Michael Galperin

List of Publications by Citations

98 papers	4,753 citations	36 h-index	67 g-index
102 ext. papers	5,118 ext. citations	5.9 avg, IF	6.02 L-index

#	Paper	IF	Citations
98	Molecular transport junctions: vibrational effects. *Journal of Physics Condensed Matter*, **2007**, 19, 103201	1.8	552
97	Inelastic electron tunneling spectroscopy in molecular junctions: peaks and dips. *Journal of Chemical Physics*, **2004**, 121, 11965-79	3.9	297
96	Hysteresis, switching, and negative differential resistance in molecular junctions: a polaron model. *Nano Letters*, **2005**, 5, 125-30	11.5	280
95	Nuclear coupling and polarization in molecular transport junctions: beyond tunneling to function. *Science*, **2008**, 319, 1056-60	33.3	256
94	Resonant inelastic tunneling in molecular junctions. *Physical Review B*, **2006**, 73,	3.3	188
93	Heat conduction in molecular transport junctions. *Physical Review B*, **2007**, 75,	3.3	170
92	Molecular optoelectronics: the interaction of molecular conduction junctions with light. *Physical Chemistry Chemical Physics*, **2012**, 14, 9421-38	3.6	139
91	Current-induced light emission and light-induced current in molecular-tunneling junctions. *Physical Review Letters*, **2005**, 95, 206802	7.4	120
90	Quantum thermodynamics: a nonequilibrium Green's function approach. *Physical Review Letters*, **2015**, 114, 080602	7.4	113
89	On the Line Widths of Vibrational Features in Inelastic Electron Tunneling Spectroscopy. *Nano Letters*, **2004**, 4, 1605-1611	11.5	109
88	Optical properties of current carrying molecular wires. *Journal of Chemical Physics*, **2006**, 124, 234709	3.9	85
87	Inelastic tunneling effects on noise properties of molecular junctions. *Physical Review B*, **2006**, 74,	3.3	85
86	Nature of heat in strongly coupled open quantum systems. *Physical Review B*, **2015**, 92,	3.3	82
85	Cooling mechanisms in molecular conduction junctions. *Physical Review B*, **2009**, 80,	3.3	81
84	Selective triplet exciton formation in a single molecule. *Nature*, **2019**, 570, 210-213	50.4	78
83	Transport in molecular states language: Generalized quantum master equation approach. *Physical Review B*, **2009**, 79,	3.3	78
82	Switching in molecular transport junctions: polarization response. *Journal of the American Chemical Society*, **2007**, 129, 13313-20	16.4	75

81	Inelastic effects in molecular junctions in the Coulomb and Kondo regimes: Nonequilibrium equation-of-motion approach. *Physical Review B*, **2007**, 76,	3.3	74
80	Inelastic effects in molecular junction transport: scattering and self-consistent calculations for the Seebeck coefficient. *Molecular Physics*, **2008**, 106, 397-404	1.7	65
79	Raman scattering in current-carrying molecular junctions. *Journal of Chemical Physics*, **2009**, 130, 144109	3.9	63
78	Inelastic transport in the Coulomb blockade regime within a nonequilibrium atomic limit. *Physical Review B*, **2008**, 78,	3.3	59
77	Self-Consistent Quantum Master Equation Approach to Molecular Transport *Journal of Physical Chemistry C*, **2010**, 114, 20362-20369	3.8	54
76	Electron Transmission through Molecular Layers. *Journal of Physical Chemistry B*, **1998**, 102, 3658-3668	3.4	54
75	Electrically Driven Spin Currents in DNA. *Journal of Physical Chemistry C*, **2013**, 117, 13730-13737	3.8	49
74	Molecular transport junctions: current from electronic excitations in the leads. *Physical Review Letters*, **2006**, 96, 166803	7.4	49
73	Asymmetric electron transmission across asymmetric alkanethiol bilayer junctions. *Journal of Electroanalytical Chemistry*, **2003**, 550-551, 337-350	4.1	49
72	On the electrostatic potential profile in biased molecular wires. *Journal of Chemical Physics*, **2002**, 117, 10837-10841	3.9	49
71	Transport in state space: voltage-dependent conductance calculations of benzene-1,4-dithiol. *Nano Letters*, **2009**, 9, 1770-4	11.5	48
70	Efficiency fluctuations in quantum thermoelectric devices. *Physical Review B*, **2015**, 91,	3.3	46
69	Collective Plasmon-Molecule Excitations in Nanojunctions: Quantum Consideration. *Journal of Physical Chemistry Letters*, **2012**, 3, 2738-2743	6.4	46
68	Transport and optical response of molecular junctions driven by surface plasmon polaritons. *Physical Review B*, **2010**, 81,	3.3	46
67	Linear optical response of current-carrying molecular junction: a nonequilibrium Green's function-time-dependent density functional theory approach. *Journal of Chemical Physics*, **2008**, 128, 124705	3.9	44
66	Molecular transport junctions: asymmetry in inelastic tunneling processes. *Journal of Physical Chemistry B*, **2005**, 109, 8519-22	3.4	42
65	Raman scattering from nonequilibrium molecular conduction junctions. *Nano Letters*, **2009**, 9, 758-62	11.5	41
64	Transient resonance structures in electron tunneling through water. *Journal of Chemical Physics*, **1999**, 111, 7558-7566	3.9	39

