Yijing Yan

List of Publications by Year in Descending Order

144 papers	4,266 citations	32 h-index	59 g-index
151 ext. papers	4,784 ext. citations	3.7 avg, IF	5.71 L-index

#	Paper	IF	Citations
144	Origin of Asymmetric Splitting of Kondo Peak in Spin-Polarized Scanning Tunneling Spectroscopy: Insights from First-Principles-Based Simulations.. *Journal of Physical Chemistry Letters*, **2022**, 2094-2100	6.4	1
143	Role of Pigment-Protein Coupling in the Energy Transport Dynamics in the Fenna-Matthews-Olson Complex. *Journal of Physical Chemistry B*, **2021**, 125, 11884-11892	3.4	0
142	Quantum dissipation with nonlinear environment couplings: Stochastic fields dressed dissipaton equation of motion approach. *Journal of Chemical Physics*, **2021**, 155, 174111	3.9	1
141	Understanding the Sub-meV Precision-Tuning of Magnetic Anisotropy of Single-Molecule Junction. *Journal of Physical Chemistry C*, **2021**, 125, 6990-6997	3.8	4
140	Correlated vibration-solvent effects on the non-Condon exciton spectroscopy. *Journal of Chemical Physics*, **2021**, 154, 244105	3.9	3
139	Nonequilibrium Kondo regime current noise spectrum of quantum dot systems with the single impurity Anderson model. *Journal of Chemical Physics*, **2021**, 155, 014104	3.9	0
138	Marcus□electron transfer rate revisited via a Rice-Ramsperger-Kassel-Marcus analogue: A unified formalism for linear and nonlinear solvation scenarios. *Chinese Journal of Chemical Physics*, **2021**, 34, 462-470	0.9	3
137	Adiabatic terminator for fermionic hierarchical equations of motion. *Chinese Journal of Chemical Physics*, **2021**, 34, 905-914	0.9	2
136	Thermodynamic free-energy spectrum theory for open quantum systems. *Journal of Chemical Physics*, **2020**, 153, 214115	3.9	3
135	Current-induced effective Dzyaloshinskii-Moriya interaction and its Kondo enhancement in double quantum dot. *Journal of Chemical Physics*, **2020**, 152, 164113	3.9	4
134	Stochastic equation of motion approach to fermionic dissipative dynamics. I. Formalism. *Journal of Chemical Physics*, **2020**, 152, 204105	3.9	7
133	Stochastic equation of motion approach to fermionic dissipative dynamics. II. Numerical implementation. *Journal of Chemical Physics*, **2020**, 152, 204106	3.9	6
132	Kondo resonance assisted thermoelectric transport through strongly correlated quantum dots. *Science China: Physics, Mechanics and Astronomy*, **2020**, 63, 1	3.6	1
131	Theoretical Study on the Effect of Environment on Excitation Energy Transfer in Photosynthetic Light-Harvesting Systems. *Journal of Physical Chemistry B*, **2020**, 124, 2354-2362	3.4	5
130	Entangled system-and-environment dynamics: Phase-space dissipaton theory. *Journal of Chemical Physics*, **2020**, 152, 041102	3.9	8
129	Hierarchical equations of motion method based on Fano spectrum decomposition for low temperature environments. *Journal of Chemical Physics*, **2020**, 152, 064107	3.9	21
128	Many-body tunneling and nonequilibrium dynamics in double quantum dots with capacitive coupling. *Journal of Physics Condensed Matter*, **2020**, 33, 075301	1.8	

