

Stephan Negle or Stéphane Nègre

List of Publications by Year in descending order

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30070

54
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30087

103
g-index

110
all docs

110
docs citations

110
times ranked

9752
citing authors

#	ARTICLE	IF	CITATIONS
1	Structure of lipid bilayers. BBA - Biomembranes, 2000, 1469, 159-195.	8.0	2,314
2	Structure of Fully Hydrated Fluid Phase Lipid Bilayers with Monounsaturated Chains. Journal of Membrane Biology, 2006, 208, 193-202.	2.1	715
3	Self-orienting head-to-tail poly(3-alkylthiophenes): new insights on structure-property relationships in conducting polymers. Journal of the American Chemical Society, 1993, 115, 4910-4911.	13.7	686
4	Structure of Fully Hydrated Fluid Phase DMPC and DLPC Lipid Bilayers Using X-Ray Scattering from Oriented Multilamellar Arrays and from Unilamellar Vesicles. Biophysical Journal, 2005, 88, 2626-2637.	0.5	531
5	X-ray structure determination of fully hydrated L alpha phase dipalmitoylphosphatidylcholine bilayers. Biophysical Journal, 1996, 70, 1419-1431.	0.5	454
6	Nanostructure Dependence of Field-Effect Mobility in Regioregular Poly(3-hexylthiophene) Thin Film Field Effect Transistors. Journal of the American Chemical Society, 2006, 128, 3480-3481.	13.7	439
7	Hydrogen bonded chain mechanisms for proton conduction and proton pumping. Journal of Membrane Biology, 1983, 74, 1-14.	2.1	374
8	Structure of Gel Phase DMPC Determined by X-Ray Diffraction. Biophysical Journal, 2002, 83, 3324-3335.	0.5	329
9	Structure and Interactions of Fully Hydrated Dioleoylphosphatidylcholine Bilayers. Biophysical Journal, 1998, 75, 917-925.	0.5	316
10	Structural Determinants of Water Permeability through the Lipid Membrane. Journal of General Physiology, 2008, 131, 69-76.	1.9	314
11	Temperature Dependence of Structure, Bending Rigidity, and Bilayer Interactions of Dioleoylphosphatidylcholine Bilayers. Biophysical Journal, 2008, 94, 117-124.	0.5	307
12	Effect of cholesterol on structural and mechanical properties of membranes depends on lipid chain saturation. Physical Review E, 2009, 80, 021931.	2.1	299
13	Lipid bilayers: thermodynamics, structure, fluctuations, and interactions. Chemistry and Physics of Lipids, 2004, 127, 3-14.	3.2	264
14	Structure and Fluctuations of Charged Phosphatidylserine Bilayers in the Absence of Salt. Biophysical Journal, 2004, 86, 1574-1586.	0.5	263
15	Measurement of chain tilt angle in fully hydrated bilayers of gel phase lecithins. Biophysical Journal, 1993, 64, 1097-1109.	0.5	259
16	Interbilayer interactions from high-resolution x-ray scattering. Physical Review E, 1998, 57, 7014-7024.	2.1	247
17	Cholesterol Perturbs Lipid Bilayers Nonuniversally. Physical Review Letters, 2008, 100, 198103.	7.8	247
18	Fluid phase structure of EPC and DMPC bilayers. Chemistry and Physics of Lipids, 1998, 95, 83-94.	3.2	245

