

# Bo Y Chang

## List of Publications by Year in descending order

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50  
papers

658  
citations

567281

15  
h-index

642732

23  
g-index

50  
all docs

50  
docs citations

50  
times ranked

220  
citing authors

#	ARTICLE	IF	CITATIONS
1	Selective Excitation of Vibrational States by Shaping of Light-Induced Potentials. <i>Physical Review Letters</i> , 2000, 85, 4241-4244.	7.8	72
2	Coherent population transfer in three-level systems by chirped laser pulses: Minimization of the intermediate-level population. <i>Physical Review A</i> , 1999, 59, 4494-4501.	2.5	44
3	Light-induced trapping of molecular wave packets in the continuum. <i>Physical Review A</i> , 2003, 68, .	2.5	36
4	Selective excitation of diatomic molecules by chirped laser pulses. <i>Journal of Chemical Physics</i> , 2000, 113, 4901.	3.0	34
5	Transferring vibrational population between electronic states of diatomic molecules via light-induced-potential shaping. <i>Journal of Chemical Physics</i> , 2001, 114, 8820-8830.	3.0	34
6	Preparing wave functions by the chirped adiabatic passage scheme in manifolds of levels. <i>Physical Review A</i> , 2001, 64, .	2.5	29
7	Manipulating bond lengths adiabatically with light. <i>Journal of Chemical Physics</i> , 2003, 119, 10653-10657.	3.0	26
8	Further aspects on the control of photodissociation in light-induced potentials. <i>Journal of Chemical Physics</i> , 2009, 131, 204314.	3.0	22
9	Bond breaking in light-induced potentials. <i>Journal of Chemical Physics</i> , 2009, 130, 124320.	3.0	21
10	Ultrafast Control of the Internuclear Distance with Parabolic Chirped Pulses. <i>Journal of Physical Chemistry A</i> , 2012, 116, 2691-2697.	2.5	21
11	Quantum Control in Multilevel Systems. <i>Advances in Atomic, Molecular and Optical Physics</i> , 2018, 67, 151-256.	2.3	21
12	Inducing changes in the bond length of diatomic molecules by time-symmetric chirped pulses. <i>Physical Review A</i> , 2010, 82, .	2.5	19
13	Stationary molecular wave packets at nonequilibrium nuclear configurations. <i>Journal of Chemical Physics</i> , 2004, 121, 11118.	3.0	18
14	Adiabatic squeezing of molecular wave packets by laser pulses. <i>Journal of Chemical Physics</i> , 2005, 122, 204316.	3.0	18
15	Selective photodissociation in diatomic molecules by dynamical Stark-shift control. <i>Journal of Chemical Physics</i> , 2008, 128, 104315.	3.0	16
16	Molecular events in the light of strong fields: A light-induced potential scenario. <i>International Journal of Quantum Chemistry</i> , 2016, 116, 608-621.	2.0	15
17	Quantum Wave-Packet Dynamics in Spin-Coupled Vibronic States. <i>Journal of Physical Chemistry A</i> , 2012, 116, 11427-11433.	2.5	14
18	Ultrafast coherent control of giant oscillating molecular dipoles in the presence of static electric fields. <i>Journal of Chemical Physics</i> , 2013, 139, 084306.	3.0	14

