Satyajit Mayor

List of Publications by Year
in descending order

86 papers	13,717 citations	38742 50 h-index	53230 85 g-index
110 all docs	110 docs citations	110 times ranked	14860 citing authors

#	Article	IF	Citations
1	The mystery of membrane organization: composition, regulation and roles of lipid rafts. Nature Reviews Molecular Cell Biology, 2017, 18, 361-374.	37.0	1,471
2	Pathways of clathrin-independent endocytosis. Nature Reviews Molecular Cell Biology, 2007, 8, 603-612.	37.0	1,294
3	GPI-anchored proteins are organized in submicron domains at the cell surface. Nature, 1998, 394, 798-801.	27.8	1,153
4	Nanoscale Organization of Multiple GPI-Anchored Proteins in Living Cell Membranes. Cell, 2004, 116, 577-589.	28.9	805
5	GPI-Anchored Proteins Are Delivered to Recycling Endosomes via a Distinct cdc42-Regulated, Clathrin-Independent Pinocytic Pathway. Developmental Cell, 2002, 2, 411-423.	7.0	581
6	Endocytosis unplugged: multiple ways to enter the cell. Cell Research, 2010, 20, 256-275.	12.0	455
7	Nanoclusters of GPI-Anchored Proteins Are Formed by Cortical Actin-Driven Activity. Cell, 2008, 135, 1085-1097.	28.9	413
8	Clathrin-Independent Pathways of Endocytosis. Cold Spring Harbor Perspectives in Biology, 2014, 6, a016758-a016758.	5.5	394
9	Ultrastructural identification of uncoated caveolin-independent early endocytic vehicles. Journal of Cell Biology, 2005, 168, 465-476.	5.2	385
10	Sorting GPI-anchored proteins. Nature Reviews Molecular Cell Biology, 2004, 5, 110-120.	37.0	384
11	Active Remodeling of Cortical Actin Regulates Spatiotemporal Organization of Cell Surface Molecules. Cell, 2012, 149, 1353-1367.	28.9	340
12	Rafts: Scaleâ€Dependent, Active Lipid Organization at the Cell Surface. Traffic, 2004, 5, 231-240.	2.7	338
13	Transbilayer Lipid Interactions Mediate Nanoclustering of Lipid-Anchored Proteins. Cell, 2015, 161, 581-594.	28.9	333
14	Membrane molecules mobile even after chemical fixation. Nature Methods, 2010, 7, 865-866.	19.0	287
15	Clathrin-independent carriers form a high capacity endocytic sorting system at the leading edge of migrating cells. Journal of Cell Biology, 2010, 190, 675-691.	5.2	263
16	Folate receptor endocytosis and trafficking. Advanced Drug Delivery Reviews, 2004, 56, 1099-1109.	13.7	255
17	ARF1 is directly involved in dynamin-independent endocytosis. Nature Cell Biology, 2008, 10, 30-41.	10.3	199
18	Building endocytic pits without clathrin. Nature Reviews Molecular Cell Biology, 2015, 16, 311-321.	37.0	175

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19	Molecules, mechanisms, and cellular roles of clathrin-independent endocytosis. Current Opinion in Cell Biology, 2010, 22, 519-527.	5.4	171
20	Transmembrane Pickets Connect Cyto- and Pericellular Skeletons Forming Barriers to Receptor Engagement. Cell, 2018, 172, 305-317.e10.	28.9	170
21	Cholesterolâ€Sensitive Cdc42 Activation Regulates Actin Polymerization for Endocytosis via the GEEC Pathway. Traffic, 2007, 8, 702-717.	2.7	166
22	A DNA-Based T Cell Receptor Reveals a Role for Receptor Clustering in Ligand Discrimination. Cell, 2017, 169, 108-119.e20.	28.9	159
23	Bafilomycin A1 Treatment Retards Transferrin Receptor Recycling More than Bulk Membrane Recycling. Journal of Biological Chemistry, 1997, 272, 13929-13936.	3.4	156
24	Nanoscale Organization of Hedgehog Is Essential for Long-Range Signaling. Cell, 2008, 133, 1214-1227.	28.9	136
25	Actomyosin dynamics drive local membrane component organization in an in vitro active composite layer. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E1645-54.	7.1	131
26	hVps41 and VAMP7 function in direct TGN to late endosome transport of lysosomal membrane proteins. Nature Communications, 2013, 4, 1361.	12.8	129
27	Use of Forster's resonance energy transfer microscopy to study lipid rafts. Biochimica Et Biophysica Acta - Molecular Cell Research, 2005, 1746, 221-233.	4.1	116
28	Mechanochemical feedback control of dynamin independent endocytosis modulates membrane tension in adherent cells. Nature Communications, 2018, 9, 4217.	12.8	106
29	Arf6-independent GPI-anchored Protein-enriched Early Endosomal Compartments Fuse with Sorting Endosomes via a Rab5/Phosphatidylinositol-3â€²-Kinaseâ€"dependent Machinery. Molecular Biology of the Cell, 2006, 17, 3689-3704.	2.1	104
30	The Nef Protein of HIV-1 Induces Loss of Cell Surface Costimulatory Molecules CD80 and CD86 in APCs. Journal of Immunology, 2005, 175, 4566-4574.	0.8	101
31	Integrin Mechano-chemical Signaling Generates Plasma Membrane Nanodomains that Promote Cell Spreading. Cell, 2019, 177, 1738-1756.e23.	28.9	99
32	Cortical actin and the plasma membrane: inextricably intertwined. Current Opinion in Cell Biology, 2016, 38, 81-89.	5.4	98
33	Active organization of membrane constituents in living cells. Current Opinion in Cell Biology, 2014, 29, 126-132.	5.4	97
34	GPI-anchored protein organization and dynamics at the cell surface. Journal of Lipid Research, 2016, 57, 159-175.	4.2	96
35	Actin retrograde flow actively aligns and orients ligand-engaged integrins in focal adhesions. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 10648-10653.	7.1	95
36	Physical principles of membrane remodelling during cell mechanoadaptation. Nature Communications, 2015, 6, 7292.	12.8	91

