

Ronnie Kosloff

List of Publications by Year in descending order

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328
papers

25,910
citations

8749

75
h-index

7340

152
g-index

336
all docs

336
docs citations

336
times ranked

8239
citing authors

#	ARTICLE	IF	CITATIONS
1	Characterization of the Hexanitrate Esters of Sugar Alcohols. Propellants, Explosives, Pyrotechnics, 2021, 46, 579-592.	1.0	2
2	Open system dynamics from thermodynamic compatibility. Physical Review Research, 2021, 3, .	1.3	16
3	Coherent control of ultrafast bond making and subsequent molecular dynamics: demonstration of final-state branching ratio control. Journal of Physics B: Atomic, Molecular and Optical Physics, 2021, 54, 144007.	0.6	2
4	Inertial Theorem: Overcoming the quantum adiabatic limit. Physical Review Research, 2021, 3, .	1.3	12
5	Quantum Finite-Time Thermodynamics: Insight from a Single Qubit Engine. Entropy, 2020, 22, 1255.	1.1	29
6	Dissociation in strong field: A quantum analysis of the relation between angular momentum and angular distribution of fragments. Chemical Physics Letters, 2020, 756, 137845.	1.2	0
7	Fast route to equilibration. Physical Review A, 2020, 101, .	1.0	19
8	Landauer's Principle in a Quantum Szilard Engine without Maxwell's Demon. Entropy, 2020, 22, 294.	1.1	16
9	Optimization of high-order harmonic generation by optimal control theory: Ascending a functional landscape in extreme conditions. Physical Review A, 2020, 101, .	1.0	4
10	Quantum signatures in the quantum Carnot cycle. New Journal of Physics, 2020, 22, 013055.	1.2	56
11	Shortcut to Equilibration of an Open Quantum System. Physical Review Letters, 2019, 122, 250402.	2.9	63
12	Quantifying the Unitary Generation of Coherence from Thermal Quantum Systems. Entropy, 2019, 21, 810.	1.1	7
13	Quantum thermodynamics and open-systems modeling. Journal of Chemical Physics, 2019, 150, 204105.	1.2	60
14	Quantum Control in Ultrafast Coherent Bond Making. , 2019, , .		1
15	Enhanced Particle Swarm Optimization Algorithm: Efficient Training of ReaxFF Reactive Force Fields. Journal of Chemical Theory and Computation, 2018, 14, 3100-3112.	2.3	31
16	Introduction to Quantum Thermodynamics: History and Prospects. Fundamental Theories of Physics, 2018, , 1-33.	0.1	39
17	Time-dependent Markovian quantum master equation. Physical Review A, 2018, 98, .	1.0	65
18	This special thematic issue of chemical physics "Energy and entropy of change: From elementary processes to biology" celebrates the 80th birthday of Prof. Raphael D. Levine, known as Raphy. Chemical Physics, 2018, 514, 1-3.	0.9	0

