## Alexander V Kyrychenko

List of Publications by Year in descending order

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102 papers 2,281 citations

147566 31 h-index 253896 43 g-index

103 all docs

103
docs citations

103 times ranked 2369 citing authors

#	Article	IF	Citations
1	Solvatochromism of a D205 indoline dye at the interface of a small TiO <sub>2</sub> -anatase nanoparticle in acetonitrile: a combined molecular dynamics simulation and DFT calculation study. Molecular Simulation, 2022, 48, 99-107.	0.9	1
2	Advantages of Quantitative Analysis of Depth-Dependent Fluorescence Quenching: Case Study of BAX. Journal of Membrane Biology, 2022, 255, 461-468.	1.0	3
3	Synthesis, molecular docking, ADMET study and in vitro pharmacological research of 7-(2-chlorophenyl)-4-(4-methylthiazol-5-yl)-4,6,7,8-tetrahydroquinoline-2,5(1H,3H)-dione as a promising non-opioid analgesic drug. Research Results in Pharmacology, 2022, 8, 1-11.	0.1	1
4	Synthesis of Novel Derivatives of 5,6,7,8-Tetrahydroquinazolines Using α-Aminoamidines and In Silico Screening of Their Biological Activity. International Journal of Molecular Sciences, 2022, 23, 3781.	1.8	3
5	$\hat{l}^3$ -Cyclodextrin as a capping agent for gold nanoparticles. Computational and Theoretical Chemistry, 2021, 1194, 113060.	1.1	6
6	Conformational switching, refolding and membrane insertion of the diphtheria toxin translocation domain. Methods in Enzymology, 2021, 649, 341-370.	0.4	7
7	Progress and Achievements in Glycosylation of Flavonoids. Frontiers in Chemistry, 2021, 9, 637994.	1.8	17
8	pH-Responsive Coating of Silver Nanoparticles with Poly(2-( <i>N</i> , <i>N</i> -dimethylamino)ethyl) Tj ETQq0 0 (2021, 125, 12118-12130.	O rgBT /Ov	erlock 10 Tf 5 5
9	Structure and dynamics of TiO2-anchored D205 dye in ionic liquids and acetonitrile. Journal of Molecular Liquids, 2021, 332, 115811.	2.3	2
10	Effects of Cardiolipin on the Conformational Dynamics of Membrane-Anchored Bcl-xL. International Journal of Molecular Sciences, 2021, 22, 9388.	1.8	4
11	Lipids modulate the BH3-independent membrane targeting and activation of BAX and Bcl-xL. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	22
12	Location of TEMPO-PC in Lipid Bilayers: Implications for Fluorescence Quenching. Journal of Membrane Biology, 2020, 253, 73-77.	1.0	6
13	Adsorption behavior of $\hat{l}^2$ -cyclodextrin onto gold nanoparticles. Journal of Molecular Graphics and Modelling, 2020, 94, 107483.	1.3	11
14	Structure of the Diphtheria Toxin at Acidic pH: Implications for the Conformational Switching of the Translocation Domain. Toxins, 2020, 12, 704.	1.5	8
15	Conformational Switching in Bcl-xL: Enabling Non-Canonic Inhibition of Apoptosis Involves Multiple Intermediates and Lipid Interactions. Cells, 2020, 9, 539.	1.8	5
16	Protonation-dependent adsorption of polyarginine onto silver nanoparticles. Journal of Applied Physics, 2020, 127, 075502.	1.1	11
17	Structure and Dynamics of Pyrene-Labeled Poly(acrylic acid): Molecular Dynamics Simulation Study. Chemistry and Chemical Technology, 2020, 14, 76-80.	0.2	3
18	4'-Methoxy-3-hydroxyflavone excited state intramolecular proton transfer reaction in alcoholic solutions: Intermolecular versus intramolecular hydrogen bonding effect. Journal of Photochemistry and Photobiology A: Chemistry, 2019, 383, 111964.	2.0	8

