

# Jay T Groves

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3850132/publications.pdf>

Version: 2024-02-01

166  
papers

11,473  
citations

30070

54  
h-index

33894

99  
g-index

177  
all docs

177  
docs citations

177  
times ranked

10787  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | TCR and Lat are expressed on separate protein islands on T cell membranes and concatenate during activation. <i>Nature Immunology</i> , 2010, 11, 90-96.                                  | 14.5 | 571       |
| 2  | Altered TCR Signaling from Geometrically Repatterned Immunological Synapses. <i>Science</i> , 2005, 310, 1191-1193.   | 12.6 | 491       |
| 3  | Conformational Coupling across the Plasma Membrane in Activation of the EGF Receptor. <i>Cell</i> , 2013, 152, 543-556.   | 28.9 | 423       |
| 4  | Micropattern Formation in Supported Lipid Membranes. <i>Accounts of Chemical Research</i> , 2002, 35, 149-157.  | 15.6 | 341       |
| 5  | Restriction of Receptor Movement Alters Cellular Response: Physical Force Sensing by EphA2. <i>Science</i> , 2010, 327, 1380-1385.  | 12.6 | 301       |
| 6  | Architecture and Function of Membrane Proteins in Planar Supported Bilayers: A Study with Photosynthetic Reaction Centers. <i>Biochemistry</i> , 1996, 35, 14773-14781.                   | 2.5  | 291       |
| 7  | A molecular assembly phase transition and kinetic proofreading modulate Ras activation by SOS. <i>Science</i> , 2019, 363, 1098-1103.   | 12.6 | 268       |
| 8  | Molecular mechanisms in signal transduction at the membrane. <i>Nature Structural and Molecular Biology</i> , 2010, 17, 659-665.  | 8.2  | 248       |
| 9  | Engineering of a synthetic electron conduit in living cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 19213-19218.             | 7.1  | 248       |
| 10 | A Mechanism for Tunable Autoinhibition in the Structure of a Human Ca <sup>2+</sup> /Calmodulin- Dependent Kinase II Holoenzyme. <i>Cell</i> , 2011, 146, 732-745.                        | 28.9 | 230       |
| 11 | Isolation of a Structural Mechanism for Uncoupling T Cell Receptor Signaling from Peptide-MHC Binding. <i>Cell</i> , 2018, 174, 672-687.e27.  | 28.9 | 229       |
| 12 | Supported planar bilayers in studies on immune cell adhesion and communication. <i>Journal of Immunological Methods</i> , 2003, 278, 19-32.   | 1.4  | 228       |
| 13 | Curvature-Modulated Phase Separation in Lipid Bilayer Membranes. <i>Langmuir</i> , 2006, 22, 5095-5099.   | 3.5  | 222       |
| 14 | Membrane-dependent signal integration by the Ras activator Son of sevenless. <i>Nature Structural and Molecular Biology</i> , 2008, 15, 452-461.  | 8.2  | 222       |
| 15 | Receptor Signaling Clusters in the Immune Synapse. <i>Annual Review of Biophysics</i> , 2012, 41, 543-556.  | 10.0 | 215       |
| 16 | Detection of molecular interactions at membrane surfaces through colloid phase transitions. <i>Nature</i> , 2004, 427, 139-141.   | 27.8 | 205       |
| 17 | Noncovalent Cell Surface Engineering: Incorporation of Bioactive Synthetic Glycopolymers into Cellular Membranes. <i>Journal of the American Chemical Society</i> , 2008, 130, 5947-5953. | 13.7 | 185       |
| 18 | T Cell Receptor Microcluster Transport through Molecular Mazes Reveals Mechanism of Translocation. <i>Biophysical Journal</i> , 2008, 94, 3286-3292.                                      | 0.5  | 158       |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 19 | H-Ras forms dimers on membrane surfaces via a protein-protein interface. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 2996-3001.  | 7.1  | 150       |
| 20 | Substrate-Membrane Interactions: Mechanisms for Imposing Patterns on a Fluid Bilayer Membrane. Langmuir, 1998, 14, 3347-3350.  | 3.5  | 146       |
| 21 | Kinetic Control of Histidine-Tagged Protein Surface Density on Supported Lipid Bilayers. Langmuir, 2008, 24, 4145-4149.  | 3.5  | 146       |
