

Valerică Raicu

List of Publications by Year in descending order

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51
papers

1,478
citations

304743

22
h-index

330143

37
g-index

56
all docs

56
docs citations

56
times ranked

1376
citing authors

#	ARTICLE	IF	CITATIONS
1	Determination of supramolecular structure and spatial distribution of protein complexes in living cells. <i>Nature Photonics</i> , 2009, 3, 107-113.	31.4	102
2	The sigma-1 receptors are present in monomeric and oligomeric forms in living cells in the presence and absence of ligands. <i>Biochemical Journal</i> , 2015, 466, 263-271.	3.7	101
3	Fully quantified spectral imaging reveals <i>in vivo</i> membrane protein interactions. <i>Integrative Biology (United Kingdom)</i> , 2016, 8, 216-229.	1.3	82
4	Protein interaction quantified in vivo by spectrally resolved fluorescence resonance energy transfer. <i>Biochemical Journal</i> , 2005, 385, 265-277.	3.7	77
5	The muscarinic M3 acetylcholine receptor exists as two differently sized complexes at the plasma membrane. <i>Biochemical Journal</i> , 2013, 452, 303-312.	3.7	72
6	Two SERK Receptor-Like Kinases Interact with EMS1 to Control Anther Cell Fate Determination. <i>Plant Physiology</i> , 2017, 173, 326-337.	4.8	72
7	Efficiency of Resonance Energy Transfer in Homo-Oligomeric Complexes of Proteins. <i>Journal of Biological Physics</i> , 2007, 33, 109-127.	1.5	71
8	Dielectric properties of yeast cells as simulated by the two-shell model. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1996, 1274, 143-148.	1.0	65
9	Oligomeric Size of the M2 Muscarinic Receptor in Live Cells as Determined by Quantitative Fluorescence Resonance Energy Transfer. <i>Journal of Biological Chemistry</i> , 2010, 285, 16723-16738.	3.4	63
10	Understanding the FRET Signatures of Interacting Membrane Proteins. <i>Journal of Biological Chemistry</i> , 2017, 292, 5291-5310.	3.4	62
11	Development and Experimental Testing of an Optical Micro-Spectroscopic Technique Incorporating True Line-Scan Excitation. <i>International Journal of Molecular Sciences</i> , 2014, 15, 261-276.	4.1	57
12	Blue/violet laser inactivates methicillin-resistant <i>Staphylococcus aureus</i> by altering its transmembrane potential. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2017, 170, 118-124.	3.8	55
13	FRET Spectrometry: A New Tool for the Determination of Protein Quaternary Structure in Living Cells. <i>Biophysical Journal</i> , 2013, 105, 1937-1945.	0.5	54
14	Carbonic Anhydrases Function in Anther Cell Differentiation Downstream of the Receptor-Like Kinase EMS1. <i>Plant Cell</i> , 2017, 29, 1335-1356.	6.6	52
15	Quaternary structures of opsin in live cells revealed by FRET spectrometry. <i>Biochemical Journal</i> , 2016, 473, 3819-3836.	3.7	48
16	A general method to quantify ligand-driven oligomerization from fluorescence-based images. <i>Nature Methods</i> , 2019, 16, 493-496.	19.0	47
17	The relative antimicrobial effect of blue 405Ånm LED and blue 405Ånm laser on methicillin-resistant <i>Staphylococcus aureus</i> in vitro. <i>Lasers in Medical Science</i> , 2015, 30, 2265-2271.	2.1	43
18	Real-time monitoring of two-photon photopolymerization for use in fabrication of microfluidic devices. <i>Lab on A Chip</i> , 2009, 9, 819-827.	6.0	38