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19	Atomistic molecular dynamics simulations of the LCST conformational transition in poly(N-vinylcaprolactam) in water. Journal of Molecular Graphics and Modelling, 2019, 90, 51-58.	1.3	27
20	Stimuli-responsive adsorption of poly(acrylic acid) onto silver nanoparticles: Role of polymer chain length and degree of ionization. Journal of Molecular Liquids, 2019, 276, 243-254.	2.3	22
21	Location of fluorescent probes (2′-hydroxy derivatives of 2,5-diaryl-1,3-oxazole) in lipid membrane studied by fluorescence spectroscopy and molecular dynamics simulation. Biophysical Chemistry, 2018, 235, 9-18.	1.5	15
22	Refining Protein Penetration into the Lipid Bilayer Using Fluorescence Quenching and Molecular Dynamics Simulations: The Case of Diphtheria Toxin Translocation Domain. Journal of Membrane Biology, 2018, 251, 379-391.	1.0	18
23	Development of colloidally stable carbazole-based fluorescent nanoaggregates. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 352, 55-64.	2.0	5
24	The role of hydrophobic modification on hyaluronic acid dynamics and self-assembly. Carbohydrate Polymers, 2018, 182, 132-141.	5.1	60
25	Derivatives of 2,5-Diaryl-1,3-Oxazole and 2,5-Diaryl-1,3,4-Oxadiazole as Environment-Sensitive Fluorescent Probes for Studies of Biological Membranes. Reviews in Fluorescence, 2018, , 199-230.	0.5	6
26	Molecular dynamics simulation of the size-dependent morphological stability of cubic shape silver nanoparticles. Molecular Simulation, 2018, 44, 981-991.	0.9	26
27	Probing the self-assembly dynamics and internal structure of amphiphilic hyaluronic acid conjugates by fluorescence spectroscopy and molecular dynamics simulations. Soft Matter, 2018, 14, 4762-4771.	1.2	20
28	Fluorescence tools for studies of membrane protein insertion. Biopolymers and Cell, 2018, 34, 251-270.	0.1	3
29	Joint refinement of FRET measurements using spectroscopic and computational tools. Analytical Biochemistry, 2017, 522, 1-9.	1.1	21
30	Poly(vinyl alcohol) as a water protecting agent for silver nanoparticles: the role of polymer size and structure. Physical Chemistry Chemical Physics, 2017, 19, 8742-8756.	1.3	97
31	Fluorescence Applications for Structural and Thermodynamic Studies of Membrane Protein Insertion. Reviews in Fluorescence, 2017, , 243-274.	0.5	3
32	Computational refinement of spectroscopic FRET measurements. Data in Brief, 2017, 12, 213-221.	0.5	7
33	Interplay between Hydrophobic and Electrostatic Interactions in Protonation-Dependent Insertion of Transmembrane Helices. Biophysical Journal, 2016, 110, 573a.	0.2	О
34	Nonlinear optical properties of silicon carbide (SiC) nanoparticles by carbothermal reduction., 2016,,		2
35	Thermodynamics of Membrane Insertion and Refolding of the Diphtheria Toxin T-Domain. Journal of Membrane Biology, 2015, 248, 383-394.	1.0	14
36	Moving along the Free Energy Landscape of Membrane Insertion of the Diphtheria Toxin Translocation Domain. Biophysical Journal, 2015, 108, 497a.	0.2	О

