Michael G Roth

List of Publications by Year
in descending order

99 papers	12,314 citations	34016 52 h-index	35952 97 g-index
102 all docs	102 docs citations	102 times ranked	15838 citing authors

#	Article	IF	Citations
1	Small moleculeâ€"mediated disruption of Wnt-dependent signaling in tissue regeneration and cancer. Nature Chemical Biology, 2009, 5, 100-107.	3.9	1,259
2	Interaction of influenza virus haemagglutinin with sphingolipid-cholesterol membrane domains via its transmembrane domain. EMBO Journal, 1997, 16, 5501-5508.	3.5	594
3	Role of Lipid Modifications in Targeting Proteins to Detergent-resistant Membrane Rafts. Journal of Biological Chemistry, 1999, 274, 3910-3917.	1.6	583
4	Phosphatidylinositol 4 Phosphate Regulates Targeting of Clathrin Adaptor AP-1 Complexes to the Golgi. Cell, 2003, 114, 299-310.	13.5	504
5	Phosphatidylinositol 4,5-bisphosphate induces actin-based movement of raft-enriched vesicles through WASP-Arp2/3. Current Biology, 2000, 10, 311-320.	1.8	490
6	Targeting QseC Signaling and Virulence for Antibiotic Development. Science, 2008, 321, 1078-1080.	6.0	452
7	Synthetic lethal screen identification of chemosensitizer loci in cancer cells. Nature, 2007, 446, 815-819.	13.7	438
8	Image-based genome-wide siRNA screen identifies selective autophagy factors. Nature, 2011, 480, 113-117.	13.7	429
9	Evidence that phospholipase D mediates ADP ribosylation factor-dependent formation of Golgi coated vesicles.. Journal of Cell Biology, 1996, 134, 295-306.	2.3	378
10	A single amino acid change in the cytoplasmic domain alters the polarized delivery of influenza virus hemagglutinin.. Journal of Cell Biology, 1991, 114, 413-421.	2.3	277
11	A single amino acid change in the cytoplasmic domain allows the influenza virus hemagglutinin to be endocytosed through coated pits. Cell, 1988, 53, 743-752.	13.5	271
12	Phosphoinositides in Constitutive Membrane Traffic. Physiological Reviews, 2004, 84, 699-730.	13.1	264
13	The Liver X Receptor Ligand T0901317 Decreases Amyloid Î² Production in Vitro and in a Mouse Model of Alzheimer's Disease. Journal of Biological Chemistry, 2005, 280, 4079-4088.	1.6	236
14	Different biosynthetic transport routes to the plasma membrane in BHK and CHO cells.. Journal of Cell Biology, 1996, 133, 247-256.	2.3	223
15	Characteristics of the tyrosine recognition signal for internalization of transmembrane surface glycoproteins.. Journal of Cell Biology, 1990, 111, 1393-1407.	2.3	212
16	Phosphatidic acid formation by phospholipase D is required for transport from the endoplasmic reticulum to the Golgi complex. Current Biology, 1997, 7, 301-307.	1.8	209
17	Differential extractability of influenza virus hemagglutinin during intracellular transport in polarized epithelial cells and nonpolar fibroblasts.. Journal of Cell Biology, 1989, 108, 821-832.	2.3	206
18	Phospholipase D is present on Golgi-enriched membranes and its activation by ADP ribosylation factor is sensitive to brefeldin A.. Proceedings of the National Academy of Sciences of the United States of America, 1995, 92, 4952-4956.	3.3	203

