Dimitrios Stamou

List of Publications by Year
in descending order

114 papers	6,284 citations	71102 41 h-index	71685 76 g-index
119 all docs	119 docs citations	119 times ranked	8464 citing authors

#	Article	IF	Citations
1	A structural analysis of M protein in coronavirus assembly and morphology. Journal of Structural Biology, 2011, 174, 11-22.	2.8	625
2	Long-range attraction between colloidal spheres at the air-water interface: The consequence of an irregular meniscus. Physical Review E, 2000, 62, 5263-5272.	2.1	377
3	How curved membranes recruit amphipathic helices and protein anchoring motifs. Nature Chemical Biology, 2009, 5, 835-841.	8.0	352
4	Membrane Curvature Induction and Tubulation Are Common Features of Synucleins and Apolipoproteins. Journal of Biological Chemistry, 2010, 285, 32486-32493.	3.4	278
5	Amphipathic motifs in BAR domains are essential for membrane curvature sensing. EMBO Journal, 2009, 28, 3303-3314.	7.8	230
6	The 2018 biomembrane curvature and remodeling roadmap. Journal Physics D: Applied Physics, 2018, 51, 343001.	2.8	212
7	Self-Assembled Microarrays of Attoliter Molecular Vessels. Angewandte Chemie - International Edition, 2003, 42, 5580-5583.	13.8	198
8	CALM Regulates Clathrin-Coated Vesicle Size and Maturation by Directly Sensing and Driving Membrane Curvature. Developmental Cell, 2015, 33, 163-175.	7.0	187
9	Integrated Nanoreactor Systems:Â Triggering the Release and Mixing of Compounds Inside Single Vesicles. Journal of the American Chemical Society, 2004, 126, 8594-8595.	13.7	163
10	Molecular basis for SNX-BAR-mediated assembly of distinct endosomal sorting tubules. EMBO Journal, 2012, 31, 4466-4480.	7.8	157
11	Friction Anisotropy and Asymmetry of a Compliant Monolayer Induced by a Small Molecular Tilt. Science, 1998, 280, 273-275.	12.6	151
12	An Integrated Selfâ€Assembled Nanofluidic System for Controlled Biological Chemistries. Angewandte Chemie - International Edition, 2008, 47, 5544-5549.	13.8	144
13	Heat Profiling of Three-Dimensionally Optically Trapped Gold Nanoparticles using Vesicle Cargo Release. Nano Letters, 2011, 11, 888-892.	9.1	143
14	Membrane-Sculpting BAR Domains Generate Stable Lipid Microdomains. Cell Reports, 2013, 4, 1213-1223.	6.4	134
15	A Fluorescence-Based Technique to Construct Size Distributions from Single-Object Measurements: Application to the Extrusion of Lipid Vesicles. Biophysical Journal, 2008, 95, 1176-1188.	0.5	133
16	Ras activation by SOS: Allosteric regulation by altered fluctuation dynamics. Science, 2014, 345, 50-54.	12.6	126
17	Surface-based lipid vesicle reactor systems: fabrication and applications. Soft Matter, 2007, 3, 828.	2.7	122
18	Observation of Inhomogeneity in the Lipid Composition of Individual Nanoscale Liposomes. Journal of the American Chemical Society, 2011, 133, 10685-10687.	13.7	108