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37	New fluorenonocrownophanes containing azobenzene: synthesis, properties and interaction with paraquat. Journal of Inclusion Phenomena and Macrocyclic Chemistry, 2015, 81, 499-508.	0.9	6
38	Lipid Headgroups Modulate Membrane Insertion of pHLIP Peptide. Biophysical Journal, 2015, 108, 791-794.	0.2	50
39	Atomistic Simulations of Coating of Silver Nanoparticles with Poly(vinylpyrrolidone) Oligomers: Effect of Oligomer Chain Length. Journal of Physical Chemistry C, 2015, 119, 7888-7899.	1.5	125
40	NANOGOLD decorated by pHLIP peptide: comparative force field study. Physical Chemistry Chemical Physics, 2015, 17, 12648-12660.	1.3	25
41	Using fluorescence for studies of biological membranes: a review. Methods and Applications in Fluorescence, 2015, 3, 042003.	1.1	33
42	Calibration of Distribution Analysis of the Depth of Membrane Penetration Using Simulations and Depth-Dependent Fluorescence Quenching. Journal of Membrane Biology, 2015, 248, 583-594.	1.0	31
43	Structural Plasticity in the Topology of the Membrane-Interacting Domain of HIV-1 gp41. Biophysical Journal, 2014, 106, 610-620.	0.2	22
44	Refining membrane penetration by a combination of steady-state and time-resolved depth-dependent fluorescence quenching. Analytical Biochemistry, 2014, 446, 19-21.	1.1	15
45	Excited-State Dynamics of an Environment-Sensitive Push–Pull Diketopyrrolopyrrole: Major Differences between the Bulk Solution Phase and the Dodecane/Water Interface. Journal of Physical Chemistry B, 2014, 118, 9952-9963.	1.2	37
46	Structural Plasticity in the Topology of Membrane-Spanning Domain of HIV-1 gp41. Biophysical Journal, 2014, 106, 507a.	0.2	0
47	Refining Analysis of Membrane Penetration with Depth-Dependent Fluorescence Quenching and Molecular Dynamics Simulations. Biophysical Journal, 2014, 106, 507a.	0.2	O
48	Validation of Depth-Dependent Fluorescence Quenching in Membranes by Molecular Dynamics Simulation of Tryptophan Octyl Ester in POPC Bilayer. Journal of Physical Chemistry B, 2013, 117, 4770-4778.	1.2	14
49	pH-Triggered Conformational Switching of the Diphtheria Toxin T-Domain: The Roles of N-Terminal Histidines. Journal of Molecular Biology, 2013, 425, 2752-2764.	2.0	42
50	Molecular Dynamics Simulations of Depth Distribution of Spin-Labeled Phospholipids within Lipid Bilayer. Journal of Physical Chemistry B, 2013, 117, 5875-5885.	1.2	49
51	Effect of acetone accumulation on structure and dynamics of lipid membranes studied by molecular dynamics simulations. Computational Biology and Chemistry, 2013, 46, 23-31.	1.1	33
52	Comparison of Various Methods for Determining Functional Activity of the Diphtheria Toxin T-Domain. Biophysical Journal, 2012, 102, 244a-245a.	0.2	0
53	Replacement of C-Terminal Histidines Uncouples Membrane Insertion and Translocation in Diphtheria Toxin T-Domain. Biophysical Journal, 2012, 102, 245a.	0.2	O
54	Fluorescence Probing of Thiol-Functionalized Gold Nanoparticles: Is Alkylthiol Coating of a Nanoparticle as Hydrophobic as Expected?. Journal of Physical Chemistry C, 2012, 116, 21059-21068.	1.5	33

