Luis A Bagatolli

List of Publications by Year
in descending order

127 papers	8,873 citations	50276 46 h-index	42399 92 g-index
133 all docs	133 docs citations	133 times ranked	7540 citing authors

#	Article	IF	Citations
1	Dengue and Zika virus capsid proteins bind to membranes and self-assemble into liquid droplets with nucleic acids. Journal of Biological Chemistry, 2021, 297, 101059.	3.4	20
2	Lipids, membranes, colloids and cells: A long view. Biochimica Et Biophysica Acta - Biomembranes, 2021, 1863, 183684.	2.6	16
3	Impact of macromolecular crowding on the mesomorphic behavior of lipid self-assemblies. Biochimica Et Biophysica Acta - Biomembranes, 2021, 1863, 183728.	2.6	5
4	Glycolytic oscillations and intracellular K+ concentration are strongly coupled in the yeast Saccharomyces cerevisiae. Archives of Biochemistry and Biophysics, 2020, 681, 108257.	3.0	10
5	Inductive effects in amino acids and peptides: Ionization constants and tryptophan fluorescence. Biochemistry and Biophysics Reports, 2020, 24, 100802.	1.3	5
6	Cellular metabolism and colloids: Realistically linking physiology and biological physical chemistry. Progress in Biophysics and Molecular Biology, 2020, 162, 79-88.	2.9	7
7	Bioactivity and action mechanism of green propolis against Pythium aphanidermatum. Anais Da Academia Brasileira De Ciencias, 2019, 91, e20180598.	0.8	5
8	Coupled Response of Membrane Hydration with Oscillating Metabolism in Live Cells: An Alternative Way to Modulate Structural Aspects of Biological Membranes?. Biomolecules, 2019, 9, 687.	4.0	12
9	Measuring molecular order for lipid membrane phase studies: Linear relationship between Laurdan generalized polarization and deuterium NMR order parameter. Biochimica Et Biophysica Acta - Biomembranes, 2019, 1861, 183053.	2.6	25
10	Application of optical microscopy techniques on giant unilamellar vesicles. , 2019, , 265-281.		0
11	Direct visualization of the lateral structure of giant vesicles composed of pseudo-binary mixtures of sulfatide, asialo-GM1 and GM1 with POPC. Biochimica Et Biophysica Acta - Biomembranes, 2018, 1860, 544-555.	2.6	3
12	Easy and Fast Preparation of Large and Giant Vesicles from Highly Confined Thin Lipid Films Deposited at the Airâ€“Water Interface. BioNanoScience, 2018, 8, 207-217.	3.5	0
13	Effect of macromolecular crowding on the kinetics of glycolytic enzymes and the behaviour of glycolysis in yeast. Integrative Biology (United Kingdom), 2018, 10, 587-597.	1.3	16
14	Is a constant low-entropy process at the root of glycolytic oscillations?. Journal of Biological Physics, 2018, 44, 419-431.	1.5	19
15	Enzymatic studies on planar supported membranes using a widefield fluorescence LAURDAN Generalized Polarization imaging approach. Biochimica Et Biophysica Acta - Biomembranes, 2017, 1859, 888-895.	2.6	7
16	Evidence of proteolipid domain formation in an inner mitochondrial membrane mimicking model. Biochimica Et Biophysica Acta - General Subjects, 2017, 1861, 969-976.	2.4	8
17	Effects of seaweed sterols fucosterol and desmosterol on lipid membranes. Chemistry and Physics of Lipids, 2017, 205, 1-10.	3.2	17
18	Imaging and modeling of acute pressure-induced changes of collagen and elastin microarchitectures in pig and human resistance arteries. American Journal of Physiology - Heart and Circulatory Physiology, 2017, 313, H164-H178.	3.2	13

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19	Topographic analysis by atomic force microscopy of proteoliposomes matrix vesicle mimetics harboring TNAP and AnxA5. Biochimica Et Biophysica Acta - Biomembranes, 2017, 1859, 1911-1920.	2.6	31