| 22 | Direct single molecule measurement of TCR triggering by agonist pMHC in living primary T cells. ELife, 2013, 2, e00778.  | 6.0  | 142       |
| 23 | Cluster size regulates protein sorting in the immunological synapse. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 12729-12734.  | 7.1  | 136       |
| 24 | Control of Cell Adhesion and Growth with Micropatterned Supported Lipid Membranes. Langmuir, 2001, 17, 5129-5133.  | 3.5  | 126       |
| 25 | Ras activation by SOS: Allosteric regulation by altered fluctuation dynamics. Science, 2014, 345, 50-54.   | 12.6 | 126       |
| 26 | Signaling clusters in the cell membrane. Current Opinion in Cell Biology, 2011, 23, 370-376.   | 5.4  | 124       |
| 27 | Colorimetric Bio-Barcode Amplification Assay for Cytokines. Analytical Chemistry, 2005, 77, 6985-6988.   | 6.5  | 120       |
| 28 | Structure and Dynamics of Supported Intermembrane Junctions. Biophysical Journal, 2004, 86, 905-912.   | 0.5  | 116       |
| 29 | Spatial organization and signal transduction at intercellular junctions. Nature Reviews Molecular Cell Biology, 2010, 11, 342-352.   | 37.0 | 114       |
| 30 | Detection of proteins using a colorimetric bio-barcode assay. Nature Protocols, 2007, 2, 1438-1444.  | 12.0 | 113       |
| 31 | Curvature and spatial organization in biological membranes. Soft Matter, 2007, 3, 24-33.   | 2.7  | 111       |
| 32 | Fluorescence Imaging of Membrane Dynamics. Annual Review of Biomedical Engineering, 2008, 10, 311-338.   | 12.3 | 111       |
| 33 | A Nanocube Plasmonic Sensor for Molecular Binding on Membrane Surfaces. Nano Letters, 2009, 9, 2077-2082.  | 9.1  | 111       |
| 34 | Negative membrane curvature catalyzes nucleation of endosomal sorting complex required for transport (ESCRT)-III assembly. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 15892-15897.    | 7.1  | 109       |
| 35 | Writing and Erasing Barriers to Lateral Mobility into Fluid Phospholipid Bilayers. Langmuir, 1999, 15, 3893-3896.  | 3.5  | 106       |
| 36 | Phosphotyrosine-mediated LAT assembly on membranes drives kinetic bifurcation in recruitment dynamics of the Ras activator SOS. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 8218-8223. | 7.1  | 101       |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 37 | Formation and Spatio-Temporal Evolution of Periodic Structures in Lipid Bilayers. <i>Journal of the American Chemical Society</i> , 2005, 127, 36-37.  | 13.7 | 90        |
| 38 | Modulation of T cell signaling by the actin cytoskeleton. <i>Journal of Cell Science</i> , 2013, 126, 1049-1058.   | 2.0  | 90        |
| 39 | Activation-triggered subunit exchange between CaMKII holoenzymes facilitates the spread of kinase activity. <i>ELife</i> , 2014, 3, e01610.  | 6.0  | 87        |
| 40 | A chemical approach to unraveling the biological function of the glycosylphosphatidylinositol anchor. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 20332-20337. | 7.1  | 86        |
| 41 | Using patterned supported lipid membranes to investigate the role of receptor organization in intercellular signaling. <i>Nature Protocols</i> , 2011, 6, 523-539.   | 12.0 | 86        |
| 42 | Membrane-protein binding measured with solution-phase plasmonic nanocube sensors. <i>Nature Methods</i> , 2012, 9, 1189-1191.  | 19.0 | 86        |
| 43 | E-cadherin junction formation involves an active kinetic nucleation process. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 10932-10937.                          | 7.1  | 84        |
| 44 | Lipid Lateral Mobility and Membrane Phase Structure Modulation by Protein Binding. <i>Journal of the American Chemical Society</i> , 2006, 128, 15221-15227.   | 13.7 | 83        |
| 45 | Synthetic Analogues of Glycosylphosphatidylinositol-Anchored Proteins and Their Behavior in Supported Lipid Bilayers. <i>Journal of the American Chemical Society</i> , 2007, 129, 11543-11550.                        | 13.7 | 79        |
| 46 | Quantitative Fluorescence Microscopy Using Supported Lipid Bilayer Standards. <i>Biophysical Journal</i> , 2008, 95, 2512-2519.  | 0.5  | 79        |