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55	Thermodynamic Measurements of Bilayer Insertion of a Single Transmembrane Helix Chaperoned by Fluorinated Surfactants. Journal of Molecular Biology, 2012, 416, 328-334.	2.0	17
56	Folding of diphtheria toxin T-domain in the presence of amphipols and fluorinated surfactants: Toward thermodynamic measurements of membrane protein folding. Biochimica Et Biophysica Acta - Biomembranes, 2012, 1818, 1006-1012.	1.4	22
57	Thermodynamic Measurements of Bilayer Insertion of a Single Transmembrane Helix. Biophysical Journal, 2012, 102, 471a.	0.2	0
58	Mechanism of the pH-Triggered Formation of Membrane-Competent State of the Diphtheria Toxin Translocation Domain Revealed by Simulations and Experiment. Biophysical Journal, 2011, 100, 206a.	0.2	0
59	Conformational Switching of the Diphtheria Toxin T-Domain. Biophysical Journal, 2011, 100, 8a.	0.2	0
60	Replacement of C-Terminal Histidines Uncouples Membrane Insertion and Translocation in Diphtheria Toxin T-Domain. Biophysical Journal, 2011, 101, L41-L43.	0.2	27
61	Preparation, structure, and a coarse-grained molecular dynamics model for dodecanethiol-stabilized gold nanoparticles. Computational and Theoretical Chemistry, 2011, 977, 34-39.	1.1	40
62	Partitioning of 2,6-Bis(1H-Benzimidazol-2-yl)pyridine fluorophore into a phospholipid bilayer: Complementary use of fluorescence quenching studies and molecular dynamics simulations. Biophysical Chemistry, 2011, 154, 8-17.	1.5	40
63	Steady-state and time-resolved fluorescence quenching with transition metal ions as short-distance probes for protein conformation. Analytical Biochemistry, 2010, 407, 284-286.	1.1	22
64	A molecular dynamics model of rhodamine-labeled phospholipid incorporated into a lipid bilayer. Chemical Physics Letters, 2010, 485, 95-99.	1.2	34
65	Conformational Switching of the Diphtheria Toxin T Domain. Journal of Molecular Biology, 2010, 402, 1-7.	2.0	44
66	Kinetic and Thermodynamic Studies of pH-Triggered Membrane Insertion of Diphtheria Toxin T-Domain. Biophysical Journal, 2010, 98, 485a.	0.2	0
67	Thermodynamics of Interfacial Membrane Binding and Transmembrane Insertion of Diphtheria Toxin T-Domain: Fluorescence Correlation Spectroscopy Study. Biophysical Journal, 2010, 98, 624a.	0.2	0
68	High-performance time-resolved fluorescence by direct waveform recording. Review of Scientific Instruments, 2010, 81, 103101.	0.6	55
69	Partitioning and Localization of Environment-Sensitive 2-(2′-Pyridyl)- and 2-(2′-Pyrimidyl)-Indoles in Lipid Membranes: A Joint Refinement Using Fluorescence Measurements and Molecular Dynamics Simulations. Journal of Physical Chemistry B, 2010, 114, 13574-13584.	1.2	36
70	From the Gas Phase to a Lipid Membrane Environment: DFT and MD Simulations of Structure and Dynamics of Hydrogen-Bonded Solvates of Bifunctional Heteroazaaromatic Compounds. Challenges and Advances in Computational Chemistry and Physics, 2010, , 35-75.	0.6	2
71	Thermodynamic and Kinetic Analysis of Membrane Protein Insertion: Case of Diphtheria Toxin Tâ€Domain. FASEB Journal, 2010, 24, 478.1.	0.2	O
72	Kinetic Intermediate Reveals Staggered pH-Dependent Transitions along the Membrane Insertion Pathway of the Diphtheria Toxin T-Domain. Biochemistry, 2009, 48, 7584-7594.	1.2	50

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73	pH-Triggered Membrane Insertion Pathway of the Diphtheria Toxin T-Domain: 2. Role of Histidines. Biophysical Journal, 2009, 96, 433a.	0.2	О
74	Can We Measure the Thermodynamic Stability of Membrane Proteins in a Lipid Bilayer Environment?. Biophysical Journal, 2009, 96, 333a.	0.2	0
75	pH-Triggered Membrane Insertion Pathway of the Diphtheria Toxin T-Domain: 1. Insertion/Refolding Intermediate. Biophysical Journal, 2009, 96, 433a.	0.2	O
76	Molecular dynamics simulations of microstructure and mixing dynamics of cryoprotective solvents in water and in the presence of a lipid membrane. Biophysical Chemistry, 2008, 136, 23-31.	1,5	29
77	Distribution and favorable binding sites of pyrroloquinoline and its analogues in a lipid bilayer studied by molecular dynamics simulations. Biophysical Chemistry, 2008, 136, 128-135.	1.5	20
78	Interactions of Fluorinated Surfactants with Diphtheria Toxin T-Domain: Testing New Media for Studies of Membrane Proteins. Biophysical Journal, 2008, 94, 4348-4357.	0.2	49
79	Separation of Different Hydrogen-Bonded Clusters by Femtosecond UV-Ionization-Detected Infrared Spectroscopy:  1H-Pyrrolo[3,2-h]quinoline·(H2O)n=1,2 Complexes. Journal of Physical Chemistry A, 2008, 112, 1150-1156.	1.1	35
80	Matrix isolation spectroscopy and molecular dynamics simulations for 2,7,12,17-tetra-tert-butylporphycene in argon and xenon. Journal of Chemical Physics, 2007, 127, 134501.	1,2	4
81	Fluorescence quenching in cyclic hydrogen-bonded complexes of 1H-pyrrolo[3,2-h]quinoline with methanol: cluster size effect. Physical Chemistry Chemical Physics, 2007, 9, 3276.	1.3	34
82	Singlet Energy Transfer in Porphyrin-Based Donorâ^Bridgeâ^'Acceptor Systems:  Interaction between Bridge Length and Bridge Energy. Journal of Physical Chemistry A, 2006, 110, 310-318.	1.1	104
83	Excited-State Proton Transfer through Water Bridges and Structure of Hydrogen-Bonded Complexes in 1H-Pyrrolo[3,2-h]quinoline:  Adiabatic Time-Dependent Density Functional Theory Study. Journal of Physical Chemistry A, 2006, 110, 11958-11967.	1.1	74
84	Detection and Structural Characterization of Clusters with Ultrashort-Lived Electronically Excited States:Â IR Absorption Detected by Femtosecond Multiphoton Ionization. Journal of the American Chemical Society, 2006, 128, 10000-10001.	6.6	42
85	Fluorescence behavior of chromones containing several protolytic centers. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2006, 65, 397-405.	2.0	11
86	Molecular dynamics simulations of matrix deposition. III. Site structure analysis for porphycene in argon and xenon. Journal of Chemical Physics, 2005, 123, 064706.	1,2	11
87	Molecular dynamics and density functional theory simulations of matrix deposition. II. Absolute site structure assignment for porphyrin in xenon. Journal of Chemical Physics, 2004, 121, 12017-12025.	1,2	8
88	Molecular dynamics simulations of matrix deposition. I. Site structure analysis for porphyrin in argon and xenon. Journal of Chemical Physics, 2003, 119, 7318-7327.	1,2	15
89	Photoinduced intramolecular electron transfer in 4-dimethylaminopyridinesDedicated to Professor Dr Z. R. Grabowski and Professor Dr J. Wirz on the occasions of their 75th and 60th birthdays Physical Chemistry Chemical Physics, 2003, 5, 1032-1038.	1.3	37
90	Excited states of 4-dimethylaminopyridines: Magnetic circular dichroism and computational studies. Photochemical and Photobiological Sciences, 2003, 2, 187-194.	1.6	16

