Tiago Buckup

List of Publications by Year in descending order

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147566 223531 2,645 136 31 46 citations g-index h-index papers 138 138 138 2457 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Sub-picosecond C <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mo>=</mml:mo></mml:math> C bond photo-isomerization: evidence for the role ofÂexcited state mixing. Comptes Rendus Physique, 2021, 22, 111-138.	0.3	4
2	Charge Transfer from Photoexcited Semiconducting Single-Walled Carbon Nanotubes to Wide-Bandgap Wrapping Polymer. Journal of Physical Chemistry C, 2021, 125, 8125-8136.	1.5	9
3	Shaping and Phase Characterization of Ultrashort Pulses in the Mid-Infrared by AOM Shaper-Based D-Scan. , 2021, , .		0
4	Acousto-optic modulator based dispersion scan for phase characterization and shaping of femtosecond mid-infrared pulses. Optics Express, 2021, 29, 20970.	1.7	3
5	Bio-orthogonal Red and Far-Red Fluorogenic Probes for Wash-Free Live-Cell and Super-resolution Microscopy. ACS Central Science, 2021, 7, 1561-1571.	5.3	57
6	Broadband mid-infrared phase retrieval for nonlinear microscopy. Optics Letters, 2021, 46, 5012.	1.7	1
7	Vibrational Coherence Spectroscopy Identifies Ultrafast Branching in an Iron(II) Sensitizer. Journal of Physical Chemistry Letters, 2021, 12, 8560-8565.	2.1	7
8	Structure Set in Stone: Designing Rigid Linkers to Control the Efficiency of Intramolecular Singlet Fission. Journal of Physical Chemistry B, 2021, 125, 13235-13245.	1.2	5
9	Evaluation of Single-Reference DFT-Based Approaches for the Calculation of Spectroscopic Signatures of Excited States Involved in Singlet Fission. Journal of Physical Chemistry A, 2020, 124, 8446-8460.	1.1	10
10	Diffusion-Controlled Singlet Fission in a Chlorinated Phenazinothiadiazole by Broadband Femtosecond Transient Absorption. Journal of Physical Chemistry B, 2020, 124, 10186-10194.	1.2	6
11	Ultrafast Singlet Fission and Intersystem Crossing in Halogenated Tetraazaperopyrenes. Journal of Physical Chemistry A, 2020, 124, 7857-7868.	1.1	7
12	Energy Transfer in Aqueously Dispersed Organic Semiconductor Nanoparticles. Journal of Physical Chemistry C, 2020, 124, 27946-27953.	1.5	5
13	Unravelling the Kinetic Model of Photochemical Reactions via Deep Learning. Journal of Physical Chemistry B, 2020, 124, 6358-6368.	1.2	14
14	Ultrafast Singlet Fission in Rigid Azaarene Dimers with Negligible Orbital Overlap. Journal of Physical Chemistry B, 2020, 124, 9163-9174.	1,2	12
15	Flexible pulse shaping for sum frequency microspectroscopies. Journal of the Optical Society of America B: Optical Physics, 2020, 37, 117.	0.9	2
16	Oxygen-catalysed sequential singlet fission. Nature Communications, 2019, 10, 5202.	5.8	15
17	Homodyne Scanning and Heterodyne Multiplex Sum Frequency Spectroscopy in a Shaper Based Nonlinear Microscope. , 2019, , .		0
18	Tailoring ultrafast singlet fission by structural modification of phenazinothiadiazoles. EPJ Web of Conferences, 2019, 205, 09013.	0.1	O

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19	Mapping the ultrafast vibrational dynamics of all-trans and 13-Cis retinal isomerization in Anabaena Sensory Rhodopsin. EPJ Web of Conferences, 2019, 205, 10001.	0.1	1
20	Tailoring Ultrafast Singlet Fission by the Chemical Modification of Phenazinothiadiazoles. Journal of the American Chemical Society, 2019, 141, 8834-8845.	6.6	39