#	ARTICLE	IF	CITATIONS
19	Oscillating molecular dipoles require strongly correlated electronic and nuclear motion. Journal of Physics B: Atomic, Molecular and Optical Physics, 2015, 48, 043001.	1.5	14
20	Electronic and vibrational population transfer in diatomic molecules as a function of chirp for different pulse bandwidths. Journal of Chemical Physics, 2003, 118, 6270-6279.	3.0	12
21	Ultrafast photodissociation assisted by strong non-resonant Stark effect: the "straddling" control pulse. Journal of Modern Optics, 2009, 56, 811-821.	1.3	11
22	Bond lengths of diatomic molecules periodically driven by light: The p-LAMB scheme. Journal of Chemical Physics, 2011, 134, 104301.	3.0	11
23	Two-Pulse Control of Large-Amplitude Vibrations in H <sub>2</sub> <sup>+</sup> . ChemPhysChem, 2013, 14, 1405-1412.	2.1	10
24	Laser adiabatic manipulation of the bond length of diatomic molecules with a single chirped pulse. Journal of Chemical Physics, 2011, 134, 144303.	3.0	9
25	Ultrafast Population Inversion without the Strong Field Catch: The Parallel Transfer. Journal of Physical Chemistry Letters, 2015, 6, 1724-1728.	4.6	9
26	Pump-dump iterative squeezing of vibrational wave packets. Journal of Chemical Physics, 2005, 123, 244101.	3.0	8
27	Wave-packet squeezing by iterative pump-dump control in diatomic molecules. Physical Review A, 2006, 73, .	2.5	8
28	Optimizing Raman Ladder Climbing: Theory and Application in Na <sub>2</sub> . Journal of Physical Chemistry A, 2001, 105, 8864-8870.	2.5	7
29	Quantum-state-selective two-photon excitation of multilevel systems assisted by the Stark shift. Physical Review A, 2007, 75, .	2.5	7
30	State-Selective Excitation of Quantum Systems via Geometrical Optimization. Journal of Chemical Theory and Computation, 2015, 11, 4005-4010.	5.3	7
31	High vibrational excitation and bond breaking by generalized Raman ladder climbing. Chemical Physics Letters, 2001, 341, 373-381.	2.6	6
32	Adiabatic and diabatic transformations as physical resources for wave packet squeezing. Physical Review A, 2006, 73, .	2.5	6
33	"Stirred, Not Shaken": Vibrational Coherence Can Speed Up Electronic Absorption. Journal of Physical Chemistry A, 2015, 119, 9091-9097.	2.5	6
34	Nonresonant electronic transitions induced by vibrational motion in light-induced potentials. Physical Chemistry Chemical Physics, 2016, 18, 25265-25270.	2.8	6
35	Anomalous Rabi Oscillations in Multilevel Quantum Systems. Physical Review Letters, 2018, 120, 133201.	7.8	6
36	The time-scale of nonlinear events driven by strong fields: can one control the spin coupling before ionization runs over?. Journal of Physics B: Atomic, Molecular and Optical Physics, 2014, 47, 124027.	1.5	5

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37	The Hydrogen molecular cation as a molecular antenna. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2015, 48, 174005.	1.5	5
38	Manipulating the singlet $\leftrightarrow$ triplet transition in ion strings by nonresonant dynamic Stark effect. <i>Theoretical Chemistry Accounts</i> , 2013, 132, 1.	1.4	4
39	Control defeasance by anti-alignment in the excited state. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 23620-23625.	2.8	4
40	Circularly polarized light-induced potentials and the demise of excited states. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 2966-2973.	2.8	4
41	Squeezing the ground vibrational state of diatomic molecules. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2006, 180, 241-247.	3.9	3
42	Raman excitation of rovibrational coherent and incoherent states via adiabatic passage assisted by dynamic Stark effect. <i>Chemical Physics</i> , 2007, 338, 228-236.	1.9	3
43	Protecting and accelerating adiabatic passage with time-delayed pulse sequences. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 13443-13448.	2.8	3
44	Laser control of the RbCs bond. <i>European Physical Journal D</i> , 2017, 71, 1.	1.3	3
45	Grid-Based Ehrenfest Model To Study Electron $\leftrightarrow$ Nuclear Processes. <i>Journal of Physical Chemistry A</i> , 2019, 123, 7171-7176.	2.5	3
46	Laser-assisted ultrafast photoassociation in HeH <sub>2</sub> <sup>+</sup> . <i>Chemical Physics</i> , 2014, 442, 18-25.	1.9	2
47	Geometrical Optimization Approach to Isomerization: Models and Limitations. <i>Journal of Physical Chemistry A</i> , 2017, 121, 8280-8287.	2.5	2
48	Squeezing Rb <sub>2</sub> wave packets with mixed adiabatic and dynamic strategies. , 2006, , 578-582.		0
49	Manipulating the singlet $\leftrightarrow$ triplet transition in ion strings by nonresonant dynamic Stark effect. <i>Highlights in Theoretical Chemistry</i> , 2014, , 79-88.	0.0	0
50	From Rabi oscillations to adiabatic passage in multi-level quantum systems with a train of weak pulses. , 2018, , .		0