# Dimitrios Stamou

List of Publications by Year
in descending order



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|---|---|---|---|
| 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 | Molecular mechanism of formation of GPCR domains at the cell surface. Biophysical Journal, 2022, 121, 10a. | 0.5 | 0 |
| 2 | WASP integrates substrate topology and cell polarity to guide neutrophil migration. Journal of Cell Biology, 2022, 221, . | 5.2 | 28 |
| 3 | 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 |
| 4 | Super-Resolving Membrane Geometry and Lipid Packing in Living Cells. Biophysical Journal, 2021, 120, 40a. | 0.5 | 0 |
| 5 | The WAVE complex associates with sites of saddle membrane curvature. Journal of Cell Biology, 2021, 220, . | 5.2 | 36 |
| 6 | Voices of chemical biology. Nature Chemical Biology, 2021, 17, 1-4. | 8.0 | 7 |
| 7 | How Membrane Geometry Regulates Protein Sorting Independently of Mean Curvature. ACS Central Science, 2020, 6, 1159-1168. | 11.3 | 29 |
| 8 | Superresolving the Membrane Topography of Live Cells. Biophysical Journal, 2020, 118, 187a. | 0.5 | 0 |
| 9 | Domains of Activated GPCRs Mediated by Membrane Curvature. Biophysical Journal, 2020, 118, 55a. | 0.5 | 0 |
| 10 | 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 |
| 11 | Protons in small spaces: Discrete simulations of vesicle acidification. PLoS Computational Biology, 2019, 15, e1007539. | 3.2 | 6 |
| 12 | 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 |
| 13 | The 2018 biomembrane curvature and remodeling roadmap. Journal Physics D: Applied Physics, 2018, 51, 343001. | 2.8 | 212 |
| 14 | Single Proteoliposome High-Content Analysis Reveals Differences in the Homo-Oligomerization of GPCRs. Biophysical Journal, 2018, 115, 300-312. | 0.5 | 19 |
| 15 | Membrane curvature regulates ligand-specific membrane sorting of GPCRs in living cells. Nature Chemical Biology, 2017, 13, 724-729. | 8.0 | 81 |
| 16 | Live Cell Strategy for Detection of Curvature Dependent Sorting of Membrane Associated Proteins. Biophysical Journal, 2017, 112, 297a. | 0.5 | 0 |
| 17 | High Content Analysis of Intracellular Heterogeneity to Study GPCR Oligomerization. Biophysical Journal, 2017, 112, 88a. | 0.5 | 0 |
| 18 | Membrane Curvature and Lipid Composition Synergize To Regulate N-Ras Anchor Recruitment. Biophysical Journal, 2017, 113, 1269-1279. | 0.5 | 26 |

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|---|---|---|---|
| 19 | Resolving Active Ion Transport at the Single Molecule Level for the First Time. Biophysical Journal, 2016, 110, 179a. | 0.5 | 0 |
| 20 | tN-Ras, Synaptotagmin1 C2Ab, Annexinb12 and Amphiphysin NBAR can Discriminate Spherical from Cylindrical Membrane Curvature. Biophysical Journal, 2016, 110, 357a. | 0.5 | 0 |
| 21 | Direct observation of proton pumping by a eukaryotic P-type ATPase. Science, 2016, 351, 1469-1473. | 12.6 | 81 |
| 22 | 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 |
| 23 | Links of Conformational Sampling to Functional Plasticity and Clinical Phenotypes by Single Molecule Studies. Biophysical Journal, 2016, 110, 397a. | 0.5 | 0 |
| 24 | N-RAS Lipid Anchor Adsorption to Membranes as a Function of Lipid Composition and Curvature. Biophysical Journal, 2016, 110, 579a. | 0.5 | 1 |
| 25 | Functional Analysis of Proton-Transporter at Single Molecule Level. Biophysical Journal, 2015, 108, 147a. | 0.5 | 0 |
| 26 | 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 |
| 27 | 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 |
| 28 | Membrane Curvature Regulates the Localization of G Protein Coupled Receptors and Ras Isoforms. Biophysical Journal, 2015, 108, 95a-96a. | 0.5 | 0 |
| 29 | Membrane curvature enables N-Ras lipid anchor sorting to liquid-ordered membrane phases. Nature Chemical Biology, 2015, 11, 192-194. | 8.0 | 108 |
| 30 | Interferometric Detection of Single Gold Nanoparticles Calibrated against TEM Size Distributions. Small, 2015, 11, 3550-3555. | 10.0 | 4 |
| 31 | Membrane curvature bends the laws of physics and chemistry. Nature Chemical Biology, 2015, 11, 822-825. | 8.0 | 75 |
| 32 | CALM Regulates Clathrin-Coated Vesicle Size and Maturation by Directly Sensing and Driving Membrane Curvature. Developmental Cell, 2015, 33, 163-175. | 7.0 | 187 |
| 33 | 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 |
| 34 | Single Liposomes Used to Study the Activity of Individual Transporters. Biophysical Journal, 2014, 106, 229a. | 0.5 | 0 |
| 35 | Single Proteoliposome Assay to Monitor Opsin and Cannabinoid Gpcr Homo-Oligomerization. Biophysical Journal, 2014, 106, 103a-104a. | 0.5 | 0 |
| 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 |