20	The dynamics of intracellular water constrains glycolytic oscillations in Saccharomyces cerevisiae. Scientific Reports, 2017, 7, 16250.	3.3	20
21	Storage Conditions of the Skin Affect Tissue Structure and In Vitro Percutaneous Penetration. , 2017, , 1191-1195.		0
22	Spectral phasor analysis of LAURDAN fluorescence in live A549 lung cells to study the hydration and time evolution of intracellular lamellar body-like structures. Biochimica Et Biophysica Acta - Biomembranes, 2016, 1858, 2625-2635.	2.6	62
23	Endothelinâ€1 shifts the mediator of bradykininâ€induced relaxation from NO to H₂O₂ in resistance arteries from patients with cardiovascular disease. British Journal of Pharmacology, 2016, 173, 1653-1664.	5.4	16
24	Fluorescence Spectroscopy: Basic Foundations and Methods. Advances in Delivery Science and Technology, 2016, , 29-59.	0.4	3
25	The Use of 6-Acyl-2-(Dimethylamino)Naphthalenes as Relaxation Probes of Biological Environments. Springer Series on Fluorescence, 2016, , 197-216.	0.8	3
26	Spatial distribution and activity of Na + /K + -ATPase in lipid bilayer membranes with phase boundaries. Biochimica Et Biophysica Acta - Biomembranes, 2016, 1858, 1390-1399.	2.6	36
27	LIFE - AS A MATTER OF FAT. The Frontiers Collection, 2016, , .	0.2	33
28	Elastin Organization in Pig and Cardiovascular Disease Patients' Pericardial Resistance Arteries. Journal of Vascular Research, 2015, 52, 1-11.	1.4	21
29	Lipid domains in model membranes: a brief historical perspective. Essays in Biochemistry, 2015, 57, 1-19.	4.7	46
30	Preparing giant unilamellar vesicles (GUVs) of complex lipid mixtures on demand: Mixing small unilamellar vesicles of compositionally heterogeneous mixtures. Biochimica Et Biophysica Acta - Biomembranes, 2015, 1848, 3175-3180.	2.6	45
31	Monitoring Membrane Hydration with 2-(Dimethylamino)-6-Acylnaphtalenes Fluorescent Probes. Sub-Cellular Biochemistry, 2015, 71, 105-125.	2.4	12
32	Tight Coupling of Metabolic Oscillations and Intracellular Water Dynamics in Saccharomyces cerevisiae. PLoS ONE, 2015, 10, e0117308.	2.5	32
33	Effect of detergents on the physicochemical properties of skin stratum corneum: a twoâ€photon excitation fluorescence microscopy study. International Journal of Cosmetic Science, 2014, 36, 39-45.	2.6	8
34	Quantitative optical microscopy and micromanipulation studies on the lipid bilayer membranes of giant unilamellar vesicles. Chemistry and Physics of Lipids, 2014, 181, 99-120.	3.2	42
35	Low PIP2 molar fractions induce nanometer size clustering in giant unilamellar vesicles. Chemistry and Physics of Lipids, 2014, 177, 51-63.	3.2	16
36	Fluid domain patterns in free-standing membranes captured on a solid support. Biochimica Et Biophysica Acta - Biomembranes, 2014, 1838, 2503-2510.	2.6	29

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37	Compositional and structural characterization of monolayers and bilayers composed of native pulmonary surfactant from wild type mice. Biochimica Et Biophysica Acta - Biomembranes, 2013, 1828, 2450-2459.	2.6	45
38	Spatially Resolved Two-Color Diffusion Measurements in Human Skin Applied to Transdermal Liposome Penetration. Journal of Investigative Dermatology, 2013, 133, 1260-1268.	0.7	56
39	Structural and dynamical aspects of skin studied by multiphoton excitation fluorescence microscopy-based methods. European Journal of Pharmaceutical Sciences, 2013, 50, 586-594.	4.0	14
40	Is the fluid mosaic (and the accompanying raft hypothesis) a suitable model to describe fundamental features of biological membranes? What may be missing?. Frontiers in Plant Science, 2013, 4, 457.	3.6	53