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19	Polyunsaturated Docosahexaenoic vs Docosapentaenoic Acid Differences in Lipid Matrix Properties from the Loss of One Double Bond. <i>Journal of the American Chemical Society</i> , 2003, 125, 6409-6421.	13.7	212
20	Partial molecular volumes of lipids and cholesterol. <i>Chemistry and Physics of Lipids</i> , 2006, 143, 1-10.	3.2	206
21	Order and disorder in fully hydrated unoriented bilayers of gel-phase dipalmitoylphosphatidylcholine. <i>Physical Review E</i> , 1994, 49, 4665-4676.	2.1	204
22	Molecular structures of fluid phase phosphatidylglycerol bilayers as determined by small angle neutron and X-ray scattering. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2012, 1818, 2135-2148.	2.6	189
23	Order Parameters and Areas in Fluid-Phase Oriented Lipid Membranes Using Wide Angle X-Ray Scattering. <i>Biophysical Journal</i> , 2008, 95, 669-681.	0.5	186
24	Lipid bilayer structure. <i>Current Opinion in Structural Biology</i> , 2000, 10, 474-480.	5.7	184
25	Closer Look at Structure of Fully Hydrated Fluid Phase DPPC Bilayers. <i>Biophysical Journal</i> , 2006, 90, L83-L85.	0.5	165
26	The Effect of Cholesterol on Short- and Long-Chain Monounsaturated Lipid Bilayers as Determined by Molecular Dynamics Simulations and X-Ray Scattering. <i>Biophysical Journal</i> , 2008, 95, 2792-2805.	0.5	148
27	Structure of gel phase saturated lecithin bilayers: temperature and chain length dependence. <i>Biophysical Journal</i> , 1996, 71, 885-891.	0.5	145
28	Method for obtaining structure and interactions from oriented lipid bilayers. <i>Physical Review E</i> , 2000, 63, 011907.	2.1	141
29	Swelling of phospholipids by monovalent salt. <i>Journal of Lipid Research</i> , 2006, 47, 302-309.	4.2	140
30	Small-angle x-ray scattering from lipid bilayers is well described by modified Caillé theory but not by paracrystalline theory. <i>Biophysical Journal</i> , 1996, 70, 349-357.	0.5	126
31	Structure of the ripple phase in lecithin bilayers.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1996, 93, 7008-7012.	7.1	123
32	What are the true values of the bending modulus of simple lipid bilayers?. <i>Chemistry and Physics of Lipids</i> , 2015, 185, 3-10.	3.2	113
33	Î±-Synuclein Induces Both Positive Mean Curvature and Negative Gaussian Curvature in Membranes. <i>Journal of the American Chemical Society</i> , 2012, 134, 2613-2620.	13.7	108
34	Liquid-Liquid Domains in Bilayers Detected by Wide Angle X-Ray Scattering. <i>Biophysical Journal</i> , 2008, 95, 682-690.	0.5	104
35	Clarification of the ripple phase of lecithin bilayers using fully hydrated, aligned samples. <i>Physical Review E</i> , 2000, 61, 5668-5677.	2.1	101
36	Alamethicin in lipid bilayers: Combined use of X-ray scattering and MD simulations. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2009, 1788, 1387-1397.	2.6	99

