Anant K Menon

List of Publications by Year
in descending order

115 papers	5,969 citations	66234 42 h-index	82410 72 g-index
132 all docs	132 docs citations	132 times ranked	5486 citing authors

#	Article	IF	Citations
1	Rethinking Opsins. Molecular Biology and Evolution, 2022, 39, .	3.5	20
2	Phospholipid Scrambling by G Proteinâ€“Coupled Receptors. Annual Review of Biophysics, 2022, 51, 39-61.	4.5	24
3	Genome-wide CRISPR screen reveals CLPTM1L as a lipid scramblase required for efficient glycosylphosphatidylinositol biosynthesis. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2115083119.	3.3	10
4	Identification of TbPBN1 in <i>Trypanosoma brucei</i> reveals a conserved heterodimeric architecture for glycosylphosphatidylinositolâ€mannosyltransferaseâ€I. Molecular Microbiology, 2022, 117, 450-461.	1.2	3
5	Cholesterol occupies the lipid translocation pathway to block phospholipid scrambling by a G protein-coupled receptor. Structure, 2022, 30, 1208-1217.e2.	1.6	3
6	Single Vesicle Fluorescence-Bleaching Assay for Multi-Parameter Analysis of Proteoliposomes by Total Internal Reflection Fluorescence Microscopy. ACS Applied Materials & Interfaces, 2022, 14, 29659-29667.	4.0	5
7	Complexity of the eukaryotic dolichol-linked oligosaccharide scramblase suggested by activity correlation profiling mass spectrometry. Scientific Reports, 2021, 11, 1411.	1.6	13
8	Unusual mode of dimerization of retinitis pigmentosa-associated F220C rhodopsin. Scientific Reports, 2021, 11, 10536.	1.6	7
9	Endoplasmic reticulum phospholipid scramblase activity revealed after protein reconstitution into giant unilamellar vesicles containing a photostable lipid reporter. Scientific Reports, 2021, 11, 14364.	1.6	5
10	Elimination of GPI2 suppresses glycosylphosphatidylinositol GlcNAc transferase activity and alters GPI glycan modification in Trypanosoma brucei. Journal of Biological Chemistry, 2021, 297, 100977.	1.6	5
11	A PhotoClick cholesterolâ€based quantitative proteomics screen for cytoplasmic sterolâ€binding proteins in Saccharomyces cerevisiae. Yeast, 2020, 37, 15-25.	0.8	4
12	Nonenzymatic synthesis of anomerically pure, mannosyl-based molecular probes for scramblase identification studies. Beilstein Journal of Organic Chemistry, 2020, 16, 1732-1739.	1.3	1
13	Dysregulated calcium homeostasis prevents plasma membrane repair in Anoctamin 5/TMEM16E-deficient patient muscle cells. Cell Death Discovery, 2019, 5, 118.	2.0	28
14	Measurement of Intracellular Sterol Transport in Yeast. Methods in Molecular Biology, 2019, 1949, 115-136.	0.4	7
15	Exchange of water for sterol underlies sterol egress from a StARkin domain. ELife, 2019, 8, .	2.8	18
16	Structural basis of sterol binding and transport by a yeast StARkin domain. Journal of Biological Chemistry, 2018, 293, 5522-5531.	1.6	42
17	Ergosterol is mainly located in the cytoplasmic leaflet of the yeast plasma membrane. Traffic, 2018, 19, 198-214.	1.3	62
18	Mechanisms of Lipid Scrambling by the G Protein-Coupled Receptor Opsin. Structure, 2018, 26, 356-367.e3.	1.6	54