41	The acyl-CoA binding protein is required for normal epidermal barrier function in mice. Journal of Lipid Research, 2012, 53, 2162-2174.	4.2	29
42	Structural Characterization and Lipid Composition of Acquired Cholesteatoma. Otology and Neurotology, 2012, 33, 177-183.	1.3	18
43	Phosphatidylethanolamine Binding Is a Conserved Feature of Cyclotide-Membrane Interactions. Journal of Biological Chemistry, 2012, 287, 33629-33643.	3.4	115
44	The Human Skin Barrier Is Organized as Stacked Bilayers of Fully Extended Ceramides with Cholesterol Molecules Associated with the Ceramide Sphingoid Moiety. Journal of Investigative Dermatology, 2012, 132, 2215-2225.	0.7	194
45	LAURDAN Fluorescence Properties in Membranes: A Journey from the Fluorometer to the Microscope. Springer Series on Fluorescence, 2012, , 3-35.	0.8	36
46	Morphometric Image Analysis of Giant Vesicles: A New Tool for Quantitative Thermodynamics Studies of Phase Separation in Lipid Membranes. Biophysical Journal, 2012, 103, 2304-2310.	0.5	32
47	Sphingomyelinase D Activity in Model Membranes: Structural Effects of in situ Generation of Ceramide-1-Phosphate. PLoS ONE, 2012, 7, e36003.	2.5	25
48	A method for analysis of lipid vesicle domain structure from confocal image data. European Biophysics Journal, 2012, 41, 161-175.	2.2	11
49	Lipid Lateral Organization on Giant Unilamellar Vesicles Containing Lipopolysaccharides. Biophysical Journal, 2011, 100, 978-986.	0.5	48
50	Stable Vesicles Composed of Monocarboxylic or Dicarboxylic Fatty Acids and Trimethylammonium Amphiphiles. Langmuir, 2011, 27, 14078-14090.	3.5	42
51	Biophysical Evaluation of Food Decontamination Effects on Tissue and Bacteria. Food Biophysics, 2011, 6, 170-182.	3.0	6
52	Potential of ultraviolet wideâ€field imaging and multiphoton microscopy for analysis of dehydroergosterol in cellular membranes. Microscopy Research and Technique, 2011, 74, 92-108.	2.2	26
53	Storage Conditions of Skin Affect Tissue Structure and Subsequent in vitro Percutaneous Penetration. Skin Pharmacology and Physiology, 2011, 24, 93-102.	2.5	29
54	Second Harmonic Generation Microscopy: A Tool for Spatially and Temporally Resolved Studies of Heat Induced Structural Changes in Meat. Food Biophysics, 2010, 5, 1-8.	3.0	40

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55	Native pulmonary surfactant membranes show similar phase segregation in bilayers and monolayers, both qualitatively and quantitatively, as predicted by lipid composition analysis. Chemistry and Physics of Lipids, 2010, 163, S31.	3.2	0
56	Fluidizing effects of Câ€reactive protein on lung surfactant membranes: protective role of surfactant protein A. FASEB Journal, 2010, 24, 3662-3673.	0.5	31
57	Native Pulmonary Surfactant Membranes in Mice Show Coexistence of Two Different Phases in Bilayers and Monolayers: When the Lipid Composition can Predict the Structural Phase Segregations. Biophysical Journal, 2010, 98, 287a.	0.5	0
58	Multiphoton excitation fluorescence microscopy in planar membrane systems. Biochimica Et Biophysica Acta - Biomembranes, 2010, 1798, 1301-1308.	2.6	58
59	Impact of membrane-anchored fluorescent probes on the mechanical properties of lipid bilayers. Biochimica Et Biophysica Acta - Biomembranes, 2010, 1798, 1333-1337.	2.6	115
60	Microscopy imaging of membrane domains. Biochimica Et Biophysica Acta - Biomembranes, 2010, 1798, 1285.	2.6	9
61	An outlook on organization of lipids in membranes: Searching for a realistic connection with the organization of biological membranes. Progress in Lipid Research, 2010, 49, 378-389.	11.6	190
