

Igor V Rubtsov

List of Publications by Year in descending order

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66
papers

2,223
citations

201674

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223800

46
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docs citations

67
times ranked

1521
citing authors

#	ARTICLE	IF	CITATIONS
1	2DIR Spectroscopy for Studies of Molecular Structure and Dynamics on Surfaces of Noble Metals. Journal of Physical Chemistry C, 2022, 126, 3314-3327.	3.1	2
2	Unidirectional coherent energy transport via conjugated oligo(<i>p</i> -phenylene) chains. Journal of Chemical Physics, 2021, 154, 134304.	3.0	7
3	Competition of Several Energy-Transport Initiation Mechanisms Defines the Ballistic Transport Speed. Journal of Physical Chemistry B, 2021, 125, 7546-7555.	2.6	1
4	Surface-enhanced ultrafast two-dimensional vibrational spectroscopy with engineered plasmonic nano-antennas. Journal of Chemical Physics, 2020, 153, 050902.	3.0	13
5	Tribute to David N. Beratan. Journal of Physical Chemistry B, 2020, 124, 3437-3440.	2.6	0
6	Proving and Probing the Presence of the Elusive C-H...O Hydrogen Bond in Liquid Solutions at Room Temperature. Angewandte Chemie - International Edition, 2020, 59, 17012-17017.	13.8	9
7	Proving and Probing the Presence of the Elusive C-H...O Hydrogen Bond in Liquid Solutions at Room Temperature. Angewandte Chemie, 2020, 132, 17160-17165.	2.0	2
8	Symmetry controlled photo-selection and charge separation in butadiyne-bridged donor-bridge-acceptor compounds. Physical Chemistry Chemical Physics, 2020, 22, 9664-9676.	2.8	6
9	Low-Temperature Vibrational Energy Transport via PEG Chains. Journal of Physical Chemistry Letters, 2020, 11, 4578-4583.	4.6	5
10	Unsymmetrical Bis-Alkynyl Complexes Based on Co(III)(cyclam): Synthesis, Ultrafast Charge Separation, and Analysis. Inorganic Chemistry, 2019, 58, 15487-15497.	4.0	10
11	Plasmonic Trimers for Dual-Frequency Surface-Enhanced Two-Dimensional Infrared Spectroscopy. Journal of Physical Chemistry C, 2019, 123, 24731-24739.	3.1	14
12	Intense-field interaction regime with weak laser pulses and localized plasmonic enhancement: Reference-free demonstration by 3rd- and 5th-order infrared spectroscopies. Journal of Chemical Physics, 2019, 151, 121103.	3.0	5
13	Ballistic and diffusive vibrational energy transport in molecules. Journal of Chemical Physics, 2019, 150, 020901.	3.0	42
14	Ballistic Transport of Vibrational Energy through an Amide Group Bridging Alkyl Chains. Journal of Physical Chemistry C, 2019, 123, 3381-3392.	3.1	11
15	Orientalional Dependence of Cofacial Porphyrin-Quinone Electronic Interactions within the Strong Coupling Regime. Journal of Physical Chemistry B, 2019, 123, 10456-10462.	2.6	8
16	Surface-Enhanced 2DIR Spectroscopy of nm-Thick Films Using Plasmonic Nano-arrays. Springer Series in Optical Sciences, 2019, , 287-310.	0.7	1
17	Radiative Enhancement of Linear and Third-Order Vibrational Excitations by an Array of Infrared Plasmonic Antennas. ACS Nano, 2018, 12, 4521-4528.	14.6	20
18	Surface-Enhanced Dual-Frequency Two-Dimensional Vibrational Spectroscopy of Thin Layers at an Interface. Journal of Physical Chemistry C, 2018, 122, 11015-11023.	3.1	21

#	ARTICLE	IF	CITATIONS
19	How can infra-red excitation both accelerate and slow charge transfer in the same molecule?. Chemical Science, 2018, 9, 6395-6405.	7.4	15