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19	Stochastic laser cooling enabled by many-body effects. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2018, 51, 135002.	0.6	2
20	Quantum heat engines: Limit cycles and exceptional points. <i>Physical Review E</i> , 2018, 97, 062153.	0.8	27
21	Markovian heat sources with the smallest heat capacity. <i>New Journal of Physics</i> , 2018, 20, 063030.	1.2	6
22	Semi-global approach for propagation of the time-dependent Schrödinger equation for time-dependent and nonlinear problems. <i>Journal of Computational Physics</i> , 2017, 343, 368-413.	1.9	21
23	Action-noise-assisted quantum control. <i>Physical Review A</i> , 2017, 96, .	1.0	13
24	Atom interferometry using a shaken optical lattice. <i>Physical Review A</i> , 2017, 95, .	1.0	18
25	Thermal Decomposition of Erythritol Tetranitrate: A Joint Experimental and Computational Study. <i>Journal of Physical Chemistry C</i> , 2017, 121, 16145-16157.	1.5	17
26	The Quantum Harmonic Otto Cycle. <i>Entropy</i> , 2017, 19, 136.	1.1	255
27	Quantum Thermodynamics in Strong Coupling: Heat Transport and Refrigeration. <i>Entropy</i> , 2016, 18, 186.	1.1	58
28	Quantum Heat Machines Equivalence, Work Extraction beyond Markovianity, and Strong Coupling via Heat Exchangers. <i>Entropy</i> , 2016, 18, 124.	1.1	58
29	Synthesis and Degradation of Hexamethylene Triperoxide Diamine (HMTD). <i>Propellants, Explosives, Pyrotechnics</i> , 2016, 41, 334-350.	1.0	21
30	Speed limits in Liouville space for open quantum systems. <i>Europhysics Letters</i> , 2016, 115, 40003.	0.7	32
31	Effects of Nanoscale Heterogeneities on the Reactivity of Shocked Erythritol Tetranitrate. <i>Journal of Physical Chemistry C</i> , 2016, 120, 28886-28893.	1.5	17
32	Parameter estimation in atomic spectroscopy using exceptional points. <i>Physical Review A</i> , 2016, 93, .	1.0	14
33	Quantum flywheel. <i>Physical Review A</i> , 2016, 93, .	1.0	46
34	Transitions between refrigeration regions in extremely short quantum cycles. <i>Physical Review E</i> , 2016, 93, 052150.	0.8	10
35	Scientific Autobiography of Ronnie Kosloff. <i>Journal of Physical Chemistry A</i> , 2016, 120, 2943-2949.	1.1	0
36	Mechanism of Intact Adsorbed Molecules Ejection Using High Intensity Laser Pulses. <i>Journal of Physical Chemistry C</i> , 2016, 120, 11306-11312.	1.5	8

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37	Efficient Formation of Ultracold Molecules with Chirped Nanosecond Pulses. <i>Journal of Physical Chemistry A</i> , 2016, 120, 3032-3041.	1.1	13
38	Reactive Force Field for Liquid Hydrazoic Acid with Applications to Detonation Chemistry. <i>Journal of Physical Chemistry C</i> , 2016, 120, 4744-4752.	1.5	19
39	Enhancement of Ultracold Molecule Formation Using Shaped Nanosecond Frequency Chirps. <i>Physical Review Letters</i> , 2015, 115, 173003.	2.9	32
40	Exceptional points for parameter estimation in open quantum systems: analysis of the Bloch equations. <i>New Journal of Physics</i> , 2015, 17, 113036.	1.2	35
41	Training Schrödinger's cat: quantum optimal control. <i>European Physical Journal D</i> , 2015, 69, 1.	0.6	550
42	Equivalence of Quantum Heat Machines, and Quantum-Thermodynamic Signatures. <i>Physical Review X</i> , 2015, 5, .	2.8	299
43	Coherent Control of Bond Making. <i>Physical Review Letters</i> , 2015, 114, 233003.	2.9	66
44	Coherent control of bond making: the performance of rationally phase-shaped femtosecond laser pulses. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2015, 48, 184004.	0.6	9
45	The multilevel four-stroke swap engine and its environment. <i>New Journal of Physics</i> , 2014, 16, 095003.	1.2	51
46	The scaling of weak field phase-only control in Markovian dynamics. <i>Journal of Chemical Physics</i> , 2014, 141, 044121.	1.2	9
47	Quantum Heat Engines and Refrigerators: Continuous Devices. <i>Annual Review of Physical Chemistry</i> , 2014, 65, 365-393.	4.8	390
48	Universal features in the efficiency at maximal work of hot quantum Otto engines. <i>Europhysics Letters</i> , 2014, 108, 40001.	0.7	49
49	The local approach to quantum transport may violate the second law of thermodynamics. <i>Europhysics Letters</i> , 2014, 107, 20004.	0.7	213
50	Hot Injection Processes in Optically Excited States: Molecular Design for Optimized Photocapture. <i>Journal of Physical Chemistry C</i> , 2014, 118, 21798-21805.	1.5	4
51	Direct MD Simulations of Terahertz Absorption and 2D Spectroscopy Applied to Explosive Crystals. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 772-776.	2.1	39
52	Decomposition of Condensed Phase Energetic Materials: Interplay between Uni- and Bimolecular Mechanisms. <i>Journal of the American Chemical Society</i> , 2014, 136, 4192-4200.	6.6	126
53	Quantum Thermodynamics: A Dynamical Viewpoint. <i>Entropy</i> , 2013, 15, 2100-2128.	1.1	565
54	Production of ultracold molecules with chirped nanosecond pulses: Evidence for coherent effects. <i>Physical Review A</i> , 2013, 87, .	1.0	14