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37	Specific volumes of lipids in fully hydrated bilayer dispersions. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1988, 938, 135-142.	2.6	95
38	Theory of Passive Permeability through Lipid Bilayers. <i>Journal of General Physiology</i> , 2008, 131, 77-85.	1.9	95
39	Anomalous swelling of lipid bilayer stacks is caused by softening of the bending modulus. <i>Physical Review E</i> , 2005, 71, 041904.	2.1	94
40	HIV-1 Fusion Peptide Decreases Bending Energy and Promotes Curved Fusion Intermediates. <i>Biophysical Journal</i> , 2007, 93, 2048-2055.	0.5	93
41	Kinetics of the subtransition in dipalmitoylphosphatidylcholine. <i>Biochemistry</i> , 1987, 26, 4288-4294.	2.5	89
42	Structure and water permeability of fully hydrated diphytanoylPC. <i>Chemistry and Physics of Lipids</i> , 2010, 163, 630-637.	3.2	89
43	The first synthesis and new properties of regioregular, head-to-tail coupled polythiophenes. <i>Synthetic Metals</i> , 1995, 69, 279-282.	3.9	82
44	Orientation of Tie-Lines in the Phase Diagram of DOPC/DPPC/Cholesterol Model Biomembranes. <i>Langmuir</i> , 2010, 26, 17363-17368.	3.5	78
45	Preparation of Oriented, Fully Hydrated Lipid Samples for Structure Determination Using X-Ray Scattering. <i>Methods in Molecular Biology</i> , 2007, 400, 63-75.	0.9	78
46	Critical Fluctuations in Membranes. <i>Physical Review Letters</i> , 1995, 74, 2832-2835.	7.8	73
47	HIV Fusion Peptide Penetrates, Disorders, and Softens T-Cell Membrane Mimics. <i>Journal of Molecular Biology</i> , 2010, 402, 139-153.	4.2	72
48	Effect of the HIV-1 fusion peptide on the mechanical properties and leaflet coupling of lipid bilayers. <i>New Journal of Physics</i> , 2011, 13, 025004.	2.9	72
49	DMSO produces a new subgel phase in DPPC: DSC and X-ray diffraction study. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1998, 1369, 19-33.	2.6	66
50	Effects of ether vs. ester linkage on lipid bilayer structure and water permeability. <i>Chemistry and Physics of Lipids</i> , 2009, 160, 33-44.	3.2	66
51	Synthesis and physical properties of regiochemically well-defined, head-to-tail coupled poly(3-alkylthiophenes). <i>Synthetic Metals</i> , 1993, 55, 1198-1203.	3.9	63
52	Structure and Elasticity of Lipid Membranes with Genistein and Daidzein Bioflavonoids Using X-ray Scattering and MD Simulations. <i>Journal of Physical Chemistry B</i> , 2012, 116, 3918-3927.	2.6	61
53	Multiple mechanisms for critical behavior in the biologically relevant phase of lecithin bilayers. <i>Physical Review E</i> , 1998, 58, 7769-7776.	2.1	56
54	Stille Catalystâ€¢Transfer Polycondensation Using Pdâ€¢PEPPSIâ€¢Pr for Highâ€¢Molecularâ€¢Weight Regioregular Poly(3â€¢hexylthiophene). <i>Macromolecular Rapid Communications</i> , 2015, 36, 840-844.	3.9	56

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55	Structural adaptations of proteins to different biological membranes. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2013, 1828, 2592-2608.	2.6	54
56	Selective Interaction of Colistin with Lipid Model Membranes. <i>Biophysical Journal</i> , 2018, 114, 919-928.	0.5	54
57	CRAC motif peptide of the HIV-1 gp41 protein thins SOPC membranes and interacts with cholesterol. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2008, 1778, 1120-1130.	2.6	48
58	Kinetics of subgel formation in DPPC: X-ray diffraction proves nucleation-growth hypothesis. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1994, 1191, 14-20.	2.6	43
59	X-ray structure, thermodynamics, elastic properties and MD simulations of cardiolipin/dimyristoylphosphatidylcholine mixed membranes. <i>Chemistry and Physics of Lipids</i> , 2014, 178, 1-10.	3.2	42
60	Chemical modification of purple membranes: role of arginine and carboxylic acid residues in bacteriorhodopsin. <i>FEBS Letters</i> , 1979, 108, 243-248.	2.8	40
61	Alamethicin Aggregation in Lipid Membranes. <i>Journal of Membrane Biology</i> , 2009, 231, 11-27.	2.1	40
62	Phase behavior of palmitoyl and egg sphingomyelin. <i>Chemistry and Physics of Lipids</i> , 2018, 213, 102-110.	3.2	32
63	Anomalous phase behavior of long chain saturated lecithin bilayers. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1996, 1279, 17-24.	2.6	29
64	Structure of gel phase DPPC determined by X-ray diffraction. <i>Chemistry and Physics of Lipids</i> , 2019, 218, 168-177.	3.2	29
65	Thermodynamic studies of purple membrane. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1986, 854, 58-66.	2.6	28
66	Re-analysis of Magic Angle Spinning Nuclear Magnetic Resonance Determination of Interlamellar Waters in Lipid Bilayer Dispersions. <i>Biophysical Journal</i> , 1999, 77, 2062-2065.	0.5	27
67	THE EFFECT OF CROSS-LINKING ON PHOTOCYCLING ACTIVITY OF BACTERIORHODOPSIN. <i>Photochemistry and Photobiology</i> , 1979, 29, 353-358.	2.5	26
68	Effect of Substrate Roughness on D Spacing Supports Theoretical Resolution of Vapor Pressure Paradox. <i>Biophysical Journal</i> , 1998, 74, 1421-1427.	0.5	26
69	HIV-1 Tat membrane interactions probed using X-ray and neutron scattering, CD spectroscopy and MD simulations. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2014, 1838, 3078-3087.	2.6	26
70	Membrane Structure Correlates to Function of LLP2 on the Cytoplasmic Tail of HIV-1 gp41 Protein. <i>Biophysical Journal</i> , 2013, 105, 657-666.	0.5	24
71	Sugar does not affect the bending and tilt moduli of simple lipid bilayers. <i>Chemistry and Physics of Lipids</i> , 2016, 196, 76-80.	3.2	24
72	How Do Ethanolamine Plasmalogens Contribute to Order and Structure of Neurological Membranes?. <i>Journal of Physical Chemistry B</i> , 2020, 124, 828-839.	2.6	23

