

# Michael Galperin

## List of Publications by Year in descending order

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98  
papers

5,397  
citations

81889

39  
h-index

82542

72  
g-index

102  
all docs

102  
docs citations

102  
times ranked

2828  
citing authors

#	ARTICLE	IF	CITATIONS
1	Molecular transport junctions: vibrational effects. <i>Journal of Physics Condensed Matter</i> , 2007, 19, 103201.	1.8	618
2	Inelastic electron tunneling spectroscopy in molecular junctions: Peaks and dips. <i>Journal of Chemical Physics</i> , 2004, 121, 11965-11979.	3.0	320
3	Hysteresis, Switching, and Negative Differential Resistance in Molecular Junctions: A Polaron Model. <i>Nano Letters</i> , 2005, 5, 125-130.	9.1	296
4	Nuclear Coupling and Polarization in Molecular Transport Junctions: Beyond Tunneling to Function. <i>Science</i> , 2008, 319, 1056-1060.	12.6	273
5	Resonant inelastic tunneling in molecular junctions. <i>Physical Review B</i> , 2006, 73, .	3.2	204
6	Heat conduction in molecular transport junctions. <i>Physical Review B</i> , 2007, 75, .	3.2	187
7	Molecular optoelectronics: the interaction of molecular conduction junctions with light. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 9421.	2.8	156
8	Selective triplet exciton formation in a single molecule. <i>Nature</i> , 2019, 570, 210-213.	27.8	142
9	Quantum Thermodynamics: A Nonequilibrium Green's Function Approach. <i>Physical Review Letters</i> , 2015, 114, 080602.	7.8	139
10	Current-Induced Light Emission and Light-Induced Current in Molecular-Tunneling Junctions. <i>Physical Review Letters</i> , 2005, 95, 206802.	7.8	127
11	On the Line Widths of Vibrational Features in Inelastic Electron Tunneling Spectroscopy. <i>Nano Letters</i> , 2004, 4, 1605-1611.	9.1	113
12	Nature of heat in strongly coupled open quantum systems. <i>Physical Review B</i> , 2015, 92, .	3.2	105
13	Optical properties of current carrying molecular wires. <i>Journal of Chemical Physics</i> , 2006, 124, 234709.	3.0	91
14	Inelastic tunneling effects on noise properties of molecular junctions. <i>Physical Review B</i> , 2006, 74, .	3.2	89
15	Transport in molecular states language: Generalized quantum master equation approach. <i>Physical Review B</i> , 2009, 79, .	3.2	86
16	Cooling mechanisms in molecular conduction junctions. <i>Physical Review B</i> , 2009, 80, .	3.2	85
17	Switching in Molecular Transport Junctions: Polarization Response. <i>Journal of the American Chemical Society</i> , 2007, 129, 13313-13320.	13.7	81
18	Inelastic effects in molecular junctions in the Coulomb and Kondo regimes: Nonequilibrium equation-of-motion approach. <i>Physical Review B</i> , 2007, 76, .	3.2	79

#	ARTICLE	IF	CITATIONS
19	Inelastic effects in molecular junction transport: scattering and self-consistent calculations for the Seebeck coefficient. <i>Molecular Physics</i> , 2008, 106, 397-404.	1.7	74
20	Raman scattering in current-carrying molecular junctions. <i>Journal of Chemical Physics</i> , 2009, 130, 144109.	3.0	66
21	Self-Consistent Quantum Master Equation Approach to Molecular Transport. <i>Journal of Physical Chemistry C</i> , 2010, 114, 20362-20369.	3.1	60
22	Inelastic transport in the Coulomb blockade regime within a nonequilibrium atomic limit. <i>Physical Review B</i> , 2008, 78, .	3.2	59
23	Electron Transmission through Molecular Layers. <i>Journal of Physical Chemistry B</i> , 1998, 102, 3658-3668.	2.6	58
24	Asymmetric electron transmission across asymmetric alkanethiol bilayer junctions. <i>Journal of Electroanalytical Chemistry</i> , 2003, 550-551, 337-350.	3.8	57
25	Electrically Driven Spin Currents in DNA. <i>Journal of Physical Chemistry C</i> , 2013, 117, 13730-13737.	3.1	57
26	On the electrostatic potential profile in biased molecular wires. <i>Journal of Chemical Physics</i> , 2002, 117, 10837-10841.	3.0	54
27	Molecular Transport Junctions: Current from Electronic Excitations in the Leads. <i>Physical Review Letters</i> , 2006, 96, 166803.	7.8	54
28	Efficiency fluctuations in quantum thermoelectric devices. <i>Physical Review B</i> , 2015, 91, .	3.2	53
29	Transport and optical response of molecular junctions driven by surface plasmon polaritons. <i>Physical Review B</i> , 2010, 81, .	3.2	52
30	Collective Plasmon-Molecule Excitations in Nanojunctions: Quantum Consideration. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 2738-2743.	4.6	51
31	Transport in State Space: Voltage-Dependent Conductance Calculations of Benzene-1,4-dithiol. <i>Nano Letters</i> , 2009, 9, 1770-1774.	9.1	49
32	Linear optical response of current-carrying molecular junction: A nonequilibrium Green's function time-dependent density functional theory approach. <i>Journal of Chemical Physics</i> , 2008, 128, 124705.	3.0	47
33	Molecular Transport Junctions: Asymmetry in Inelastic Tunneling Processes. <i>Journal of Physical Chemistry B</i> , 2005, 109, 8519-8522.	2.6	43
34	Raman Scattering from Nonequilibrium Molecular Conduction Junctions. <i>Nano Letters</i> , 2009, 9, 758-762.	9.1	43
35	Transient resonance structures in electron tunneling through water. <i>Journal of Chemical Physics</i> , 1999, 111, 7558-7566.	3.0	42
36	Numerical computation of tunneling fluxes. <i>Journal of Chemical Physics</i> , 2002, 117, 10817-10826.	3.0	41

