Ferdinand Evers

List of Publications by Citations

123 papers	6,820 citations	41 h-index	81 g-index
130 ext. papers	7,755 ext. citations	6.9 avg, IF	6.09 L-index

#	Paper	IF	Citations
123	Anderson transitions. *Reviews of Modern Physics*, **2008**, 80, 1355-1417	40.5	1076
122	Charge transport in single Au / alkanedithiol / Au junctions: coordination geometries and conformational degrees of freedom. *Journal of the American Chemical Society*, **2008**, 130, 318-26	16.4	411
121	A single-molecule diode. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 8815-20	11.5	402
120	Giant magnetoresistance through a single molecule. *Nature Nanotechnology*, **2011**, 6, 185-9	28.7	262
119	Influence of conformation on conductance of biphenyl-dithiol single-molecule contacts. *Nano Letters*, **2010**, 10, 156-63	11.5	252
118	GW100: Benchmarking G0W0 for Molecular Systems. *Journal of Chemical Theory and Computation*, **2015**, 11, 5665-87	6.4	207
117	Resonance shifts and spill-out effects in self-consistent hydrodynamic nanoplasmonics. *Nature Communications*, **2015**, 6, 7132	17.4	195
116	Organometallic benzene-vanadium wire: A one-dimensional half-metallic ferromagnet. *Physical Review Letters*, **2006**, 97, 097201	7.4	189
115	Conductance of molecular wires and transport calculations based on density-functional theory. *Physical Review B*, **2004**, 69,	3.3	176
114	The GW-Method for Quantum Chemistry Applications: Theory and Implementation. *Journal of Chemical Theory and Computation*, **2013**, 9, 232-46	6.4	174
113	Multifractality and critical fluctuations at the Anderson transition. *Physical Review B*, **2000**, 62, 7920-7933	3.3	166
112	Zero-bias molecular electronics: Exchange-correlation corrections to Landauer's formula. *Physical Review B*, **2006**, 73,	3.3	160
111	Fluctuations of the inverse participation ratio at the anderson transition. *Physical Review Letters*, **2000**, 84, 3690-3	7.4	156
110	Electrical control over the Fe(II) spin crossover in a single molecule: Theory and experiment. *Physical Review B*, **2011**, 83,	3.3	152
109	Plasmons in Molecules. *Journal of Physical Chemistry C*, **2013**, 117, 1863-1878	3.8	105
108	Exact relations between multifractal exponents at the Anderson transition. *Physical Review Letters*, **2006**, 97, 046803	7.4	94
107	Perspective: Theory of quantum transport in molecular junctions. *Journal of Chemical Physics*, **2018**, 148, 030901	3.9	90

106	Quasi-Particle Self-Consistent GW for Molecules. *Journal of Chemical Theory and Computation*, **2016**, 12, 2528-41	6.4	90
105	Quasiclassical negative magnetoresistance of a 2D electron gas: interplay of strong scatterers and smooth disorder. *Physical Review Letters*, **2001**, 87, 126805	7.4	83
104	Quantum chemistry calculations for molecules coupled to reservoirs: formalism, implementation, and application to benzenedithiol. *Journal of Chemical Physics*, **2007**, 126, 174101	3.9	81
103	Strong Magnetoresistance Induced by Long-Range Disorder. *Physical Review Letters*, **1999**, 83, 2801-2804	7.4	75
102	Advances and challenges in single-molecule electron transport. *Reviews of Modern Physics*, **2020**, 92,	40.5	73
101	Ab initio study of surface stress response to charging. *Europhysics Letters*, **2007**, 78, 13001	1.6	68
100	Spin transition in arrays of gold nanoparticles and spin crossover molecules. *ACS Nano*, **2015**, 9, 4496-507	16.7	67
99	Multifractality of wave functions at the quantum Hall transition revisited. *Physical Review B*, **2001**, 64,	3.3	63
98	Conductance saturation in a series of highly transmitting molecular junctions. *Nature Materials*, **2016**, 15, 444-9	27	61
97	Charge transport through a cardan-joint molecule. *Small*, **2008**, 4, 2229-35	11	60
96	Quasiclassical magnetotransport in a random array of antidots. *Physical Review B*, **2001**, 64,	3.3	60
95	Semiclassical theory of transport in a random magnetic field. *Physical Review B*, **1999**, 60, 8951-8969	3.3	58
94	Impact of Electrode Density of States on Transport through Pyridine-Linked Single Molecule Junctions. *Nano Letters*, **2015**, 15, 3716-22	11.5	56
93	Exact ground state density-functional theory for impurity models coupled to external reservoirs and transport calculations. *Physical Review Letters*, **2008**, 100, 086401	7.4	56
92	Structural relaxation in charged metal surfaces and cluster ions. *Small*, **2006**, 2, 1497-503	11	56
91	Multifractality at the quantum Hall transition: beyond the parabolic paradigm. *Physical Review Letters*, **2008**, 101, 116803	7.4	55
90	Dimensionality dependence of the wave-function statistics at the Anderson transition. *Physical Review B*, **2002**, 66,	3.3	53
89	Density Propagator for Many-Body Localization: Finite-Size Effects, Transient Subdiffusion, and Exponential Decay. *Physical Review Letters*, **2017**, 118, 196801	7.4	52