127	System-bath entanglement theorem with Gaussian environments. *Journal of Chemical Physics*, **2020**, 152, 034102	3.9	4
126	Equilibrium and transient thermodynamics: A unified dissipaton-space approach. *Journal of Chemical Physics*, **2020**, 153, 154111	3.9	4
125	Stochastic Representation of Non-Markovian Fermionic Quantum Dissipation. *Physical Review Letters*, **2019**, 123, 050601	7.4	9
124	Highly efficient and accurate sum-over-poles expansion of Fermi and Bose functions at near zero temperatures: Fano spectrum decomposition scheme. *Journal of Chemical Physics*, **2019**, 151, 024110	3.9	24
123	The current-induced heat generation in a quantum dot with Andreev-Fano resonance. *Journal of Applied Physics*, **2019**, 126, 195101	2.5	0
122	Transient dynamics of a quantum-dot: From Kondo regime to mixed valence and to empty orbital regimes. *Journal of Chemical Physics*, **2018**, 148, 134111	3.9	4
121	Precise Control of Local Spin States in an Adsorbed Magnetic Molecule with an STM Tip: Theoretical Insights from First-Principles-Based Simulation. *Journal of Physical Chemistry Letters*, **2018**, 9, 2418-2425	6.4	18
120	Manipulating quantum coherence of charge states in interacting double-dot AharonovBohm interferometers. *New Journal of Physics*, **2018**, 20, 043043	2.9	4
119	Theories of quantum dissipation and nonlinear coupling bath descriptors. *Journal of Chemical Physics*, **2018**, 148, 114103	3.9	13
118	Statistical quasi-particle theory for open quantum systems. *Molecular Physics*, **2018**, 116, 780-812	1.7	12
117	On the exact truncation tier of fermionic hierarchical equations of motion. *Journal of Chemical Physics*, **2018**, 148, 234108	3.9	17
116	Dissipaton equation of motion theory versus Fokker-Planck quantum master equation. *Chinese Journal of Chemical Physics*, **2018**, 31, 245-256	0.9	5
115	A hierarchical-equation-of-motion based semiclassical approach to quantum dissipation *Chinese Journal of Chemical Physics*, **2018**, 31, 608-612	0.9	1
114	Quantum entanglement of parallel-coupled double quantum dots: A theoretical study using the hierarchical equations of motion approach *Chinese Journal of Chemical Physics*, **2018**, 31, 510-516	0.9	4
113	Kondo-peak splitting and resonance enhancement caused by interdot tunneling in coupled double quantum dots. *Physical Review B*, **2018**, 98,	3.3	12
112	Chemical Synthesis of Diubiquitin-Based Photoaffinity Probes for Selectively Profiling Ubiquitin-Binding Proteins. *Angewandte Chemie*, **2017**, 129, 2788-2792	3.6	10
111	Chemical Synthesis of Diubiquitin-Based Photoaffinity Probes for Selectively Profiling Ubiquitin-Binding Proteins. *Angewandte Chemie - International Edition*, **2017**, 56, 2744-2748	16.4	32
110	Fokker-Planck quantum master equation for mixed quantum-semiclassical dynamics. *Journal of Chemical Physics*, **2017**, 146, 024104	3.9	10