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19	Transbilayer lipid asymmetry. Current Biology, 2018, 28, R386-R391.	1.8	110
20	Scrambling of natural and fluorescently tagged phosphatidylinositol by reconstituted G proteinâ€“coupled receptor and TMEM16 scramblases. Journal of Biological Chemistry, 2018, 293, 18318-18327.	1.6	20
21	Sterol gradients in cells. Current Opinion in Cell Biology, 2018, 53, 37-43.	2.6	36
22	Endoplasmic reticulum-plasma membrane contact sites integrate sterol and phospholipid regulation. PLoS Biology, 2018, 16, e2003864.	2.6	132
23	Gating mechanism of the extracellular entry to the lipid pathway in a TMEM16 scramblase. Nature Communications, 2018, 9, 3251.	5.8	70
24	TOR complex 2â€“regulated protein kinase Ypk1 controls sterol distribution by inhibiting StARkin domainâ€“containing proteins located at plasma membraneâ€“endoplasmic reticulum contact sites. Molecular Biology of the Cell, 2018, 29, 2128-2136.	0.9	28
25	Structural mapping of fluorescently-tagged, functional nhTMEM16 scramblase in a lipid bilayer. Journal of Biological Chemistry, 2018, 293, 12248-12258.	1.6	11
26	Out-of-the-groove transport of lipids by TMEM16 and GPCR scramblases. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E7033-E7042.	3.3	49
27	A novel assay to measure scrambling of natural phospholipids in reconstituted proteoliposomes. FASEB Journal, 2018, 32, 815.7.	0.2	0
28	RFT1 Protein Affects Glycosylphosphatidylinositol (GPI) Anchor Glycosylation. Journal of Biological Chemistry, 2017, 292, 1103-1111.	1.6	14
29	Disulfide Bond Formation and N-Glycosylation Modulate Protein-Protein Interactions in GPI-Transamidase (GPIT). Scientific Reports, 2017, 7, 45912.	1.6	10
30	Speed Limits for Nonvesicular Intracellular Sterol Transport. Trends in Biochemical Sciences, 2017, 42, 90-97.	3.7	55
31	Light-independent phospholipid scramblase activity of bacteriorhodopsin from Halobacterium salinarum. Scientific Reports, 2017, 7, 9522.	1.6	24
32	An engineered opsin monomer scrambles phospholipids. Scientific Reports, 2017, 7, 16741.	1.6	14
33	flippantâ€“An R package for the automated analysis of fluorescence-based scramblase assays. BMC Bioinformatics, 2017, 18, 146.	1.2	0
34	Lipid topogenesis â€” 35 years on. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2016, 1861, 757-766.	1.2	26
35	Lipid somersaults: Uncovering the mechanisms of protein-mediated lipid flipping. Progress in Lipid Research, 2016, 64, 69-84.	5.3	140
36	Dimerization deficiency of enigmatic retinitis pigmentosa-linked rhodopsin mutants. Nature Communications, 2016, 7, 12832.	5.8	54

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37	The nhTMEM16 Scramblase Is Also a Nonselective Ion Channel. Biophysical Journal, 2016, 111, 1919-1924.	0.2	70
38	A Fluorescence-based Assay of Phospholipid Scramblase Activity. Journal of Visualized Experiments, 2016, , .	0.2	33
39	The cellular lipid landscape. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2016, 1861, 755-756.	1.2	4
40	Intramembrane and Intermembrane Lipid Transport. , 2016, , 415-436.		3
41	A new family of StART domain proteins at membrane contact sites has a role in ER-PM sterol transport. ELife, 2015, 4, .	2.8	227
42	Phospholipid scrambling by rhodopsin. Photochemical and Photobiological Sciences, 2015, 14, 1922-1931.	1.6	39
43	Phosphatidylserine translocation at the yeast<i>trans</i>-Golgi network regulates protein sorting into exocytic vesicles. Molecular Biology of the Cell, 2015, 26, 4674-4685.	0.9	56
44	Lipid gymnastics. Nature, 2015, 524, 420-422.	13.7	2
45	Countercurrents in lipid flow. Nature, 2015, 525, 191-192.	13.7	7
46	Constitutive phospholipid scramblase activity of a G protein-coupled receptor. Nature Communications, 2014, 5, 5115.	5.8	112
47	Lipid landscapes and pipelines in membrane homeostasis. Nature, 2014, 510, 48-57.	13.7	697
48	Arv1 Regulates <scp>PM</scp> and <scp>ER</scp> Membrane Structure and Homeostasis But is Dispensable for Intracellular Sterol Transport. Traffic, 2013, 14, 912-921.	1.3	26
49	Ca2+-dependent phospholipid scrambling by a reconstituted TMEM16 ion channel. Nature Communications, 2013, 4, 2367.	5.8	202
50	A Protein Pair with PIPs Inside. Structure, 2013, 21, 1070-1071.	1.6	5
51	Glycoprotein Biosynthesis in a Eukaryote Lacking the Membrane Protein Rft1. Journal of Biological Chemistry, 2013, 288, 20616-20623.	1.6	28
52	Reconstitution of Glucosylceramide Flip-Flop across Endoplasmic Reticulum. Journal of Biological Chemistry, 2012, 287, 15523-15532.	1.6	35
53	A Detour for Yeast Oxysterol Binding Proteins. Journal of Biological Chemistry, 2012, 287, 11481-11488.	1.6	64
54	Biochemical reconstitution and resolution of lipid flippase activities required for protein glycosylation in the ER. FASEB Journal, 2012, 26, 349.2.	0.2	0

