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	Lipid Rafts Reconstituted in Model Membranes. Biophysical Journal, 2001, 80, 1417-1428.	0.5	1,298
2	Laurdan and Prodan as Polarity-Sensitive Fluorescent Membrane Probes. Journal of Fluorescence, 1998, 8, 365-373.	2.5	551
3	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
4	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
5	Cholesterol Rules. Journal of Biological Chemistry, 2004, 279, 40715-40722.	3.4	260
6	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
7	Direct Visualization of Membrane Leakage Induced by the Antibiotic Peptides: Maculatin, Citropin, and Aurein. Biophysical Journal, 2005, 89, 1874-1881.	0.5	214
8	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
9	Interaction of Biotin with Streptavidin. Journal of Biological Chemistry, 1997, 272, 11288-11294.	3.4	208
10	Giant Unilamellar Vesicles Electroformed from Native Membranes and Organic Lipid Mixtures under Physiological Conditions. Biophysical Journal, 2007, 93, 3548-3554.	0.5	208
11	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
12	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
13	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
14	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
15	Absence of Fluid-Ordered/Fluid-Disordered Phase Coexistence in Ceramide/POPC Mixtures Containing Cholesterol. Biophysical Journal, 2006, 90, 4437-4451.	0.5	157
16	Detergent-Resistant, Ceramide-Enriched Domains in Sphingomyelin/Ceramide Bilayers. Biophysical Journal, 2006, 90, 903-914.	0.5	141
17	Structure of Spin-Coated Lipid Films and Domain Formation in Supported Membranes Formed by Hydration. Langmuir, 2004, 20, 9720-9728.	3.5	140
18	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

#	Article	IF	Citations
19	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
20	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
21	Phosphatidylethanolamine Binding Is a Conserved Feature of Cyclotide-Membrane Interactions. Journal of Biological Chemistry, 2012, 287, 33629-33643.	3.4	115
22	Giant Unilamellar Vesicle Electroformation. Methods in Enzymology, 2009, 465, 161-176.	1.0	104
23	Pig skin structure and transdermal delivery of liposomes: A two photon microscopy study. Journal of Controlled Release, 2008, 132, 12-20.	9.9	103
24	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
25	[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
26	Water Dynamics in Glycosphingolipid Aggregates Studied by LAURDAN Fluorescence. Biophysical Journal, 1998, 75, 331-341.	0.5	96
27	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
28	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
29	Two-Photon Fluorescence Microscopy Studies of Bipolar Tetraether Giant Liposomes from Thermoacidophilic Archaebacteria Sulfolobus acidocaldarius. Biophysical Journal, 2000, 79, 416-425.	0.5	88
30	Phase behavior of multicomponent membranes: Experimental and computational techniques. Soft Matter, 2009, 5, 3234.	2.7	85
31	Title is missing!. Journal of Fluorescence, 2001, 11, 141-160.	2.5	78
32	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
33	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
34	Texture of Lipid Bilayer Domains. Journal of the American Chemical Society, 2009, 131, 14130-14131.	13.7	67
35	Segregation of Saturated Chain Lipids in Pulmonary Surfactant Filmsand Bilayers. Biophysical Journal, 2002, 82, 2041-2051.	0.5	63
36	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

#	Article	IF	Citations
37	Laurdan properties in glycosphingolipid-phospholipid mixtures: a comparative fluorescence and calorimetric study. Biochimica Et Biophysica Acta - Biomembranes, 1997, 1325, 80-90.	2.6	60
38	Two distinguishable fluorescent modes of 1-anilino-8-naphthalenesulfonate bound to human albumin. Journal of Fluorescence, 1996, 6, 33-40.	2.5	59
39	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
40	Multiphoton excitation fluorescence microscopy in planar membrane systems. Biochimica Et Biophysica Acta - Biomembranes, 2010, 1798, 1301-1308.	2.6	58
41	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
42	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
43	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
44	Surface properties of cholesterol-containing membranes detected by Prodan fluorescence. Biochimica Et Biophysica Acta - Biomembranes, 2001, 1511, 330-340.	2.6	52
45	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
46	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
47	Lipid Lateral Organization on Giant Unilamellar Vesicles Containing Lipopolysaccharides. Biophysical Journal, 2011, 100, 978-986.	0.5	48
48	Lipid domains in model membranes: a brief historical perspective. Essays in Biochemistry, 2015, 57, 1-19.	4.7	46
49	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
50	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
51	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
52	Stable Vesicles Composed of Monocarboxylic or Dicarboxylic Fatty Acids and Trimethylammonium Amphiphiles. Langmuir, 2011, 27, 14078-14090.	3.5	42
53	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
54	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

#	Article	IF	Citations
55	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
56	Evidence of a strong interaction of 2,4-dichlorophenoxyacetic acid herbicide with human serum albumin. Life Sciences, 1998, 63, 2343-2351.	4.3	37
57	LAURDAN Fluorescence Properties in Membranes: A Journey from the Fluorometer to the Microscope. Springer Series on Fluorescence, 2012, , 3-35.	0.8	36
58	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
59	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
60	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
61	Thermotropic behavior and lateral distribution of very long chain sphingolipids. Biochimica Et Biophysica Acta - Biomembranes, 2009, 1788, 1310-1320.	2.6	33
62	LIFE - AS A MATTER OF FAT. The Frontiers Collection, 2016, , .	0.2	33
63	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
64	Tight Coupling of Metabolic Oscillations and Intracellular Water Dynamics in Saccharomyces cerevisiae. PLoS ONE, 2015, 10, e0117308.	2.5	32
65	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
66	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
67	Storage Conditions of Skin Affect Tissue Structure and Subsequent in vitro Percutaneous Penetration. Skin Pharmacology and Physiology, 2011, 24, 93-102.	2.5	29
68	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
69	Fluid domain patterns in free-standing membranes captured on a solid support. Biochimica Et Biophysica Acta - Biomembranes, 2014, 1838, 2503-2510.	2.6	29
70	Highâ€Density Lipoprotein Aggregated by Oxidation Induces Degeneration of Neuronal Cells. Journal of Neurochemistry, 1997, 69, 2102-2114.	3.9	26
71	A 3D view on free-floating, space-fixed and surface-bound para-phenylene nanofibres. Nanotechnology, 2005, 16, 2396-2401.	2.6	26
72	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

