Anastasia V Bochenkova

List of Publications by Year
in descending order

59	1,111	394421 19	434195 31
papers	citations	h-index	g-index

64	64	64	992
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Liquid-microjet photoelectron spectroscopy of the green fluorescent protein chromophore. Nature Communications, 2022, 13, 507.	12.8	10
2	Light Driven Ultrafast Bioinspired Molecular Motors: Steering and Accelerating Photoisomerization Dynamics of Retinal. Journal of the American Chemical Society, 2022, 144, 69-73.	13.7	11
3	On the temperature of large biomolecules in ion-storage rings. European Physical Journal D, 2022, 76, 1.	1.3	5
4	A photoelectron imaging study of the deprotonated GFP chromophore anion and RNA fluorescent tags. Physical Chemistry Chemical Physics, 2021, 23, 19911-19922.	2.8	3
5	Controlling Lightâ€Induced Proton Transfer from the GFP Chromophore. ChemPhysChem, 2021, 22, 833-841.	2.1	4
6	Controlling Lightâ€Induced Proton Transfer from the GFP Chromophore. ChemPhysChem, 2021, 22, 807-807.	2.1	1
7	Insights into the Early-Time Excited-State Dynamics of Structurally Inhomogeneous Rhodopsin KR2. Journal of Physical Chemistry Letters, 2021, 12, 8664-8671.	4.6	10
8	Role of the Protein Environment in Photoisomerization of Type I and Type II Rhodopsins: a Theoretical Perspective. Moscow University Chemistry Bulletin, 2021, 76, 407-416.	0.6	2
9	Designing Red-Shifted Molecular Emitters Based on the Annulated Locked GFP Chromophore Derivatives. International Journal of Molecular Sciences, 2021, 22, 13645.	4.1	2
10	A General Mechanism of Green-to-Red Photoconversions of GFP. Frontiers in Molecular Biosciences, 2020, 7, 176.	3.5	10
11	Plasmon-Enhanced Fluorescence of EGFP on Short-Range Ordered Ag Nanohole Arrays. Nanomaterials, 2020, 10, 2563.	4.1	1
12	Mode-Specific Vibrational Autodetachment Following Excitation of Electronic Resonances by Electrons and Photons. Physical Review Letters, 2020, 124, 203401.	7.8	41
13	Intrinsic photoisomerization dynamics of protonated Schiff-base retinal. Nature Communications, 2019, 10, 1210.	12.8	39
14	Excited-state locked amino analogues of the green fluorescent protein chromophore with a giant Stokes shift. RSC Advances, 2019, 9, 38730-38734.	3.6	8
15	Potential functions of internal rotation of the methacryloyl fluoride molecule in the ground (S0) and excited (S1) electronic states. Journal of Molecular Structure, 2019, 1181, 228-234.	3.6	7
16	The UV-visible action-absorption spectrum of all-trans and 11-cis protonated Schiff base retinal in the gas phase. Physical Chemistry Chemical Physics, 2018, 20, 7190-7194.	2.8	15
17	Electronic structure of the para-dinitrobenzene radical anion: a combined 2D photoelectron imaging and computational study. Physical Chemistry Chemical Physics, 2018, 20, 24019-24026.	2.8	15
18	Mechanism of resonant electron emission from the deprotonated GFP chromophore and its biomimetics. Chemical Science, 2017, 8, 3154-3163.	7.4	38

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19	Origin of the Intrinsic Fluorescence of the Green Fluorescent Protein. Journal of the American Chemical Society, 2017, 139, 8766-8771.	13.7	75
20	Decoupling Electronic versus Nuclear Photoresponse of Isolated Green Fluorescent Protein Chromophores Using Short Laser Pulses. Physical Review Letters, 2016, 117, 243004.	7.8	22
21	A PYP chromophore acts as a â€˜photoacidâ€™ in an isolated hydrogen bonded complex. Physical Chemistry Chemical Physics, 2016, 18, 9909-9913.	2.8	9
22	Frontispiece: Direct Measurement of the Isomerization Barrier of the Isolated Retinal Chromophore. Angewandte Chemie - International Edition, 2015, 54, .	13.8	0
23	Direct Measurement of the Isomerization Barrier of the Isolated Retinal Chromophore. Journal of Physics: Conference Series, 2015, 635, 032034.	0.4	0
24	Direct Measurement of the Isomerization Barrier of the Isolated Retinal Chromophore. Angewandte Chemie - International Edition, 2015, 54, 4748-4752.	13.8	18
25	How far can a single hydrogen bond tune the spectral properties of the GFP chromophore?. Physical Chemistry Chemical Physics, 2015, 17, 20056-20060.	2.8	10
26	Hidden photoinduced reactivity of the blue fluorescent protein mKalama1. Physical Chemistry Chemical Physics, 2015, 17, 12472-12485.	2.8	14
27	UV Excitedâ€State Photoresponse of Biochromophore Negative Ions. Angewandte Chemie - International Edition, 2014, 53, 9797-9801.	13.8	36
28	Photoresponse of the protonated Schiff-base retinal chromophore in the gas phase. Physical Chemistry Chemical Physics, 2013, 15, 19566.	2.8	17
29	Photo-initiated Dynamics and Spectroscopy of the Deprotonated Green Fluorescent Protein Chromophore. Physical Chemistry in Action, 2013, , 67-103.	0.6	7
30	Ultrafast dual photoresponse of isolated biological chromophores: link to the photoinduced mode-specific non-adiabatic dynamics in proteins. Faraday Discussions, 2013, 163, 297.	3.2	59
31	Photodissociation pathways and lifetimes of protonated peptides and their dimers. Journal of Chemical Physics, 2012, 136, 014307.	3.0	10
32	Direct and Indirect Electron Emission from the Green Fluorescent Protein Chromophore. Physical Review Letters, 2012, 109, 128101.	7.8	37
33	Probing the Barrier for Internal Rotation of the Retinal Chromophore. Angewandte Chemie - International Edition, 2012, 51, 8757-8761.	13.8	8
34	The origin of radiationless conversion of the excited state in the kindling fluorescent protein (KFP): femtosecond studies and quantum modeling. Laser Physics Letters, 2011, 8, 469-474.	1.4	8
35	Modeling reaction routes from rhodopsin to bathorhodopsin. Proteins: Structure, Function and Bioinformatics, 2010, 78, 614-622.	2.6	19
36	The photophysics of isolated protein chromophores. European Physical Journal D, 2009, 51, 5-14.	1.3	20