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55	Osh Proteins Regulate Membrane Sterol Organization but Are Not Required for Sterol Movement Between the ER and PM. Traffic, 2011, 12, 1341-1355.	1.3	113
56	Opsin Is a Phospholipid Flippase. Current Biology, 2011, 21, 149-153.	1.8	154
57	Stereoselective transbilayer translocation of mannosyl phosphoryl dolichol by an endoplasmic reticulum flippase. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 11289-11294.	3.3	45
58	Tritium Suicide Selection Identifies Proteins Involved in the Uptake and Intracellular Transport of Sterols in <i>Saccharomyces cerevisiae</i>. Eukaryotic Cell, 2009, 8, 161-169.	3.4	28
59	Specific transbilayer translocation of dolichol-linked oligosaccharides by an endoplasmic reticulum flippase. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 767-772.	3.3	53
60	Chapter 8 Split Topology of GPI Biosynthesis. The Enzymes, 2009, , 151-158.	0.7	1
61	Yeast oxysterol-binding proteins: sterol transporters or regulators of cell polarization?. Molecular and Cellular Biochemistry, 2009, 326, 9-13.	1.4	24
62	Flipping Lipids: Why anâ€™ Whatâ€™s the Reason for?. ACS Chemical Biology, 2009, 4, 895-909.	1.6	127
63	Chapter 7 Attachment of a GPI Anchor to Protein. The Enzymes, 2009, 26, 133-149.	0.7	1
64	Does Rft1 flip an N-glycan lipid precursor?. Nature, 2008, 454, E3-E4.	13.7	69
65	Lipid modifications of proteins. , 2008, , 39-58.		2
66	Distinct Flippases Translocate Glycerophospholipids and Oligosaccharide Diphosphate Dolichols across the Endoplasmic Reticulum. Biochemistry, 2008, 47, 7937-7946.	1.2	80
67	De Novo Sphingolipid Synthesis Is Essential for Viability, but Not for Transport of Glycosylphosphatidylinositol-Anchored Proteins, in African Trypanosomes. Eukaryotic Cell, 2007, 6, 454-464.	3.4	42
68	Flip-Flop of Fluorescently Labeled Phospholipids in Proteoliposomes Reconstituted with <i>Saccharomyces cerevisiae</i> Microsomal Proteins. Eukaryotic Cell, 2007, 6, 1625-1634.	3.4	42
69	Thematic review series: Lipid Posttranslational Modifications. GPI anchoring of protein in yeast and mammalian cells, or: how we learned to stop worrying and love glycophospholipids. Journal of Lipid Research, 2007, 48, 993-1011.	2.0	347
70	A Flip-Flop Switch in Polarity Signaling. Developmental Cell, 2007, 13, 607-608.	3.1	4
71	Candida Drug Resistance Protein 1, a Major Multidrug ATP Binding Cassette Transporter of Candida albicans, Translocates Fluorescent Phospholipids in a Reconstituted System. Biochemistry, 2007, 46, 12081-12090.	1.2	27
72	HeLa Cell Entry by Guanidinium-Rich Î²-Peptides: Importance of Specific Cationâ€“Cell Surface Interactions. ChemBioChem, 2007, 8, 917-926.	1.3	51

