

# Arpita Upadhyaya

## List of Publications by Year in descending order

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Version: 2024-02-01

42  
papers

2,775  
citations

236925

25  
h-index

265206

42  
g-index

44  
all docs

44  
docs citations

44  
times ranked

3312  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | A microfabricated array bioreactor for perfused 3D liver culture. <i>Biotechnology and Bioengineering</i> , 2002, 78, 257-269.  | 3.3  | 441       |
| 2  | Anomalous diffusion and non-Gaussian velocity distribution of Hydra cells in cellular aggregates. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2001, 293, 549-558.            | 2.6  | 228       |
| 3  | Probing polymerization forces by using actin-propelled lipid vesicles. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 4521-4526.           | 7.1  | 176       |
| 4  | Cytoskeletal forces during signaling activation in Jurkat T-cells. <i>Molecular Biology of the Cell</i> , 2015, 26, 685-695.  | 2.1  | 145       |
| 5  | Tension in Tubulovesicular Networks of Golgi and Endoplasmic Reticulum Membranes. <i>Biophysical Journal</i> , 2004, 86, 2923-2928.   | 0.5  | 117       |
| 6  | Rapid image deconvolution and multiview fusion for optical microscopy. <i>Nature Biotechnology</i> , 2020, 38, 1337-1346.   | 17.5 | 105       |
| 7  | Diffusion and Deformations of Single Hydra Cells in Cellular Aggregates. <i>Biophysical Journal</i> , 2000, 79, 1903-1914.  | 0.5  | 103       |
| 8  | Improving the realism of the cellular Potts model in simulations of biological cells. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2003, 329, 451-458.                        | 2.6  | 100       |
| 9  | Three-dimensional residual channel attention networks denoise and sharpen fluorescence microscopy image volumes. <i>Nature Methods</i> , 2021, 18, 678-687.                                     | 19.0 | 94        |
| 10 | Transcriptional Bursting and Co-bursting Regulation by Steroid Hormone Release Pattern and Transcription Factor Mobility. <i>Molecular Cell</i> , 2019, 75, 1161-1177.e11.                      | 9.7  | 86        |
| 11 | An intrinsically disordered region-mediated confinement state contributes to the dynamics and function of transcription factors. <i>Molecular Cell</i> , 2021, 81, 1484-1498.e6.                | 9.7  | 83        |
| 12 | The pivotal position of the actin cytoskeleton in the initiation and regulation of B cell receptor activation. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2014, 1838, 569-578.       | 2.6  | 80        |
| 13 | Mechanical Regulation of Transcription: Recent Advances. <i>Trends in Cell Biology</i> , 2021, 31, 457-472.   | 7.9  | 75        |
| 14 | A Balance of Bruton's Tyrosine Kinase and SHIP Activation Regulates B Cell Receptor Cluster Formation by Controlling Actin Remodeling. <i>Journal of Immunology</i> , 2011, 187, 230-239.       | 0.8  | 70        |
| 15 | Ligand Mobility Regulates B Cell Receptor Clustering and Signaling Activation. <i>Biophysical Journal</i> , 2014, 106, 26-36.   | 0.5  | 70        |
| 16 | Dynamic microtubules regulate cellular contractility during T-cell activation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E4175-E4183. | 7.1  | 70        |
| 17 | Power-law behavior of transcription factor dynamics at the single-molecule level implies a continuum affinity model. <i>Nucleic Acids Research</i> , 2021, 49, 6605-6620.                       | 14.5 | 70        |
| 18 | N-WASP Is Essential for the Negative Regulation of B Cell Receptor Signaling. <i>PLoS Biology</i> , 2013, 11, e1001704.   | 5.6  | 67        |