21	Unveiling the concentration dependent direct triplet formation via singlet fission in a tetracene derivative. EPJ Web of Conferences, 2019, 205, 09031.	0.1	1
22	Point Mutation of <i>Anabaena</i> Sensory Rhodopsin Enhances Ground-State Hydrogen Out-of-Plane Wag Raman Activity. Journal of Physical Chemistry Letters, 2019, 10, 1012-1017.	2.1	6
23	Isomerization Dynamics of Wild Type and Mutated Anabaena Sensory Rhodopsin Mapped by Time-Resolved Coherent Raman Spectroscopy. , 2019, , .		O
24	Singlet Fission in Tetraaza-TIPS-Pentacene Oligomers: From fs Excitation to $\hat{l}\frac{1}{4}$ s Triplet Decay via the Biexcitonic State. Journal of Physical Chemistry B, 2019, 123, 10780-10793.	1.2	24
25	Introduction to State-of-the-Art Multidimensional Time-Resolved Spectroscopy Methods. Topics in Current Chemistry Collections, 2019, , 1-25.	0.2	O
26	Multidimensional Vibrational Coherence Spectroscopy. Topics in Current Chemistry Collections, 2019, , 207-245.	0.2	4
27	Effect of point mutations on the ultrafast photo-isomerization of Anabaena sensory rhodopsin. Faraday Discussions, 2018, 207, 55-75.	1.6	18
28	Mapping the ultrafast vibrational dynamics of all- <i>trans</i> and 13- <i>cis</i> retinal isomerization in Anabaena Sensory Rhodopsin. Physical Chemistry Chemical Physics, 2018, 20, 30159-30173.	1.3	16
29	Excited State Vibrational Spectra of All- <i>trans</i> Retinal Derivatives in Solution Revealed By Pump-DFWM Experiments. Journal of Physical Chemistry B, 2018, 122, 12271-12281.	1.2	5
30	Substituting Coumarins for Quinolinones: Altering the Cycloreversion Potential Energy Landscape. Journal of Physical Chemistry A, 2018, 122, 7587-7597.	1.1	8
31	Introduction to State-of-the-Art Multidimensional Time-Resolved Spectroscopy Methods. Topics in Current Chemistry, 2018, 376, 28.	3.0	5
32	Ultrafast ring closing of a diarylethene-based photoswitchable nucleoside. Physical Chemistry Chemical Physics, 2018, 20, 22867-22876.	1.3	8
33	Multidimensional Vibrational Coherence Spectroscopy. Topics in Current Chemistry, 2018, 376, 35.	3.0	11
34	Experimental and numerical investigation of a phase-only control mechanism in the linear intensity regime. Journal of Chemical Physics, 2018, 148, 214310.	1.2	5
35	Photocleavage of coumarin dimers studied by femtosecond UV transient absorption spectroscopy. Physical Chemistry Chemical Physics, 2017, 19, 4597-4606.	1.3	23
36	Two-step kinetic model of the self-assembly mechanism for diphenylalanine micro/nanotube formation. Physical Chemistry Chemical Physics, 2017, 19, 31647-31654.	1.3	10

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37	Multiplex coherent anti-Stokes Raman scattering microspectroscopy of brain tissue with higher ranking data classification for biomedical imaging. Journal of Biomedical Optics, 2017, 22, 066005.	1.4	13
38	Minimization of $1/f^n$ phase noise in liquid crystal masks for reliable femtosecond pulse shaping. Optics Express, 2017, 25, 23376.	1.7	6
39	Exploring the Potential of Tailored Probing for a Flexible Coherent Raman Excitation Scheme. , 2016, , .		0
40	Vibronic coupling in the excited-states of carotenoids. Physical Chemistry Chemical Physics, 2016, 18, 11443-11453.	1.3	19
41	Exploring the potential of tailored spectral focusing. Journal of the Optical Society of America B: Optical Physics, 2016, 33, 1482.	0.9	28
42	Fast singleâ€beamâ€CARS imaging scheme based on ⟨i⟩in silico⟨/i⟩ optimization of excitation phases. Journal of Raman Spectroscopy, 2015, 46, 679-682.	1.2	7