| 47 | Bending Mechanics and Molecular Organization in Biological Membranes. <i>Annual Review of Physical Chemistry</i> , 2007, 58, 697-717.  | 10.8 | 78        |
| 48 | Diffusion of GPI-anchored proteins is influenced by the activity of dynamic cortical actin. <i>Molecular Biology of the Cell</i> , 2015, 26, 4033-4045.  | 2.1  | 76        |
| 49 | Investigating Cell Surface Galectin-Mediated Cross-Linking on Glycoengineered Cells. <i>Journal of the American Chemical Society</i> , 2012, 134, 9549-9552.   | 13.7 | 70        |
| 50 | Mapping the stochastic sequence of individual ligand-receptor binding events to cellular activation: T cells act on the rare events. <i>Science Signaling</i> , 2019, 12, .  | 3.6  | 70        |
| 51 | K-Ras4B Remains Monomeric on Membranes over a Wide Range of Surface Densities and Lipid Compositions. <i>Biophysical Journal</i> , 2018, 114, 137-145.   | 0.5  | 69        |
| 52 | Altered Actin Centripetal Retrograde Flow in Physically Restricted Immunological Synapses. <i>PLoS ONE</i> , 2010, 5, e11878.  | 2.5  | 66        |
| 53 | Synthesis of Lipidated Green Fluorescent Protein and Its Incorporation in Supported Lipid Bilayers. <i>Journal of the American Chemical Society</i> , 2005, 127, 14383-14387.  | 13.7 | 65        |
| 54 | Myosin IIA Modulates T Cell Receptor Transport and CasL Phosphorylation during Early Immunological Synapse Formation. <i>PLoS ONE</i> , 2012, 7, e30704.   | 2.5  | 65        |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 55 | EGFR family and Src family kinase interactions: mechanics matters?. <i>Current Opinion in Cell Biology</i> , 2018, 51, 97-102.   | 5.4  | 64        |
| 56 | Early T cell receptor signals globally modulate ligand:receptor affinities during antigen discrimination. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 12190-12195. | 7.1  | 62        |
| 57 | Engineering supported membranes for cell biology. <i>Medical and Biological Engineering and Computing</i> , 2010, 48, 955-963.   | 2.8  | 60        |
| 58 | Supported Membrane Formation, Characterization, Functionalization, and Patterning for Application in Biological Science and Technology. <i>Current Protocols in Chemical Biology</i> , 2010, 2, 235-269.                   | 1.7  | 57        |
| 59 | Characterization of dynamic actin associations with T-cell receptor microclusters in primary T cells. <i>Journal of Cell Science</i> , 2012, 125, 735-742.   | 2.0  | 55        |
| 60 | Neuronal synapse interaction reconstituted between live cells and supported lipid bilayers. <i>Nature Chemical Biology</i> , 2005, 1, 283-289.   | 8.0  | 54        |
| 61 | Lipid Mobility and Molecular Binding in Fluid Lipid Membranes. <i>Journal of the American Chemical Society</i> , 2005, 127, 2826-2827.   | 13.7 | 54        |
| 62 | Electrostatically Targeted Intermembrane Lipid Exchange with Micropatterned Supported Membranes. <i>Langmuir</i> , 2003, 19, 1606-1610.  | 3.5  | 53        |
| 63 | Live Cell Plasma Membranes Do Not Exhibit a Miscibility Phase Transition over a Wide Range of Temperatures. <i>Journal of Physical Chemistry B</i> , 2015, 119, 4450-4459.   | 2.6  | 53        |
| 64 | Optical Techniques for Imaging Membrane Topography. <i>Cell Biochemistry and Biophysics</i> , 2004, 41, 391-414.   | 1.8  | 52        |
| 65 | Cell membrane array fabrication and assay technology. <i>BMC Biotechnology</i> , 2005, 5, 18.  | 3.3  | 52        |
| 66 | Hydrodynamic Damping of Membrane Thermal Fluctuations near Surfaces Imaged by Fluorescence Interference Microscopy. <i>Physical Review Letters</i> , 2006, 96, 118101.   | 7.8  | 51        |
| 67 | Supported Membranes Embedded with Fixed Arrays of Gold Nanoparticles. <i>Nano Letters</i> , 2011, 11, 4912-4918.   | 9.1  | 51        |
| 68 | Hierarchical Assembly of Model Cell Surfaces: Synthesis of Mucin Mimetic Polymers and Their Display on Supported Bilayers. <i>Journal of the American Chemical Society</i> , 2007, 129, 5462-5471.                         | 13.7 | 50        |