#	Article	IF	Citations
19	Mutations in the Middle of the Transmembrane Domain Reverse the Polarity of Transport of the Influenza Virus Hemagglutinin in MDCK Epithelial Cells. Journal of Cell Biology, 1998, 142, 51-57.	2.3	185
20	High-throughput Screening for Potent and Selective Inhibitors of Plasmodium falciparum Dihydroorotate Dehydrogenase. Journal of Biological Chemistry, 2005, 280, 21847-21853.	1.6	174
21	Mutations in the cytoplasmic domain of the influenza virus hemagglutinin affect different stages of intracellular transport.. Journal of Cell Biology, 1985, 100, 704-714.	2.3	166
22	A genome-wide RNAi screen for Wnt/Î²-catenin pathway components identifies unexpected roles for TCF transcription factors in cancer. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 9697-9702.	3.3	163
23	XPO1-dependent nuclear export is a druggable vulnerability in KRAS-mutant lung cancer. Nature, 2016, 538, 114-117.	13.7	162
24	ARNO and ARF6 Regulate Axonal Elongation and Branching through Downstream Activation of Phosphatidylinositol 4-Phosphate 5-Kinase Î±. Molecular Biology of the Cell, 2004, 15, 111-120.	0.9	151
25	Systematic Identification of Molecular Subtype-Selective Vulnerabilities in Non-Small-Cell Lung Cancer. Cell, 2013, 155, 552-566.	13.5	151
26	Influenza virus hemagglutinin expression is polarized in cells infected with recombinant SV40 viruses carrying cloned hemagglutinin DNA. Cell, 1983, 33, 435-443.	13.5	148
27	Exo1: A new chemical inhibitor of the exocytic pathway. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 6469-6474.	3.3	139
28	Molecular Mechanisms of PLD Function in Membrane Traffic. Traffic, 2008, 9, 1233-1239.	1.3	138
29	Phosphatidylinositol phosphate 5-kinase lÎ² recruits AP-2 to the plasma membrane and regulates rates of constitutive endocytosis. Journal of Cell Biology, 2003, 162, 693-701.	2.3	131
30	Genome-Wide siRNA-Based Functional Genomics of Pigmentation Identifies Novel Genes and Pathways That Impact Melanogenesis in Human Cells. PLoS Genetics, 2008, 4, e1000298.	1.5	129
31	Lipid regulators of membrane traffic through the Golgi complex. Trends in Cell Biology, 1999, 9, 174-179.	3.6	122
32	Amino Acid Sequence Requirements of the Transmembrane and Cytoplasmic Domains of Influenza Virus Hemagglutinin for Viable Membrane Fusion. Molecular Biology of the Cell, 1999, 10, 1821-1836.	0.9	120
33	Heterologous transmembrane and cytoplasmic domains direct functional chimeric influenza virus hemagglutinins into the endocytic pathway.. Journal of Cell Biology, 1986, 102, 1271-1283.	2.3	119
34	PtK1 cells contain a nondiffusible, dominant factor that makes the Golgi apparatus resistant to brefeldin A.. Journal of Cell Biology, 1991, 113, 1009-1023.	2.3	118
35	Polarity of influenza and vesicular stomatitis virus maturation in MDCK cells: lack of a requirement for glycosylation of viral glycoproteins.. Proceedings of the National Academy of Sciences of the United States of America, 1979, 76, 6430-6434.	3.3	115
36	Action of brefeldin A blocked by activation of a pertussis-toxin-sensitive G protein. Nature, 1992, 356, 344-346.	13.7	110

#	Article	IF	Citations
37	Tyrosine-based Membrane Protein Sorting Signals Are Differentially Interpreted by Polarized Madin-Darby Canine Kidney and LLC-PK1 Epithelial Cells. Journal of Biological Chemistry, 1998, 273, 26862-26869.	1.6	109
38	Differently anchored influenza hemagglutinin mutants display distinct interaction dynamics with mutual rafts. Journal of Cell Biology, 2003, 163, 879-888.	2.3	103
39	The role of lipid signaling in constitutive membrane traffic. Current Opinion in Cell Biology, 1997, 9, 519-526.	2.6	102
40	Salicylihalamide A Inhibits the V0 Sector of the V-ATPase through a Mechanism Distinct from Bafilomycin A1. Journal of Biological Chemistry, 2004, 279, 19755-19763.	1.6	102
41	Chemistry-First Approach for Nomination of Personalized Treatment in Lung Cancer. Cell, 2018, 173, 864-878.e29.	13.5	102
42	Glucagon receptor antibody completely suppresses type 1 diabetes phenotype without insulin by disrupting a novel diabetogenic pathway. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 2503-2508.	3.3	101
43	A Point Mutation in the Transmembrane Domain of the Hemagglutinin of Influenza Virus Stabilizes a Hemifusion Intermediate That Can Transit to Fusion. Molecular Biology of the Cell, 2000, 11, 3765-3775.	0.9	97
44	The large external domain is sufficient for the correct sorting of secreted or chimeric influenza virus hemagglutinins in polarized monkey kidney cells.. Journal of Cell Biology, 1987, 104, 769-782.	2.3	94
45	Snapshots of ARF1. Cell, 1999, 97, 149-152.	13.5	87
46	SMARCA4-inactivating mutations increase sensitivity to Aurora kinase A inhibitor VX-680 in non-small cell lung cancers. Nature Communications, 2017, 8, 14098.	5.8	80
47	Hyperglycemia in rodent models of type 2 diabetes requires insulin-resistant alpha cells. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 13217-13222.	3.3	78
48	Chemical inhibition of RNA viruses reveals REDD1 as a host defense factor. Nature Chemical Biology, 2011, 7, 712-719.	3.9	70
49	Towards patient-based cancer therapeutics. Nature Biotechnology, 2010, 28, 904-906.	9.4	65
50	Phospholipase D as an effector for ADP-ribosylation factor in the regulation of vesicular traffic. Chemistry and Physics of Lipids, 1999, 98, 141-152.	1.5	62
51	Evidence from lateral mobility studies for dynamic interactions of a mutant influenza hemagglutinin with coated pits.. Journal of Cell Biology, 1991, 115, 1585-1594.	2.3	61
52	Evaluation and Characterization of the hyt/hyt Hypothyroid Mouse. Neuroendocrinology, 1989, 49, 509-519.	1.2	58
53	SAR-Based Optimization of a 4-Quinoline Carboxylic Acid Analogue with Potent Antiviral Activity. ACS Medicinal Chemistry Letters, 2013, 4, 517-521.	1.3	54
54	Inhibition of pyrimidine synthesis reverses viral virulence factor-mediated block of mRNA nuclear export. Journal of Cell Biology, 2012, 196, 315-326.	2.3	53