43	Signatures and control of strong-field dynamics in a complex system. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 15613-15618.	3.3	17
44	Lightâ€Induced Solubility Modulation of Polyfluorene To Enhance the Performance of OLEDs. Angewandte Chemie - International Edition, 2015, 54, 14545-14548.	7.2	34
45	Enhancement of coherent anti-Stokes Raman signal via tailored probing in spectral focusing. Optics Letters, 2015, 40, 5204.	1.7	22
46	Emission Turn-On and Solubility Turn-Off in Conjugated Polymers: One- and Two-Photon-Induced Removal of Fluorescence-Quenching Solubilizing Groups. Macromolecular Rapid Communications, 2015, 36, 31-37.	2.0	11
47	Lightâ€Induced Protein Dimerization by One―and Twoâ€Photon Activation of Gibberellic Acid Derivatives in Living Cells. Angewandte Chemie - International Edition, 2015, 54, 2825-2829.	7.2	54
48	Unveiling Singlet Fission Mediating States in TIPS-pentacene and its Aza Derivatives. Journal of Physical Chemistry A, 2015, 119, 6602-6610.	1.1	65
49	Ultrafast Time-Resolved Spectroscopy of Diarylethene-Based Photoswitchable Deoxyuridine Nucleosides. Journal of Physical Chemistry Letters, 2015, 6, 4717-4721.	2.1	24
50	Ultrafast Interaction of Dark and Bright Electronic States in Open-Chain Carotenoids Investigated by Pump-DFWM. Springer Proceedings in Physics, 2015, , 440-443.	0.1	0
51	Ultrafast Interaction of Dark and Bright Electronic States in Open-Chain Carotenoids Investigated by Pump-DFWM. , 2014, , .		0
52	Multimodal nonlinear optical microscopy with shaped 10 fs pulses. Optics Express, 2014, 22, 28790.	1.7	29
53	Chemical imaging of lignocellulosic biomass by CARS microscopy. Journal of Biophotonics, 2014, 7, 126-134.	1.1	15
54	Multidimensional Time-Resolved Spectroscopy of Vibrational Coherence in Biopolyenes. Annual Review of Physical Chemistry, 2014, 65, 39-57.	4.8	50

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55	Rigid tetrazine fluorophore conjugates with fluorogenic properties in the inverse electron demand Diels–Alder reaction. Organic and Biomolecular Chemistry, 2014, 12, 4177-4185.	1.5	48
56	Acceleration of Singlet Fission in an Aza-Derivative of TIPS-Pentacene. Journal of Physical Chemistry Letters, 2014, 5, 2425-2430.	2.1	86
57	Quantum control spectroscopy: Nonlinear (micro-) spectroscopy with tailored pulses., 2014,,.		0
58	On the Investigation of Excited State Dynamics with (Pump-)Degenerate Four Wave Mixing. Springer Series in Chemical Physics, 2014, , 205-230.	0.2	2
59	Mapping Impurity of Single-Walled Carbon Nanotubes in Bulk Samples with Multiplex Coherent Anti-Stokes Raman Microscopy. Nano Letters, 2013, 13, 697-702.	4.5	13
60	Ultrafast branching in the excited state of coumarin and umbelliferone. Physical Chemistry Chemical Physics, 2013, 15, 17846.	1.3	48
61	Coherent High-Frequency Vibrational Dynamics in the Excited Electronic State of All-Trans Retinal Derivatives. Journal of Physical Chemistry Letters, 2013, 4, 383-387.	2.1	26
62	Mapping multidimensional excited state dynamics using pump-impulsive-vibrational-spectroscopy and pump-degenerate-four-wave-mixing. Physical Chemistry Chemical Physics, 2013, 15, 14487.	1.3	58
63	High frequency vibrational coherences and coupling in the excited state of polyenic biochromophores. , 2013, , .		0
64	Highlighting short-lived excited electronic states with pump-degenerate-four-wave-mixing. Journal of Chemical Physics, 2013, 139, 074202.	1.2	13
65	Elimination of twoâ€photon excited fluorescence using a singleâ€beam coherent antiâ€Stokes Raman scattering setup. Journal of Raman Spectroscopy, 2013, 44, 1379-1384.	1.2	9