88	Transport calculations based on density functional theory, Friedel's sum rule, and the Kondo effect. *Physical Review B*, **2012**, 85,	3.3	48
87	Conduction properties of bipyridinium-functionalized molecular wires. *Journal of the American Chemical Society*, **2008**, 130, 9013-8	16.4	48
86	Finite-size effects and irrelevant corrections to scaling near the integer quantum Hall transition. *Physical Review Letters*, **2012**, 109, 206804	7.4	47
85	Single molecule magnetoresistance with combined antiferromagnetic and ferromagnetic electrodes. *Nano Letters*, **2012**, 12, 5131-6	11.5	45
84	Atomically wired molecular junctions: connecting a single organic molecule by chains of metal atoms. *Nano Letters*, **2013**, 13, 1956-61	11.5	43
83	Molecular switch controlled by pulsed bias voltages. *Small*, **2009**, 5, 2218-23	11	41
82	Electron-vibration interaction in the presence of a switchable Kondo resonance realized in a molecular junction. *Physical Review Letters*, **2014**, 113, 236603	7.4	37
81	Off-Diagonal Self-Energy Terms and Partially Self-Consistency in GW Calculations for Single Molecules: Efficient Implementation and Quantitative Effects on Ionization Potentials. *Journal of Chemical Theory and Computation*, **2015**, 11, 5152-60	6.4	36
80	Wave function multifractality and dephasing at metal-insulator and quantum Hall transitions. *Annals of Physics*, **2011**, 326, 1457-1478	2.5	33
79	Surface criticality and multifractality at localization transitions. *Physical Review Letters*, **2006**, 96, 126802	7.4	33
78	Electrochemical gate-controlled electron transport of redox-active single perylene bisimide molecular junctions. *Journal of Physics Condensed Matter*, **2008**, 20, 374122	1.8	32
77	Near Length-Independent Conductance in Polymethine Molecular Wires. *Nano Letters*, **2018**, 18, 6387-6391	11.5	30
76	Ab initio spin-flip conductance of hydrogenated graphene nanoribbons: Spin-orbit interaction and scattering with local impurity spins. *Physical Review B*, **2015**, 92,	3.3	29
75	Density of quasiparticle states for a two-dimensional disordered system: Metallic, insulating, and critical behavior in the class-D thermal quantum Hall effect. *Physical Review B*, **2007**, 75,	3.3	29
74	Signature of the Dirac cone in the properties of linear oligoacenes. *Nature Communications*, **2014**, 5, 5000	17.4	27
73	Elastic properties of graphene flakes: Boundary effects and lattice vibrations. *Physical Review B*, **2010**, 82,	3.3	27
72	Wave function statistics at the symplectic two-dimensional Anderson transition: Bulk properties. *Physical Review B*, **2007**, 75,	3.3	27
71	Wavefunction statistics and multifractality at the spin quantum Hall transition. *Journal of Physics A*, **2003**, 36, 3255-3279		27