| 69 | Protein patterns at lipid bilayer junctions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 12798-12803.  | 7.1  | 49        |
| 70 | One-way membrane trafficking of SOS in receptor-triggered Ras activation. <i>Nature Structural and Molecular Biology</i> , 2016, 23, 838-846.  | 8.2  | 49        |
| 71 | Interfacial Forces Dictate the Pathway of Phospholipid Vesicle Adsorption onto Silicon Dioxide Surfaces. <i>Langmuir</i> , 2018, 34, 1775-1782.  | 3.5  | 49        |
| 72 | Coupled membrane lipid miscibility and phosphotyrosine-driven protein condensation phase transitions. <i>Biophysical Journal</i> , 2021, 120, 1257-1265.   | 0.5  | 49        |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 73 | EphA2 Receptor Activation by Monomeric Ephrin-A1 on Supported Membranes. <i>Biophysical Journal</i> , 2011, 101, 2731-2739.  | 0.5  | 47        |
| 74 | Scanning Probe Lithography on Fluid Lipid Membranes. <i>Journal of the American Chemical Society</i> , 2004, 126, 13878-13879.   | 13.7 | 46        |
| 75 | Electrostatic readout of DNA microarrays with charged microspheres. <i>Nature Biotechnology</i> , 2008, 26, 825-830.   | 17.5 | 45        |
| 76 | Monitoring Lipid Anchor Organization in Cell Membranes by PIE-FCCS. <i>Journal of the American Chemical Society</i> , 2012, 134, 10833-10842.  | 13.7 | 43        |
| 77 | Materials Science of Supported Lipid Membranes. <i>MRS Bulletin</i> , 2006, 31, 507-512.   | 3.5  | 42        |
| 78 | Molecular topography imaging by intermembrane fluorescence resonance energy transfer. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002, 99, 14147-14152.  | 7.1  | 41        |
| 79 | Spatial Organization of EphA2 at the Cell-Cell Interface Modulates Trans-Endocytosis of EphrinA1. <i>Biophysical Journal</i> , 2014, 106, 2196-2205.   | 0.5  | 41        |
| 80 | Mechanism of SOS PR-domain autoinhibition revealed by single-molecule assays on native protein from lysate. <i>Nature Communications</i> , 2017, 8, 15061.   | 12.8 | 41        |
| 81 | Stochastic geometry sensing and polarization in a lipid kinase-phosphatase competitive reaction. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 15013-15022.  | 7.1  | 41        |
| 82 | Phase Segregation on Different Length Scales in a Model Cell Membrane System. <i>Journal of Physical Chemistry B</i> , 2005, 109, 19960-19969.   | 2.6  | 40        |
| 83 | Spatially modulated ephrinA1:EphA2 signaling increases local contractility and global focal adhesion dynamics to promote cell motility. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E5696-E5705. | 7.1  | 40        |
| 84 | The Membrane Environment Can Promote or Suppress Bistability in Cell Signaling Networks. <i>Journal of Physical Chemistry B</i> , 2012, 116, 3630-3640.  | 2.6  | 39        |
| 85 | How the T cell signaling network processes information to discriminate between self and agonist ligands. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 26020-26030.                                | 7.1  | 39        |
| 86 | Raf promotes dimerization of the Ras G-domain with increased allosteric connections. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .   | 7.1  | 39        |
| 87 | Topographical Imaging of an Intermembrane Junction by Combined Fluorescence Interference and Energy Transfer Microscopies. <i>Journal of the American Chemical Society</i> , 2001, 123, 12414-12415.   | 13.7 | 38        |
| 88 | Sustained $\beta$ -catenin Activation at E-cadherin Junctions in the Absence of Mechanical Force. <i>Biophysical Journal</i> , 2016, 111, 1044-1052.   | 0.5  | 37        |
| 89 | Switch-like activation of Bruton's tyrosine kinase by membrane-mediated dimerization. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 10798-10803.   | 7.1  | 37        |
| 90 | A Fluid Membrane-Based Soluble Ligand-Display System for Live-Cell Assays. <i>ChemBioChem</i> , 2006, 7, 436-440.  | 2.6  | 35        |