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|---|---|---|---|
| 37 | Geometrical Membrane Curvature as an Allosteric Regulator of Membrane Protein Structure and Function. Biophysical Journal, 2014, 106, 201-209. | 0.5 | 44 |
| 38 | Nanoscale high-content analysis using compositional heterogeneities of single proteoliposomes. Nature Methods, 2014, 11, 931-934. | 19.0 | 64 |
| 39 | Ras activation by SOS: Allosteric regulation by altered fluctuation dynamics. Science, 2014, 345, 50-54. | 12.6 | 126 |
| 40 | Sensing and Stiffening of Tubular Membranes by the Syndapin 1 FBAR. Biophysical Journal, 2014, 106, 714a. | 0.5 | 0 |
| 41 | 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 |
| 42 | Fractional Binding: A Molecular Analog-To-Digital Converter in Ca++ Regulated Vesicle Differentiation. Biophysical Journal, 2014, 106, 529a-530a. | 0.5 | 0 |
| 43 | Single vesicle biochips for ultra-miniaturized nanoscale fluidics and single molecule bioscience. Lab on A Chip, 2013, 13, 3613. | 6.0 | 17 |
| 44 | FBAR Syndapin 1 recognizes and stabilizes highly curved tubular membranes in a concentration dependent manner. Scientific Reports, 2013, 3, 1565. | 3.3 | 55 |
| 45 | A Computational Investigation of the Effect of Membrane Curvature on G-Protein Coupled Receptor Oligomerization. Biophysical Journal, 2013, 104, 114a. | 0.5 | 0 |
| 46 | Membrane-Sculpting BAR Domains Generate Stable Lipid Microdomains. Cell Reports, 2013, 4, 1213-1223. | 6.4 | 134 |
| 47 | 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 |
| 48 | Membrane Curvature Regulates the Oligomerization of Human Î²2-Adrenergic Receptors. Biophysical Journal, 2013, 104, 42a. | 0.5 | 3 |
| 49 | Biochemical and Biophysical Studies of Membrane Deformation by Bar-Domain Proteins. Biophysical Journal, 2013, 104, 94a. | 0.5 | 0 |
| 50 | Lipid-Anchored Ras is Sorted by Membrane Curvature Both InÂVitro and in Living Cells. Biophysical Journal, 2013, 104, 96a. | 0.5 | 0 |
| 51 | Superresolution Inter-Surface Interaction Energy Mapping using Particle Tracking Microscopy (PTE). Biophysical Journal, 2013, 104, 503a. | 0.5 | 0 |
| 52 | Single Proton Pump Activity Measurements on Single Vesicles for a Quinol Heme-Copper Oxidase. Biophysical Journal, 2013, 104, 277a-278a. | 0.5 | 3 |
| 53 | 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 |
| 54 | Sorting of tN-Ras by Membrane Curvature in Lipid Vesicles and Tubes. Biophysical Journal, 2013, 104, 549a. | 0.5 | 0 |