#	Article	IF	Citations
19	Membrane Curvature Sensing by Amphipathic Helices. Journal of Biological Chemistry, 2011, 286, 42603-42614.	3.4	108
20	Membrane curvature enables N-Ras lipid anchor sorting to liquid-ordered membrane phases. Nature Chemical Biology, 2015, 11, 192-194.	8.0	108
21	A unifying mechanism accounts for sensing of membrane curvature by BAR domains, amphipathic helices and membrane-anchored proteins. Seminars in Cell and Developmental Biology, 2010, 21, 381-390.	5.0	99
22	Highly Fluorescent Streptavidin-Coated CdSe Nanoparticles:Â Preparation in Water, Characterization, and Micropatterning. Langmuir, 2004, 20, 3828-3831.	3.5	87
23	Encapsulation Efficiency Measured on Single Small Unilamellar Vesicles. Journal of the American Chemical Society, 2008, 130, 14372-14373.	13.7	87
24	Direct observation of proton pumping by a eukaryotic P-type ATPase. Science, 2016, 351, 1469-1473.	12.6	81
25	Membrane curvature regulates ligand-specific membrane sorting of GPCRs in living cells. Nature Chemical Biology, 2017, 13, 724-729.	8.0	81
26	BAR domains, amphipathic helices and membraneâ€anchored proteins use the same mechanism to sense membrane curvature. FEBS Letters, 2010, 584, 1848-1855.	2.8	79
27	Composition and structure of mixed phospholipid supported bilayers formed by POPC and DPPC. Soft Matter, 2012, 8, 5658.	2.7	77
28	Membrane curvature bends the laws of physics and chemistry. Nature Chemical Biology, 2015, 11, 822-825.	8.0	75
29	PICK1 Deficiency Impairs Secretory Vesicle Biogenesis and Leads to Growth Retardation and Decreased Glucose Tolerance. PLoS Biology, 2013, 11, e1001542.	5.6	73
30	Influence of the Preparation Route on the Supramolecular Organization of Lipids in a Vesicular System. Journal of the American Chemical Society, 2012, 134, 1918-1921.	13.7	68
31	Quantification of nano-scale intermembrane contact areas by using fluorescence resonance energy transfer. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 12341-12346.	7.1	64
32	Nanoscale high-content analysis using compositional heterogeneities of single proteoliposomes. Nature Methods, 2014, 11, 931-934.	19.0	64
33	Monitoring Shifts in the Conformation Equilibrium of the Membrane Protein Cytochrome P450 Reductase (POR) in Nanodiscs. Journal of Biological Chemistry, 2012, 287, 34596-34603.	3.4	59
34	Mixing subattolitre volumes in a quantitative and highly parallel manner with soft matter nanofluidics. Nature Nanotechnology, 2012, 7, 51-55.	31.5	57
35	FBAR Syndapin 1 recognizes and stabilizes highly curved tubular membranes in a concentration dependent manner. Scientific Reports, 2013, 3, 1565.	3.3	55
36	Single Molecule Activity Measurements of Cytochrome P450 Oxidoreductase Reveal the Existence of Two Discrete Functional States. ACS Chemical Biology, 2014, 9, 630-634.	3.4	55

#	Article	IF	Citations
37	Influence of Lipid Heterogeneity and Phase Behavior on Phospholipase A2 Action at the Single Molecule Level. Biophysical Journal, 2010, 98, 1873-1882.	0.5	48
38	Sensing-Applications of Surface-Based Single Vesicle Arrays. Sensors, 2010, 10, 11352-11368.	3.8	47
39	Membrane Localization is Critical for Activation of the PICK1 BAR Domain. Traffic, 2008, 9, 1327-1343.	2.7	46
40	Geometrical Membrane Curvature as an Allosteric Regulator of Membrane Protein Structure and Function. Biophysical Journal, 2014, 106, 201-209.	0.5	44
41	Single Enzyme Experiments Reveal a Long-Lifetime Proton Leak State in a Heme-Copper Oxidase. Journal of the American Chemical Society, 2015, 137, 16055-16063.	13.7	42
42	Templated Protein Assembly on Micro-Contact-Printed Surface Patterns. Use of the SNAP-tag Protein Functionality. Langmuir, 2008, 24, 6375-6381.	3.5	38
43	Synapsin I Senses Membrane Curvature by an Amphipathic Lipid Packing Sensor Motif. Journal of Neuroscience, 2011, 31, 18149-18154.	3.6	38
44	Single Enzyme Studies Reveal the Existence of Discrete Functional States for Monomeric Enzymes and How They Are â€œSelectedâ€•upon Allosteric Regulation. Journal of the American Chemical Society, 2012, 134, 9296-9302.	13.7	38
45	An Amphipathic Helix Directs Cellular Membrane Curvature Sensing and Function of the BAR Domain Protein PICK1. Cell Reports, 2018, 23, 2056-2069.	6.4	37
46	The WAVE complex associates with sites of saddle membrane curvature. Journal of Cell Biology, 2021, 220, .	5.2	36
47	Constructing Size Distributions of Liposomes from Single-Object Fluorescence Measurements. Methods in Enzymology, 2009, 465, 143-160.	1.0	29
48	How Membrane Geometry Regulates Protein Sorting Independently of Mean Curvature. ACS Central Science, 2020, 6, 1159-1168.	11.3	29
49	WASP integrates substrate topology and cell polarity to guide neutrophil migration. Journal of Cell Biology, 2022, 221, .	5.2	28
50	Induced dye leakage by PAMAM G6 does not imply dendrimer entry into vesicle lumen. Soft Matter, 2012, 8, 8972.	2.7	26
51	Membrane Curvature and Lipid Composition Synergize To Regulate N-Ras Anchor Recruitment. Biophysical Journal, 2017, 113, 1269-1279.	0.5	26
52	Sample patterning on NMR surface microcoils. Journal of Magnetic Resonance, 2006, 178, 96-105.	2.1	24
53	Fully integrated monolithic optoelectronic transducer for real-time protein and DNA detection: The NEMOSLAB approach. Biosensors and Bioelectronics, 2010, 26, 1528-1535.	10.1	24
54	Single Vesicle Assaying of SNARE-Synaptotagmin-Driven Fusion Reveals Fast and Slow Modes of Both Docking and Fusion and Intrasample Heterogeneity. Biophysical Journal, 2011, 100, 957-967.	0.5	24