| #   | ARTICLE  | IF   | CITATIONS |
|-----|--|------|-----------|
| 91  | Covalent Ras Dimerization on Membrane Surfaces through Photosensitized Oxidation. <i>Journal of the American Chemical Society</i> , 2016, 138, 1800-1803.  | 13.7 | 35        |
| 92  | A two-component protein condensate of the EGFR cytoplasmic tail and Grb2 regulates Ras activation by SOS at the membrane. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, e2122531119. | 7.1  | 33        |
| 93  | Control of Antigen Presentation with a Photoreleasable Agonist Peptide. <i>Journal of the American Chemical Society</i> , 2006, 128, 15354-15355.  | 13.7 | 32        |
| 94  | Like-charge interactions between colloidal particles are asymmetric with respect to sign. <i>Soft Matter</i> , 2009, 5, 1931.  | 2.7  | 31        |
| 95  | Hybrid Protein~Lipid Patterns from Aluminum Templates. <i>Langmuir</i> , 2007, 23, 2052-2057.  | 3.5  | 30        |
| 96  | Neuronal Activation by GPI-Linked Neuroligin-1 Displayed in Synthetic Lipid Bilayer Membranes. <i>Langmuir</i> , 2005, 21, 10693-10698.  | 3.5  | 29        |
| 97  | Nanoscale Obstacle Arrays Frustrate Transport of EphA2~Ephrin-A1 Clusters in Cancer Cell Lines. <i>Nano Letters</i> , 2013, 13, 3059-3064.   | 9.1  | 28        |
| 98  | DNA-Mediated Assembly of Protein Heterodimers on Membrane Surfaces. <i>Journal of the American Chemical Society</i> , 2013, 135, 5012-5016.  | 13.7 | 27        |
| 99  | Allosteric Modulation of Grb2 Recruitment to the Intrinsically Disordered Scaffold Protein, LAT, by Remote Site Phosphorylation. <i>Journal of the American Chemical Society</i> , 2017, 139, 18009-18015.                                 | 13.7 | 27        |
| 100 | Hybrid Live Cell~Supported Membrane Interfaces for Signaling Studies. <i>Annual Review of Biophysics</i> , 2019, 48, 537-562.  | 10.0 | 27        |
| 101 | Molecular Organization and Signal Transduction at Intermembrane Junctions. <i>Angewandte Chemie - International Edition</i> , 2005, 44, 3524-3538.   | 13.8 | 26        |
| 102 | Surface Binding Affinity Measurements from Order Transitions of Lipid Membrane-Coated Colloidal Particles. <i>Analytical Chemistry</i> , 2006, 78, 174-180.  | 6.5  | 25        |
| 103 | Effect of Support Corrugation on Silica Xerogel~Supported Phase-Separated Lipid Bilayers. <i>Langmuir</i> , 2009, 25, 3713-3717.   | 3.5  | 24        |
| 104 | Lateral Reorganization of Fluid Lipid Membranes in Response to the Electric Field Produced by a Buried Charge. <i>Journal of Physical Chemistry B</i> , 2000, 104, 11409-11415.  | 2.6  | 23        |
| 105 | Spatial mutation of the T cell immunological synapse. <i>Current Opinion in Chemical Biology</i> , 2006, 10, 544-550.  | 6.1  | 23        |
| 106 | Bending-mediated superstructural organizations in phase-separated lipid membranes. <i>New Journal of Physics</i> , 2010, 12, 095001.   | 2.9  | 23        |
| 107 | Dynamic Scaling Analysis of Molecular Motion within the LAT:Grb2:SOS Protein Network on Membranes. <i>Biophysical Journal</i> , 2017, 113, 1807-1813.  | 0.5  | 23        |
| 108 | Electric Field Effects in Multicomponent Fluid Lipid Membranes. <i>Journal of Physical Chemistry B</i> , 2000, 104, 119-124.   | 2.6  | 22        |

