

Svetlana A Malinovskaya

List of Publications by Year in descending order

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56
papers

454
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758635

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752256

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docs citations

56
times ranked

326
citing authors

#	ARTICLE	IF	CITATIONS
1	Delocalization mechanism of ferromagnetic exchange interactions in complexes of copper(II) with nitroxyl radicals. <i>Inorganic Chemistry</i> , 1992, 31, 4118-4121.	1.9	66
2	Chirped-pulse adiabatic control in coherent anti-Stokes Raman scattering for imaging of biological structure and dynamics. <i>Optics Letters</i> , 2007, 32, 707.	1.7	44
3	Theory of selective excitation in stimulated Raman scattering. <i>Physical Review A</i> , 2004, 69, .	1.0	27
4	Mode-selective excitation using ultrafast chirped laser pulses. <i>Physical Review A</i> , 2006, 73, .	1.0	23
5	Stimulated Raman adiabatic passage as a route to achieving optical control in plasmonics. <i>Physical Review A</i> , 2012, 86, .	1.0	23
6	Optimal control of population and coherence in three-level \hat{H} systems. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2011, 44, 154010.	0.6	21
7	Quantum Control in Multilevel Systems. <i>Advances in Atomic, Molecular and Optical Physics</i> , 2018, 67, 151-256.	2.3	21
8	Dynamics of proton-acetylene collisions at 30 eV. <i>Journal of Chemical Physics</i> , 2002, 117, 1103-1108.	1.2	20
9	Prevention of decoherence by two femtosecond chirped pulse trains. <i>Optics Letters</i> , 2008, 33, 2245.	1.7	19
10	Manipulation of ultracold Rb atoms using a single linearly chirped laser pulse. <i>Optics Letters</i> , 2012, 37, 2298.	1.7	17
11	Chirped pulse control methods for imaging of biological structure and dynamics. <i>International Journal of Quantum Chemistry</i> , 2007, 107, 3151-3158.	1.0	13
12	Effects of phase and coupling between the vibrational modes on selective excitation in coherent anti-Stokes Raman scattering microscopy. <i>Physical Review A</i> , 2010, 81, .	1.0	13
13	Population inversion in hyperfine states of Rb with a single nanosecond chirped pulse in the framework of a four-level system. <i>Physical Review A</i> , 2014, 89, .	1.0	11
14	Design of many-body spin states of Rydberg atoms excited to highly tunable magnetic sublevels. <i>Optics Letters</i> , 2017, 42, 314.	1.7	11
15	Adiabatic rapid passage two-photon excitation of a Rydberg atom. <i>Physica Scripta</i> , 2014, T160, 014024.	1.2	9
16	Creation of the maximum coherence via adiabatic passage in the four-wave mixing process of coherent anti-Stokes Raman scattering. <i>Chemical Physics Letters</i> , 2020, 738, 136763.	1.2	9
17	Harmonic spectral modulation of an optical frequency comb to control the ultracold molecules formation. <i>Chemical Physics Letters</i> , 2016, 664, 1-4.	1.2	8
18	Limits to remote molecular detection via coherent anti-Stokes raman spectroscopy using a maximal coherence control technique. <i>Journal of Modern Optics</i> , 2020, 67, 21-25.	0.6	8

#	ARTICLE	IF	CITATIONS
19	Violation of electronic optical selection rules in x-ray emission by nuclear dynamics: Time-dependent formulation. <i>Physical Review A</i> , 2000, 61, .	1.0	7
20	Optimal control of multilevel quantum systems in the field-interaction representation. <i>Physical Review A</i> , 2014, 90, .	1.0	7
21	Semiclassical control theory of coherent anti-Stokes Raman scattering maximizing vibrational coherence for remote detection. <i>Physical Review A</i> , 2021, 104, .	1.0	7
22	On the role of coupling in mode selective excitation using ultrafast pulse shaping in stimulated Raman spectroscopy. <i>Journal of Chemical Physics</i> , 2004, 121, 3434-3437.	1.2	6
23	Creation of quantum entangled states of Rydberg atoms via chirped adiabatic passage. <i>Scientific Reports</i> , 2021, 11, 12980.	1.6	6
24	The role of coherence and time in the mechanism of dynamical symmetry breaking and localization. <i>International Journal of Quantum Chemistry</i> , 2000, 80, 950-957.	1.0	5
25	Optimal coherence via adiabatic following. <i>Optics Communications</i> , 2009, 282, 3527-3529.	1.0	5
26	Nonadiabatic effects induced by the coupling between vibrational modes via Raman fields. <i>Physical Review A</i> , 2011, 83, .	1.0	5
27	Impact of decoherence on internal state cooling using optical frequency combs. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2013, 30, 482.	0.9	5
28	Creation of ultracold molecules within the lifetime scale by direct implementation of an optical frequency comb. <i>Journal of Modern Optics</i> , 2018, 65, 1309-1317.	0.6	5
29	Laser cooling using adiabatic rapid passage. <i>Frontiers of Physics</i> , 2021, 16, 1.	2.4	5
30	Quantum dynamics manipulation using optimal control theory in the presence of laser field noise. <i>Journal of Modern Optics</i> , 2010, 57, 1243-1250.	0.6	4
31	Robust control in ultracold alkali metals using a single linearly chirped pulse. <i>Journal of Modern Optics</i> , 2013, 60, 28-35.	0.6	4
32	Optimal coherence via chirped pulse adiabatic passage in the presence of dephasing. <i>Journal of Modern Optics</i> , 2008, 55, 3101-3108.	0.6	3
33	Ultrafast geometric control of a single qubit using chirped pulses. <i>Physica Scripta</i> , 2012, T147, 014013.	1.2	3
34	Ultrafast Manipulation of Raman Transitions and Prevention of Decoherence Using Chirped Pulses and Optical Frequency Combs. <i>Advances in Quantum Chemistry</i> , 2012, 64, 211-258.	0.4	2
35	Selective creation of maximum coherence in multi-level $\hat{\rho}$ system. <i>Molecular Physics</i> , 2014, 112, 326-331.	0.8	2
36	Collective effects in subwavelength hybrid systems: a numerical analysis. <i>Molecular Physics</i> , 2015, 113, 392-396.	0.8	2

