostructures. European Physical Journal B, 2008, 66, 239-244.	0.6	8
61	Reentrant classicality of a damped system. Europhysics Letters, 2013, 103, 60007.	0.7	8
62	Nonequilibrium effects in the Casimir force between two similar metallic plates kept at different temperatures. Physical Review A, 2020, 101, .	1.0	8
63	Observability of the coulomb blockade in single tunnel junctions. Physica B: Condensed Matter, 1990, 165-166, 977-978.	1.3	7
64	IdentitÃtsverlust mit Folgen: vom Quantengas zur Boseâ€Einsteinâ€Kondensation. Physik in Unserer Zeit, 1996, 27, 200-205.	0.0	7
65	Anomaly in the relaxation dynamics close to the surface plasmon resonance. Europhysics Letters, 2007, 78, 27002.	0.7	7
66	Lissajous curves and semiclassical theory: The two-dimensional harmonic oscillator. American Journal of Physics, 2007, 75, 208-215.	0.3	7
67	Metaplectic sheets and caustic traversals in the Weyl representation. Journal of Physics A: Mathematical and Theoretical, 2014, 47, 105303.	0.7	7
68	Classical Casimir free energy for two Drude spheres of arbitrary radii: A plane-wave approach. SciPost Physics Core, 2021, 4, .	0.9	7
69	Supercurrent in ultrasmall Josephson junctions. Physica B: Condensed Matter, 1994, 194-196, 1025-1026.	1.3	5
70	Accounting for Dissipation in the Scattering Approach to the Casimir Energy. Symmetry, 2018, 10, 37.	1.1	5
71	On the observability of Coulomb blockade and single-electron tunneling. Ultramicroscopy, 1992, 42-44, 22-32.	0.8	4
72	Semiclassical analysis of level widths for one-dimensional potentials. American Journal of Physics, 2001, 69, 201-206.	0.3	4

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73	From ballistic motion to localization: a phase space analysis. European Physical Journal B, 2002, 27, 11-14.	0.6	4
74	Relation between phase-space coverage and entanglement for spin-1âˆ•2systems. Physical Review A, 2007, 75, .	1.0	4
75	The embedding method beyond the single-channel case. European Physical Journal B, 2010, 75, 253-266.	0.6	4
76	CaPS: Casimir Effect in the Plane-Sphere Geometry. Journal of Open Source Software, 2020, 5, 2011.	2.0	4
77	Transport through cavities with tunnel barriers: a semiclassical analysis. European Physical Journal B, 1998, 3, 387-396.	0.6	3
78	Unitary dynamics and finite-time measurements: a case study. Physica Scripta, 2015, T165, 014014.	1.2	3
79	Anomalies in the specific heat of a free damped particle: the role of the cutoff in the spectral density of the coupling. Physica Scripta, 2015, T165, 014028.	1.2	3
80	Casimir Interaction between a Plane and a Sphere: Correction to the Proximity-Force Approximation at Intermediate Temperatures. Universe, 2021, 7, 129.	0.9	3
81	Title is missing!. European Physical Journal B, 2002, 27, 11-14.	0.6	3
82	Sluggish decay of preparation effects in low temperature quantum systems. Lecture Notes in Mathematics, 1990, , 219-230.	0.1	2
83	The quantum canonical ensemble in phase space. Physica D: Nonlinear Phenomena, 2021, 424, 132951.	1.3	2
84	Effect of the Electromagnetic Environment on Single Charge Tunneling. , 1993, , 245-256.		1
85	Weder Fermionen noch Bosonen. Physik in Unserer Zeit, 1994, 25, 81-86.	0.0	1
86	Superconducting box coupled to a classical environment. Physica B: Condensed Matter, 1994, 203, 369-375.	1.3	1
87	Casimir effect between spherical objects: Proximity-force approximation and beyond using plane waves. International Journal of Modern Physics A, 2022, 37, .	0.5	1
88	Universal Casimir Interaction between Two Dielectric Spheres in Salted Water. Physical Review Letters, 2022, 128, .	2.9	1
89	Localization and Anomalous Diffusion of a Damped Quantum Particle. Physical Review Letters, 1987, 58, 2386-2386.	2.9	0
90	Relativistic Astrophysics: 162. WEâ€Heraeusâ€Seminar/Physics and Dynamics between Chaos, Order, and Noise: Chaos, Order, and Noise/Quantum Chaos and Dissipation: 164. WEâ€Heraeusâ€Seminar. Physik Journal, 1996, 52, 1250-1251.	0.1	0

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91	Josephson effect and quantum fluctuations. Physica B: Condensed Matter, 2000, 284-288, 1824-1825.	1.3	0
92	PROPERTIES OF LOW TEMPERATURE QUANTUM NOISE. , 1986, , 277-279.		0