70	Density of states in graphene with vacancies: midgap power law and frozen multifractality. *Physical Review Letters*, **2014**, 113, 186802	7.4	26
69	Transport properties of individual C60-molecules. *Journal of Chemical Physics*, **2013**, 139, 234701	3.9	26
68	Broadening of the derivative discontinuity in density functional theory. *Physical Chemistry Chemical Physics*, **2011**, 13, 14417-20	3.6	26
67	Ab initio quantum transport through armchair graphene nanoribbons: Streamlines in the current density. *Physical Review B*, **2014**, 89,	3.3	25
66	Zero-frequency anomaly in quasiclassical ac transport: Memory effects in a two-dimensional metal with a long-range random potential or random magnetic field. *Physical Review B*, **2000**, 61, 13774-13784	3.3	25
65	Slow dynamics and strong finite-size effects in many-body localization with random and quasiperiodic potentials. *Physical Review B*, **2019**, 100,	3.3	24
64	Current patterns and orbital magnetism in mesoscopic dc transport. *Physical Review Letters*, **2014**, 113, 136602	7.4	24
63	Multifractality and Scaling at the Quantum Hall Transitions. *Journal of the Physical Society of Japan*, **2003**, 72, 189-190	1.5	24
62	Universality of the edge-tunneling exponent of fractional quantum Hall liquids. *Physical Review Letters*, **2005**, 94, 166804	7.4	23
61	Quantum Hall ferromagnets, cooperative transport anisotropy, and the random field Ising model. *Physical Review B*, **2002**, 66,	3.3	22
60	Multifractality at the spin quantum Hall transition. *Physical Review B*, **2003**, 67,	3.3	20
59	Exchange processes in the contact formation of Pb electrodes. *Electrochimica Acta*, **2014**, 140, 505-510	6.7	19
58	Tunable non-integer high-harmonic generation in a topological insulator. *Nature*, **2021**, 593, 385-390	50.4	19
57	Enhanced coupling through □-stacking in imidazole-based molecular junctions. *Chemical Science*, **2019**, 10, 9998-10002	9.4	18
56	Boundary multifractality in critical one-dimensional systems with long-range hopping. *Physical Review B*, **2007**, 75,	3.3	17
55	Long time tails in the quantum Hall effect. *European Physical Journal B*, **1994**, 94, 155-159	1.2	17
54	First-principles study of the structure of water layers on flat and stepped Pb electrodes. *Beilstein Journal of Nanotechnology*, **2016**, 7, 533-43	3	17
53	Local Current Density Calculations for Molecular Films from Ab Initio. *Journal of Chemical Theory and Computation*, **2015**, 11, 5161-76	6.4	16

52	Magnetotransport of electrons in quantum Hall systems. *Physica Status Solidi (B): Basic Research*, **2008**, 245, 239-259	1.3	16
51	Theory of many-fermion systems. II. The case of Coulomb interactions. *Physical Review B*, **1998**, 58, 9710-9720	3.3	16
50	Mechanically Tunable Quantum Interference in Ferrocene-Based Single-Molecule Junctions. *Nano Letters*, **2020**, 20, 6381-6386	11.5	16
49	Quantum size effects in the atomistic structure of armchair nanoribbons. *Physical Review B*, **2012**, 85,	3.3	15
48	High-temperature spin dynamics in the Heisenberg chain: Magnon propagation and emerging Kardar-Parisi-Zhang scaling in the zero-magnetization limit. *Physical Review B*, **2020**, 101,	3.3	14
47	Graphene with vacancies: Supernumerary zero modes. *Physical Review B*, **2016**, 94,	3.3	14
46	ANDERSON TRANSITIONS: CRITICALITY, SYMMETRIES AND TOPOLOGIES. *International Journal of Modern Physics B*, **2010**, 24, 1577-1620	1.1	14
45	Theory of Chirality Induced Spin Selectivity: Progress and Challenges.. *Advanced Materials*, **2022**, e2106629	29	14
44	Incommensurate quantum-size oscillations in acene-based molecular wires: Effects of quantum fluctuations. *Journal of Chemical Physics*, **2017**, 146, 092320	3.9	13
43	Kondo effect in binuclear metal-organic complexes with weakly interacting spins. *Physical Review B*, **2015**, 91,	3.3	13
42	Cyclotron resonance in antidot arrays. *Physical Review B*, **2002**, 65,	3.3	13
41	Semiclassical theory of the quantum Hall effect. *Physical Review B*, **1998**, 57, 1805-1813	3.3	13
40	Preface: Special Topic on Frontiers in Molecular Scale Electronics. *Journal of Chemical Physics*, **2017**, 146, 092101	3.9	12
39	C58 on Au(111): a scanning tunneling microscopy study. *Journal of Chemical Physics*, **2013**, 138, 104703	3.9	12
38	Lowering of surface melting temperature in atomic clusters with a nearly closed shell structure. *Physical Review B*, **2010**, 81,	3.3	12
37	Atomically resolved single-molecule triplet quenching. *Science*, **2021**, 373, 452-456	33.3	12
36	Ab initio simulations of scanning-tunneling-microscope images with embedding techniques and application to C58-dimers on Au(111). *Physical Chemistry Chemical Physics*, **2013**, 15, 6684-90	3.6	11
35	Quantum Hall effects in normal and superconducting systems: localization and multifractality. *Physica Status Solidi (B): Basic Research*, **2008**, 245, 284-302	1.3	11