63	Numerical computation of tunneling fluxes. *Journal of Chemical Physics*, **2002**, 117, 10817-10826	3.9	38
62	Inelastic transport: a pseudoparticle approach. *Physical Chemistry Chemical Physics*, **2012**, 14, 13809-19	3.6	35
61	Light-induced current in molecular junctions: Local field and non-Markov effects. *Physical Review B*, **2011**, 83,	3.3	35
60	Photonics and spectroscopy in nanojunctions: a theoretical insight. *Chemical Society Reviews*, **2017**, 46, 4000-4019	58.5	34
59	Self-consistent full counting statistics of inelastic transport. *Physical Review B*, **2011**, 84,	3.3	33
58	Coherently controlled molecular junctions. *Journal of Chemical Physics*, **2012**, 136, 044107	3.9	32
57	The non-linear response of molecular junctions: the polaron model revisited. *Journal of Physics Condensed Matter*, **2008**, 20, 374107	1.8	32
56	Raman scattering from biased molecular conduction junctions: The electronic background and its temperature. *Physical Review B*, **2011**, 84,	3.3	31
55	Observation and analysis of Fano-like lineshapes in the Raman spectra of molecules adsorbed at metal interfaces. *Physical Review B*, **2016**, 93,	3.3	30
54	Inelastic scattering and heating in a molecular spin pump. *Physical Review B*, **2010**, 81,	3.3	30
53	NEGF-HF method in molecular junction property calculations. *Annals of the New York Academy of Sciences*, **2003**, 1006, 48-67	6.5	29
52	Raman scattering in molecular junctions: a pseudoparticle formulation. *Nano Letters*, **2014**, 14, 699-703	11.5	26
51	Raman Staircase in Charge Transfer SERS at the Junction of Fusing Nanospheres. *Journal of Physical Chemistry Letters*, **2013**, 4, 88-92	6.4	26
50	Raman Scattering and Electronic Heating in Molecular Conduction Junctions. *Journal of Physical Chemistry Letters*, **2011**, 2, 2110-2113	6.4	26
49	Organic single molecular structures for light induced spin-pump devices. *ACS Nano*, **2013**, 7, 1064-71	16.7	25
48	Nuclear Dynamics at Molecule-Metal Interfaces: A Pseudoparticle Perspective. *Journal of Physical Chemistry Letters*, **2015**, 6, 4898-903	6.4	24
47	Coherence in charge and energy transfer in molecular junctions. *Physical Review B*, **2013**, 88,	3.3	24
46	Spin inelastic currents in molecular ring junctions. *Physical Review B*, **2012**, 86,	3.3	24

45	Numerical Simulations of Electron Tunneling Currents in Water *Journal of Physical Chemistry A*, **2002**, 106, 10790-10796	2.8	24
44	Many-Body State Description of Single-Molecule Electroluminescence Driven by a Scanning Tunneling Microscope. *Nano Letters*, **2019**, 19, 2803-2811	11.5	23
43	Pump-Probe Noise Spectroscopy of Molecular Junctions. *Journal of Physical Chemistry Letters*, **2015**, 6, 470-6	6.4	23
42	Charge-transfer contribution to surface-enhanced Raman scattering in a molecular junction: Time-dependent correlations. *Physical Review B*, **2011**, 84,	3.3	22
41	Raman scattering from molecular conduction junctions: Charge transfer mechanism. *Physical Review B*, **2012**, 85,	3.3	21
40	Nonequilibrium Atomic Limit for Transport and Optical Response of Molecular Junctions. *Journal of Physical Chemistry C*, **2014**, 118, 11159-11173	3.8	19
39	Molecular nanoplasmonics: Self-consistent electrodynamics in current-carrying junctions. *Physical Review B*, **2012**, 86,	3.3	19
38	Correlation between Raman scattering and conductance in a molecular junction. *Europhysics Letters*, **2011**, 95, 27001	1.6	19
37	Perturbation theory approach to tunneling: Direct and resonance transmission in super-exchange models. *Journal of Chemical Physics*, **1999**, 111, 1569-1579	3.9	19
36	Towards Noise Simulation in Interacting Nonequilibrium Systems Strongly Coupled to Baths. *Scientific Reports*, **2017**, 7, 9735	4.9	18
35	Nonequilibrium diagrammatic technique for Hubbard Green functions. *Journal of Chemical Physics*, **2017**, 146, 092301	3.9	17
34	Gate-Induced Intramolecular Charge Transfer in a Tunnel Junction: A Nonequilibrium Analysis. *Journal of Physical Chemistry C*, **2013**, 117, 10257-10263	3.8	17
33	Current-Induced Forces for Nonadiabatic Molecular Dynamics. *Journal of Physical Chemistry A*, **2019**, 123, 693-701	2.8	17
32	Green's function methods for single molecule junctions. *Journal of Chemical Physics*, **2020**, 152, 090901	3.9	16
31	Spin Seebeck coefficient of a molecular spin pump. *Physical Chemistry Chemical Physics*, **2011**, 13, 14350-7	3.6	16
30	Molecular Heat Engines: Quantum Coherence Effects. *Entropy*, **2017**, 19, 472	2.8	15
29	Quantum transport with two interacting conduction channels. *Journal of Chemical Physics*, **2013**, 138, 174111	3.9	13
28	Traversal time for electron tunneling in water. *Journal of Chemical Physics*, **2001**, 114, 9205-9208	3.9	13

