Donatas Zigmantas

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8142191/publications.pdf

Version: 2024-02-01

70 papers	6,360 citations	101496 36 h-index	95218 68 g-index
72 all docs	72 docs citations	72 times ranked	4735 citing authors

#	Article	IF	Citations
1	Excited States and Their Dynamics in CdSe Quantum Dots Studied by Two-Color 2D Spectroscopy. Journal of Physical Chemistry Letters, 2022, 13, 1266-1271.	2.1	11
2	Beating signals in CdSe quantum dots measured by low-temperature 2D spectroscopy. Journal of Chemical Physics, 2022, 157, .	1.2	4
3	Unraveling the Ultrafast Hot Electron Dynamics in Semiconductor Nanowires. ACS Nano, 2021, 15, 1133-1144.	7.3	18
4	Intraband dynamics and exciton trapping in the LH2 complex of Rhodopseudomonas acidophila. Journal of Chemical Physics, 2021, 154, 045102.	1.2	9
5	Dynamic band-shift signal in two-dimensional electronic spectroscopy: A case of bacterial reaction center. Journal of Chemical Physics, 2021, 154, 115102.	1.2	7
6	Understanding radiative transitions and relaxation pathways in plexcitons. CheM, 2021, 7, 1092-1107.	5.8	28
7	Generation and compression of 10-fs deep ultraviolet pulses at high repetition rate using standard optics. Optics Express, 2021, 29, 25593.	1.7	7
8	Revealing vibronic coupling in chlorophyll c1 by polarization-controlled 2D electronic spectroscopy. Chemical Physics, 2020, 530, 110643.	0.9	19
9	Quantum biology revisited. Science Advances, 2020, 6, eaaz4888.	4.7	266
10	Fully symmetric dispersionless stable transmission-grating Michelson interferometer. Optics Express, 2020, 28, 37752.	1.7	6
11	Potential pitfalls of the early-time dynamics in two-dimensional electronic spectroscopy. Journal of Chemical Physics, 2019, 151, 024201.	1.2	25
12	Compressive imaging of transient absorption dynamics on the femtosecond timescale. Optics Express, 2019, 27, 10234.	1.7	3
13	Correction of Fabry-PÃ©rot interference effects in phase and amplitude pulse shapers based on liquid crystal spatial light modulators. Optics Express, 2019, 27, 22970.	1.7	6
14	Origin of the Two Bands in the B800 Ring and Their Involvement in the Energy Transfer Network of Allochromatium vinosum. Journal of Physical Chemistry Letters, 2018, 9, 1340-1345.	2.1	13
15	Identification and characterization of diverse coherences in the Fennaâ€“Matthewsâ€“Olson complex. Nature Chemistry, 2018, 10, 780-786.	6.6	177
16	Double-crossed polarization transient grating for distinction and characterization of coherences. Optics Express, 2018, 26, 32900.	1.7	2
17	Unveiling the excited state energy transfer pathways in peridinin-chlorophyll a- protein by ultrafast multi-pulse transient absorption spectroscopy. Biochimica Et Biophysica Acta - Bioenergetics, 2017, 1858, 297-307.	0.5	21
18	Two mechanisms for dissipation of excess light in monomeric and trimeric light-harvesting complexes. Nature Plants, 2017, 3, 17033.	4.7	121