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55	First-Principles-Based Reaction Kinetics for Decomposition of Hot, Dense Liquid TNT from ReaxFF Multiscale Reactive Dynamics Simulations. <i>Journal of Physical Chemistry C</i> , 2013, 117, 21043-21054.	1.5	64
56	Femtosecond two-photon photoassociation of hot magnesium atoms: A quantum dynamical study using thermal random phase wavefunctions. <i>Journal of Chemical Physics</i> , 2013, 139, 164124.	1.2	30
57	Effects of an exceptional point on the dynamics of a single particle in a time-dependent harmonic trap. <i>Physical Review A</i> , 2013, 88, .	1.0	19
58	Comment on "Cooling by Heating: Refrigeration Powered by Photons". <i>Physical Review Letters</i> , 2012, 109, 248901; discussion 248902.	2.9	19
59	Quantum dynamical calculations of ultracold collisions induced by nonlinearly chirped light. <i>Physical Review A</i> , 2012, 85, .	1.0	9
60	Short time cycles of purely quantum refrigerators. <i>Physical Review E</i> , 2012, 85, 051114.	0.8	35
61	Optimal-control theory of harmonic generation. <i>Physical Review A</i> , 2012, 86, .	1.0	10
62	New, Highly Accurate Propagator for the Linear and Nonlinear Schrödinger Equation. <i>Journal of Scientific Computing</i> , 2012, 53, 211-221.	1.1	15
63	Mutual influence of locality and chaotic dynamics on quantum controllability. <i>Physical Review A</i> , 2012, 86, .	1.0	4
64	Quantum Absorption Refrigerator. <i>Physical Review Letters</i> , 2012, 108, 070604.	2.9	186
65	Time-optimal processes for interacting spin systems. <i>Europhysics Letters</i> , 2012, 99, 40002.	0.7	10
66	Quantum refrigerators and the third law of thermodynamics. <i>Physical Review E</i> , 2012, 85, 061126.	0.8	135
67	Time-optimal controls for frictionless cooling in harmonic traps. <i>Europhysics Letters</i> , 2011, 96, 60015.	0.7	65
68	Role of Metal Ions in the Destruction of TATP: Theoretical Considerations. <i>Journal of Physical Chemistry A</i> , 2011, 115, 10565-10575.	1.1	11
69	Hot Injection Dynamics: Design Mechanisms and Ideas. <i>Journal of Physical Chemistry A</i> , 2011, 115, 5833-5837.	1.1	4
70	Molecular dynamics simulations of weak detonations. <i>Physical Review E</i> , 2011, 84, 061122.	0.8	2
71	Density-Dependent Liquid Nitromethane Decomposition: Molecular Dynamics Simulations Based on ReaxFF. <i>Journal of Physical Chemistry A</i> , 2011, 115, 10181-10202.	1.1	129
72	Quantum effects in chemistry: seven sample situations. <i>Procedia Chemistry</i> , 2011, 3, 63-81.	0.7	3