20	Azido alkanes as convenient reporters for mobility within lipid membranes. Chemical Physics, 2018, 512, 20-26.	1.9	11
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#	ARTICLE	IF	CITATIONS
37	Evaluating the Extent of Intramolecular Charge Transfer in the Excited States of Rhenium(I) Donor-acceptor Complexes with Time-Resolved Vibrational Spectroscopy. <i>Journal of Physical Chemistry B</i> , 2013, 117, 15903-15916.	2.6	19
38	Ballistic energy transport via perfluoroalkane linkers. <i>Chemical Physics</i> , 2013, 422, 16-21.	1.9	25
39	Theoretical Study of Internal Vibrational Relaxation and Energy Transport in Polyatomic Molecules. <i>Journal of Physical Chemistry A</i> , 2013, 117, 315-323.	2.5	28
40	Intramolecular vibrational coupling contribution to temperature dependence of vibrational mode frequencies. <i>Journal of Chemical Physics</i> , 2012, 136, 144503.	3.0	16
41	Discrimination between coupling networks of glucopyranosides varying at a single stereocenter using two-dimensional vibrational correlation spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 6179.	2.8	10
42	Constant-speed vibrational signaling along polyethyleneglycol chain up to 60-Å distance. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 1413-1418.	7.1	53
43	Ballistic energy transport along PEG chains: distance dependence of the transport efficiency. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 10445.	2.8	26
44	Structure Dependent Energy Transport: Relaxation-Assisted 2DIR Measurements and Theoretical Studies. <i>Journal of Physical Chemistry B</i> , 2011, 115, 11063-11073.	2.6	40
45	A Method for Determining Small Anharmonicity Values from 2DIR Spectra Using Thermally Induced Shifts of Frequencies of High-Frequency Modes. <i>Journal of Physical Chemistry B</i> , 2011, 115, 5347-5353.	2.6	31
46	Sulfoxide stretching mode as a structural reporter via dual-frequency two-dimensional infrared spectroscopy. <i>Journal of Chemical Physics</i> , 2010, 133, 144513.	3.0	20
47	Mode Coupling Pattern Changes Drastically Upon Photoisomerization in Ru ^{II} Complex. <i>Journal of Physical Chemistry C</i> , 2010, 114, 16740-16745.	3.1	15
48	Semiclassical Model for Vibrational Dynamics in Polyatomic Molecules: Investigation of Internal Vibrational Relaxation. <i>Journal of Physical Chemistry C</i> , 2010, 114, 20510-20517.	3.1	26
49	Energy transport via coordination bonds. <i>Journal of Chemical Physics</i> , 2009, 131, 154508.	3.0	41
50	Relaxation-Assisted Two-Dimensional Infrared (RA 2DIR) Method: Accessing Distances over 10 Å... and Measuring Bond Connectivity Patterns. <i>Accounts of Chemical Research</i> , 2009, 42, 1385-1394.	15.6	106
51	C ¹³ D Modes of Deuterated Side Chain of Leucine as Structural Reporters via Dual-frequency Two-dimensional Infrared Spectroscopy. <i>Journal of Physical Chemistry B</i> , 2009, 113, 4940-4946.	2.6	50
52	Modulating Unimolecular Charge Transfer by Exciting Bridge Vibrations. <i>Journal of the American Chemical Society</i> , 2009, 131, 18060-18062.	13.7	97
53	Turning Charge Transfer On and Off in a Molecular Interferometer with Vibronic Pathways. <i>Nano Letters</i> , 2009, 9, 1818-1823.	9.1	54
54	Ultrafast Excited-State Dynamics of Nanoscale Near-Infrared Emissive Polymersomes. <i>Journal of the American Chemical Society</i> , 2008, 130, 9773-9784.	13.7	45

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55	Bond connectivity measured via relaxation-assisted two-dimensional infrared spectroscopy. <i>Journal of Chemical Physics</i> , 2008, 128, 104502.	3.0	67
56	A relaxation-assisted 2D IR spectroscopy method. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 14209-14214.	7.1	142
57	Câ€D Modes as structural reporters via dual-frequency 2DIR spectroscopy. <i>Chemical Physics Letters</i> , 2007, 437, 262-266.	2.6	38
58	Dual-frequency 2D IR photon echo of a hydrogen bond. <i>Chemical Physics Letters</i> , 2005, 402, 439-443.	2.6	70
59	The Degree of Charge Transfer in Ground and Charge-Separated States Revealed by Ultrafast Visible Pump/Mid-IR Probe Spectroscopy. <i>Journal of the American Chemical Society</i> , 2004, 126, 5022-5023.	13.7	36
60	Interrogating Conformationally Dependent Electron-Transfer Dynamics via Ultrafast Visible Pump/IR Probe Spectroscopy. <i>Journal of the American Chemical Society</i> , 2004, 126, 2684-2685.	13.7	42
61	Dynamical Models in the Two-Dimensional Infrared Spectroscopy of Peptides. <i>Israel Journal of Chemistry</i> , 2004, 44, 271-280.	2.3	3
62	Vibrational Coupling between Amide-I and Amide-A Modes Revealed by Femtosecond Two Color Infrared Spectroscopy. <i>Journal of Physical Chemistry A</i> , 2003, 107, 3384-3396.	2.5	92
63	Ultrafast Singlet Excited-State Polarization in Electronically Asymmetric Ethyne-Bridged Bis[(porphinato)zinc(II)] Complexes. <i>Journal of the American Chemical Society</i> , 2003, 125, 2687-2696.	13.7	124
64	Dual-frequency 2D-IR spectroscopy heterodyned photon echo of the peptide bond. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 5601-5606.	7.1	146
65	Vibrational Dynamics, Mode Coupling, and Structural Constraints for Acetylproline-NH ₂ . <i>Journal of Physical Chemistry B</i> , 2002, 106, 9165-9171.	2.6	93
66	Distance Dependence of Electron Transfer in Rigid, Cofacially Compressed, ð-Stacked Porphyrinâ”Bridgeâ”Quinone Systems. <i>Journal of the American Chemical Society</i> , 2002, 124, 8275-8279.	13.7	66