62	Electroformation of Giant Unilamellar Vesicles from Native Membranes and Organic Lipid Mixtures for the Study of Lipid Domains under Physiological Ionic-Strength Conditions. Methods in Molecular Biology, 2010, 606, 105-114.	0.9	25
63	Texture of Lipid Bilayer Domains. Journal of the American Chemical Society, 2009, 131, 14130-14131.	13.7	67
64	Phase behavior of multicomponent membranes: Experimental and computational techniques. Soft Matter, 2009, 5, 3234.	2.7	85
65	Visualization of lipid domains in giant unilamellar vesicles using an environment-sensitive membrane probe based on 3-hydroxyflavone. Biochimica Et Biophysica Acta - Biomembranes, 2009, 1788, 495-499.	2.6	68
66	Thermotropic behavior and lateral distribution of very long chain sphingolipids. Biochimica Et Biophysica Acta - Biomembranes, 2009, 1788, 1310-1320.	2.6	33
67	Macroscopic domain formation during cooling in the platelet plasma membrane: An issue of low cholesterol content. Biochimica Et Biophysica Acta - Biomembranes, 2009, 1788, 1229-1237.	2.6	18
68	Lipid domains in giant unilamellar vesicles and their correspondence with equilibrium thermodynamic phases: A quantitative fluorescence microscopy imaging approach. Biochimica Et Biophysica Acta - Biomembranes, 2009, 1788, 2142-2149.	2.6	68
69	Implementation of Two Photon Excitation Fluorescence Microscopy Techniques in Langmuir Films. Biophysical Journal, 2009, 96, 149a.	0.5	0
70	Lipid Domains In Giant Vesicles Composed Of Ternary Lipid Mixtures Containing Cholesterol And Their Relationship With Thermodynamic Phases. Biophysical Journal, 2009, 96, 161a.	0.5	2
71	Direct Visualization of the Lateral Structure of Porcine Brain Cerebrosides/POPC Mixtures in Presence and Absence of Cholesterol. Biophysical Journal, 2009, 97, 142-154.	0.5	34
72	Segregated Phases in Pulmonary Surfactant Membranes Do Not Show Coexistence of Lipid Populations with Differentiated Dynamic Properties. Biophysical Journal, 2009, 97, 1381-1389.	0.5	91

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73	Giant Unilamellar Vesicle Electroformation. Methods in Enzymology, 2009, 465, 161-176.	1.0	104
74	Biophysical, Structural and Compositional characterization at the molecular level of Native Pulmonary Surfactant Membranes directly isolated from mice Wild-type and Knocked-out Protein D Bronco-alveolar Lavage Fluid. Biophysical Journal, 2009, 96, 451a.	0.5	2
75	Combining LAURDAN Generalized Polarization, Fluorescence Correlation Spectroscopy and Fluorescence Lifetime Imaging as a Tool in Skin Diagnostics. Biophysical Journal, 2009, 96, 295a.	0.5	0
76	Effects of seaweed sterols fucosterol And desmosterol on lipid membranes. Biophysical Journal, 2009, 96, 606a.	0.5	6
77	Ceramide-Enriched Membrane Domains in Red Blood Cells and the Mechanism of Sphingomyelinase-Induced Hot-Cold Hemolysis. Biophysical Journal, 2009, 96, 448a.	0.5	0
78	Membranes and Fluorescence Microscopy. Reviews in Fluorescence, 2009, , 33-51.	0.5	5
79	Laurdan generalized polarization analysis as a tool in skin diagnostics. Chemistry and Physics of Lipids, 2008, 154, S21.	3.2	0
80	Stratum corneum lipid organization as observed by atomic force, confocal and twoâ€photon excitation fluorescence microscopy. International Journal of Cosmetic Science, 2008, 30, 391-411.	2.6	26
81	Pig skin structure and transdermal delivery of liposomes: A two photon microscopy study. Journal of Controlled Release, 2008, 132, 12-20.	9.9	103
82	Phase diagrams of lipid mixtures relevant to the study of membrane rafts. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2008, 1781, 665-684.	2.4	186
83	Ceramide-Enriched Membrane Domains in Red Blood Cells and the Mechanism of Sphingomyelinase-Induced Hotâ^'Cold Hemolysis. Biochemistry, 2008, 47, 11222-11230.	2.5	55