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37	Many-Body State Description of Single-Molecule Electroluminescence Driven by a Scanning Tunneling Microscope. Nano Letters, 2019, 19, 2803-2811.	9.1	41
38	Light-induced current in molecular junctions: Local field and non-Markov effects. Physical Review B, 2011, 83, .	3.2	40
39	Self-consistent full counting statistics of inelastic transport. Physical Review B, 2011, 84, .	3.2	40
40	Observation and analysis of Fano-like lineshapes in the Raman spectra of molecules adsorbed at metal interfaces. Physical Review B, 2016, 93, .	3.2	40
41	Photonics and spectroscopy in nanojunctions: a theoretical insight. Chemical Society Reviews, 2017, 46, 4000-4019.	38.1	40
42	The non-linear response of molecular junctions: the polaron model revisited. Journal of Physics Condensed Matter, 2008, 20, 374107.	1.8	39
43	Greenâ€™s function methods for single molecule junctions. Journal of Chemical Physics, 2020, 152, 090901.	3.0	39
44	Inelastic transport: a pseudoparticle approach. Physical Chemistry Chemical Physics, 2012, 14, 13809.	2.8	37
45	NEGF-HF Method in Molecular Junction Property Calculations. Annals of the New York Academy of Sciences, 2003, 1006, 48-67.	3.8	35
46	Coherently controlled molecular junctions. Journal of Chemical Physics, 2012, 136, 044107.	3.0	33
47	Raman scattering from biased molecular conduction junctions: The electronic background and its temperature. Physical Review B, 2011, 84, .	3.2	32
48	Inelastic scattering and heating in a molecular spin pump. Physical Review B, 2010, 81, .	3.2	31
49	Spin inelastic currents in molecular ring junctions. Physical Review B, 2012, 86, .	3.2	31
50	Raman Scattering in Molecular Junctions: A Pseudoparticle Formulation. Nano Letters, 2014, 14, 699-703.	9.1	30
51	Raman Staircase in Charge Transfer SERS at the Junction of Fusing Nanospheres. Journal of Physical Chemistry Letters, 2013, 4, 88-92.	4.6	28
52	Pumpâ€™Probe Noise Spectroscopy of Molecular Junctions. Journal of Physical Chemistry Letters, 2015, 6, 470-476.	4.6	28
53	Nuclear Dynamics at Moleculeâ€™Metal Interfaces: A Pseudoparticle Perspective. Journal of Physical Chemistry Letters, 2015, 6, 4898-4903.	4.6	27
54	Raman Scattering and Electronic Heating in Molecular Conduction Junctions. Journal of Physical Chemistry Letters, 2011, 2, 2110-2113.	4.6	26

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55	Charge-transfer contribution to surface-enhanced Raman scattering in a molecular junction: Time-dependent correlations. <i>Physical Review B</i> , 2011, 84, .	3.2	26
56	Raman scattering from molecular conduction junctions: Charge transfer mechanism. <i>Physical Review B</i> , 2012, 85, .	3.2	26
57	Coherence in charge and energy transfer in molecular junctions. <i>Physical Review B</i> , 2013, 88, .	3.2	26
58	Organic Single Molecular Structures for Light Induced Spin-Pump Devices. <i>ACS Nano</i> , 2013, 7, 1064-1071.	14.6	26
59	Numerical Simulations of Electron Tunneling Currents in Water. <i>Journal of Physical Chemistry A</i> , 2002, 106, 10790-10796.	2.5	25
60	Current-Induced Forces for Nonadiabatic Molecular Dynamics. <i>Journal of Physical Chemistry A</i> , 2019, 123, 693-701.	2.5	24
61	Markovian treatment of non-Markovian dynamics of open Fermionic systems. <i>New Journal of Physics</i> , 2019, 21, 123035.	2.9	22
62	Perturbation theory approach to tunneling: Direct and resonance transmission in super-exchange models. <i>Journal of Chemical Physics</i> , 1999, 111, 1569-1579.	3.0	21
63	Gate-Induced Intramolecular Charge Transfer in a Tunnel Junction: A Nonequilibrium Analysis. <i>Journal of Physical Chemistry C</i> , 2013, 117, 10257-10263.	3.1	21
64	Nonequilibrium Atomic Limit for Transport and Optical Response of Molecular Junctions. <i>Journal of Physical Chemistry C</i> , 2014, 118, 11159-11173.	3.1	21
65	Nonequilibrium diagrammatic technique for Hubbard Green functions. <i>Journal of Chemical Physics</i> , 2017, 146, .	3.0	21
66	Correlation between Raman scattering and conductance in a molecular junction. <i>Europhysics Letters</i> , 2011, 95, 27001.	2.0	20
67	Molecular nanoplasmonics: Self-consistent electrodynamics in current-carrying junctions. <i>Physical Review B</i> , 2012, 86, .	3.2	20
68	Towards Noise Simulation in Interacting Nonequilibrium Systems Strongly Coupled to Baths. <i>Scientific Reports</i> , 2017, 7, 9735.	3.3	20
69	Molecular Heat Engines: Quantum Coherence Effects. <i>Entropy</i> , 2017, 19, 472.	2.2	20
70	Numerically exact full counting statistics of the energy current in the Kondo regime. <i>Physical Review B</i> , 2019, 100, .	3.2	19
71	Optical spectroscopy of molecular junctions: Nonequilibrium Green's functions perspective. <i>Journal of Chemical Physics</i> , 2016, 144, 174113.	3.0	17
72	On simulation of local fluxes in molecular junctions. <i>Journal of Chemical Physics</i> , 2018, 148, 204103.	3.0	17