34	Coherent transport through a molecular wire: DFT calculation. *Physica E: Low-Dimensional Systems and Nanostructures*, **2003**, 18, 255-257	3	11
33	Silver Makes Better Electrical Contacts to Thiol-Terminated Silanes than Gold. *Angewandte Chemie - International Edition*, **2017**, 56, 14145-14148	16.4	10
32	Griffiths phase in the thermal quantum Hall effect. *Physical Review B*, **2006**, 73,	3.3	9
31	Solitonics with Polyacetylenes. *Nano Letters*, **2020**, 20, 2615-2619	11.5	8
30	Nonadiabatic scattering of a classical particle in an inhomogeneous magnetic field. *Physical Review B*, **1998**, 58, 15321-15324	3.3	7
29	Multiplicity of atomic reconfigurations in an electrochemical Pb single-atom transistor. *Physical Review B*, **2017**, 95,	3.3	6
28	Incommensurate Quantum Size Oscillations of Oligoacene Wires Adsorbed on Au(111). *Journal of Physical Chemistry C*, **2019**, 123, 8902-8907	3.8	6
27	Density functional theory with exact XC potentials: Lessons from DMRG studies and exactly solvable models. *Physica Status Solidi (B): Basic Research*, **2013**, 250, 2330-2341	1.3	6
26	Invariants of the single-impurity Anderson model and implications for conductance functionals. *Europhysics Letters*, **2013**, 103, 47012	1.6	5
25	Statistics of conductances and subleading corrections to scaling near the integer quantum Hall plateau transition. *Europhysics Letters*, **2013**, 104, 27014	1.6	5
24	Relaxation on critical percolation clusters, self-avoiding random walks, and the quantum Hall effect. *Physical Review E*, **1997**, 55, 2321-2327	2.4	5
23	Universal scaling and diagonal conductivity in the integral quantum Hall effect. *Physical Review B*, **1998**, 57, 14829-14832	3.3	5
22	Ab Initio Transport Calculations for Single-Atom Copper Junctions in the Presence of Hydrogen Chloride. *Journal of Physical Chemistry C*, **2014**, 118, 28252-28257	3.8	4
21	Reorganization energy and polaronic effects of pentacene on NaCl films. *Physical Review B*, **2020**, 102,	3.3	4
20	Self-consistent-field ensembles of disordered Hamiltonians: Efficient solver and application to superconducting films. *Physical Review B*, **2020**, 101,	3.3	3
19	Spin locking at the apex of nano-scale platinum tips. *Surface Science*, **2013**, 618, 49-52	1.8	3
18	Charge susceptibility in Kondo systems at half filling: DMRG study. *Annalen Der Physik*, **2012**, 524, L1-L4	2.6	2
17	Classical analysis of a network model of quantum Hall systems. *Physical Review B*, **1996**, 54, 10720-10725	3.3	2

16	Molecular Conductance from Ab Initio Calculations: Self Energies and Absorbing Boundary Conditions. *Lecture Notes in Physics*, **2010**, 27-53	0.8	2
15	Semiconductor Bloch-equations formalism: Derivation and application to high-harmonic generation from Dirac fermions. *Physical Review B*, **2021**, 103,	3.3	2
14	Density Expansion for Transport Coefficients: Long-Wavelength versus Fermi Surface Nonanalyticities. *Physical Review Letters*, **1997**, 78, 2768-2771	7.4	1
13	Magnetotransport in a random array of antidots. *Physica E: Low-Dimensional Systems and Nanostructures*, **2002**, 12, 260-263	3	1
12	Semiclassical transport in a random magnetic field. *Physica E: Low-Dimensional Systems and Nanostructures*, **2000**, 6, 742-745	3	1
11	An SYK-inspired model with density–density interactions: Spectral & wave function statistics, Green's function and phase diagram. *Annals of Physics*, **2021**, 435, 168503	2.5	1
10	Quartic multifractality and finite-size corrections at the spin quantum Hall transition. *Physical Review B*, **2021**, 103,	3.3	1
9	Functional renormalization group approach to electronic structure calculations for systems without translational symmetry. *Physical Review B*, **2016**, 94,	3.3	1
8	Silver Makes Better Electrical Contacts to Thiol-Terminated Silanes than Gold. *Angewandte Chemie*, **2017**, 129, 14333-14336	3.6	0
7	Principles of Density Functional Theory: Equilibrium and Nonequilibrium Applications **2011**, 1-44		
6	Disordered quantum Hall ferromagnets and cooperative transport anisotropy. *Physica E: Low-Dimensional Systems and Nanostructures*, **2004**, 22, 82-85	3	
5	Finite-frequency transport of composite fermions. *Physica B: Condensed Matter*, **2001**, 298, 187-190	2.8	
4	Nonadiabatic scattering of a quantum particle in an inhomogenous magnetic field. *Europhysics Letters*, **2001**, 55, 603-609	1.6	
3	Anderson Transitions and Interactions **2021**, 147-157		
2	Ab Initio Transport Calculations for Functionalized Graphene Flakes on a Supercomputer **2016**, 139-154		
1	Elektronische Bauteile aus Einzelmolekülen. *Physik in Unserer Zeit*, **2020**, 51, 283-289	0.1	