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73	A needless but interesting controversy. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	22
74	Elastic behavior of model membranes with antimicrobial peptides depends on lipid specificity and d -enantiomers. Soft Matter, 2019, 15, 1860-1868.	2.7	21
75	Revisiting Volumes of Lipid Components in Bilayers. Journal of Physical Chemistry B, 2019, 123, 2697-2709.	2.6	21
76	Enabling Marangoni flow at air-liquid interfaces through deposition of aerosolized lipid dispersions. Journal of Colloid and Interface Science, 2016, 484, 270-278.	9.4	19
77	Polymorphism in Myristoylpalmitoylphosphatidylcholine. Chemistry and Physics of Lipids, 1999, 100, 101-113.	3.2	18
78	HIV-1 matrix-31 membrane binding peptide interacts differently with membranes containing PS vs. PI(4,5)P2. Biochimica Et Biophysica Acta - Biomembranes, 2016, 1858, 3071-3081.	2.6	16
79	Determination of mosaicity in oriented stacks of lipid bilayers. Soft Matter, 2016, 12, 1884-1891.	2.7	16
80	Volumetric stability of lipid bilayers. Physical Chemistry Chemical Physics, 2012, 14, 15452.	2.8	15
81	Accurate calibration and control of relative humidity close to 100% by X-raying a DOPC multilayer. Physical Chemistry Chemical Physics, 2015, 17, 3570-3576.	2.8	15
82	The thermotropic phase behavior of cationic lipids: calorimetric, infrared spectroscopic and X-ray diffraction studies of lipid bilayer membranes composed of 1,2-di-O-myristoyl-3-N,N,N-trimethylaminopropane (DM-TAP). Biochimica Et Biophysica Acta - Biomembranes, 2001, 1510, 70-82.	2.6	14
83	Structural insights into the cubic-hexagonal phase transition kinetics of monoolein modulated by sucrose solutions. Physical Chemistry Chemical Physics, 2015, 17, 9194-9204.	2.8	14
84	MOLECULAR ASPECTS OF LIGHT-INDUCED UPTAKE AND RELEASE OF PROTONS BY PURPLE MEMBRANES. Photochemistry and Photobiology, 1981, 33, 579-585.	2.5	13
85	Design, synthesis, and properties of a six-membered oligofuran macrocycle. Organic Chemistry Frontiers, 2021, 8, 1775-1782.	4.5	12
86	Comment on "Growth of Molecular Superlattice in Fully Hydrated Dipalmitoylphosphatidylcholine during Subgel Phase Formation Process" by H. Takahashi, K. Hatta and I. Hatta. European Physical Journal B, 1998, 1, 399-400.	1.5	11
87	Penetration of HIV-1 Tat47-57 into PC/PE Bilayers Assessed by MD Simulation and X-ray Scattering. Membranes, 2015, 5, 473-494.	3.0	11
88	Use of X-Ray and Neutron Scattering Methods with Volume Measurements to Determine Lipid Bilayer Structure and Number of Water Molecules/Lipid. Sub-Cellular Biochemistry, 2015, 71, 17-43.	2.4	11
89	Location of the Hydrophobic Surfactant Proteins, SP-B and SP-C, in Fluid-Phase Bilayers. Journal of Physical Chemistry B, 2020, 124, 6763-6774.	2.6	11
90	Thermodynamic and structural characterization of amino acid-linked dialkyl lipids. Chemistry and Physics of Lipids, 2005, 134, 29-39.	3.2	9