#	Article	IF	Citations
19	Discrimination of Diverse Coherences Allows Identification of Electronic Transitions of a Molecular Nanoring. Journal of Physical Chemistry Letters, 2017, 8, 2344-2349.	2.1	43
20	Ultrafast coherence transfer in DNA-templated silver nanoclusters. Nature Communications, 2017, 8, 15577.	5.8	45
21	Quantum coherence as a witness of vibronically hot energy transfer in bacterial reaction center. Science Advances, 2017, 3, e1603141.	4.7	60
22	Spatially and spectrally resolved quantum path interference with chirped driving pulses. New Journal of Physics, 2016, 18, 123032.	1.2	27
23	Exciton Structure and Energy Transfer in the Fennaâ€“Matthewsâ€“Olson Complex. Journal of Physical Chemistry Letters, 2016, 7, 1653-1660.	2.1	97
24	Hot electron and hole dynamics in thiol-capped CdSe quantum dots revealed by 2D electronic spectroscopy. Physical Chemistry Chemical Physics, 2016, 18, 26199-26204.	1.3	35
25	In situ mapping of the energy flow through the entire photosynthetic apparatus. Nature Chemistry, 2016, 8, 705-710.	6.6	139
26	Real-time observation of multiexcitonic states in ultrafast singlet fission using coherent 2D electronic spectroscopy. Nature Chemistry, 2016, 8, 16-23.	6.6	308
27	Vibronic origin of long-lived coherence in an artificial molecular light harvester. Nature Communications, 2015, 6, 7755.	5.8	129
28	Coherence and population dynamics of chlorophyll excitations in FCP complex: Two-dimensional spectroscopy study. Journal of Chemical Physics, 2015, 142, 212414.	1.2	30
29	Mapping energy transfer channels in fucoxanthinâ€“chlorophyll protein complex. Biochimica Et Biophysica Acta - Bioenergetics, 2015, 1847, 241-247.	0.5	59
30	Vibrational Coherence Reveals the Role of Dark Multiexciton States in Ultrafast Singlet Exciton Fission. Springer Proceedings in Physics, 2015, , 226-229.	0.1	1
31	Transfer of vibrational coherence through incoherent energy transfer process in FÃ¶rster limit. Canadian Journal of Chemistry, 2014, 92, 135-143.	0.6	13
32	Vibrational Coherence Reveals the Role of Dark Multiexciton States in Ultrafast Singlet Exciton Fission. , 2014, , .		2
33	Unraveling the nature of coherent beatings in chlorosomes. Journal of Chemical Physics, 2014, 140, 115103.	1.2	29
34	The nature of coherences in the B820 bacteriochlorophyll dimer revealed by two-dimensional electronic spectroscopy. Physical Chemistry Chemical Physics, 2014, 16, 9930.	1.3	50
35	2D Spectroscopy Study of Water-Soluble Chlorophyll-Binding Protein from Lepidium virginicum. Journal of Physical Chemistry B, 2014, 118, 3524-3531.	1.2	34
36	Quantum coherence in photosynthesis for efficient solar-energy conversion. Nature Physics, 2014, 10, 676-682.	6.5	481

#	Article	IF	Citations
37	2D Electronic Spectroscopy Reveals Excitonic Structure in the Baseplate of a Chlorosome. Journal of Physical Chemistry Letters, 2014, 5, 1743-1747.	2.1	25
38	Detector and dispersive delay calibration issues in broadband 2D electronic spectroscopy. Journal of the Optical Society of America B: Optical Physics, 2013, 30, 1770.	0.9	20
39	Distinctive character of electronic and vibrational coherences in disordered molecular aggregates. Chemical Physics Letters, 2013, 587, 93-98.	1.2	96
40	Origin of the Bathochromic Shift of Astaxanthin in Lobster Protein: 2D Electronic Spectroscopy Investigation of Î²-Crustacyanin. Journal of Physical Chemistry B, 2013, 117, 11209-11219.	1.2	28
41	Beatings in electronic 2D spectroscopy suggest another role of vibrations in photosynthetic light harvesting. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 1148-1149.	3.3	29
42	Ultrafast Energy Transfer from Chlorophyll c₂ to Chlorophyll a in Fucoxanthinâ€“Chlorophyll Protein Complex. Journal of Physical Chemistry Letters, 2013, 4, 3590-3595.	2.1	33
43	Phase relationships of spectral oscillations in 2D molecular spectroscopy. EPJ Web of Conferences, 2013, 41, 05021.	0.1	0
44	Two-Dimensional Electronic Spectroscopy Reveals Ultrafast Energy Diffusion in Chlorosomes. Journal of the American Chemical Society, 2012, 134, 11611-11617.	6.6	101
45	Coherent Picosecond Exciton Dynamics in a Photosynthetic Reaction Center. Journal of the American Chemical Society, 2012, 134, 16484-16487.	6.6	112
46	Vibrational vs. electronic coherences in 2D spectrum of molecular systems. Chemical Physics Letters, 2012, 545, 40-43.	1.2	202
47	Two-dimensional electronic spectroscopy with double modulation lock-in detection: enhancement of sensitivity and noise resistance. Optics Express, 2011, 19, 13126.	1.7	99
48	Belt-Shaped Ï€-Systems: Relating Geometry to Electronic Structure in a Six-Porphyrin Nanoring. Journal of the American Chemical Society, 2011, 133, 17262-17273.	6.6	201
49	Optical microscopy in photosynthesis. Photosynthesis Research, 2009, 102, 111-141.	1.6	38
50	Inter-pigment interactions in the peridinin chlorophyll protein studied by global and target analysis of time resolved absorption spectra. Chemical Physics, 2009, 357, 70-78.	0.9	33
51	Kinetic Modeling of Charge-Transfer Quenching in the CP29 Minor Complex. Journal of Physical Chemistry B, 2008, 112, 13418-13423.	1.2	24
52	Nonlinear Femtosecond Optical Spectroscopy Techniques in Photosynthesis. Advances in Photosynthesis and Respiration, 2008, , 201-222.	1.0	3
53	Zeaxanthin Radical Cation Formation in Minor Light-harvesting Complexes of Higher Plant Antenna. Journal of Biological Chemistry, 2008, 283, 3550-3558.	1.6	193
54	Energy Transfer in the Major Intrinsic Light-Harvesting Complex fromAmphidinium carteraeâ€. Biochemistry, 2006, 45, 8516-8526.	1.2	76