#	Article	IF	Citations
55	Fluorescence Anisotropy Based Single Liposome Assay to Measure Moleculeâ€“Membrane Interactions. Analytical Chemistry, 2011, 83, 8169-8176.	6.5	23
56	Monitoring the Waiting Time Sequence of Single Ras GTPase Activation Events Using Liposome Functionalized Zero-Mode Waveguides. Nano Letters, 2016, 16, 2890-2895.	9.1	22
57	Single Proteoliposome High-Content Analysis Reveals Differences in the Homo-Oligomerization of GPCRs. Biophysical Journal, 2018, 115, 300-312.	0.5	19
58	Chemically Specific Laserâ^'Induced Patterning of Alkanethiol SAMs: Characterization by SEM and AFM. Langmuir, 2009, 25, 12819-12824.	3.5	17
59	Single vesicle biochips for ultra-miniaturized nanoscale fluidics and single molecule bioscience. Lab on A Chip, 2013, 13, 3613.	6.0	17
60	Functionalisation of gold surfaces via topological templates. Tetrahedron, 1998, 54, 3725-3734.	1.9	16
61	Site-Directed Molecular Assembly on Templates Structured with Electron-Beam Lithography. Langmuir, 2004, 20, 3495-3497.	3.5	15
62	Quantitative investigation of negative membrane curvature sensing and generation by I-BARs in filopodia of living cells. Soft Matter, 2019, 15, 9829-9839.	2.7	15
63	Subnanometer Actuation of a Tethered Lipid Bilayer Monitored with Fluorescence Resonance Energy Transfer. Journal of the American Chemical Society, 2006, 128, 11328-11329.	13.7	14
64	Intermembrane Docking Reactions Are Regulated by Membrane Curvature. Biophysical Journal, 2011, 101, 2693-2703.	0.5	10
65	Monitoring the Aggregation of Single Casein Micelles Using Fluorescence Microscopy. Langmuir, 2011, 27, 866-869.	3.5	9
66	Improving membrane binding as a design strategy for amphipathic peptide hormones: 2â€helix variants of PYY3â€36. Journal of Peptide Science, 2012, 18, 579-587.	1.4	7
67	Voices of chemical biology. Nature Chemical Biology, 2021, 17, 1-4.	8.0	7
68	Synthesis of Nanoscopic Optical Fibers Using Lipid Membranes as Templates. Angewandte Chemie - International Edition, 2005, 44, 4957-4960.	13.8	6
69	Optically Induced Linking of Protein and Nanoparticles to Gold Surfaces. Bioconjugate Chemistry, 2010, 21, 1056-1061.	3.6	6
70	Protons in small spaces: Discrete simulations of vesicle acidification. PLoS Computational Biology, 2019, 15, e1007539.	3.2	6
71	Self-assembling functionalized templates in biosensor technology. Polymer Bulletin, 1998, 40, 151-157.	3.3	4
72	Developing an Assay to Probe Activtion and Conformational Dynamics of Î²2-Adrenergic Receptor on Single Molecule Level. Biophysical Journal, 2013, 104, 61a.	0.5	4