#	Article	IF	Citations
55	Phospholipase D2 Is Required for Efficient Endocytic Recycling of Transferrin Receptors. Molecular Biology of the Cell, 2006, 17, 598-606.	0.9	49
56	Evaluating the potential of Vacuolar ATPase inhibitors as anticancer agents and multigram synthesis of the potent salicylihalamide analog saliphenylhalamide. Bioorganic and Medicinal Chemistry Letters, 2008, 18, 5879-5883.	1.0	48
57	Mitochondrial Dysfunction Confers Resistance to Multiple Drugs in<i>Caenorhabditis elegans</i>. Molecular Biology of the Cell, 2010, 21, 956-969.	0.9	45
58	Clathrin-mediated endocytosis before fluorescent proteins. Nature Reviews Molecular Cell Biology, 2006, 7, 63-68.	16.1	44
59	Epidermal Growth Factor Receptors with Tyrosine Kinase Domain Mutations Exhibit Reduced Cbl Association, Poor Ubiquitylation, and Down-regulation but Are Efficiently Internalized. Cancer Research, 2007, 67, 7695-7702.	0.4	39
60	Comprehensive Mapping of the Human Kinome to Epidermal Growth Factor Receptor Signaling. Journal of Biological Chemistry, 2010, 285, 21134-21142.	1.6	39
61	Genomeâ€wide si RNA screen reveals coupling between mitotic apoptosis and adaptation. EMBO Journal, 2014, 33, 1960-1976.	3.5	39
62	Apical and basolateral coated pits of MDCK cells differ in their rates of maturation into coated vesicles, but not in the ability to distinguish between mutant hemagglutinin proteins with different internalization signals.. Journal of Cell Biology, 1995, 129, 1241-1250.	2.3	38
63	Immunolocalisation of phospholipase D1 on tubular vesicular membranes of endocytic and secretory origin. European Journal of Cell Biology, 2001, 80, 508-520.	1.6	38
64	Casein Kinase I Regulates Membrane Binding by ARF GAP1. Molecular Biology of the Cell, 2002, 13, 2559-2570.	0.9	38
65	Features of Influenza HA Required for Apical Sorting Differ from Those Required for Association with DRMs or MAL. Traffic, 2003, 4, 838-849.	1.3	36
66	Hierarchy of Sorting Signals in Chimeras of Intestinal Lactase-Phlorizin Hydrolase and the Influenza Virus Hemagglutinin. Journal of Biological Chemistry, 1999, 274, 8061-8067.	1.6	34
67	Inheriting the Golgi. Cell, 1999, 99, 559-562.	13.5	33
68	Dynamic or Stable Interactions of Influenza Hemagglutinin Mutants with Coated Pits. Journal of Biological Chemistry, 1995, 270, 21075-21081.	1.6	32
69	Partitioning of Proteins into Plasma Membrane Microdomains. Journal of Biological Chemistry, 1997, 272, 29538-29545.	1.6	32
70	An Internalization-Competent Influenza Hemagglutinin Mutant Causes the Redistribution of AP-2 to Existing Coated Pits and Is Colocalized with AP-2 in Clathrin Free Clustersâ€. Biochemistry, 1999, 38, 15166-15173.	1.2	31
71	A New Biology of Diabetes Revealed by Leptin. Cell Metabolism, 2015, 21, 15-20.	7.2	31
72	Host Modulators of H1N1 Cytopathogenicity. PLoS ONE, 2012, 7, e39284.	1.1	31