#	Article	IF	Citations
73	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
74	Sphingomyelinase D Activity in Model Membranes: Structural Effects of in situ Generation of Ceramide-1-Phosphate. PLoS ONE, 2012, 7, e36003.	2.5	25
75	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
76	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
77	Effect of Surfactant Protein A on the Physical Properties and Surface Activity of KL4-Surfactant. Biophysical Journal, 2007, 92, 482-492.	0.5	24
78	Elastin Organization in Pig and Cardiovascular Disease Patients' Pericardial Resistance Arteries. Journal of Vascular Research, 2015, 52, 1-11.	1.4	21
79	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
80	The dynamics of intracellular water constrains glycolytic oscillations in Saccharomyces cerevisiae. Scientific Reports, 2017, 7, 16250.	3.3	20
81	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
82	Is a constant low-entropy process at the root of glycolytic oscillations?. Journal of Biological Physics, 2018, 44, 419-431.	1.5	19
83	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
84	Structural Characterization and Lipid Composition of Acquired Cholesteatoma. Otology and Neurotology, 2012, 33, 177-183.	1.3	18
85	Effects of seaweed sterols fucosterol and desmosterol on lipid membranes. Chemistry and Physics of Lipids, 2017, 205, 1-10.	3.2	17
86	Low PIP2 molar fractions induce nanometer size clustering in giant unilamellar vesicles. Chemistry and Physics of Lipids, 2014, 177, 51-63.	3.2	16
87	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
88	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
89	Lipids, membranes, colloids and cells: A long view. Biochimica Et Biophysica Acta - Biomembranes, 2021, 1863, 183684.	2.6	16
90	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

#	Article	IF	Citations
91	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
92	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
93	Monitoring Membrane Hydration with 2-(Dimethylamino)-6-Acylnaphtalenes Fluorescent Probes. Sub-Cellular Biochemistry, 2015, 71, 105-125.	2.4	12
94	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
95	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
96	A method for analysis of lipid vesicle domain structure from confocal image data. European Biophysics Journal, 2012, 41, 161-175.	2.2	11
97	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
98	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
99	Nanofibers made to order: free floating, transferred and gel-packed organic nanoaggregates. , 2005, , .		9
100	Microscopy imaging of membrane domains. Biochimica Et Biophysica Acta - Biomembranes, 2010, 1798, 1285.	2.6	9
101	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
102	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
103	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
104	Cellular metabolism and colloids: Realistically linking physiology and biological physical chemistry. Progress in Biophysics and Molecular Biology, 2020, 162, 79-88.	2.9	7
105	Effects of seaweed sterols fucosterol And desmosterol on lipid membranes. Biophysical Journal, 2009, 96, 606a.	0.5	6
106	Biophysical Evaluation of Food Decontamination Effects on Tissue and Bacteria. Food Biophysics, 2011, 6, 170-182.	3.0	6
107	Bioactivity and action mechanism of green propolis against Pythium aphanidermatum. Anais Da Academia Brasileira De Ciencias, 2019, 91, e20180598.	0.8	5
108	Inductive effects in amino acids and peptides: Ionization constants and tryptophan fluorescence. Biochemistry and Biophysics Reports, 2020, 24, 100802.	1.3	5

#	Article	IF	Citations
109	Impact of macromolecular crowding on the mesomorphic behavior of lipid self-assemblies. Biochimica Et Biophysica Acta - Biomembranes, 2021, 1863, 183728.	2.6	5
110	Membranes and Fluorescence Microscopy. Reviews in Fluorescence, 2009, , 33-51.	0.5	5
111	Chapter 1 Piercing Lipid Bilayers with Peptides. Behavior Research Methods, 2006, 5, 1-23.	4.0	4
112	Fluorescence Spectroscopy: Basic Foundations and Methods. Advances in Delivery Science and Technology, 2016, , 29-59.	0.4	3
113	The Use of 6-Acyl-2-(Dimethylamino)Naphthalenes as Relaxation Probes of Biological Environments. Springer Series on Fluorescence, 2016, , 197-216.	0.8	3
114	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
115	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
116	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
117	The Lateral Structure of Lipid Membranes as Seen by Fluorescence Microscopy. , 2005, , 150-159.		1
118	Laurdan generalized polarization analysis as a tool in skin diagnostics. Chemistry and Physics of Lipids, 2008, 154, S21.	3.2	0
119	Implementation of Two Photon Excitation Fluorescence Microscopy Techniques in Langmuir Films. Biophysical Journal, 2009, 96, 149a.	0.5	0
120	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
121	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
122	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
123	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
124	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
125	Storage Conditions of the Skin Affect Tissue Structure and In Vitro Percutaneous Penetration. , 2017, , 1191-1195.		0
126	Application of optical microscopy techniques on giant unilamellar vesicles. , 2019, , 265-281.		0

#	Article	IF	Citations
127	Multiphoton-Excitation Fluorescence Microscopy and Membranes. , 2006, , 247-266.		0