#	Article	IF	Citations
73	Interferometric Detection of Single Gold Nanoparticles Calibrated against TEM Size Distributions. Small, 2015, 11, 3550-3555.	10.0	4
74	David versus Goliath. Nanomedicine: Nanotechnology, Biology, and Medicine, 2010, 6, 504-509.	3.3	3
75	Membrane Curvature Regulates the Oligomerization of Human Î²2-Adrenergic Receptors. Biophysical Journal, 2013, 104, 42a.	0.5	3
76	Single Proton Pump Activity Measurements on Single Vesicles for a Quinol Heme-Copper Oxidase. Biophysical Journal, 2013, 104, 277a-278a.	0.5	3
77	Observation of Inhomogeneity in the Lipid Composition of Individual Nanoscale Liposomes. Biophysical Journal, 2012, 102, 426a.	0.5	2
78	Screening the Sensing of Membrane Curvature by BAR domains on Single Liposome Arrays. Biophysical Journal, 2009, 96, 570a.	0.5	1
79	Creating a Proteoliposome Assay for Single Photosystem I Activity Assessment. Biophysical Journal, 2012, 102, 626a-627a.	0.5	1
80	N-RAS Lipid Anchor Adsorption to Membranes as a Function of Lipid Composition and Curvature. Biophysical Journal, 2016, 110, 579a.	0.5	1
81	Manipulating The Environment Of a Single Lipase Molecule. Biophysical Journal, 2009, 96, 28a.	0.5	0
82	Phase Transitions in Single Nano-Vesicles. Biophysical Journal, 2009, 96, 148a.	0.5	0
83	The Language of Shape: Biological Reactions are Dramatically Affected byÂthe Shape of Lipid Membranes. Biophysical Journal, 2010, 98, 618a.	0.5	0
84	Regulation of Enzymatic Activity Occurs by Selection of Discrete Activity States. Biophysical Journal, 2011, 100, 194a.	0.5	0
85	Soft Matter Based Nanofluidic Platform for Highly Parallel Mixing of Sub-Attoliter Total Volumes. Biophysical Journal, 2012, 102, 600a-601a.	0.5	0
86	Synergy of Liquid Ordered â€œRaft Likeâ€•Domains and Membrane Curvature in Promoting Sorting of Lipidated Proteins Such As NRas. Biophysical Journal, 2012, 102, 18a-19a.	0.5	0
87	Highly Accurate Quantification of the Oligomerization of the Î²2 Adrenergic Receptor using FRET. Biophysical Journal, 2012, 102, 232a-233a.	0.5	0
88	Cooperative All-Or-None Recruitment of Synaptotagmin C2AB on Single Vesicles Explains Why Ca2+ Regulates the Amplitude of SNARE Mediated Vesicle Fusion. Biophysical Journal, 2012, 102, 318a-319a.	0.5	0
89	A Computational Investigation of the Effect of Membrane Curvature on G-Protein Coupled Receptor Oligomerization. Biophysical Journal, 2013, 104, 114a.	0.5	0
90	Single Enzyme Studies Reveal the Existence of Discrete Functional States for Monomeric Enzymes and How they are â€œSelectedâ€•upon Allosteric Regulation. Biophysical Journal, 2013, 104, 231a.	0.5	0