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37	Nicotinic acetylcholine receptor is internalized via a Rac-dependent, dynamin-independent endocytic pathway. Journal of Cell Biology, 2008, 181, 1179-1193.	5.2	88
38	A composition-dependent molecular clutch between T cell signaling condensates and actin. ELife, 2019, 8, .	6.0	86
39	deep-orange and carnation define distinct stages in late endosomal biogenesis in Drosophila melanogaster. Journal of Cell Biology, 2003, 161, 593-607.	5.2	84
40	Direction of actin flow dictates integrin LFA-1 orientation during leukocyte migration. Nature Communications, 2017, 8, 2047.	12.8	83
41	Spoiled for Choice: Diverse Endocytic Pathways Function at the Cell Surface. Annual Review of Cell and Developmental Biology, 2019, 35, 55-84.	9.4	77
42	Diffusion of GPI-anchored proteins is influenced by the activity of dynamic cortical actin. Molecular Biology of the Cell, 2015, 26, 4033-4045.	2.1	76
43	Spatiotemporal regulation of chemical reactions by active cytoskeletal remodeling. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 14825-14830.	7.1	75
44	Small GTPases and BAR domain proteins regulate branched actin polymerisation for clathrin and dynamin-independent endocytosis. Nature Communications, 2018, 9, 1835.	12.8	74
45	Induced Domain Formation in Endocytic Invagination, Lipid Sorting, and Scission. Cell, 2010, 142, 507-510.	28.9	70
46	Analysis of Endocytic Pathways in Drosophila Cells Reveals a Conserved Role for GBF1 in Internalization via GEECs. PLoS ONE, 2009, 4, e6768.	2.5	69
47	Endocytosis of lipid rafts: an identity crisis. Seminars in Cell and Developmental Biology, 2002, 13, 205-214.	5.0	67
48	Salt-Induced Remodeling of Spatially Restricted Clathrin-Independent Endocytic Pathways in Arabidopsis Root. Plant Cell, 2015, 27, 1297-1315.	6.6	66
49	Wnt and Hedgehog: Secretion of Lipid-Modified Morphogens. Trends in Cell Biology, 2018, 28, 157-170.	7.9	58
50	Live Cell Plasma Membranes Do Not Exhibit a Miscibility Phase Transition over a Wide Range of Temperatures. Journal of Physical Chemistry B, 2015, 119, 4450-4459.	2.6	53
51	Cell Surface Dynamics of GPI-Anchored Proteins. Advances in Experimental Medicine and Biology, 1997, 419, 355-364.	1.6	52
52	Toward a new picture of the living plasma membrane. Protein Science, 2020, 29, 1355-1365.	7.6	48
53	Dynamic Imaging of Homo-FRET in Live Cells by Fluorescence Anisotropy Microscopy. Methods in Enzymology, 2012, 505, 291-327.	1.0	47
54	Quantitative Control of GPCR Organization and Signaling by Endocytosis in Epithelial Morphogenesis. Current Biology, 2018, 28, 1570-1584.e6.	3.9	43