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37	Gas Phase Absorption Studies of Photoactive Yellow Protein Chromophore Derivatives. Journal of Physical Chemistry A, 2009, 113, 9442-9449.	2.5	56
38	HArF in Solid Argon Revisited: Transition from Unstable to Stable Configuration. Journal of Physical Chemistry A, 2009, 113, 7654-7659.	2.5	24
39	Photoabsorption studies of neutral green fluorescent protein model chromophores in vacuo. Physical Chemistry Chemical Physics, 2009, 11, 9996.	2.8	41
40	Characterization of a complete cycle of acetylcholinesterase catalysis by ab initio QM/MM modeling. Journal of Molecular Modeling, 2008, 14, 409-416.	1.8	69
41	Modeling of the structure and electronic spectra of green fluorescent protein chromophore. Russian Journal of Physical Chemistry B, 2008, 2, 671-675.	1.3	25
42	Modeling Photoabsorption of the asFP595 Chromophore. Journal of Physical Chemistry A, 2008, 112, 8804-8810.	2.5	32
43	Hindered rotation of HArF in solid argon: Infrared spectroscopy and a theoretical model. Physical Review B, 2008, 77, .	3.2	14
44	Computational approaches in modeling spectra of biological chromophores. Proceedings of SPIE, 2008, , .	0.8	0
45	Remarkably efficient acid generation in chemically amplified resist from quantum chemistry modeling. Journal of Vacuum Science & Technology B, 2007, 25, 58.	1.3	0
46	Investigation of matrix-isolated species: spectroscopy and molecular modelling. Russian Chemical Reviews, 2007, 76, 1085-1092.	6.5	6
47	An Opsin Shift in Rhodopsin:â€‰ Retinal S0â^'S1 Excitation in Protein, in Solution, and in the Gas Phase. Journal of the American Chemical Society, 2007, 129, 13035-13042.	13.7	94
48	Impact of Pyrophosphate andO-Ethyl-Substituted Pyrophosphate Groups on DNA Structure. Journal of Physical Chemistry B, 2007, 111, 432-438.	2.6	9
49	Gas-Phase Spectroscopy of Protonated 3-OH Kynurenine and Argpyrimidine. Comparison of Experimental Results to Theoretical Modeling. Journal of Physical Chemistry A, 2007, 111, 10537-10543.	2.5	12
50	The role of magnesium in hydrolysis of triphosphates in water: Quantum mechanical/molecular mechanical modeling. Moscow University Chemistry Bulletin, 2007, 62, 123-127.	0.6	1
51	Accurate modeling of the S 0 -S 1 photo-absorption in biological chromophores. , 2007, , .		6
52	Molecular Modeling the Reaction Mechanism of Serine-Carboxyl Peptidases. Journal of Chemical Theory and Computation, 2006, 2, 1168-1175.	5.3	10
53	Hybrid DIM-based QM/MM approach applied to vibrational spectra and trapping site structures of HArF in solid argon. Chemical Physics Letters, 2005, 405, 165-171.	2.6	28
54	QM/MM modeling of the structures and properties of the Î²-diketonate-based lanthanide complexes. International Journal of Quantum Chemistry, 2005, 104, 203-213.	2.0	4

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55	Hybrid diatomics-in-molecules-based quantum mechanical/molecular mechanical approach applied to the modeling of structures and spectra of mixed molecular clusters Arn(HCl)m and Arn(HF)m. Journal of Chemical Physics, 2004, 120, 3732-3743.	3.0	28
56	Structures of the Peptideâ€“Water Complexes Studied by the Hybrid Quantum Mechanicalâ€”Molecular Mechanical (QM/MM) Technique. Structural Chemistry, 2004, 15, 3-9.	2.0	10
57	A QM/MM approach with effective fragment potentials applied to the dipeptideâ€“water structures. Computational and Theoretical Chemistry, 2002, 581, 167-175.	1.5	38
58	Protein Mobility Measurements through Oxidative Green-to-Red Photoconversion of EGFP. Journal of Physical Chemistry B, 0, , .	2.6	0
59	Action-Absorption Spectroscopy at the Band Origin of the Deprotonated Green Fluorescent Protein Chromophore In Vacuo. Journal of Physical Chemistry Letters, 0, , 6683-6685.	4.6	3