66	Using a single-beam-CARS setup for the full characterization of the third-order susceptibility and elimination of strong two-photon excited fluorescence. , $2013, \ldots$		0
67	Resonant Two-Photon Excitation Pathways During Retinal-Isomerization in Bacteriorhodopsin. EPJ Web of Conferences, 2013, 41, 07019.	0.1	1
68	Vibronic Coupling in Excited Electronic States Investigated with Resonant 2D Raman Spectroscopy. EPJ Web of Conferences, 2013, 41, 05018.	0.1	4
69	Full characterization of the third-order nonlinear susceptibility using a single-beam coherent anti-Stokes Raman scattering setup. Optics Letters, 2012, 37, 4239.	1.7	18
70	Multiplexing single-beam coherent anti-stokes Raman spectroscopy with heterodyne detection. Applied Physics Letters, 2012, 100, .	1.5	20
71	Evidence for the Two-State-Two-Mode model in retinal protonated Schiff-bases from pump degenerate four-wave-mixing experiments. Physical Chemistry Chemical Physics, 2012, 14, 13979.	1.3	21
72	A Quantum Control Spectroscopy Approach by Direct UV Femtosecond Pulse Shaping. IEEE Journal of Selected Topics in Quantum Electronics, 2012, 18, 449-459.	1.9	8

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73	A General control mechanism of energy flow in the excited state of polyenic biochromophores. Faraday Discussions, 2011, 153, 213.	1.6	13
74	Vibrational analysis of excited and ground electronic states of all-trans retinal protonated Schiff-bases. Physical Chemistry Chemical Physics, 2011, 13, 21402.	1.3	22
75	Direct Observation of a Dark State in Lycopene Using Pump-DFWM. Journal of Physical Chemistry B, 2011, 115, 8328-8337.	1.2	40
76	Chemoselective imaging of mouse brain tissue via multiplex CARS microscopy. Biomedical Optics Express, 2011, 2, 2110.	1.5	45
77	Broadband Coherent Anti-Stokes Raman Microspectroscopy With Shaped Femtosecond Pulses., 2011,,.		0
78	Ground―and Excited‧tate Vibrational Coherence Dynamics in Bacteriorhodopsin Probed With Degenerate Fourâ€Waveâ€Mixing Experiments. ChemPhysChem, 2011, 12, 1851-1859.	1.0	34
79	Selective nonlinear response preparation using femtosecond spectrally resolved four-wave-mixing. Journal of Chemical Physics, 2011, 135, 224505.	1.2	15
80	Hyperspectral data processing for chemoselective multiplex coherent anti-Stokes Raman scattering microscopy of unknown samples. Journal of Biomedical Optics, 2011, 16, 021105.	1.4	29
81	Optimisation of two-photon induced cleavage of molecular linker systems for drug delivery. Journal of Photochemistry and Photobiology A: Chemistry, 2010, 210, 188-192.	2.0	14
82	Ultrafast multiphoton transient absorption of \hat{l}^2 -carotene. Chemical Physics, 2010, 373, 38-44.	0.9	15
83	Generation and characterization of phase and amplitude modulated femtosecond UV pulses. , 2010, , .		1
84	Shaper-assisted ultraviolet cross correlator. Optics Letters, 2010, 35, 1816.	1.7	3
85	Multiplex coherent anti-Stokes Raman microspectroscopy with tailored Stokes spectrum. Optics Letters, 2010, 35, 3721.	1.7	19
86	Shaper-assisted full-phase characterization of UV pulses without a spectrometer. Optics Letters, 2010, 35, 3916.	1.7	10
87	New Insights into the Excited State Relaxation Network of Carotenoids. , 2010, , .		0
88	Coherent Control for Molecular Ultrafast Spectroscopy. NATO Science for Peace and Security Series B: Physics and Biophysics, 2010, , 37-55.	0.2	0
89	Initial relaxation dynamics of retinal protonated Schiff-bases determined by Pump Degenerate Four Wave Mixing. , 2010, , .		0