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73	Application of quantum coherence and decoherence. <i>Procedia Chemistry</i> , 2011, 3, 322-331.	0.7	4
74	Femtosecond coherent control of thermal photoassociation of magnesium atoms. <i>Faraday Discussions</i> , 2011, 153, 383.	1.6	18
75	Generating Molecular Rovibrational Coherence by Two-Photon Femtosecond Photoassociation of Thermally Hot Atoms. <i>Physical Review Letters</i> , 2011, 107, 273001.	2.9	49
76	Scaling the robustness of the solutions for quantum controllable problems. <i>Physical Review A</i> , 2011, 83, .	1.0	8
77	Coherent control of ultracold Rb 85 trap-loss collisions with nonlinearly frequency-chirped light. <i>Physical Review A</i> , 2011, 83, .	1.0	21
78	Noise and Controllability: Suppression of Controllability in Large Quantum Systems. <i>Physical Review Letters</i> , 2011, 106, 123002.	2.9	10
79	A Chebychev propagator with iterative time ordering for explicitly time-dependent Hamiltonians. <i>Journal of Chemical Physics</i> , 2010, 132, 064105.	1.2	29
80	Correlation dynamics after short-pulse photoassociation. <i>Physical Review A</i> , 2010, 81, .	1.0	10
81	Algorithm for simulation of quantum many-body dynamics using dynamical coarse-graining. <i>Physical Review A</i> , 2010, 81, .	1.0	5
82	Dynamic matter-wave pulse shaping. <i>Physical Review A</i> , 2010, 81, .	1.0	11
83	Minimal temperature of quantum refrigerators. <i>Europhysics Letters</i> , 2010, 89, 20004.	0.7	19
84	Control by decoherence: weak field control of an excited state objective. <i>New Journal of Physics</i> , 2010, 12, 015003.	1.2	48
85	Quantum Tunneling of Hydrogen Atom in Dissociation of Photoexcited Methylamine. <i>Journal of Physical Chemistry A</i> , 2010, 114, 9623-9627.	1.1	26
86	Optimal performance of reciprocating demagnetization quantum refrigerators. <i>Physical Review E</i> , 2010, 82, 011134.	0.8	56
87	Chirp effects on impulsive vibrational spectroscopy: a multimode perspective. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 2149.	1.3	43
88	Time-dependent quantum wave-packet description of H and D atom tunneling in H and D photodissociation of methylamine and methylamine-d ₂ . <i>Journal of Chemical Physics</i> , 2009, 131, 064302.	1.2	18
89	Pump-Probe Spectroscopy of Two-Body Correlations in Ultracold Gases. <i>Physical Review Letters</i> , 2009, 103, 260401.	2.9	10
90	The quantum refrigerator: The quest for absolute zero. <i>Europhysics Letters</i> , 2009, 85, 30008.	0.7	88

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91	A novel intraline of conical intersections for methylamine: A theoretical study. <i>International Journal of Quantum Chemistry</i> , 2009, 109, 2482-2489.	1.0	21
92	Deleterious Effects of Long-Range Self-Repulsion on the Density Functional Description of O_2 Sticking on Aluminum. <i>Journal of Physical Chemistry A</i> , 2009, 113, 7521-7527.	1.1	27
93	Intralines of Quasi-Conical Intersections on Torsion Planes: Methylamine as a Case Study. <i>Journal of Physical Chemistry A</i> , 2009, 113, 6756-6762.	1.1	10
94	A Chebychev propagator for inhomogeneous Schrödinger equations. <i>Journal of Chemical Physics</i> , 2009, 130, 124108.	1.2	28
95	Chirp Effect on Vibrational Wave Packets in Large Molecules: a Multimode Perspective. <i>Springer Series in Chemical Physics</i> , 2009, , 331-333.	0.2	0
96	Maximum work in minimum time from a conservative quantum system. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 1027-1032.	1.3	108
97	Two-photon coherent control of femtosecond photoassociation. <i>Faraday Discussions</i> , 2009, 142, 389.	1.6	19
98	Vibrational spectroscopy of triacetone triperoxide (TATP): Anharmonic fundamentals, overtones and combination bands. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2008, 71, 1438-1445.	2.0	30
99	Raman and Infrared Fingerprint Spectroscopy of Peroxide-Based Explosives. <i>Applied Spectroscopy</i> , 2008, 62, 906-915.	1.2	85
100	Stochastic surrogate Hamiltonian. <i>Journal of Chemical Physics</i> , 2008, 129, 034108.	1.2	41
101	An intraline of conical intersections for methylamine. <i>Journal of Chemical Physics</i> , 2008, 128, 244302.	1.2	34
102	The globally stable solution of a stochastic nonlinear Schrödinger equation. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2008, 41, 365203.	0.7	3
103	Efficient simulation of quantum evolution using dynamical coarse graining. <i>Physical Review A</i> , 2008, 78, .	1.0	7
104	Protecting coherence in optimal control theory: State-dependent constraint approach. <i>Physical Review A</i> , 2008, 77, .	1.0	55
105	Unitary photoassociation: One-step production of ground-state bound molecules. <i>Physical Review A</i> , 2008, 77, .	1.0	17
106	Quantum refrigerator in the quest for the absolute zero temperature. <i>Proceedings of SPIE</i> , 2008, , .	0.8	0
107	Quantum dynamical treatment of inelastic scattering of atoms at a surface at finite temperature: The random phase thermal wave function approach. <i>Journal of Chemical Physics</i> , 2007, 127, 134711.	1.2	27
108	Grid methods for cold molecules: Determination of photoassociation line shapes and rate constants. <i>Physical Review A</i> , 2007, 75, .	1.0	13