84	Profilin binding to sub-micellar concentrations of phosphatidylinositol (4,5) bisphosphate and phosphatidylinositol (3,4,5) trisphosphate. Biochimica Et Biophysica Acta - Biomembranes, 2007, 1768, 439-449.	2.6	48
85	Energy-independent translocation of cell-penetrating peptides occurs without formation of pores. A biophysical study with pep-1. Molecular Membrane Biology, 2007, 24, 282-293.	2.0	49
86	Effect of Surfactant Protein A on the Physical Properties and Surface Activity of KL4-Surfactant. Biophysical Journal, 2007, 92, 482-492.	0.5	24
87	Direct Visualization of Lipid Domains in Human Skin Stratum Corneum's Lipid Membranes: Effect of pH and Temperature. Biophysical Journal, 2007, 93, 3142-3155.	0.5	133
88	Giant Unilamellar Vesicles Electroformed from Native Membranes and Organic Lipid Mixtures under Physiological Conditions. Biophysical Journal, 2007, 93, 3548-3554.	0.5	208
89	Detergent-Resistant, Ceramide-Enriched Domains in Sphingomyelin/Ceramide Bilayers. Biophysical Journal, 2006, 90, 903-914.	0.5	141
90	Absence of Fluid-Ordered/Fluid-Disordered Phase Coexistence in Ceramide/POPC Mixtures Containing Cholesterol. Biophysical Journal, 2006, 90, 4437-4451.	0.5	157

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91	Chapter 1 Piercing Lipid Bilayers with Peptides. Behavior Research Methods, 2006, 5, 1-23.	4.0	4
92	To see or not to see: Lateral organization of biological membranes and fluorescence microscopy. Biochimica Et Biophysica Acta - Biomembranes, 2006, 1758, 1541-1556.	2.6	334
93	Physical properties and surface activity of surfactant-like membranes containing the cationic and hydrophobic peptide KL4. FEBS Journal, 2006, 273, 2515-2527.	4.7	41
94	Multiphoton-Excitation Fluorescence Microscopy and Membranes. , 2006, , 247-266.		0
95	Nanofibers made to order: free floating, transferred and gel-packed organic nanoaggregates. , 2005, , .		9
96	A 3D view on free-floating, space-fixed and surface-bound para-phenylene nanofibres. Nanotechnology, 2005, 16, 2396-2401.	2.6	26
97	The Lateral Structure of Lipid Membranes as Seen by Fluorescence Microscopy. , 2005, , 150-159.		1
98	Surface Behavior and Lipid Interaction of Alzheimer Î²-Amyloid Peptide 1â€“42: A Membrane-Disrupting Peptide. Biophysical Journal, 2005, 88, 2706-2713.	0.5	172
99	Direct Visualization of Membrane Leakage Induced by the Antibiotic Peptides: Maculatin, Citropin, and Aurein. Biophysical Journal, 2005, 89, 1874-1881.	0.5	214
100	Structure of Spin-Coated Lipid Films and Domain Formation in Supported Membranes Formed by Hydration. Langmuir, 2004, 20, 9720-9728.	3.5	140
101	Cholesterol Rules. Journal of Biological Chemistry, 2004, 279, 40715-40722.	3.4	260
102	Direct observation of lipid domains in free standing bilayers: from simple to complex lipid mixtures. Chemistry and Physics of Lipids, 2003, 122, 137-145.	3.2	59
103	[20] Giant vesicles, laurdan, and two-photon fluorescence microscopy: Evidence of lipid lateral separation in bilayers. Methods in Enzymology, 2003, 360, 481-500.	1.0	99
104	Thermotropic Behavior of Lipid Mixtures Studied at the Level of Single Vesicles: Giant Unilamellar Vesicles and Two-Photon Excitation Fluorescence Microscopy. Methods in Enzymology, 2003, 367, 233-253.	1.0	11
105	Segregation of Saturated Chain Lipids in Pulmonary Surfactant Filmsand Bilayers. Biophysical Journal, 2002, 82, 2041-2051.	0.5	63
106	A Two-Photon View of an Enzyme at Work: Crotalus atrox Venom PLA2 Interaction with Single-Lipid and Mixed-Lipid Giant Unilamellar Vesicles. Biophysical Journal, 2002, 82, 2232-2243.	0.5	92