90	On the paradigm of coherent control: the phase-dependent light–matter interaction in the shaping window. New Journal of Physics, 2009, 11, 105049.	1.2	11

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91	Heterodyne singleâ€beam CARS microscopy. Journal of Raman Spectroscopy, 2009, 40, 809-816.	1.2	36
92	Carotenoid deactivation in an artificial light-harvesting complex via a vibrationally hot ground state. Chemical Physics, 2009, 357, 181-187.	0.9	28
93	Multidimensional spectroscopy of \hat{l}^2 -carotene: Vibrational cooling in the excited state. Archives of Biochemistry and Biophysics, 2009, 483, 219-223.	1.4	45
94	Generation of phase-controlled ultraviolet pulses and characterization by a simple autocorrelator setup. Journal of the Optical Society of America B: Optical Physics, 2009, 26, 1538.	0.9	18
95	Quantum control spectroscopy (QCS) with a micro-electro-mechanical-system (MEMS)., 2009,,.		0
96	Coherent control of the efficiency of an artificial light-harvesting complex. Springer Series in Chemical Physics, 2009, , 454-456.	0.2	0
97	Early Time Vibrationally Hot Ground-State Dynamics in β-Carotene Investigated with Pump-Degenerate Four-Wave Mixing (Pump-DFWM). Springer Series in Chemical Physics, 2009, , 442-444.	0.2	0
98	Interferometrically Detected Femtosecond CARS in a Single Beam of Shaped Femtosecond Pulses. Springer Series in Chemical Physics, 2009, , 1009-1011.	0.2	0
99	Coherent control of matter waves passing through a conical intersection in \hat{l}^2 -carotene. Springer Series in Chemical Physics, 2009, , 436-438.	0.2	0
100	Control of Excited-State Population and Vibrational Coherence with Shaped-Resonant and Near-Resonant Excitation. Springer Series in Chemical Physics, 2009, , 460-462.	0.2	0
101	Coherently Controlled Release of Drugs in Ophthalmology. Springer Series in Chemical Physics, 2009, , 574-576.	0.2	0
102	Microanalytical nonlinear single-beam spectroscopy combining an unamplified femtosecond fibre laser, pulse shaping and interferometry. Applied Physics B: Lasers and Optics, 2008, 91, 213-217.	1.1	6
103	Quantum control spectroscopy of vibrational modes: Comparison of control scenarios for ground and excited states in \hat{l}^2 -carotene. Chemical Physics, 2008, 350, 220-229.	0.9	35
104	Parametrically amplified ultrashort pulses from a shaped photonic crystal fiber supercontinuum. Optics Letters, 2008, 33, 186.	1.7	4
105	Ultrafast Energy Transfer Dynamics of a Bioinspired Dyad Molecule. Journal of Physical Chemistry B, 2008, 112, 2678-2685.	1.2	21
106	Controlling the efficiency of an artificial light-harvesting complex. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 7641-7646.	3.3	67
107	Control of excited-state population and vibrational coherence with shaped-resonant and near-resonant excitation. Journal of Physics B: Atomic, Molecular and Optical Physics, 2008, 41, 074024.	0.6	31
108	Parametric amplification and phase management of arbitrarily shaped PCF-supercontinuum., 2007,,.		O

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109	Performance of a sound card as data acquisition system and a lock-in emulated by software in capillary electrophoresis. Talanta, 2007, 71, 1998-2002.	2.9	6
110	Shaper-assisted collinear SPIDER: fast and simple broadband pulse compression in nonlinear microscopy. Journal of the Optical Society of America B: Optical Physics, 2007, 24, 1091.	0.9	36