#	Article	IF	Citations
91	Biochemical and Biophysical Studies of Membrane Deformation by Bar-Domain Proteins. Biophysical Journal, 2013, 104, 94a.	0.5	0
92	Lipid-Anchored Ras is Sorted by Membrane Curvature Both InÂVitro and in Living Cells. Biophysical Journal, 2013, 104, 96a.	0.5	0
93	Superresolution Inter-Surface Interaction Energy Mapping using Particle Tracking Microscopy (PTE). Biophysical Journal, 2013, 104, 503a.	0.5	0
94	Sorting of tN-Ras by Membrane Curvature in Lipid Vesicles and Tubes. Biophysical Journal, 2013, 104, 549a.	0.5	0
95	Single Liposomes Used to Study the Activity of Individual Transporters. Biophysical Journal, 2014, 106, 229a.	0.5	0
96	Single Proteoliposome Assay to Monitor Opsin and Cannabinoid Gpcr Homo-Oligomerization. Biophysical Journal, 2014, 106, 103a-104a.	0.5	0
97	Sensing and Stiffening of Tubular Membranes by the Syndapin 1 FBAR. Biophysical Journal, 2014, 106, 714a.	0.5	0
98	How Membrane Curvature Drives the Up-Concentration of N-Ras Proteins to Ordered Lipid Domains : Correlation of In Vivo and In Vitro Experiments with Mean Field Theory Calculations and Coarse Grain Simulations. Biophysical Journal, 2014, 106, 713a.	0.5	0
99	Fractional Binding: A Molecular Analog-To-Digital Converter in Ca++ Regulated Vesicle Differentiation. Biophysical Journal, 2014, 106, 529a-530a.	0.5	0
100	Functional Analysis of Proton-Transporter at Single Molecule Level. Biophysical Journal, 2015, 108, 147a.	0.5	0
101	Development of a Fluorescence-Based Assay for Functional Studies of Transporter Proteins on the Single Molecule Level. Biophysical Journal, 2015, 108, 187a.	0.5	0
102	Single Molecule Activity Measurements of Cytochrome P450 Oxidoreductase Reveal the Existence of Two Discrete Functional States. Biophysical Journal, 2015, 108, 224a-225a.	0.5	0
103	Membrane Curvature Regulates the Localization of G Protein Coupled Receptors and Ras Isoforms. Biophysical Journal, 2015, 108, 95a-96a.	0.5	0
104	Resolving Active Ion Transport at the Single Molecule Level for the First Time. Biophysical Journal, 2016, 110, 179a.	0.5	0
105	tN-Ras, Synaptotagmin1 C2Ab, Annexinb12 and Amphiphysin NBAR can Discriminate Spherical from Cylindrical Membrane Curvature. Biophysical Journal, 2016, 110, 357a.	0.5	0
106	Links of Conformational Sampling to Functional Plasticity and Clinical Phenotypes by Single Molecule Studies. Biophysical Journal, 2016, 110, 397a.	0.5	0
107	Live Cell Strategy for Detection of Curvature Dependent Sorting of Membrane Associated Proteins. Biophysical Journal, 2017, 112, 297a.	0.5	0
108	High Content Analysis of Intracellular Heterogeneity to Study GPCR Oligomerization. Biophysical Journal, 2017, 112, 88a.	0.5	0

#	Article	IF	Citations
109	Superresolving the Membrane Topography of Live Cells. Biophysical Journal, 2020, 118, 187a.	0.5	0
110	Domains of Activated GPCRs Mediated by Membrane Curvature. Biophysical Journal, 2020, 118, 55a.	0.5	0
111	Pump, Rest and Repeat: Single Molecule Measurements Reveal Mode-Switching in the Mammalian Brain V-ATPase. Biophysical Journal, 2021, 120, 74a-75a.	0.5	0
112	Super-Resolving Membrane Geometry and Lipid Packing in Living Cells. Biophysical Journal, 2021, 120, 40a.	0.5	0
113	Vesicle Arrays as Model-Membranes and Biochemical Reactor Systems. Biological and Medical Physics Series, 2011, , 87-112.	0.4	0
114	Molecular mechanism of formation of GPCR domains at the cell surface. Biophysical Journal, 2022, 121, 10a.	0.5	0