109	Manipulation of Pauli spin blockade in double quantum dot systems. *Journal of Chemical Physics*, **2017**, 146, 224304	3.9	7
108	Many-body Tunneling and Nonequilibrium Dynamics of Doublons in Strongly Correlated Quantum Dots. *Scientific Reports*, **2017**, 7, 2486	4.9	10
107	Long-range exchange interaction in triple quantum dots in the Kondo regime. *Physical Review B*, **2017**, 95,	3.3	15
106	Low-frequency logarithmic discretization of the reservoir spectrum for improving the efficiency of hierarchical equations of motion approach. *Journal of Chemical Physics*, **2017**, 147, 074111	3.9	20
105	Efficient steady-state solver for hierarchical quantum master equations. *Journal of Chemical Physics* , **2017**, 147, 044105	3.9	15
104	Ferromagnetic Phase in Nonequilibrium Quantum Dots. *Scientific Reports*, **2017**, 7, 18072	4.9	1
103	Theory of Quantum Dissipation in a Class of Non-Gaussian Environments. *Chinese Journal of Chemical Physics*, **2017**, 30, 395-403	0.9	10
102	Solvent-induced polarization dynamics and coherent two-dimensional spectroscopy: Dissipaton equation of motion approach. *Chemical Physics*, **2016**, 481, 237-244	2.3	11
101	Kinetic Rate Kernels via Hierarchical Liouville-Space Projection Operator Approach. *Journal of Physical Chemistry A*, **2016**, 120, 3241-5	2.8	9
100	HEOM-QUICK: a program for accurate, efficient, and universal characterization of strongly correlated quantum impurity systems. *Wiley Interdisciplinary Reviews: Computational Molecular Science*, **2016**, 6, 608-638	7.9	63
99	Thermodynamic meaning of local temperature of nonequilibrium open quantum systems. *Physical Review B*, **2016**, 94,	3.3	9
98	Minimum-exponents ansatz for molecular dynamics and quantum dissipation. *Journal of Chemical Physics*, **2016**, 145, 204110	3.9	11
97	Anisotropy induced Kondo splitting in a mechanically stretched molecular junction: A first-principles based study. *Journal of Chemical Physics*, **2016**, 144, 034101	3.9	22
96	Effects of Herzberg-Teller vibronic coupling on coherent excitation energy transfer. *Journal of Chemical Physics*, **2016**, 145, 204109	3.9	23
95	Dissipation equation of motion approach to open quantum systems. *Frontiers of Physics*, **2016**, 11, 1	3.7	41
94	Current noise spectra and mechanisms with dissipaton equation of motion theory. *Journal of Chemical Physics*, **2015**, 142, 234108	3.9	32
93	Time-dependent transport through quantum-impurity systems with Kondo resonance. *New Journal of Physics*, **2015**, 17, 033009	2.9	24
92	Improving the efficiency of hierarchical equations of motion approach and application to coherent dynamics in Aharonov-Bohm interferometers. *Journal of Chemical Physics*, **2015**, 142, 104112	3.9	30

91	Dissipaton Equation of Motion with Controlled Truncation*Chinese Journal of Chemical Physics*, **2015**, 28, 409-414	0.9	0
90	Dissipaton equation of motion for system-and-bath interference dynamics. *Science China Chemistry*, **2015**, 58, 1816-1824	7.9	14
89	Nonperturbative spin-boson and spin-spin dynamics and nonlinear Fano interferences: a unified dissipaton theory based study. *Journal of Chemical Physics*, **2015**, 142, 024112	3.9	28
88	Local temperatures of strongly-correlated quantum dots out of equilibrium. *Physical Review B*, **2015**, 91,	3.3	18
87	Onsets of hierarchy truncation and self-consistent Born approximation with quantum mechanics prescriptions invariance. *Journal of Chemical Physics*, **2015**, 143, 214112	3.9	12
86	Hierarchical equations of motion for an impurity solver in dynamical mean-field theory. *Physical Review B*, **2014**, 90,	3.3	27
85	Quantum transfer through a non-Markovian environment under frequent measurements and Zeno effect. *Physical Review A*, **2014**, 90,	2.6	10
84	Dynamic protein conformations preferentially drive energy transfer along the active chain of the photosystem II reaction centre. *Nature Communications*, **2014**, 5, 4170	17.4	33
83	Theory of open quantum systems with bath of electrons and phonons and spins: many-dissipaton density matrixes approach. *Journal of Chemical Physics*, **2014**, 140, 054105	3.9	83
82	Improved master equation approach to quantum transport: from Born to self-consistent Born approximation. *Journal of Chemical Physics*, **2014**, 140, 244111	3.9	18
81	Thermopower of few-electron quantum dots with Kondo correlations. *Physical Review B*, **2014**, 90,	3.3	30
80	Nonadiabatic molecular dynamics simulation: An approach based on quantum measurement picture. *AIP Advances*, **2014**, 4, 077131	1.5	19
79	Number-resolved master equation approach to quantum transport under the self-consistent Born approximation. *Science China: Physics, Mechanics and Astronomy*, **2013**, 56, 1866-1873	3.6	2
78	Time-dependent quantum transport theory and its applications to graphene nanoribbons. *Physica Status Solidi (B): Basic Research*, **2013**, 250, 2481-2494	1.3	19
77	Correlated driving and dissipation in two-dimensional spectroscopy. *Journal of Chemical Physics*, **2013**, 138, 024106	3.9	23
76	Kondo memory in driven strongly correlated quantum dots. *Physical Review Letters*, **2013**, 111, 086601	7.4	54
75	Hierarchical Liouville-space approach to nonequilibrium dynamical properties of quantum impurity systems. *Physical Review B*, **2013**, 88,	3.3	32
74	Inelastic electron transport through mesoscopic systems: Heating versus cooling and sequential tunneling versus cotunneling processes. *Physical Review B*, **2012**, 85,	3.3	22