| #   | ARTICLE  | IF   | CITATIONS |
|-----|--|------|-----------|
| 109 | Many-Particle Tracking with Nanometer Resolution in Three Dimensions by Reflection Interference Contrast Microscopy. <i>Langmuir</i> , 2005, 21, 6430-6435.                                    | 3.5  | 22        |
| 110 | Monitoring the Waiting Time Sequence of Single Ras GTPase Activation Events Using Liposome Functionalized Zero-Mode Waveguides. <i>Nano Letters</i> , 2016, 16, 2890-2895.                     | 9.1  | 22        |
| 111 | Probing the effect of clustering on EphA2 receptor signaling efficiency by subcellular control of ligand-receptor mobility. <i>ELife</i> , 2021, 10, .   | 6.0  | 22        |
| 112 | Size-Based Chromatography of Signaling Clusters in a Living Cell Membrane. <i>Nano Letters</i> , 2014, 14, 2293-2298.  | 9.1  | 21        |
| 113 | Dynamic Cellular Interactions with Extracellular Matrix Triggered by Biomechanical Tuning of Low-Rigidity, Supported Lipid Membranes. <i>Advanced Healthcare Materials</i> , 2017, 6, 1700243. | 7.6  | 21        |
| 114 | Single Molecule Kinetics of ENTH Binding to Lipid Membranes. <i>Journal of Physical Chemistry B</i> , 2012, 116, 5122-5131.  | 2.6  | 20        |
| 115 | Cholesterol-Enriched Domain Formation Induced by Viral-Encoded, Membrane-Active Amphipathic Peptide. <i>Biophysical Journal</i> , 2016, 110, 176-187.  | 0.5  | 20        |
| 116 | Membrane Mechanics in Living Cells. <i>Developmental Cell</i> , 2019, 48, 15-16.   | 7.0  | 19        |
| 117 | Nonequilibrium Adhesion Patterns at Lipid Bilayer Junctions. <i>Journal of Physical Chemistry B</i> , 2004, 108, 649-657.  | 2.6  | 18        |
| 118 | Nonequilibrium Patterns of Cholesterol-Rich Chemical Heterogenieties within Single Fluid Supported Phospholipid Bilayer Membranes. <i>Langmuir</i> , 2006, 22, 5374-5384.                      | 3.5  | 18        |
| 119 | Patterned Two-Photon Photoactivation Illuminates Spatial Reorganization in Live Cells. <i>Journal of Physical Chemistry A</i> , 2011, 115, 3867-3875.  | 2.5  | 18        |
| 120 | Membrane Association Transforms an Inert Anti-TCR <sup>Î²</sup> Fab <sup>TM</sup> Ligand into a Potent T Cell Receptor Agonist. <i>Biophysical Journal</i> , 2020, 118, 2879-2893.             | 0.5  | 18        |
| 121 | EphrinB2 clustering by Nipah virus G is required to activate and trap F intermediates at supported lipid bilayer-cell interfaces. <i>Science Advances</i> , 2021, 7, .                         | 10.3 | 18        |
| 122 | Analysis of Shape, Fluctuations, and Dynamics in Intermembrane Junctions. <i>Biophysical Journal</i> , 2006, 91, 3600-3606.  | 0.5  | 17        |
| 123 | Molecular Orientation of Membrane-Anchored Mucin Glycoprotein Mimics. <i>Journal of Physical Chemistry B</i> , 2007, 111, 12133-12135.   | 2.6  | 17        |
| 124 | The physical chemistry of membrane curvature. <i>Nature Chemical Biology</i> , 2009, 5, 783-784.   | 8.0  | 17        |
| 125 | Interrogating the T cell synapse with patterned surfaces and photoactivated proteins. <i>Current Opinion in Immunology</i> , 2007, 19, 722-727.  | 5.5  | 14        |
| 126 | Graphene-Templated Supported Lipid Bilayer Nanochannels. <i>Nano Letters</i> , 2016, 16, 5022-5026.  | 9.1  | 14        |



| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 127 | A Microbead Supported Membrane-Based Fluorescence Imaging Assay Reveals Intermembrane Receptorâ€“Ligand Complex Dimension with Nanometer Precision. <i>Langmuir</i> , 2016, 32, 6775-6780.  | 3.5  | 14        |
| 128 | Dynamic Organization of Myristoylated Src in the Live Cell Plasma Membrane. <i>Journal of Physical Chemistry B</i> , 2016, 120, 867-876.  | 2.6  | 14        |
| 129 | Multicomponent Supported Membrane Microarray for Monitoring Spatially Resolved Cellular Signaling Reactions. <i>Advanced Biology</i> , 2018, 2, 1800015.  | 3.0  | 14        |
| 130 | Discrete Arrays of Liquidâ€“Crystalâ€“Supported Proteolipid Monolayers as Phantom Cell Surfaces. <i>ChemPhysChem</i> , 2008, 9, 1688-1692.  | 2.1  | 13        |
| 131 | Electrical Manipulation of Supported Lipid Membranes by Embedded Electrodes. <i>Langmuir</i> , 2008, 24, 6189-6193.   | 3.5  | 13        |
| 132 | Spatiochemical Modulation of EphB4-Ephrin-B2 Signaling in Neural Stem Cell Differentiation. <i>Biophysical Journal</i> , 2018, 115, 865-873.  | 0.5  | 13        |
| 133 | Learning the Chemical Language of Cell-Surface Interactions. <i>Science Signaling</i> , 2005, 2005, pe45-pe45.  | 3.6  | 12        |
| 134 | Coupled Membrane Fluctuations and Protein Mobility in Supported Intermembrane Junctions. <i>Journal of Physical Chemistry B</i> , 2006, 110, 8513-8516.   | 2.6  | 11        |
| 135 | Roles of the cytoskeleton in regulating EphA2 signals. <i>Communicative and Integrative Biology</i> , 2010, 3, 454-457.   | 1.4  | 11        |
| 136 | Nanopore-mediated protein delivery enabling three-color single-molecule tracking in living cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .                           | 7.1  | 11        |
| 137 | Fabrication of Multicomponent, Spatially Segregated DNA and Protein-Functionalized Supported Membrane Microarray. <i>Langmuir</i> , 2018, 34, 9781-9788.  | 3.5  | 10        |
| 138 | Size-dependent, stochastic nature of lipid exchange between nano-vesicles and model membranes. <i>Nanoscale</i> , 2016, 8, 13513-13520.   | 5.6  | 9         |
| 139 | Relating cellular signaling timescales to single-molecule kinetics: A first-passage time analysis of Ras activation by SOS. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, . | 7.1  | 9         |
| 140 | Height, but not binding epitope, affects the potency of synthetic TCR agonists. <i>Biophysical Journal</i> , 2021, 120, 3869-3880.  | 0.5  | 8         |
| 141 | The Biomolecular Interface. <i>Langmuir</i> , 2003, 19, 1449-1450.  | 3.5  | 7         |
| 142 | CHEMISTRY: Unveiling the Membrane Domains. <i>Science</i> , 2006, 313, 1901-1902.   | 12.6 | 7         |
| 143 | Ratiometric Imaging of the T-Cell Actin Cytoskeleton Reveals the Nature of Receptor-Induced Cytoskeletal Enrichment. <i>Biophysical Journal</i> , 2013, 105, L11-L13.   | 0.5  | 7         |
| 144 | Two-step membrane binding by the bacterial SRP receptor enable efficient and accurate Co-translational protein targeting. <i>ELife</i> , 2017, 6, .   | 6.0  | 7         |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 145 | Stochasticity and positive feedback enable enzyme kinetics at the membrane to sense reaction size. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .                                | 7.1  | 7         |