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| 55 | PICK1 Deficiency Impairs Secretory Vesicle Biogenesis and Leads to Growth Retardation and Decreased Glucose Tolerance. PLoS Biology, 2013, 11, e1001542. | 5.6 | 73 |
| 56 | Molecular basis for SNX-BAR-mediated assembly of distinct endosomal sorting tubules. EMBO Journal, 2012, 31, 4466-4480. | 7.8 | 157 |
| 57 | 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 |
| 58 | Composition and structure of mixed phospholipid supported bilayers formed by POPC and DPPC. Soft Matter, 2012, 8, 5658. | 2.7 | 77 |
| 59 | Mixing subattolitre volumes in a quantitative and highly parallel manner with soft matter nanofluidics. Nature Nanotechnology, 2012, 7, 51-55. | 31.5 | 57 |
| 60 | 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 |
| 61 | Observation of Inhomogeneity in the Lipid Composition of Individual Nanoscale Liposomes. Biophysical Journal, 2012, 102, 426a. | 0.5 | 2 |
| 62 | Creating a Proteoliposome Assay for Single Photosystem I Activity Assessment. Biophysical Journal, 2012, 102, 626a-627a. | 0.5 | 1 |
| 63 | Soft Matter Based Nanofluidic Platform for Highly Parallel Mixing of Sub-Attoliter Total Volumes. Biophysical Journal, 2012, 102, 600a-601a. | 0.5 | 0 |
| 64 | 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 |
| 65 | 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 |
| 66 | Highly Accurate Quantification of the Oligomerization of the Î²2 Adrenergic Receptor using FRET. Biophysical Journal, 2012, 102, 232a-233a. | 0.5 | 0 |
| 67 | 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 |
| 68 | Induced dye leakage by PAMAM G6 does not imply dendrimer entry into vesicle lumen. Soft Matter, 2012, 8, 8972. | 2.7 | 26 |
| 69 | 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 |
| 70 | Monitoring the Aggregation of Single Casein Micelles Using Fluorescence Microscopy. Langmuir, 2011, 27, 866-869. | 3.5 | 9 |
| 71 | Observation of Inhomogeneity in the Lipid Composition of Individual Nanoscale Liposomes. Journal of the American Chemical Society, 2011, 133, 10685-10687. | 13.7 | 108 |
| 72 | Regulation of Enzymatic Activity Occurs by Selection of Discrete Activity States. Biophysical Journal, 2011, 100, 194a. | 0.5 | 0 |

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| 73 | 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 |
| 74 | Intermembrane Docking Reactions Are Regulated by Membrane Curvature. Biophysical Journal, 2011, 101, 2693-2703. | 0.5 | 10 |
| 75 | Heat Profiling of Three-Dimensionally Optically Trapped Gold Nanoparticles using Vesicle Cargo Release. Nano Letters, 2011, 11, 888-892. | 9.1 | 143 |
| 76 | Fluorescence Anisotropy Based Single Liposome Assay to Measure Moleculeâ€"Membrane Interactions. Analytical Chemistry, 2011, 83, 8169-8176. | 6.5 | 23 |
| 77 | A structural analysis of M protein in coronavirus assembly and morphology. Journal of Structural Biology, 2011, 174, 11-22. | 2.8 | 625 |
| 78 | Membrane Curvature Sensing by Amphipathic Helices. Journal of Biological Chemistry, 2011, 286, 42603-42614. | 3.4 | 108 |
| 79 | Synapsin I Senses Membrane Curvature by an Amphipathic Lipid Packing Sensor Motif. Journal of Neuroscience, 2011, 31, 18149-18154. | 3.6 | 38 |
| 80 | Vesicle Arrays as Model-Membranes and Biochemical Reactor Systems. Biological and Medical Physics Series, 2011, , 87-112. | 0.4 | 0 |
| 81 | David versus Goliath. Nanomedicine: Nanotechnology, Biology, and Medicine, 2010, 6, 504-509. | 3.3 | 3 |
| 82 | 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 |
| 83 | 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 |
| 84 | Membrane Curvature Induction and Tubulation Are Common Features of Synucleins and Apolipoproteins. Journal of Biological Chemistry, 2010, 285, 32486-32493. | 3.4 | 278 |
| 85 | Sensing-Applications of Surface-Based Single Vesicle Arrays. Sensors, 2010, 10, 11352-11368. | 3.8 | 47 |
| 86 | The Language of Shape: Biological Reactions are Dramatically Affected byÂthe Shape of Lipid Membranes. Biophysical Journal, 2010, 98, 618a. | 0.5 | 0 |
| 87 | 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 |
| 88 | 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 |
| 89 | Optically Induced Linking of Protein and Nanoparticles to Gold Surfaces. Bioconjugate Chemistry, 2010, 21, 1056-1061. | 3.6 | 6 |
| 90 | 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 |