73	Hierarchical Liouville-space approach for accurate and universal characterization of quantum impurity systems. *Physical Review Letters*, **2012**, 109, 266403	7.4	100
72	Optimizing hierarchical equations of motion for quantum dissipation and quantifying quantum bath effects on quantum transfer mechanisms. *Journal of Chemical Physics*, **2012**, 136, 224103	3.9	41
71	Large-deviation analysis for counting statistics in mesoscopic transport. *Physical Review B*, **2011**, 84,	3.3	24
70	Pad□spectrum decompositions of quantum distribution functions and optimal hierarchical equations of motion construction for quantum open systems. *Journal of Chemical Physics*, **2011**, 134, 244106	3.9	142
69	Optimized hierarchical equations of motion theory for Drude dissipation and efficient implementation to nonlinear spectroscopies. *Journal of Chemical Physics*, **2011**, 135, 164107	3.9	49
68	Quantifying quantum discord and entanglement of formation via unified purifications. *Physical Review A*, **2011**, 83,	2.6	44
67	Non-Markovian shot noise spectrum of quantum transport through quantum dots. *Journal of Applied Physics*, **2011**, 109, 053704	2.5	18
66	Communication: Pad□spectrum decomposition of Fermi function and Bose function. *Journal of Chemical Physics*, **2010**, 133, 101106	3.9	148
65	Real-time counting of single electron tunneling through a T-shaped double quantum dot system. *Journal of Applied Physics*, **2010**, 108, 083720	2.5	5
64	Biexponential theory of Drude dissipation via hierarchical quantum master equation. *Journal of Chemical Physics*, **2010**, 133, 114112	3.9	28
63	Density functional theory study of 1:1 glycine-water complexes in the gas phase and in solution. *Science China Chemistry*, **2010**, 53, 383-395	7.9	18
62	Hierarchical theory of quantum dissipation: Partial fraction decomposition scheme. *Chemical Physics*, **2010**, 370, 109-114	2.3	10
61	Numerical approach to time-dependent quantum transport and dynamical Kondo transition. *Journal of Chemical Physics*, **2009**, 130, 164708	3.9	91
60	Optical line shapes of molecular aggregates: hierarchical equations of motion method. *Journal of Chemical Physics*, **2009**, 131, 094502	3.9	107
59	Hierarchical quantum master equation with semiclassical Drude dissipation. *Journal of Chemical Physics*, **2009**, 131, 214111	3.9	31
58	Efficient hierarchical Liouville space propagator to quantum dissipative dynamics. *Journal of Chemical Physics*, **2009**, 130, 084105	3.9	178
57	Performance of Several Density Functional Theory Methods on Describing Hydrogen-Bond Interactions. *Journal of Chemical Theory and Computation*, **2009**, 5, 86-96	6.4	117
56	Complex non-Markovian effect on time-dependent quantum transport. *Journal of Chemical Physics*, **2009**, 130, 124508	3.9	40