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91	Effect of Anti-Leishmania Drugs on the Structural and Elastic Properties of Ultradeformable Lipid Membranes. <i>Journal of Physical Chemistry B</i> , 2018, 122, 7332-7339.	2.6	9
92	Synergistic Biophysical Techniques Reveal Structural Mechanisms of Engineered Cationic Antimicrobial Peptides in Lipid Model Membranes. <i>Chemistry - A European Journal</i> , 2020, 26, 6247-6256.	3.3	9
93	Isotope effects and activation parameters for chemically modified bacteriorhodopsin. <i>FEBS Letters</i> , 1980, 117, 359-362.	2.8	8
94	Aliphatic flexible spacer length controls photomechanical response in compact, ordered liquid crystalline polymer networks. <i>Polymer</i> , 2017, 133, 30-39.	3.8	8
95	Microcalorimetry, Fluorescence, and Fractionation Study of Yeast Alcohol Dehydrogenase: Stability and Heterogeneity Implications. <i>Biotechnology Progress</i> , 1989, 5, 164-171.	2.6	6
96	Synthesis and Physical Properties of Self-Orienting Head-To-Tail Polythiophenes.. <i>Materials Research Society Symposia Proceedings</i> , 1993, 328, 215.	0.1	4
97	Structure and Interactions of Lipid Bilayers: Role of Fluctuations. , 2001, , 1-23.		4
98	X-ray Diffraction Study of Three ¹⁹ F-Labeled Dimyristoylphosphatidylcholines. <i>The Journal of Physical Chemistry</i> , 1994, 98, 4469-4472.	2.9	3
99	Suppression of L ₁ /L ₂ Phase Coexistence in the Lipids of Pulmonary Surfactant. <i>Biophysical Journal</i> , 2021, 120, 243-253.	0.5	3
100	Preparation of Oriented, Fully Hydrated Lipid Samples for Structure Determination Using X-Ray Scattering. , 0, , 63-76.		3
101	Rational Framework for the Design of Trp- and Arg-Rich Peptide Antibiotics Against Multidrug-Resistant Bacteria. <i>Frontiers in Microbiology</i> , 2022, 13, .	3.5	3
102	A Thermotropic Study of 1-Deoxy-1- (N-methyloctanamido)-D-glucitol (MEGA-8) Using Microscopy, Calorimetry and X-Ray Diffraction. <i>Molecular Crystals and Liquid Crystals Incorporating Nonlinear Optics</i> , 1990, 188, 41-56.	0.3	2
103	Physics of HIV. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 183001.	2.8	2
104	HIV Fusion Peptide Penetrates, Disorders and Softens T-Cell Membrane Mimics. <i>Biophysical Journal</i> , 2011, 100, 186a.	0.5	1
105	Changes in membrane elasticity caused by the hydrophobic surfactant proteins correlate poorly with adsorption of lipid vesicles. <i>Soft Matter</i> , 2021, 17, 3358-3366.	2.7	1
106	The Superstructure of an Antimicrobial Peptide, Alamethicin, in Lipid Membranes. <i>Biophysical Journal</i> , 2009, 96, 158a-159a.	0.5	0
107	Probing the Membrane Deformations Induced by Binding of Membrane Proteins: Alpha-Synuclein and CRAC. <i>Biophysical Journal</i> , 2010, 98, 487a-488a.	0.5	0
108	Determining Volumes of Lipid Components: Hidden Assumptions Have Not-So-Hidden Consequences. <i>Biophysical Journal</i> , 2019, 116, 87a.	0.5	0

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109	Methylene volumes in monoglyceride bilayers are larger than in liquid alkanes. Chemistry and Physics of Lipids, 2020, 226, 104833.	3.2	0