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37	Adiabatic Passage Control Methods for Ultracold Alkali Atoms and Molecules via Chirped Laser Pulses and Optical Frequency Combs. <i>Advances in Quantum Chemistry</i> , 2018, 77, 241-294.	0.4	2
38	Exchange parameters of five-spin clusters of Cu(II) coordination compounds with imidazoline nitroxide radicals. <i>Journal of Structural Chemistry</i> , 1993, 34, 398-401.	0.3	1
39	Chirped Pulse Adiabatic Passage in CARS for Imaging of Biological Structure and Dynamics. <i>AIP Conference Proceedings</i> , 2007, , .	0.3	1
40	Robust control by two chirped pulse trains in the presence of decoherence. <i>Journal of Modern Optics</i> , 2009, 56, 784-789.	0.6	1
41	Internal state cooling with a femtosecond optical frequency comb. <i>International Journal of Quantum Chemistry</i> , 2010, 110, 3080-3085.	1.0	1
42	Feshbach-to-ultracold molecular state Raman transitions via a femtosecond optical frequency comb. <i>Journal of Modern Optics</i> , 2010, 57, 1871-1876.	0.6	1
43	Two-photon adiabatic passage in ultracold Rb interacting with a single nanosecond, chirped pulse. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2015, 48, 194001.	0.6	1
44	Method and program for magnetic susceptibility calculation of a system of clusters composed of exchange-interacting paramagnetic species including the anisotropy of g-factor and zero-field splittings. <i>Journal of Structural Chemistry</i> , 1993, 34, 394-397.	0.3	0
45	Analytical approximation of the conformational dependence of the exchange interaction parameters for axially coordinated Cu(II) complexes with nitroxides. <i>Journal of Structural Chemistry</i> , 1995, 36, 23-28.	0.3	0
46	Pulse function for control of the coherent excitation in stimulated Raman spectroscopy. <i>International Journal of Quantum Chemistry</i> , 2005, 102, 313-317.	1.0	0
47	Chirped Pulse Adiabatic Passage in CARS. , 2007, , .		0
48	An <i>ab initio</i> analysis of charge redistribution upon isomerization of retinal in rhodopsin and bacteriorhodopsin. <i>International Journal of Quantum Chemistry</i> , 2009, 109, 3131-3141.	1.0	0
49	Realization of population inversion under nonadiabatic conditions induced by the coupling between vibrational modes via Raman fields. <i>International Journal of Quantum Chemistry</i> , 2012, 112, 3739-3743.	1.0	0
50	Many-Body Physics with Spin States of Rydberg Atoms. , 2018, , .		0
51	Optimal Coherence Using Chirped Pulse Trains for Enhanced Imaging. , 2008, , .		0
52	Optimal Coherence Using Chirped Pulse Trains for Enhanced Imaging. , 2009, , .		0
53	Theory of Molecular Cooling Using Optical Frequency Combs in the Presence of Decoherence. , 2011, , .		0
54	Enhanced contrast CARS for biochemical and environmental analysis. , 2016, , .		0

#	ARTICLE	IF	CITATIONS
55	From Rabi oscillations to adiabatic passage in multi-level quantum systems with a train of weak pulses. , 2018, , .		0
56	Quantum Control of Entanglement Using Spin States in Rydberg Atoms. , 2019, , .		0