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73	Traversal time for electron tunneling in water. <i>Journal of Chemical Physics</i> , 2001, 114, 9205-9208.	3.0	16
74	Spin seebeck coefficient of a molecular spin pump. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 14350.	2.8	16
75	Quantum transport with two interacting conduction channels. <i>Journal of Chemical Physics</i> , 2013, 138, 174111.	3.0	14
76	Inelastic effects in electron tunneling through water layers. <i>Journal of Chemical Physics</i> , 2001, 115, 2681-2694.	3.0	13
77	A time-dependent response to optical excitation in molecular junctions. <i>Physica Scripta</i> , 2012, T151, 014038.	2.5	13
78	Optical properties of periodically driven open nonequilibrium quantum systems. <i>Journal of Chemical Physics</i> , 2020, 152, 094101.	3.0	13
79	Cooperative Effects in Inelastic Tunneling. <i>Journal of Physical Chemistry B</i> , 2013, 117, 4449-4453.	2.6	12
80	Simulation of optical response functions in molecular junctions. <i>Journal of Chemical Physics</i> , 2016, 144, 244106.	3.0	12
81	Kinetic Schemes in Open Interacting Systems. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 4886-4892.	4.6	12
82	Auxiliary Master Equation for Nonequilibrium Dual-Fermion Approach. <i>Physical Review Letters</i> , 2019, 122, 186803.	7.8	12
83	Electronic friction in interacting systems. <i>Journal of Chemical Physics</i> , 2019, 150, 174101.	3.0	12
84	A Greenâ€™s function perspective on the nonequilibrium thermodynamics of open quantum systems strongly coupled to baths. <i>European Physical Journal: Special Topics</i> , 2021, 230, 859-866.	2.6	12
85	Hubbard Nonequilibrium Greenâ€™s Function Analysis of Photocurrent in Nitroazobenzene Molecular Junction. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 1550-1557.	4.6	9
86	Traversal Times for Resonant Tunnelingâ€™. <i>Journal of Physical Chemistry B</i> , 2002, 106, 8306-8312.	2.6	8
87	Simulation of Scanning Tunneling Microscope Images of 1,3-Cyclohexadiene Bound to a Silicon Surface. <i>Journal of Physical Chemistry B</i> , 2005, 109, 1473-1480.	2.6	8
88	Entropy and information flow in quantum systems strongly coupled to baths. <i>Physical Review B</i> , 2021, 103, .	3.2	7
89	The effect of electronic localized states at dislocations on the â€™chemicalâ€™ impurity-dislocation interaction. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1996, 73, 845-860.	0.6	6
90	A non-equilibrium equation-of-motion approach to quantum transport utilizing projection operators. <i>Journal of Physics Condensed Matter</i> , 2014, 26, 455301.	1.8	6

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91	Effects of Electromagnetic Coupling on Conductance Switching of a Gated Tunnel Junction. Journal of Physical Chemistry Letters, 2014, 5, 3545-3550.	4.6	6
92	Flux-Conserving Diagrammatic Formulation of Optical Spectroscopy of Open Quantum Systems. Journal of Physical Chemistry C, 2019, 123, 29015-29023.	3.1	6
93	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.	3.0	5
94	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.	3.0	3
95	Electron Transfer Methods in Open Systems. Journal of Physical Chemistry B, 2019, 123, 7225-7232.	2.6	3
96	Nonequilibrium dual-boson approach. Physical Review B, 2020, 101, .	3.2	3
97	Non-Markovian theory of collective plasmon-molecule excitations in nanojunctions combined with classical electrodynamic simulations. , 2013, , .		1
98	Green Function Methods for Optoelectronics. , 2019, , .		0