27	Optical spectroscopy of molecular junctions: Nonequilibrium Green's functions perspective. *Journal of Chemical Physics*, **2016**, 144, 174113	3.9	13
26	On simulation of local fluxes in molecular junctions. *Journal of Chemical Physics*, **2018**, 148, 204103	3.9	12
25	A time-dependent response to optical excitation in molecular junctions. *Physica Scripta*, **2012**, T151, 014038	2.8	12
24	Inelastic effects in electron tunneling through water layers. *Journal of Chemical Physics*, **2001**, 115, 2681-2694	3.9	12
23	Numerically exact full counting statistics of the energy current in the Kondo regime. *Physical Review B*, **2019**, 100,	3.3	11
22	Cooperative effects in inelastic tunneling. *Journal of Physical Chemistry B*, **2013**, 117, 4449-53	3.4	11
21	Markovian treatment of non-Markovian dynamics of open Fermionic systems. *New Journal of Physics*, **2019**, 21, 123035	2.9	11
20	Kinetic Schemes in Open Interacting Systems. *Journal of Physical Chemistry Letters*, **2018**, 9, 4886-4892	6.4	10
19	Simulation of optical response functions in molecular junctions. *Journal of Chemical Physics*, **2016**, 144, 244106	3.9	10
18	Auxiliary Master Equation for Nonequilibrium Dual-Fermion Approach. *Physical Review Letters*, **2019**, 122, 186803	7.4	8
17	Traversal Times for Resonant Tunneling *Journal of Physical Chemistry B*, **2002**, 106, 8306-8312	3.4	7
16	Hubbard Nonequilibrium Green's Function Analysis of Photocurrent in Nitroazobenzene Molecular Junction. *Journal of Physical Chemistry Letters*, **2019**, 10, 1550-1557	6.4	6
15	A non-equilibrium equation-of-motion approach to quantum transport utilizing projection operators. *Journal of Physics Condensed Matter*, **2014**, 26, 455301	1.8	6
14	Simulation of scanning tunneling microscope images of 1,3-cyclohexadiene bound to a silicon surface. *Journal of Physical Chemistry B*, **2005**, 109, 1473-80	3.4	6
13	Flux-Conserving Diagrammatic Formulation of Optical Spectroscopy of Open Quantum Systems. *Journal of Physical Chemistry C*, **2019**, 123, 29015-29023	3.8	6
12	Local-noise spectroscopy for nonequilibrium systems. *Physical Review B*, **2018**, 98,	3.3	6
11	Electronic friction in interacting systems. *Journal of Chemical Physics*, **2019**, 150, 174101	3.9	5
10	Comment on "Frequency-domain stimulated and spontaneous light emission signals at molecular junctions" [J. Chem. Phys. 141, 074107 (2014)]. *Journal of Chemical Physics*, **2015**, 142, 137101	3.9	5

9	Effects of Electromagnetic Coupling on Conductance Switching of a Gated Tunnel Junction. *Journal of Physical Chemistry Letters*, **2014**, 5, 3545-50	6.4	4
8	The effect of electronic localized states at dislocations on the chemical impurity-dislocation interaction. *The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties*, **1996**, 73, 845-860		4
7	Optical properties of periodically driven open nonequilibrium quantum systems. *Journal of Chemical Physics*, **2020**, 152, 094101	3.9	3
6	Electron Transfer Methods in Open Systems. *Journal of Physical Chemistry B*, **2019**, 123, 7225-7232	3.4	3
5	On the widths of Stokes lines in Raman scattering from molecules adsorbed at metal surfaces and in molecular conduction junctions. *Journal of Chemical Physics*, **2016**, 144, 244114	3.9	3
4	Nonequilibrium dual-boson approach. *Physical Review B*, **2020**, 101,	3.3	2
3	A Green's function perspective on the nonequilibrium thermodynamics of open quantum systems strongly coupled to baths. *European Physical Journal: Special Topics*, **2021**, 230, 859-866	2.3	2
2	Entropy and information flow in quantum systems strongly coupled to baths. *Physical Review B*, **2021**, 103,	3.3	2
1	Non-Markovian theory of collective plasmon-molecule excitations in nanojunctions combined with classical electrodynamic simulations **2013**,		1