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73	Intracellular sterol transport and distribution. Current Opinion in Cell Biology, 2006, 18, 379-385.	2.6	120
74	Regulation of surface coat exchange by differentiating African trypanosomes. Molecular and Biochemical Parasitology, 2006, 147, 211-223.	0.5	44
75	Ethanolamine Phosphate Linked to the First Mannose Residue of Glycosylphosphatidylinositol (GPI) Lipids Is a Major Feature of the GPI Structure That Is Recognized by Human GPI Transamidase. Journal of Biological Chemistry, 2006, 281, 38358-38364.	1.6	17
76	Endoplasmic Reticulum Localization of Gaa1 and PIG-T, Subunits of the Glycosylphosphatidylinositol Transamidase Complex. Journal of Biological Chemistry, 2005, 280, 16402-16409.	1.6	9
77	New fluorescent probes reveal that flippase-mediated flip-flop of phosphatidylinositol across the endoplasmic reticulum membrane does not depend on the stereochemistry of the lipid. Organic and Biomolecular Chemistry, 2005, 3, 1275.	1.5	58
78	Transport of Newly Synthesized Sterol to the Sterol-Enriched Plasma Membrane Occurs via Nonvesicular Equilibrationâ€. Biochemistry, 2005, 44, 5816-5826.	1.2	199
79	Effects of Conformational Stability and Geometry of Guanidinium Display on Cell Entry by Î²-Peptides. Journal of the American Chemical Society, 2005, 127, 3686-3687.	6.6	101
80	Flip-flop of glycosylphosphatidylinositols (GPI's) across the ER. Chemical Communications, 2005, , 453.	2.2	53
81	Subcellular Localization and Targeting of N-Acetylglucosaminyl Phosphatidylinositol De-N-acetylase, the Second Enzyme in the Glycosylphosphatidylinositol Biosynthetic Pathway. Journal of Biological Chemistry, 2004, 279, 15743-15751.	1.6	24
82	A Conserved Proline in the Last Transmembrane Segment of Gaa1 Is Required for Glycosylphosphatidylinositol (GPI) Recognition by GPI Transamidase. Journal of Biological Chemistry, 2004, 279, 6540-6545.	1.6	33
83	Chemical Modification Identifies Two Populations of Glycerophospholipid Flippase in Rat Liver ER. Biochemistry, 2004, 43, 10710-10718.	1.2	67
84	Glycosylphosphatidylinositol (GPI) Anchors. , 2004, , 308-311.		1
85	Comparative importance in vivo of conserved glutamate residues in the EX7E motif retaining glycosyltransferase Gpi3p, the UDP-GlcNAc-binding subunit of the first enzyme in glycosylphosphatidylinositol assembly. FEBS Journal, 2003, 270, 4507-4514.	0.2	19
86	Cytoplasmic and Nuclear Delivery of a TAT-derived Peptide and a Î²-Peptide after Endocytic Uptake into HeLa Cells. Journal of Biological Chemistry, 2003, 278, 50188-50194.	1.6	206
87	Reconstitution and Assay of Biogenic Membrane-Derived Phospholipid Flippase Activity in Proteoliposomes. , 2003, 228, 271-280.		8
88	Transbilayer Movement of Dipalmitoylphosphatidylcholine in Proteoliposomes Reconstituted from Detergent Extracts of Endoplasmic Reticulum. Journal of Biological Chemistry, 2002, 277, 25337-25343.	1.6	47
89	Structural Requirements for the Recruitment of Gaa1 into a Functional Glycosylphosphatidylinositol Transamidase Complex. Journal of Biological Chemistry, 2002, 277, 30535-30542.	1.6	43
90	Chapter 2 Lipid modifications of proteins. New Comprehensive Biochemistry, 2002, , 37-54.	0.1	3