#	Article	IF	Citations
73	Studies toward the Unique Pederin Family Member Psymberin: Structureâ€"Activity Relationships, Biochemical Studies, and Genetics Identify the Mode-of-Action of Psymberin. Journal of the American Chemical Society, 2012, 134, 18998-19003.	6.6	29
74	Loss of Aurora Kinase Signaling Allows Lung Cancer Cells to Adopt Endoreplication and Form Polyploid Giant Cancer Cells That Resist Antimitotic Drugs. Cancer Research, 2021, 81, 400-413.	0.4	29
75	Tyrosine-dependent Basolateral Sorting Signals Are Distinct from Tyrosine-dependent Internalization Signals. Journal of Biological Chemistry, 1997, 272, 26300-26305.	1.6	28
76	The Hedgehog Pathway Effector Smoothened Exhibits Signaling Competency in the Absence of Ciliary Accumulation. Chemistry and Biology, 2014, 21, 1680-1689.	6.2	28
77	Dapagliflozin suppresses glucagon signaling in rodent models of diabetes. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 6611-6616.	3.3	26
78	Degradation of Mutant Influenza Virus Hemagglutinins Is Influenced by Cytoplasmic Sequences Independent of Internalization Signals. Journal of Biological Chemistry, 1996, 271, 907-917.	1.6	24
79	Inhibition of Iron Uptake Is Responsible for Differential Sensitivity to V-ATPase Inhibitors in Several Cancer Cell Lines. PLoS ONE, 2010, 5, e11629.	1.1	24
80	Endocytosis of chimeric influenza virus hemagglutinin proteins that lack a cytoplasmic recognition feature for coated pits.. Journal of Cell Biology, 1996, 134, 339-348.	2.3	21
81	Glucagon therapeutics: Dawn of a new era for diabetes care. Diabetes/Metabolism Research and Reviews, 2016, 32, 660-665.	1.7	20
82	A missense mutation in Caenorhabditis elegans prohibitin 2 confers an atypical multidrug resistance. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 15523-15528.	3.3	18
83	The Establishment of Telomerase-immortalized Tangier Disease Cell Lines Indicates the Existence of an Apolipoprotein A-I-inducible but ABCA1-independent Cholesterol Efflux Pathway. Journal of Biological Chemistry, 2004, 279, 20866-20873.	1.6	17
84	Chapter 6 SV40 Virus Expression Vectors. Methods in Cell Biology, 1994, 43 Pt A, 113-136.	0.5	15
85	Molecular Biological Approaches to Protein Sorting. Annual Review of Physiology, 1989, 51, 797-810.	5.6	13
86	TDP-43 Identified from a Genome Wide RNAi Screen for SOD1 Regulators. PLoS ONE, 2012, 7, e35818.	1.1	13
87	Internalization-competent Influenza Hemagglutinin Mutants Form Complexes with Clathrin-deficient Multivalent AP-2 Oligomers in Live Cells. Journal of Biological Chemistry, 2001, 276, 28356-28363.	1.6	12
88	Integrating Actin Assembly and Endocytosis. Developmental Cell, 2007, 13, 3-4.	3.1	12
89	An AlphaScreen Assay for the Discovery of Synthetic Chemical Inhibitors of Glucagon Production. Journal of Biomolecular Screening, 2016, 21, 325-332.	2.6	8
90	The Non-Catalytic Carboxyl-Terminal Domain of ARFGAP1 Regulates Actin Cytoskeleton Reorganization by Antagonizing the Activation of Rac1. PLoS ONE, 2011, 6, e18458.	1.1	8

#	Article	IF	Citations
91	Membrane Insertion and Intracellular Transport of Influenza Virus Glycoproteins. , 1989, , 219-267.		7
92	New candidates for vesicle coat proteins. Nature Cell Biology, 2004, 6, 384-385.	4.6	7
93	Chapter 2 Mutational Analysis of the Structure and Function of the Influenza Virus Hemagglutinin. Current Topics in Membranes and Transport, 1985, 23, 17-41.	0.6	6
94	A Screen of Random Sequences for those that Alter the Trafficking of the Influenza Virus Hemagglutinin In Vivo. Traffic, 2000, 1, 282-290.	1.3	6
95	A Novel Inhibitor of Topoisomerase I Is Selectively Toxic for a Subset of Nonâ€"Small Cell Lung Cancer Cell Lines. Molecular Cancer Therapeutics, 2016, 15, 23-36.	1.9	6
96	Cellular expression and function of phospholipase DI. Biochemical Society Transactions, 1999, 27, 634-637.	1.6	5
97	[38] Biological properties and measurement of phospholipase D activation by ADP-ribosylation factor (ARF). Methods in Enzymology, 2001, 329, 355-372.	0.4	5
98	Porter and sorter. Nature, 2008, 452, 706-707.	13.7	2
99	Sorting of Membrane Proteins in the Endocytic and Exocytic Pathways. , 1993, , 137-156.		1