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| 91 | Amphipathic motifs in BAR domains are essential for membrane curvature sensing. EMBO Journal, 2009, 28, 3303-3314. | 7.8 | 230 |
| 92 | How curved membranes recruit amphipathic helices and protein anchoring motifs. Nature Chemical Biology, 2009, 5, 835-841. | 8.0 | 352 |
| 93 | Chemically Specific Laserâˆ'Induced Patterning of Alkanethiol SAMs: Characterization by SEM and AFM. Langmuir, 2009, 25, 12819-12824. | 3.5 | 17 |
| 94 | Manipulating The Environment Of a Single Lipase Molecule. Biophysical Journal, 2009, 96, 28a. | 0.5 | 0 |
| 95 | Phase Transitions in Single Nano-Vesicles. Biophysical Journal, 2009, 96, 148a. | 0.5 | 0 |
| 96 | Constructing Size Distributions of Liposomes from Single-Object Fluorescence Measurements. Methods in Enzymology, 2009, 465, 143-160. | 1.0 | 29 |
| 97 | Screening the Sensing of Membrane Curvature by BAR domains on Single Liposome Arrays. Biophysical Journal, 2009, 96, 570a. | 0.5 | 1 |
| 98 | An Integrated Selfâ€Assembled Nanofluidic System for Controlled Biological Chemistries. Angewandte Chemie - International Edition, 2008, 47, 5544-5549. | 13.8 | 144 |
| 99 | Membrane Localization is Critical for Activation of the PICK1 BAR Domain. Traffic, 2008, 9, 1327-1343. | 2.7 | 46 |
| 100 | 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 |
| 101 | Templated Protein Assembly on Micro-Contact-Printed Surface Patterns. Use of the SNAP-tag Protein Functionality. Langmuir, 2008, 24, 6375-6381. | 3.5 | 38 |
| 102 | Encapsulation Efficiency Measured on Single Small Unilamellar Vesicles. Journal of the American Chemical Society, 2008, 130, 14372-14373. | 13.7 | 87 |
| 103 | Surface-based lipid vesicle reactor systems: fabrication and applications. Soft Matter, 2007, 3, 828. | 2.7 | 122 |
| 104 | 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 |
| 105 | Sample patterning on NMR surface microcoils. Journal of Magnetic Resonance, 2006, 178, 96-105. | 2.1 | 24 |
| 106 | Synthesis of Nanoscopic Optical Fibers Using Lipid Membranes as Templates. Angewandte Chemie - International Edition, 2005, 44, 4957-4960. | 13.8 | 6 |
| 107 | Site-Directed Molecular Assembly on Templates Structured with Electron-Beam Lithography. Langmuir, 2004, 20, 3495-3497. | 3.5 | 15 |
| 108 | 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 |

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| 109 | Highly Fluorescent Streptavidin-Coated CdSe Nanoparticles:Â Preparation in Water, Characterization, and Micropatterning. Langmuir, 2004, 20, 3828-3831. | 3.5 | 87 |
| 110 | Self-Assembled Microarrays of Attoliter Molecular Vessels. Angewandte Chemie - International Edition, 2003, 42, 5580-5583. | 13.8 | 198 |
| 111 | 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 |
| 112 | Self-assembling functionalized templates in biosensor technology. Polymer Bulletin, 1998, 40, 151-157. | 3.3 | 4 |
| 113 | Functionalisation of gold surfaces via topological templates. Tetrahedron, 1998, 54, 3725-3734. | 1.9 | 16 |
| 114 | Friction Anisotropy and Asymmetry of a Compliant Monolayer Induced by a Small Molecular Tilt. Science, 1998, 280, 273-275. | 12.6 | 151 |