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91	Sterically Induced Conformational Relaxation and Structure ofmeso-Diaryloctaalkyl Porphyrins in the Excited Triplet State:Â Experimental and DFT Studies. Journal of Physical Chemistry B, 2002, 106, 12613-12622.	1.2	32
92	MOLECULAR STRUCTURE AND PHOTOPHYSICS OF N-QUATERNARY DIARYLOXAZOLIUM SALTS. Spectroscopy Letters, 2002, 35, 171-181.	0.5	2
93	Temperature and viscosity dependence of the triplet energy transfer process in porphyrin dimers. Photochemical and Photobiological Sciences, 2002, 1, 111-119.	1.6	31
94	Conformer-dependent electronic coupling for long-range triplet energy transfer in donor-bridge-acceptor porphyrin dimers. Chemical Physics Letters, 2002, 366, 291-299.	1.2	34
95	Molecular structure, fluorescent properties and dynamics of excited state structural relaxation of the oxadiazolic ortho -analog of POPOP with the additional sterical hindrance. Journal of Molecular Structure, 2000, 524, 289-296.	1.8	14
96	Title is missing!. Journal of Fluorescence, 2000, 10, 41-48.	1.3	13
97	Molecular Dynamics and DFT Studies of Intermolecular Hydrogen Bonds between Bifunctional Heteroazaaromatic Molecules and Hydroxylic Solvents. Journal of Physical Chemistry A, 2000, 104, 9542-9555.	1.1	55
98	Solvent-Inducedsynâ^'antiRotamerization of 2-(2â€~-Pyridyl)indole and the Structure of its Alcohol Complexes. Journal of the American Chemical Society, 2000, 122, 2818-2827.	6.6	64
99	Photoinduced Double Proton Transfer: Inter―and Intramolecular Cases. Israel Journal of Chemistry, 1999, 39, 309-318.	1.0	40
100	Role of Ground State Structure in Photoinduced Tautomerization in Bifunctional Proton Donorâ^'Acceptor Molecules:Â 1H-Pyrrolo[3,2-h]quinoline and Related Compounds. Journal of the American Chemical Society, 1999, 121, 11179-11188.	6.6	60
101	Spectral properties and dynamics of the excited state structural relaxation of the ortho analogues of POPOP — Effective abnormally large Stokes shift luminophores. Journal of Photochemistry and Photobiology A: Chemistry, 1996, 94, 15-26.	2.0	60
102	Structure of sterically hindered aryl derivatives of five-membered nitrogen containing heterocyclicortho-analogs of POPOP. Molecular Engineering, 1994, 3, 353-363.	0.2	13