Svetlana A Malinovskaya

List of Publications by Year
in descending order

56	454	759233	752698
papers	citations	12 h-index	20 g-index

56	56	56	326
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Delocalization mechanism of ferromagnetic exchange interactions in complexes of copper(II) with nitroxyl radicals. Inorganic Chemistry, 1992, 31, 4118-4121.	4.0	66
2	Chirped-pulse adiabatic control in coherent anti-Stokes Raman scattering for imaging of biological structure and dynamics. Optics Letters, 2007, 32, 707.	3.3	44
3	Theory of selective excitation in stimulated Raman scattering. Physical Review A, 2004, 69, .	2.5	27
4	Mode-selective excitation using ultrafast chirped laser pulses. Physical Review A, 2006, 73, .	2.5	23
5	Stimulated Raman adiabatic passage as a route to achieving optical control in plasmonics. Physical Review A, 2012, 86, .	2.5	23
6	Optimal control of population and coherence in three-level Î› systems. Journal of Physics B: Atomic, Molecular and Optical Physics, 2011, 44, 154010.	1.5	21
7	Quantum Control in Multilevel Systems. Advances in Atomic, Molecular and Optical Physics, 2018, 67, 151-256.	2.3	21
8	Dynamics of proton-acetylene collisions at 30 eV. Journal of Chemical Physics, 2002, 117, 1103-1108.	3.0	20
9	Prevention of decoherence by two femtosecond chirped pulse trains. Optics Letters, 2008, 33, 2245.	3.3	19
10	Manipulation of ultracold Rb atoms using a single linearly chirped laser pulse. Optics Letters, 2012, 37, 2298.	3.3	17
11	Chirped pulse control methods for imaging of biological structure and dynamics. International Journal of Quantum Chemistry, 2007, 107, 3151-3158.	2.0	13
12	Effects of phase and coupling between the vibrational modes on selective excitation in coherent anti-Stokes Raman scattering microscopy. Physical Review A, 2010, 81, .	2.5	13
13	Population inversion in hyperfine states of Rb with a single nanosecond chirped pulse in the framework of a four-level system. Physical Review A, 2014, 89, .	2.5	11
14	Design of many-body spin states of Rydberg atoms excited to highly tunable magnetic sublevels. Optics Letters, 2017, 42, 314.	3.3	11
15	Adiabatic rapid passage two-photon excitation of a Rydberg atom. Physica Scripta, 2014, T160, 014024.	2.5	9
16	Creation of the maximum coherence via adiabatic passage in the four-wave mixing process of coherent anti-Stokes Raman scattering. Chemical Physics Letters, 2020, 738, 136763.	2.6	9
17	Harmonic spectral modulation of an optical frequency comb to control the ultracold molecules formation. Chemical Physics Letters, 2016, 664, 1-4.	2.6	8
18	Limits to remote molecular detection via coherent anti-Stokes raman spectroscopy using a maximal coherence control technique. Journal of Modern Optics, 2020, 67, 21-25.	1.3	8