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109	Dynamical hole in ultrafast photoassociation: Analysis of the compression effect. <i>Physical Review A</i> , 2007, 76, .	1.0	15
110	Decoherence Control by Tracking a Hamiltonian Reference Molecule. <i>Physical Review Letters</i> , 2007, 98, 203006.	2.9	49
111	Coherent control of ultracold collisions with chirped light: Direction matters. <i>Physical Review A</i> , 2007, 75, .	1.0	37
112	Momentum control in photoassociation of ultracold atoms. <i>Physical Review A</i> , 2007, 76, .	1.0	15
113	Negativity as a distance from a separable state. <i>Physical Review A</i> , 2007, 75, .	1.0	9
114	Rise and fall of quantum and classical correlations in open-system dynamics. <i>Physical Review A</i> , 2007, 76, .	1.0	12
115	Thermodynamic Aspects of the Quantum-Mechanical Measuring Process. <i>Advances in Chemical Physics</i> , 2007, , 153-193.	0.3	5
116	Quantum Description of the Impulsive Photodissociation Dynamics of I_2 in Solution. <i>Advances in Chemical Physics</i> , 2007, , 229-315.	0.3	29
117	Mechanism of Thermal Unimolecular Decomposition of TNT (2,4,6-Trinitrotoluene): A DFT Study. <i>Journal of Physical Chemistry A</i> , 2007, 111, 11074-11083.	1.1	111
118	Irreversible performance of a quantum harmonic heat engine. <i>New Journal of Physics</i> , 2006, 8, 83-83.	1.2	264
119	ON THE EXACT IDENTITY BETWEEN THERMODYNAMIC AND INFORMATIC ENTROPIES IN A UNITARY MODEL OF FRICTION. <i>International Journal of Quantum Information</i> , 2006, 04, 99-104.	0.6	17
120	Electron transfer mechanism and the locality of the system-bath interaction: A comparison of local, semilocal, and pure dephasing models. <i>Journal of Chemical Physics</i> , 2006, 124, 074501.	1.2	35
121	Improved methods for mapped grids: Applied to highly excited vibrational states of diatomic molecules. <i>Chemical Physics Letters</i> , 2006, 433, 221-227.	1.2	34
122	Theoretical model for ultracold molecule formation via adaptive feedback control. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2006, 39, S1001-S1015.	0.6	33
123	Photoassociation with chirped laser pulses: calculation of the absolute number of molecules per pulse. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2006, 39, S1017-S1041.	0.6	65
124	Two-dimensional surrogate Hamiltonian investigation of laser-induced desorption of NO on $NiO(100)$. <i>Journal of Chemical Physics</i> , 2006, 124, 024702.	1.2	18
125	Quantum lubrication: Suppression of friction in a first-principles four-stroke heat engine. <i>Physical Review E</i> , 2006, 73, 025107.	0.8	81
126	Quantum governor: Automatic quantum control and reduction of the influence of noise without measuring. <i>Physical Review A</i> , 2006, 73, .	1.0	17