55	Exact dynamics of driven Brownian oscillators. *Journal of Chemical Physics*, **2009**, 130, 074107	3.9	17
54	Electron transfer dynamics: Zusman equation versus exact theory. *Journal of Chemical Physics*, **2009** , 130, 164518	3.9	66
53	Exact dynamics of dissipative electronic systems and quantum transport: Hierarchical equations of motion approach. *Journal of Chemical Physics*, **2008**, 128, 234703	3.9	271
52	Dynamic electronic response of a quantum dot driven by time-dependent voltage. *Journal of Chemical Physics*, **2008**, 129, 184112	3.9	57
51	Dynamic Coulomb blockade in single-lead quantum dots. *New Journal of Physics*, **2008**, 10, 093016	2.9	48
50	Dissipative dynamic theory for open many-electron systems: Hierarchical equations-of-motion approach **2008**,		1
49	Spin-mixing dynamics in a spin-1 atomic condensate coupled with a molecular condensate. *Physical Review A*, **2008**, 77,	2.6	11
48	Conductance switching, hysteresis, and magnetoresistance in organic semiconductors. *Organic Electronics*, **2007**, 8, 487-497	3.5	26
47	Dynamics of quantum dissipation systems interacting with bosonic canonical bath: hierarchical equations of motion approach. *Physical Review E*, **2007**, 75, 031107	2.4	115
46	Quantum master equation scheme of time-dependent density functional theory to time-dependent transport in nanoelectronic devices. *Physical Review B*, **2007**, 75,	3.3	36
45	Quantum dynamics of a molecular matter-wave amplifier. *Physical Review A*, **2007**, 75,	2.6	1
44	Calculation of the current noise spectrum in mesoscopic transport: A quantum master equation approach. *Physical Review B*, **2007**, 76,	3.3	43
43	Bias-induced insulator-metal transition in organic electronics. *Applied Physics Letters*, **2007**, 91, 022115	3.4	9
42	Quantum coherence control of solid-state charge qubit by means of a suboptimal feedback algorithm. *Physical Review B*, **2006**, 73,	3.3	9
41	Optical manipulation of single electron spin in doped and undoped quantum dots. *Applied Physics Letters*, **2006**, 89, 041112	3.4	
40	Stimulated Raman adiabatic passage from atomic to molecular Bose-Einstein condensates: Feedback laser-detuning control and suppression of dynamical instability. *Physical Review A*, **2006**, 73,	2.6	16
39	EFFECTS OF PHASE-BREAKING ON LONG-RANGE CHARGE TRANSFER IN DNA: PARTIALLY-COHERENT-TUNNELING MODEL STUDY. *Journal of Theoretical and Computational Chemistry*, **2006**, 05, 317-329	1.8	1
38	Quantum transport from the perspective of quantum open systems. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2006**, 357, 449-453	2.3	30

37	Trapping and hopping of bipolarons in DNA: Su-Schrieffer-Heeger model calculations. *Physical Review B*, **2005**, 72,	3.3	13
36	Quantum mechanics of dissipative systems. *Annual Review of Physical Chemistry*, **2005**, 56, 187-219	15.7	141
35	Exact quantum master equation via the calculus on path integrals. *Journal of Chemical Physics*, **2005** , 122, 41103	3.9	208
34	Spontaneous relaxation of a charge qubit under electrical measurement. *Physical Review Letters*, **2005**, 94, 066803	7.4	66
33	Kinetic study for hopping conduction through deoxyribonucleic acid molecules. *Applied Physics Letters*, **2005**, 86, 203901	3.4	7
32	Quantum master-equation approach to quantum transport through mesoscopic systems. *Physical Review B*, **2005**, 71,	3.3	125
31	Correlation and response functions with non-Markovian dissipation: a reduced Liouville-space theory. *Journal of Chemical Physics*, **2005**, 122, 84115	3.9	22
30	Transverse localization and slow propagation of light. *Physical Review A*, **2005**, 72,	2.6	15
29	Quantum measurement of a solid-state qubit: A unified quantum master equation approach. *Physical Review B*, **2004**, 69,	3.3	32
28	Experimental and Theoretical Studies of Protein Folding-Unfolding. *Journal of the Chinese Chemical Society*, **2004**, 51, 1161-1173	1.5	6
27	Application of the Generalized Kinetic Ising Model to the Kinetics of Protein Folding. *Journal of the Chinese Chemical Society*, **2003**, 50, 335-338	1.5	7
26	Thermodynamics and kinetics of protein folding: A mean field theory. *Physical Chemistry Chemical Physics*, **2003**, 5, 5300	3.6	14
25	Highly coherent solid-state quantum bit from a pair of quantum dots. *Applied Physics Letters*, **2002**, 81, 168-170	3.4	5
24	Optimal pump□ump control and time-frequency resolved spectroscopy of ground-state wave-packet focusing. *Journal of Chemical Physics*, **2002**, 117, 6142-6147	3.9	9
23	Quantum computation with coupled quantum dots embedded in optical microcavities. *Physical Review B*, **2002**, 65,	3.3	28
22	Partially coherent tunneling through a series of barriers: Inelastic scattering versus pure dephasing. *Physical Review B*, **2002**, 65,	3.3	14
21	Theory of open quantum systems. *Journal of Chemical Physics*, **2002**, 116, 9196-9206	3.9	51
20	Interplay between partial incoherence, partial inelasticity, resonance, and heterogeneity in long-range electron transfer and transport. *Journal of Chemical Physics*, **2002**, 117, 2180-2186	3.9	8