| 146 | Glycans' imprints. Nature Materials, 2013, 12, 96-97.   | 27.5 | 5         |
| 147 | Membrane array technology for drug discovery. Current Opinion in Drug Discovery & Development, 2002, 5, 606-12.   | 1.9  | 5         |
| 148 | Kinetic Pathways of Phase Ordering in Lipid Raft Model Systems. Journal of Physical Chemistry B, 2006, 110, 8416-8421.  | 2.6  | 4         |
| 149 | Membrane Reconstitution of Monoamine Oxidase Enzymes on Supported Lipid Bilayers. Langmuir, 2018, 34, 10764-10773.  | 3.5  | 4         |
| 150 | Membrane anchoring facilitates colocalization of enzymes in plant cytochrome P450 redox systems. Communications Biology, 2021, 4, 1057.   | 4.4  | 4         |
| 151 | Competition for shared downstream signaling molecules establishes indirect negative feedback between EGFR and EphA2. Biophysical Journal, 2022, 121, 1897-1908.   | 0.5  | 3         |
| 152 | Micropatterning fluid membranes. Advanced Materials, 1997, 9, 1121-1123.  | 21.0 | 2         |
| 153 | Stochastic Fluctuation Sensing in a Bistable Phosphatidylinositol-Based Reaction Diffusion System. Biophysical Journal, 2016, 110, 421a.  | 0.5  | 1         |
| 154 | Cell Adhesion: Dynamic Cellular Interactions with Extracellular Matrix Triggered by Biomechanical Tuning of Low Rigidity, Supported Lipid Membranes (Adv. Healthcare Mater. 10/2017). Advanced Healthcare Materials, 2017, 6, . | 7.6  | 1         |
| 155 | Activation Dependent Organization of T Cell Membranes: A FCCS Study. Biophysical Journal, 2009, 96, 451a.   | 0.5  | 0         |
| 156 | Probing Spatial Organization in Cell Membrane at the Immunological Synapse. Biophysical Journal, 2010, 98, 688a.  | 0.5  | 0         |
| 157 | Receptor Cluster Size Affects Signaling in Breast Epithelial Cancer Cells. Biophysical Journal, 2010, 98, 493a-494a.  | 0.5  | 0         |
| 158 | Gradient Distribution of LFA-1 cluster Size in the Immunological Synapse. Biophysical Journal, 2011, 100, 253a.   | 0.5  | 0         |
| 159 | EphA2-Ephrina1 Signaling and PI(4,5)P2 Spatial Organization on Breast Cancer Cells. Biophysical Journal, 2012, 102, 301a-302a.  | 0.5  | 0         |
| 160 | Clustering of Ras on Membrane Surfaces Independent of Lipid Anchor Effects. Biophysical Journal, 2013, 104, 97a-98a.  | 0.5  | 0         |
| 161 | Restricting EphA2 Receptor Movement Affects Internalization and Signaling in Living Cells. Biophysical Journal, 2013, 104, 27a.   | 0.5  | 0         |
| 162 | Single Molecule Measurements of TCR Triggering in Self-Reactive T Cells. Biophysical Journal, 2014, 106, 520a.  | 0.5  | 0         |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 163 | Direct, Single Molecule, Cell-by-Cell Observation of Molecular Kinetics and Thermodynamics in Early Lymphocyte Signaling. <i>Biophysical Journal</i> , 2014, 106, 19a.                                 | 0.5 | 0         |
| 164 | Live and Simultaneous Readout of NFAT and ERK Activation in T Cells Reveals Multiple Dimensions of TCR Signaling. <i>Biophysical Journal</i> , 2019, 116, 530a.  | 0.5 | 0         |
| 165 | Total Reconstitution of Receptor-Mediated Ras Activation by SOS in Vitro Reveals Kinetic and Conformational Layers of Regulation in MAPK Signaling. <i>Biophysical Journal</i> , 2019, 116, 531a-532a. | 0.5 | 0         |
| 166 | Bruton's Tyrosine Kinase Membrane Dynamics and Signaling. <i>Biophysical Journal</i> , 2020, 118, 560a-561a.   | 0.5 | 0         |