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127	Short-pulse photoassociation in rubidium below the D1 line. <i>Physical Review A</i> , 2006, 73, .	1.0	67
128	RATIONAL DETECTION SCHEMES FOR TATP NATO ADVANCED RESEARCH WORKSHOP. , 2006, , 105-112.		0
129	D. Manipulation of Molecules. , 2005, , 475-493.		0
130	Intensity and wavelength control of a single molecule reaction: Simulation of photodissociation of cold-trapped MgH ⁺ . <i>Journal of Chemical Physics</i> , 2005, 123, 094302.	1.2	18
131	Temperature dependence of interaction-induced entanglement. <i>Physical Review A</i> , 2005, 72, .	1.0	0
132	Minimizing broadband excitation under dissipative conditions. <i>Journal of Chemical Physics</i> , 2005, 123, 234506.	1.2	9
133	Control of Ultracold Collisions with Frequency-Chirped Light. <i>Physical Review Letters</i> , 2005, 95, 063001.	2.9	43
134	Dissipative dynamics of a system passing through a conical intersection: Ultrafast pump-probe observables. <i>Journal of Chemical Physics</i> , 2005, 123, 134112.	1.2	24
135	Creating Ground State Molecules with Optical Feshbach Resonances in Tight Traps. <i>Physical Review Letters</i> , 2005, 94, 193001.	2.9	23
136	Role of Vibrationally Excited NO in Promoting Electron Emission When Colliding with a Metal Surface: A Nonadiabatic Dynamic Model. <i>Journal of Physical Chemistry B</i> , 2005, 109, 18876-18880.	1.2	16
137	Decomposition of Triacetone Triperoxide Is an Entropic Explosion. <i>Journal of the American Chemical Society</i> , 2005, 127, 1146-1159.	6.6	259
138	Nonadiabatic charge transfer processes of oxygen on metal surfaces. <i>Israel Journal of Chemistry</i> , 2005, 45, 27-36.	1.0	6
139	Atomistic-Scale Simulations of the Initial Chemical Events in the Thermal Initiation of Triacetone triperoxide. <i>Journal of the American Chemical Society</i> , 2005, 127, 11053-11062.	6.6	147
140	Abstractive dissociation of oxygen over Al(111): A nonadiabatic quantum model. <i>Journal of Chemical Physics</i> , 2004, 120, 3931-3948.	1.2	42
141	Characteristics of the limit cycle of a reciprocating quantum heat engine. <i>Physical Review E</i> , 2004, 70, 046110.	0.8	113
142	Stabilization of ultracold molecules using optimal control theory. <i>Physical Review A</i> , 2004, 70, .	1.0	114
143	Pulse-shaping algorithm of a coherent matter-wave-controlling reaction dynamics. <i>Physical Review A</i> , 2004, 70, .	1.0	3
144	Photoassociation of cold atoms with chirped laser pulses: Time-dependent calculations and analysis of the adiabatic transfer within a two-state model. <i>Physical Review A</i> , 2004, 70, .	1.0	100

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145	Photo-dissociation of Cold MgH ⁺ ions. European Physical Journal D, 2004, 31, 403-408.	0.6	17
146	String, ring, sphere: visualizing wavefunctions on different topologies. Computing in Science and Engineering, 2004, 6, 82-86.	1.2	1
147	Dissipative quantum dynamics with the surrogate Hamiltonian approach. A comparison between spin and harmonic baths. Journal of Chemical Physics, 2004, 121, 661-671.	1.2	48
148	Theoretical Modeling of Steric Effect in Electron-Induced Desorption: CH ₃ Br/O/Ru(001). Journal of Physical Chemistry B, 2004, 108, 14056-14061.	1.2	7
149	Conical Intersections: Relaxation, Dephasing, and Dynamics in a Simple Model. Israel Journal of Chemistry, 2004, 44, 53-64.	1.0	6
150	Simulating dissipative phenomena with a random phase thermal wavefunctions, high temperature application of the Surrogate Hamiltonian approach. Chemical Physics Letters, 2003, 381, 129-138.	1.2	52
151	The role of nonadiabatic pathways and molecular rotations in the oxygen abstraction reaction on the Al(111) surface. Chemical Physics Letters, 2003, 373, 366-371.	1.2	28
152	Time-dependent quantum calculations of negative ion formation in scattering of atoms from alkali-halide surfaces. Surface Science, 2003, 528, 84-90.	0.8	1
153	Two-pulse atomic coherent control. Surface Science, 2003, 528, 156-162.	0.8	4
154	Two-pulse atomic coherent control spectroscopy of Eley-Rideal reactions: An application of an atom laser. Journal of Chemical Physics, 2003, 119, 149-160.	1.2	4
155	Quantum soliton dynamics in vibrational chains: Comparison of fully correlated, mean field, and classical dynamics. Journal of Chemical Physics, 2003, 118, 5729-5735.	1.2	2
156	Surrogate Hamiltonian study of electronic relaxation in the femtosecond laser induced desorption of NO/NiO(100). Journal of Chemical Physics, 2003, 119, 1750-1765.	1.2	31
157	Quantum four-stroke heat engine: Thermodynamic observables in a model with intrinsic friction. Physical Review E, 2003, 68, 016101.	0.8	188
158	Investigating pure vibrational dephasing of I ₃ ⁺ in solution: Temperature dependence of T ₂ [*] for the fundamental and first harmonic of I ₃ ⁺ . Journal of Chemical Physics, 2003, 118, 3660-3667.	1.2	19
159	Femtosecond Photodesorption of Small Molecules from Surfaces: A Theoretical Investigation from First Principles. Physical Review Letters, 2003, 90, 117601.	2.9	41
160	Optimal control theory for unitary transformations. Physical Review A, 2003, 68, .	1.0	261
161	Rotational alignment in the photodesorption of CO from Cr ₂ O ₃ (0001): A systematic three-dimensional ab initio study. Journal of Chemical Physics, 2002, 116, 762-773.	1.2	26
162	Quantum Computing by an Optimal Control Algorithm for Unitary Transformations. Physical Review Letters, 2002, 89, 188301.	2.9	288