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19	Violation of electronic optical selection rules in x-ray emission by nuclear dynamics: Time-dependent formulation. Physical Review A, 2000, 61, .	2.5	7
20	Optimal control of multilevel quantum systems in the field-interaction representation. Physical Review A, 2014, 90, .	2.5	7
21	Semiclassical control theory of coherent anti-Stokes Raman scattering maximizing vibrational coherence for remote detection. Physical Review A, 2021, 104, .	2.5	7
22	On the role of coupling in mode selective excitation using ultrafast pulse shaping in stimulated Raman spectroscopy. Journal of Chemical Physics, 2004, 121, 3434-3437.	3.0	6
23	Creation of quantum entangled states of Rydberg atoms via chirped adiabatic passage. Scientific Reports, 2021, 11, 12980.	3.3	6
24	The role of coherence and time in the mechanism of dynamical symmetry breaking and localization. International Journal of Quantum Chemistry, 2000, 80, 950-957.	2.0	5
25	Optimal coherence via adiabatic following. Optics Communications, 2009, 282, 3527-3529.	2.1	5
26	Nonadiabatic effects induced by the coupling between vibrational modes via Raman fields. Physical Review A, 2011, 83, .	2.5	5
27	Impact of decoherence on internal state cooling using optical frequency combs. Journal of the Optical Society of America B: Optical Physics, 2013, 30, 482.	2.1	5
28	Creation of ultracold molecules within the lifetime scale by direct implementation of an optical frequency comb. Journal of Modern Optics, 2018, 65, 1309-1317.	1.3	5
29	Laser cooling using adiabatic rapid passage. Frontiers of Physics, 2021, 16, 1.	5.0	5
30	Quantum dynamics manipulation using optimal control theory in the presence of laser field noise. Journal of Modern Optics, 2010, 57, 1243-1250.	1.3	4
31	Robust control in ultracold alkali metals using a single linearly chirped pulse. Journal of Modern Optics, 2013, 60, 28-35.	1.3	4
32	Optimal coherence via chirped pulse adiabatic passage in the presence of dephasing. Journal of Modern Optics, 2008, 55, 3101-3108.	1.3	3
33	Ultrafast geometric control of a single qubit using chirped pulses. Physica Scripta, 2012, T147, 014013.	2.5	3
34	Ultrafast Manipulation of Raman Transitions and Prevention of Decoherence Using Chirped Pulses and Optical Frequency Combs. Advances in Quantum Chemistry, 2012, 64, 211-258.	0.8	2
35	Selective creation of maximum coherence in multi-level Î› system. Molecular Physics, 2014, 112, 326-331.	1.7	2
36	Collective effects in subwavelength hybrid systems: a numerical analysis. Molecular Physics, 2015, 113, 392-396.	1.7	2

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37	Adiabatic Passage Control Methods for Ultracold Alkali Atoms and Molecules via Chirped Laser Pulses and Optical Frequency Combs. Advances in Quantum Chemistry, 2018, 77, 241-294.	0.8	2
38	Exchange parameters of five-spin clusters of Cu(II) coordination compounds with imidazoline nitroxide radicals. Journal of Structural Chemistry, 1993, 34, 398-401.	1.0	1
39	Chirped Pulse Adiabatic Passage in CARS for Imaging of Biological Structure and Dynamics. AIP Conference Proceedings, 2007, , .	0.4	1
40	Robust control by two chirped pulse trains in the presence of decoherence. Journal of Modern Optics, 2009, 56, 784-789.	1.3	1
41	Internal state cooling with a femtosecond optical frequency comb. International Journal of Quantum Chemistry, 2010, 110, 3080-3085.	2.0	1
42	Feshbach-to-ultracold molecular state Raman transitions via a femtosecond optical frequency comb. Journal of Modern Optics, 2010, 57, 1871-1876.	1.3	1
43	Two-photon adiabatic passage in ultracold Rb interacting with a single nanosecond, chirped pulse. Journal of Physics B: Atomic, Molecular and Optical Physics, 2015, 48, 194001.	1.5	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. Journal of Structural Chemistry, 1993, 34, 394-397.	1.0	0
45	Analytical approximation of the conformational dependence of the exchange interaction parameters for axially coordinated Cu(II) complexes with nitroxides. Journal of Structural Chemistry, 1995, 36, 23-28.	1.0	0
46	Pulse function for control of the coherent excitation in stimulated Raman spectroscopy. International Journal of Quantum Chemistry, 2005, 102, 313-317.	2.0	0
47	Chirped Pulse Adiabatic Passage in CARS. , 2007, , .		0
48	An ab initio analysis of charge redistribution upon isomerization of retinal in rhodopsin and bacteriorhodopsin. International Journal of Quantum Chemistry, 2009, 109, 3131-3141.	2.0	0
49	Realization of population inversion under nonadiabatic conditions induced by the coupling between vibrational modes via Raman fields. International Journal of Quantum Chemistry, 2012, 112, 3739-3743.	2.0	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