19	Nonadiabatic geometric quantum computation with trapped ions. *Physical Review A*, **2002**, 66,	2.6	12
18	A partially incoherent rate theory of long-range charge transfer in deoxyribose nucleic acid. *Journal of Chemical Physics*, **2002**, 117, 4578-4584	3.9	74
17	Dynamical semigroup Fokker–Planck equation approach to transient absorption and fluorescence upconversion spectroscopies. *Journal of Chemical Physics*, **2001**, 114, 3868-3879	3.9	30
16	Electrical transport through individual DNA molecules. *Applied Physics Letters*, **2001**, 79, 2190-2192	3.4	83
15	Scattering matrix approach to electronic dephasing in long-range electron transfer. *Journal of Chemical Physics*, **2001**, 115, 4169-4174	3.9	30
14	Exact equivalence between the sequential long-range charge transfer rates and the electric conductances in evaluation of chemical yields. *Journal of Chemical Physics*, **2001**, 114, 8248-8250	3.9	8
13	Theory and experiment of coherent wave packet dynamics in rare earth solids: Absorption spectrum vs femtosecond fringe-resolved interferogram. *Journal of Chemical Physics*, **2001**, 114, 1870-1875	3.9	7
12	A Superexchange-Mediated Sequential Hopping Theory for Charge Transfer in DNA. *Journal of Physical Chemistry A*, **2001**, 105, 9563-9567	2.8	26
11	Unified approach to the Bloch–Redfield theory and quantum Fokker–Planck equations. *Journal of Chemical Physics*, **2000**, 113, 2068-2078	3.9	48
10	Generalized quantum Fokker–Planck theory and its application to laser driven intramolecular hydrogen transfer reactions in condensed phases. *Journal of Chemical Physics*, **2000**, 112, 6104-6112	3.9	25
9	Optimal control of multisurface molecular systems. *Journal of Chemical Physics*, **1998**, 109, 1654-1662	3.9	10
8	Quantum Fokker-Planck theory in a non-Gaussian-Markovian medium. *Physical Review A*, **1998**, 58, 2721-2732	2.8	80
7	Effective Hamiltonians of polymethineimine, polyazine and polyazoethene: A density matrix variation approach. *Journal of Chemical Physics*, **1998**, 109, 2565-2571	3.9	8
6	A classical time-frequency theory of transient absorption spectroscopy. *Journal of Chemical Physics*, **1997**, 106, 6947-6956	3.9	12
5	Optimal pump-dump control: Linearization and symmetry relation. *Journal of Chemical Physics*, **1997**, 107, 3471-3477	3.9	11
4	Semiclassical Dynamics and Quantum Control in Condensed Phases: Application to I2 in a Solid Argon Matrix. *The Journal of Physical Chemistry*, **1996**, 100, 7873-7883		26
3	Magnetic Field Dependent Kondo Transport through Double Quantum Dots System. *Annalen Der Physik*,2100439	2.6	
2	CHAPTER 13:Modified Zusman Equation for Quantum Solvation Dynamics and Rate Processes. *RSC Theoretical and Computational Chemistry Series*,319-336	1.2	2

1	Universal time-domain Prony fitting decomposition for optimized hierarchical quantum master equations. *Journal of Chemical Physics*,	3.9	3