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163	Discrete four-stroke quantum heat engine exploring the origin of friction. <i>Physical Review E</i> , 2002, 65, 055102.	0.8	119
164	The Fourier method for tri-atomic systems in the search for the optimal coordinate system. <i>Journal of Chemical Physics</i> , 2002, 116, 4403-4414.	1.2	20
165	A complete quantum description of an ultrafast pump-probe charge transfer event in condensed phase. <i>Journal of Chemical Physics</i> , 2002, 116, 7983-7996.	1.2	68
166	Effects of anharmonicity and electronic coupling on photoinduced electron transfer in mixed valence compounds. <i>Journal of Chemical Physics</i> , 2002, 117, 10125-10132.	1.2	16
167	Intramolecular energy flow and nonadiabaticity in vibrationally mediated chemistry: Wave packet studies of Cl+H ₂ O. <i>Journal of Chemical Physics</i> , 2002, 116, 1406-1416.	1.2	44
168	Rate Constant Turnovers: Energy Spacings and Mixings. <i>Journal of Physical Chemistry B</i> , 2002, 106, 8479-8483.	1.2	17
169	Experimental implementation of the Deutsch-Jozsa algorithm for three-qubit functions using pure coherent molecular superpositions. <i>Physical Review A</i> , 2002, 66, .	1.0	76
170	Experimental coherent computation of a multiple-input AND gate using pure molecular superpositions. <i>Chemical Physics Letters</i> , 2002, 359, 8-14.	1.2	44
171	Quantum dissipative model for the collision induced ionization of I ₂ impinging on a diamond surface. <i>Chemical Physics Letters</i> , 2002, 358, 284-289.	1.2	9
172	Three-dimensional quantum time-dependent study of the photodissociation dynamics of Na ⁺ FH/D. <i>Chemical Physics Letters</i> , 2002, 359, 453-459.	1.2	6
173	Novel Approach to the Detection of Triacetone Triperoxide (TATP): Its Structure and Its Complexes with Ions. <i>Journal of Physical Chemistry A</i> , 2002, 106, 4951-4956.	1.1	76
174	Coherent mechanism of robust population inversion. <i>Optics Express</i> , 2001, 8, 238.	1.7	23
175	Quantum thermodynamic cooling cycle. <i>Physical Review E</i> , 2001, 64, 056130.	0.8	116
176	Ab initio and diatomic molecule potentials for I ₂ ⁺ , I ₂ , I ₃ ⁺ , and I ₃ . <i>Journal of Chemical Physics</i> , 2001, 114, 7413-7423.	1.2	28
177	Impulsive Control of Ground Surface Dynamics of I ₃ -in Solution. <i>Journal of Physical Chemistry A</i> , 2001, 105, 5081-5095.	1.1	47
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