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|----|---|------|-----------|
| 19 | Biomimetic Systems for Studying Actin-Based Motility. <i>Current Biology</i> , 2003, 13, R734-R744.   | 3.9  | 63        |
| 20 | Actin Reorganization Is Required for the Formation of Polarized B Cell Receptor Signalosomes in Response to Both Soluble and Membrane-Associated Antigens. <i>Journal of Immunology</i> , 2012, 188, 3237-3246. | 0.8  | 61        |
| 21 | Single-shot super-resolution total internal reflection fluorescence microscopy. <i>Nature Methods</i> , 2018, 15, 425-428.  | 19.0 | 57        |
| 22 | Reflective imaging improves spatiotemporal resolution and collection efficiency in light sheet microscopy. <i>Nature Communications</i> , 2017, 8, 1452.  | 12.8 | 41        |
| 23 | Mechanosensing in the immune response. <i>Seminars in Cell and Developmental Biology</i> , 2017, 71, 137-145.   | 5.0  | 32        |
| 24 | Remarkable structural transformations of actin bundles are driven by their initial polarity, motor activity, crosslinking, and filament treadmilling. <i>PLoS Computational Biology</i> , 2019, 15, e1007156.   | 3.2  | 32        |
| 25 | Actin-binding protein 1 links B-cell antigen receptors to negative signaling pathways. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 9881-9886.           | 7.1  | 31        |
| 26 | Membrane Dynamics Correlate with Formation of Signaling Clusters during Cell Spreading. <i>Biophysical Journal</i> , 2012, 102, 1524-1533.  | 0.5  | 30        |
| 27 | Phase separation in transcription factor dynamics and chromatin organization. <i>Current Opinion in Structural Biology</i> , 2021, 71, 148-155.   | 5.7  | 30        |
| 28 | Elastic Instability in Growing Yeast Colonies. <i>Biophysical Journal</i> , 2004, 86, 2740-2747.  | 0.5  | 28        |
| 29 | Actin-mediated feedback loops in B cell receptor signaling. <i>Immunological Reviews</i> , 2013, 256, 177-189.  | 6.0  | 27        |
| 30 | WASP family proteins regulate the mobility of the B cell receptor during signaling activation. <i>Nature Communications</i> , 2020, 11, 439.  | 12.8 | 27        |
| 31 | Subcellular topography modulates actin dynamics and signaling in B-cells. <i>Molecular Biology of the Cell</i> , 2018, 29, 1732-1742.   | 2.1  | 26        |
| 32 | Analyzing actin dynamics during the activation of the B cell receptor in live B cells. <i>Biochemical and Biophysical Research Communications</i> , 2012, 427, 202-206.   | 2.1  | 19        |
| 33 | The actin crosslinking protein palladin modulates force generation and mechanosensitivity of tumor associated fibroblasts. <i>Scientific Reports</i> , 2016, 6, 28805.  | 3.3  | 18        |
| 34 | The glucocorticoid receptor associates with the cohesin loader NIPBL to promote long-range gene regulation. <i>Science Advances</i> , 2022, 8, eabj8360.  | 10.3 | 18        |
| 35 | The actin cytoskeleton coordinates the signal transduction and antigen processing functions of the B cell antigen receptor. <i>Frontiers in Biology</i> , 2013, 8, 475-485.                                     | 0.7  | 13        |
| 36 | Actin Polymerization: Forcing Flat Faces Forward. <i>Current Biology</i> , 2004, 14, R467-R469.   | 3.9  | 11        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 37 | Bidirectional feedback between BCR signaling and actin cytoskeletal dynamics. FEBS Journal, 2022, 289, 4430-4446.  | 4.7 | 8         |
| 38 | Biophysical Techniques to Study B Cell Activation: Single-Molecule Imaging and Force Measurements. Methods in Molecular Biology, 2018, 1707, 51-68.                | 0.9 | 6         |
| 39 | Bcl10 is associated with actin dynamics at the T cell immune synapse. Cellular Immunology, 2020, 356, 104161.  | 3.0 | 6         |
| 40 | Non-Muscle Myosin II Is Essential for the Negative Regulation of B-Cell Receptor Signaling and B-Cell Activation. Frontiers in Immunology, 2022, 13, 842605.       | 4.8 | 5         |
| 41 | WASp Is Crucial for the Unique Architecture of the Immunological Synapse in Germinal Center B-Cells. Frontiers in Cell and Developmental Biology, 2021, 9, 646077. | 3.7 | 3         |
| 42 | Increased Expression of Cytoskeleton Coordinator Protein MACF1 at the Immune Synapse during Jurkat T Cell Activation. Blood, 2020, 136, 28-29.                     | 1.4 | 1         |