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91	Reconstitution of Phospholipid Flippase Activity from E. coli Inner Membrane: A Test of the Protein Translocon as a Candidate Flippase. Biological Chemistry, 2002, 383, 1435-1440.	1.2	10
92	Transbilayer Movement of Fluorescent Phospholipid Analogues in the Cytoplasmic Membrane of Escherichia coli. Biochemistry, 2002, 41, 5605-5612.	1.2	52
93	Introduction: lipid transportâ€"an overview. Seminars in Cell and Developmental Biology, 2002, 13, 159-162.	2.3	7
94	Endoplasmic reticulum proteins involved in glycosylphosphatidylinositol-anchor attachment. FEBS Journal, 2001, 268, 2290-2300.	0.2	33
95	Photoaffinity labelling with P3-(4-azidoanilido)uridine 5â€²-triphosphate identifies Gpi3p as the UDP-GlcNAc-binding subunit of the enzyme that catalyses formation of GlcNAc-phosphatidylinositol, the first glycolipid intermediate in glycosylphosphatidylinositol synthesis. Biochemical Journal, 2000, 350, 815.	1.7	12
96	Soluble GPI8 restores glycosylphosphatidylinositol anchoring in a trypanosome cell-free system depleted of lumenal endoplasmic reticulum proteins. Biochemical Journal, 2000, 351, 717.	1.7	5
97	Photoaffinity labelling with P3-(4-azidoanilido)uridine 5â€²-triphosphate identifies Gpi3p as the UDP-GlcNAc-binding subunit of the enzyme that catalyses formation of GlcNAc-phosphatidylinositol, the first glycolipid intermediate in glycosylphosphatidylinositol synthesis. Biochemical Journal, 2000, 350, 815-822.	1.7	39
98	Soluble GPI8 restores glycosylphosphatidylinositol anchoring in a trypanosome cell-free system depleted of lumenal endoplasmic reticulum proteins. Biochemical Journal, 2000, 351, 717-722.	1.7	31
99	Specific proteins are required to translocate phosphatidylcholine bidirectionally across the endoplasmic reticulum. Current Biology, 2000, 10, 241-252.	1.8	100
100	Cell Surface Display and Intracellular Trafficking of Free Glycosylphosphatidylinositols in Mammalian Cells. Journal of Biological Chemistry, 2000, 275, 7378-7389.	1.6	46
101	Reconstitution and Partial Characterization of Phospholipid Flippase Activity from Detergent Extracts of the Bacillus subtilis Cell Membrane. Journal of Bacteriology, 2000, 182, 4198-4206.	1.0	49
102	Recent developments in the cell biology and biochemistry of glycosylphosphatidylinositol lipids (Review). Molecular Membrane Biology, 2000, 17, 1-16.	2.0	136
103	Segregation of Glycosylphosphatidylinositol Biosynthetic Reactions in a Subcompartment of the Endoplasmic Reticulum. Journal of Biological Chemistry, 1999, 274, 15203-15212.	1.6	61
104	A Cell-free Assay for Glycosylphosphatidylinositol Anchoring in African Trypanosomes. Journal of Biological Chemistry, 1999, 274, 16479-16486.	1.6	62
105	Identification and Purification of the Rat Liver Golgi Membrane UDP-N-acetylgalactosamine Transporter. Journal of Biological Chemistry, 1999, 274, 4474-4479.	1.6	46
106	Identification of endoplasmic reticulum proteins involved in glycan assembly: synthesis and characterization of P3-(4-azidoanilido)uridine 5â€²-triphosphate, a membrane-topological photoaffinity probe for uridine diphosphate-sugar binding proteins. Biochemical Journal, 1998, 333, 661-669.	1.7	6
107	Transbilayer Movement of Fluorescent Phospholipids inBacillus megateriumMembrane Vesiclesâ€. Biochemistry, 1997, 36, 4969-4978.	1.2	62
108	Phosphatidylinositol Hydrolysis by Glycosylphosphatidylinositol Phospholipase C. Journal of Biological Chemistry, 1996, 271, 15533-15541.	1.6	41

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109	[38] Biosynthesis of glycosylphosphatidylinositol anchors. Methods in Enzymology, 1995, 250, 513-535.	0.4	21
110	Nonpolarized Distribution of Glycosylphosphatidylinositols in the Plasma Membrane of Polarized Madin-Darby Canine Kidney Cells. Journal of Biological Chemistry, 1995, 270, 24150-24155.	1.6	43
111	Molecular species analysis of phospholipids from Trypanosoma brucei bloodstream and procyclic forms. Molecular and Biochemical Parasitology, 1993, 58, 97-105.	0.5	76
112	BIOSYNTHESIS OF GLYCOSYL-PHOSPHATIDYLINOSITOL. , 1992, , 155-169.		2
113	Biosynthesis of Glycolipid Anchors in Trypanosoma brucei.. Trends in Glycoscience and Glycotechnology, 1991, 3, 107-115.	0.0	6
114	Biosynthesis of the glycolipid membrane anchor of <i>Trypanosoma brucei</i> variant surface glycoproteins: involvement of Dol-<i>P</i>-Man. Biochemical Society Transactions, 1989, 17, 746-748.	1.6	22
115	Glycolipid precursor of <i>Trypanosoma brucei</i> variant surface glycoproteins: incorporation of radiolabelled mannose and myristic acid in a cell-free system. Biochemical Society Transactions, 1988, 16, 996-997.	1.6	12