111	Pump-Degenerate Four Wave Mixing as a Technique for Analyzing Structural and Electronic Evolution: A Multidimensional Time-Resolved Dynamics near a Conical Intersection. Journal of Physical Chemistry A, 2007, 111, 10517-10529.	1.1	75
112	The photoinduced cleavage of coumarin dimers studied with femtosecond and nanosecond two-photon excitation. Chemical Physics Letters, 2007, 439, 308-312.	1.2	15
113	Enhancement of Raman Modes in Complex Molecules by Coherent Control. Springer Series in Chemical Physics, 2007, , 303-305.	0.2	1
114	In situ broadband pulse compression for multiphoton microscopy using a shaper-assisted collinear SPIDER. Optics Letters, 2006, 31, 1154.	1.7	43
115	Highly sensitive single-beam heterodyne coherent anti-Stokes Raman scattering. Optics Letters, 2006, 31, 2495.	1.7	83
116	Singlet versus triplet dynamics of \hat{l}^2 -carotene studied by quantum control spectroscopy. Journal of Photochemistry and Photobiology A: Chemistry, 2006, 180, 314-321.	2.0	38
117	Enhancement of molecular modes by electronically resonant multipulse excitation: Further progress towards mode selective chemistry. Journal of Chemical Physics, 2006, 125, 061101.	1.2	38
118	Pump-probe and pump-deplete-probe spectroscopies on carotenoids with N=9–15 conjugated bonds. Journal of Chemical Physics, 2006, 125, 194505.	1.2	71
119	Shaper-assisted collinear SPIDER for broadband pulse compression in multiphoton microscopy. , 2006, , .		0
120	Multiphoton quantum control spectroscopy of ß-carotene., 2006,,.		0
121	Enhancement of Raman Modes in Complex Molecules by Coherent Control., 2006,,.		O
122	Coherent Control for Spectroscopy and Manipulation of Biological Dynamics. ChemPhysChem, 2005, 6, 850-857.	1.0	111
123	Time-resolved optical Kerr-effect investigation on CS2/polystyrene mixtures. Journal of Chemical Physics, 2005, 123, 054509.	1.2	28
124	Ultrafast dynamics of biomolecules studied by quantum control., 2005, , .		0
125	Energy flow in carotenoids, studied with pump-deplete-probe, multiphoton and coherent control spectroscopy. Springer Series in Chemical Physics, 2005, , 368-370.	0.2	2
126	Time-resolved Hyper-Rayleigh Scattering. , 2004, , FB3.		0

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127	First hyperpolarizability in a new benzimidazole derivative. Chemical Physics, 2004, 305, 115-121.	0.9	37
128	Femtosecond Raman time-resolved molecular spectroscopy. Comptes Rendus Physique, 2004, 5, 215-229.	0.3	25
129	Pumpâ^'Depleteâ^'Probe Spectroscopy and the Puzzle of Carotenoid Dark States. Journal of Physical Chemistry B, 2004, 108, 3320-3325.	1.2	115
130	Energy flow in photosynthetic light harvesting: spectroscopy and control., 2004,, 91-94.		2
131	Pump-probe and pump-deplete-probe spectroscopy on carotenoids with N=9-15., 2004, , 453-456.		1
132	Micromirror SLM for femtosecond pulse shaping in the ultraviolet. Applied Physics B: Lasers and Optics, 2003, 76, 711-714.	1.1	99
133	Multichannel Carotenoid Deactivation in Photosynthetic Light Harvesting as Identified by an Evolutionary Target Analysis. Biophysical Journal, 2003, 85, 442-450.	0.2	84
134	Determination of collisional line broadening coefficients with femtosecond time-resolved CARS. Journal of Raman Spectroscopy, 2002, 33, 866-871.	1.2	21
135	First hyperpolarizability in proton-transfer benzoxazoles: computer-aided design, synthesis and study of a new model compound. Chemical Physics, 2001, 273, 1-10.	0.9	35
136	Evidence for a Polariton-Mediated Biexciton Transition in Single-Walled Carbon Nanotubes. ACS Photonics, 0, , .	3.2	1