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55	Chirality-Induced Budding: A Raft-Mediated Mechanism for Endocytosis and Morphology of Caveolae?. Biophysical Journal, 2007, 92, 3140-3158.	0.5	42
56	Strategies to target SARS-CoV-2 entry and infection using dual mechanisms of inhibition by acidification inhibitors. PLoS Pathogens, 2021, 17, e1009706.	4.7	42
57	Endocytosis of Wingless via a dynamin-independent pathway is necessary for signaling in <i>Drosophila</i> wing discs. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E6993-E7002.	7.1	38
58	Dynamic actin-mediated nano-scale clustering of CD44 regulates its meso-scale organization at the plasma membrane. Molecular Biology of the Cell, 2020, 31, 561-579.	2.1	38
59	A Two-Pronged Mechanism for HIV-1 Nef-Mediated Endocytosis of Immune Costimulatory Molecules CD80 and CD86. Cell Host and Microbe, 2007, 1, 37-49.	11.0	36
60	Cargo-specific recruitment in clathrin- and dynamin-independent endocytosis. Nature Cell Biology, 2021, 23, 1073-1084.	10.3	34
61	Oligomerization and endocytosis of Hedgehog is necessary for its efficient exovesicular secretion. Molecular Biology of the Cell, 2015, 26, 4700-4717.	2.1	33
62	Lysosomal Membrane Protein Composition, Acidic pH and Sterol Content are Regulated via a Lightâ€Dependent Pathway in Metazoan Cells. Traffic, 2011, 12, 1037-1055.	2.7	32
63	Phosphorylation of nephrin induces phase separated domains that move through actomyosin contraction. Molecular Biology of the Cell, 2019, 30, 2996-3012.	2.1	30
64	Bilayer registry in a multicomponent asymmetric membrane: Dependence on lipid composition and chain length. Journal of Chemical Physics, 2014, 141, 064903.	3.0	27
65	Ceramide structure dictates glycosphingolipid nanodomain assembly and function. Nature Communications, 2021, 12, 3675.	12.8	27
66	Recent advances in clathrin-independent endocytosis. F1000Research, 2019, 8, 138.	1.6	27
67	PTRF Triggers a Cave In. Cell, 2008, 132, 23-24.	28.9	26
68	Formin nanoclustering-mediated actin assembly during plant flagellin and DSF signaling. Cell Reports, 2021, 34, 108884.	6.4	25
69	The bacterial quorum sensing signal DSF hijacks <i>Arabidopsis thaliana</i> sterol biosynthesis to suppress plant innate immunity. Life Science Alliance, 2020, 3, e202000720.	2.8	23
70	Current approaches to studying membrane organization. F1000Research, 2015, 4, 1380.	1.6	21
71	PSF decomposition of nanoscopy images via Bayesian analysis unravels distinct molecular organization of the cell membrane. Scientific Reports, 2014, 4, 4354.	3.3	20
72	Distinct actin-dependent nanoscale assemblies underlie the dynamic and hierarchical organization of E-cadherin. Current Biology, 2021, 31, 1726-1736.e4.	3.9	19

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73	Population Distribution Analyses Reveal a Hierarchy of Molecular Players Underlying Parallel Endocytic Pathways. PLoS ONE, 2014, 9, e100554.	2.5	17
74	â€œViscotaxisâ€• directed migration of mesenchymal stem cells in response to loss modulus gradient. Acta Biomaterialia, 2021, 135, 356-367.	8.3	16
75	Need Tension Relief Fast? Try Caveolae. Cell, 2011, 144, 323-324.	28.9	15
76	Myosin II Filament Dynamics in Actin Networks Revealed with Interferometric Scattering Microscopy. Biophysical Journal, 2020, 118, 1946-1957.	0.5	14
77	Stratification relieves constraints from steric hindrance in the generation of compact actomyosin asters at the membrane cortex. Science Advances, 2020, 6, eaay6093.	10.3	14
78	Exploiting Cell-To-Cell Variability To Detect Cellular Perturbations. PLoS ONE, 2014, 9, e90540.	2.5	12
79	Homo-FRET Imaging Highlights the Nanoscale Organization of Cell Surface Molecules. Methods in Molecular Biology, 2015, 1251, 151-173.	0.9	12
80	Synthesis of non-hydrolysable mimics of glycosylphosphatidylinositol (GPI) anchors. Organic and Biomolecular Chemistry, 2014, 12, 1163.	2.8	8
81	Tailor-Made Ezrin Actin Binding Domain to Probe Its Interaction with Actin In-Vitro. PLoS ONE, 2015, 10, e0123428.	2.5	7
82	The shifting geography and language of cell biology. Journal of Cell Biology, 2015, 209, 323-325.	5.2	1
83	Squishy matter and active chemistry: understanding membrane organization. Nature Cell Biology, 2011, 13, 519-519.	10.3	0
84	Cell biology in India: The future needs an international perspective. Nature Cell Biology, 2011, 13, 1385-1385.	10.3	0
85	Spatio-temporal kinetics of wingless trafficking and signalling in Drosophila wing imaginal discs. Mechanisms of Development, 2017, 145, S100.	1.7	0
86	Acto-Myosin Driven Functional Nanoclusters of GPI-Anchored Proteins Are Generated by Integrin Receptor Signaling. SSRN Electronic Journal, 0, , .	0.4	0