107	Activation of dynamin II by POPC in giant unilamellar vesicles: a two-photon fluorescence microscopy study. The Protein Journal, 2002, 21, 383-391.	1.1	10
108	Lipid Rafts Reconstituted in Model Membranes. Biophysical Journal, 2001, 80, 1417-1428.	0.5	1,298

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109	Surface properties of cholesterol-containing membranes detected by Prodan fluorescence. Biochimica Et Biophysica Acta - Biomembranes, 2001, 1511, 330-340.	2.6	52
110	Title is missing!. Journal of Fluorescence, 2001, 11, 141-160.	2.5	78
111	Giant phospholipid vesicles: comparison among the whole lipid sample characteristics using different preparation methods. Chemistry and Physics of Lipids, 2000, 105, 135-147.	3.2	135
112	Two-Photon Fluorescence Microscopy Studies of Bipolar Tetraether Giant Liposomes from Thermoacidophilic Archaebacteria Sulfolobus acidocaldarius. Biophysical Journal, 2000, 79, 416-425.	0.5	88
113	A Correlation between Lipid Domain Shape and Binary Phospholipid Mixture Composition in Free Standing Bilayers: A Two-Photon Fluorescence Microscopy Study. Biophysical Journal, 2000, 79, 434-447.	0.5	212
114	Two Photon Fluorescence Microscopy of Coexisting Lipid Domains in Giant Unilamellar Vesicles of Binary Phospholipid Mixtures. Biophysical Journal, 2000, 78, 290-305.	0.5	372
115	Two-Photon Fluorescence Microscopy Observation of Shape Changes at the Phase Transition in Phospholipid Giant Unilamellar Vesicles. Biophysical Journal, 1999, 77, 2090-2101.	0.5	248
116	A Model for the Interaction of 6-Lauroyl-2-(N,N-dimethylamino)naphthalene with Lipid Environments: Implications for Spectral Properties. Photochemistry and Photobiology, 1999, 70, 557.	2.5	102
117	A model for the interaction of 6-lauroyl-2-(N,N-dimethylamino)naphthalene with lipid environments: implications for spectral properties. Photochemistry and Photobiology, 1999, 70, 557-64.	2.5	34
118	Laurdan and Prodan as Polarity-Sensitive Fluorescent Membrane Probes. Journal of Fluorescence, 1998, 8, 365-373.	2.5	551
119	Evidence of a strong interaction of 2,4-dichlorophenoxyacetic acid herbicide with human serum albumin. Life Sciences, 1998, 63, 2343-2351.	4.3	37
120	Water Dynamics in Glycosphingolipid Aggregates Studied by LAURDAN Fluorescence. Biophysical Journal, 1998, 75, 331-341.	0.5	96
121	Interaction of Biotin with Streptavidin. Journal of Biological Chemistry, 1997, 272, 11288-11294.	3.4	208
122	High-Density Lipoprotein from Hypercholesterolemic Animals Has Peroxidized Lipids and Oligomeric Apolipoprotein A-I: Its Putative Role in Atherogenesis. Biochemical and Biophysical Research Communications, 1997, 239, 570-574.	2.1	20
123	Laurdan properties in glycosphingolipid-phospholipid mixtures: a comparative fluorescence and calorimetric study. Biochimica Et Biophysica Acta - Biomembranes, 1997, 1325, 80-90.	2.6	60
124	Highâ€Density Lipoprotein Aggregated by Oxidation Induces Degeneration of Neuronal Cells. Journal of Neurochemistry, 1997, 69, 2102-2114.	3.9	26
125	Two distinguishable fluorescent modes of 1-anilino-8-naphthalenesulfonate bound to human albumin. Journal of Fluorescence, 1996, 6, 33-40.	2.5	59
126	Interaction of Small Ligands with Human Serum Albumin Iiia Subdomain. How to Determine the Affinity Constant Using an Easy Steady State Fluorescent Method. Journal of Pharmaceutical Sciences, 1996, 85, 1131-1132.	3.3	44

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127	Fatty acid-indole fluorescent derivatives as probes to measure the polarity of interfaces containing gangliosides. Chemistry and Physics of Lipids, 1995, 78, 193-202.	3.2	12