#	Article	IF	Citations
55	Two-dimensional electronic spectroscopy of the B800-B820 light-harvesting complex. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 12672-12677.	3.3	197
56	Picosecond z-scan measurements of the two-photon absorption in beta-carotene solution over the 590-790 nm wavelength range. , 2005, , .		3
57	Carotenoid Cation Formation and the Regulation of Photosynthetic Light Harvesting. Science, 2005, 307, 433-436.	6.0	723
58	Ultrafast light-induced charge pair formation dynamics in poly[3-(2â€²-methoxy-5â€²octylphenyl)thiophene]. Physical Review B, 2004, 70, .	1.1	32
59	Effect of a conjugated carbonyl group on the photophysical properties of carotenoids. Physical Chemistry Chemical Physics, 2004, 6, 3009-3016.	1.3	215
60	Dynamics of Excited States of the Carotenoid Peridinin in Polar Solvents:Â Dependence on Excitation Wavelength, Viscosity, and Temperature. Journal of Physical Chemistry B, 2003, 107, 5339-5348.	1.2	138
61	A Near-Infrared Transient Absorption Study of the Excited-State Dynamics of the Carotenoid Spirilloxanthin in Solution and in the LH1 Complex ofRhodospirillum rubrum. Journal of Physical Chemistry B, 2003, 107, 11216-11223.	1.2	52
62	The Carotenoid S1 State in LH2 Complexes from Purple Bacteria Rhodobacter sphaeroides and Rhodopseudomonas acidophila:â€‰ S1 Energies, Dynamics, and Carotenoid Radical Formation. Journal of Physical Chemistry B, 2002, 106, 11016-11025.	1.2	93
63	Carotenoid to chlorophyll energy transfer in the peridinin-chlorophyll-a-protein complex involves an intramolecular charge transfer state. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 16760-16765.	3.3	193
64	Carotenoid S1 State in a Recombinant Light-Harvesting Complex of Photosystem II. Biochemistry, 2002, 41, 439-450.	1.2	139
65	Dynamics of vibrational relaxation in the S1 state of carotenoids having 11 conjugated C˜...C bonds. Chemical Physics Letters, 2002, 355, 465-470.	1.2	135
66	Near-Infrared Time-Resolved Study of the S1 State Dynamics of the Carotenoid Spheroidene. Journal of Physical Chemistry B, 2001, 105, 1072-1080.	1.2	107
67	Spectroscopic and Dynamic Properties of the Peridinin Lowest Singlet Excited Statesâ€. Journal of Physical Chemistry A, 2001, 105, 10296-10306.	1.1	158
68	Luminescence quenching by inter-chain aggregates in substituted polythiophenes. Journal of Photochemistry and Photobiology A: Chemistry, 2001, 144, 3-12.	2.0	36
69	Photoluminescence quenching at apolythiophene/C60heterojunction. Physical Review B, 2000, 61, 12957-12963.	1.1	225
70	Direct observation of the (forbidden) S1 state in carotenoids. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 4914-4917.	3.3	275