#	ARTICLE	IF	CITATIONS
19	Crosstalk between a regulatory small RNA, cyclic GMP signalling and flagellar regulator FlhDC for virulence and bacterial behaviours. <i>Environmental Microbiology</i> , 2015, 17, 4745-4763.	3.8	34
20	Determination of the quaternary structure of a bacterial ATP-binding cassette (ABC) transporter in living cells. <i>Integrative Biology (United Kingdom)</i> , 2013, 5, 312-323.	1.3	31
21	Comparison between Whole Distribution- and Average-Based Approaches to the Determination of Fluorescence Resonance Energy Transfer Efficiency in Ensembles of Proteins in Living Cells. <i>Biophysical Journal</i> , 2010, 98, 2127-2135.	0.5	28
22	Quaternary structure of the yeast pheromone receptor Ste2 in living cells. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2017, 1859, 1456-1464.	2.6	28
23	Determination of the Fe~CO Bond Energy in Myoglobin Using Heterodyne-Detected Transient Thermal Phase Grating Spectroscopy. <i>Journal of Physical Chemistry B</i> , 2005, 109, 20605-20611.	2.6	20
24	Non-Debye dielectric relaxation in biological structures arises from their fractal nature. <i>Physical Review E</i> , 2001, 64, 021916.	2.1	19
25	Experimental Verification of the Kinetic Theory of FRET Using Optical Microspectroscopy and Obligate Oligomers. <i>Biophysical Journal</i> , 2015, 108, 1613-1622.	0.5	19
26	An Ire~Phk1 Chimera Reveals a Dispensable Role of Autokinase Activity in Endoplasmic Reticulum Stress Response. <i>Journal of Molecular Biology</i> , 2013, 425, 2083-2099.	4.2	17
27	Chemokine receptor CXCR4 oligomerization is disrupted selectively by the antagonist ligand IT1t. <i>Journal of Biological Chemistry</i> , 2021, 296, 100139.	3.4	15
28	In-Cell Detection of Conformational Substates of a G Protein-Coupled Receptor Quaternary Structure: Modulation of Substate Probability by Cognate Ligand Binding. <i>Journal of Physical Chemistry B</i> , 2020, 124, 10062-10076.	2.6	10
29	Comparative photophysical properties of some widely used fluorescent proteins under two-photon excitation conditions. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2021, 262, 120133.	3.9	10
30	Fluorescence-based Methods for the Study of Protein-Protein Interactions Modulated by Ligand Binding. <i>Current Pharmaceutical Design</i> , 2020, 26, 5668-5683.	1.9	10
31	Quantitative microspectroscopic imaging reveals viral and cellular RNA helicase interactions in live cells. <i>Journal of Biological Chemistry</i> , 2017, 292, 11165-11177.	3.4	9
32	Extraction of information on macromolecular interactions from fluorescence micro-spectroscopy measurements in the presence and absence of FRET. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2018, 199, 340-348.	3.9	6
33	Ab Initio Derivation of the FRET Equations Resolves Old Puzzles and Suggests Measurement Strategies. <i>Biophysical Journal</i> , 2019, 116, 1313-1327.	0.5	6
34	Reply to: Spatial heterogeneity in molecular brightness. <i>Nature Methods</i> , 2020, 17, 276-278.	19.0	6
35	Investigation of dielectric relaxation in systems with hierarchical organization: From time to frequency domain and back again. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2017, 381, 1981-1988.	2.1	5
36	Fluorescence intensity fluctuation analysis of receptor oligomerization in membrane domains. <i>Biophysical Journal</i> , 2021, 120, 3028-3039.	0.5	5

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37	Advanced Microscopy Techniques. , 2017, , 39-75.		4
38	Adaptation to Endoplasmic Reticulum Stress Requires Transphosphorylation within the Activation Loop of Protein Kinases Kin1 and Kin2, Orthologs of Human Microtubule Affinity-Regulating Kinase. Molecular and Cellular Biology, 2018, 38, .	2.3	4
39	Proposal for simultaneous analysis of fluorescence intensity fluctuations and resonance energy transfer (IFRET) measurements. Methods and Applications in Fluorescence, 2020, 8, 035011.	2.3	4
40	The M ₁ muscarinic receptor is present in situ as a ligand-regulated mixture of monomers and oligomeric complexes. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	4
41	Combined spectrally-resolved multiphoton microscopy and transmission microscopy employing a high-sensitivity electron-multiplying CCD camera. , 2007, , .		3
42	In vivo Quantification of G Protein Coupled Receptor Interactions using Spectrally Resolved Two-photon Microscopy. Journal of Visualized Experiments, 2011, , .	0.3	3
43	Dielectric Spectroscopy Based Detection of Specific and Nonspecific Cellular Mechanisms. Sensors, 2021, 21, 3177.	3.8	3
44	Quantifying the efficiency of various FRET constructs using OptiMiS ₂ . BioTechniques, 2012, 52, 191-195.	1.8	3
45	Determination of two-photon excitation and emission spectra of fluorescent molecules in single living cells. , 2008, , .		2
46	Relaxation in systems with hierarchical organization: Analytical derivation of the relaxation and dispersion functions. Physics Letters, Section A: General, Atomic and Solid State Physics, 2019, 383, 1063-1070.	2.1	2
47	Tissue Factor Oligomerization in Living Cells Using Förster Resonance Energy Transfer. Microscopy and Microanalysis, 2020, 26, 828-829.	0.4	2
48	Fluorescence Intensity Fluctuation Analysis of Protein Oligomerization in Cell Membranes. Current Protocols, 2022, 2, e384.	2.9	2
49	New Techniques to Study Intracellular Receptors in Living Cells: Insights Into RIG-I-Like Receptor Signaling. Advances in Experimental Medicine and Biology, 2018, 1111, 219-240.	1.6	1
50	Real time monitoring of the evolution of an epidemic regarded as a physical relaxation process. Physics Letters, Section A: General, Atomic and Solid State Physics, 2021, 388, 127074.	2.1	0
51	Potentials induced by applied electrical fields in and around particles comprised of four dielectric layers. Bioelectrochemistry, 2022, 144, 108039.	4.6	0