Marino Zerial

List of Publications by Year
in descending order

148 papers	31,382 citations	10956 71 h-index	10708 138 g-index
173 all docs	173 docs citations	173 times ranked	23433 citing authors

#	Article	IF	Citations
1	Quantitative intracellular retention of delivered RNAs through optimized cell fixation and immunostaining. Rna, 2022, 28, 433-446.	1.6	3
2	Endosomal escape of delivered mRNA from endosomal recycling tubules visualized at the nanoscale. Journal of Cell Biology, 2022, 221, .	2.3	60
3	Active APPL1 sequestration by Plasmodium favors liver-stage development. Cell Reports, 2022, 39, 110886.	2.9	4
4	Profiling Structural Alterations During Nucleotide Exchange by. Methods in Molecular Biology, 2021, 2293, 69-89.	0.4	0
5	Anisotropic expansion of hepatocyte lumina enforced by apical bulkheads. Journal of Cell Biology, 2021, 220, .	2.3	14
6	Resilience of three-dimensional sinusoidal networks in liver tissue. PLoS Computational Biology, 2020, 16, e1007965.	1.5	12
7	A drug discovery platform to identify compounds that inhibit EGFR triple mutants. Nature Chemical Biology, 2020, 16, 577-586.	3.9	30
8	Quantification of nematic cell polarity in three-dimensional tissues. PLoS Computational Biology, 2020, 16, e1008412.	1.5	6
9	Bile canaliculi remodeling activates <scp>YAP</scp> via the actin cytoskeleton during liver regeneration. Molecular Systems Biology, 2020, 16, e8985.	3.2	29
10	A non-linear system patterns Rab5 GTPase on the membrane. ELife, 2020, 9, .	2.8	29
11	Resilience of three-dimensional sinusoidal networks in liver tissue. , 2020, 16, e1007965.		0
12	Resilience of three-dimensional sinusoidal networks in liver tissue. , 2020, 16, e1007965.		0
13	Resilience of three-dimensional sinusoidal networks in liver tissue. , 2020, 16, e1007965.		0
14	Resilience of three-dimensional sinusoidal networks in liver tissue. , 2020, 16, e1007965.		0
15	Resilience of three-dimensional sinusoidal networks in liver tissue. , 2020, 16, e1007965.		0
16	Resilience of three-dimensional sinusoidal networks in liver tissue. , 2020, 16, e1007965.		0
17	Correlative singleâ€molecule localization microscopy and electron tomography reveals endosome nanoscale domains. Traffic, 2019, 20, 601-617.	1.3	49
18	Retrograde transport of Akt by a neuronal Rab5-APPL1 endosome. Scientific Reports, 2019, 9, 2433.	1.6	24

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19	Three-dimensional spatially resolved geometrical and functional models of human liver tissue reveal new aspects of NAFLD progression. Nature Medicine, 2019, 25, 1885-1893.	15.2	58
20	Liquid-crystal organization of liver tissue. ELife, 2019, 8, .	2.8	42
21	Auto-regulation of Rab5 GEF activity in Rabex5 by allosteric structural changes, catalytic core dynamics and ubiquitin binding. ELife, 2019, 8, .	2.8	26
22	Basic Phenotypes of Endocytic System Recognized by Independent Phenotypes Analysis of a High-throughput Genomic Screen. , 2019, , .		0
23	Content-aware image restoration: pushing the limits of fluorescence microscopy. Nature Methods, 2018, 15, 1090-1097.	9.0	758
24	Claudin-3 regulates bile canalicular paracellular barrier and cholesterol gallstone core formation in mice. Journal of Hepatology, 2018, 69, 1308-1316.	1.8	34
25	Rab5 and Alsin regulate stress-activated cytoprotective signaling on mitochondria. ELife, 2018, 7, .	2.8	65
26	A Predictive 3D Multi-Scale Model of Biliary Fluid Dynamics in the Liver Lobule. Cell Systems, 2017, 4, 277-290.e9.	2.9	79
27	Functional properties of hepatocytes in vitro are correlated with cell polarity maintenance. Experimental Cell Research, 2017, 350, 242-252.	1.2	73
28	Acute loss of the hepatic endo-lysosomal system in vivo causes compensatory changes in iron homeostasis. Scientific Reports, 2017, 7, 4023.	1.6	4
29	Chemical regulators of epithelial plasticity reveal a nuclear receptor pathway controlling myofibroblast differentiation. Scientific Reports, 2016, 6, 29868.	1.6	9
30	An endosomal tether undergoes an entropic collapse to bring vesicles together. Nature, 2016, 537, 107-111.	13.7	135
31	Automatic recognition and characterization of different non-parenchymal cells in liver tissue. , 2016, , .		9
32	Liprin-Î±1 and ERC1 control cell edge dynamics by promoting focal adhesion turnover. Scientific Reports, 2016, 6, 33653.	1.6	40
33	RNAi-nanoparticulate manipulation of gene expression as a new functional genomics tool in the liver. Journal of Hepatology, 2016, 64, 899-907.	1.8	9
34	Signal processing by the endosomal system. Current Opinion in Cell Biology, 2016, 39, 53-60.	2.6	154
35	A probabilistic method to quantify the colocalization of markers on intracellular vesicular structures visualized by light microscopy. AIP Conference Proceedings, 2015, , .	0.3	16
36	Regulation of EGFR signal transduction by analogue-to-digital conversion in endosomes. ELife, 2015, 4, .	2.8	93

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37	Regulation of Liver Metabolism by the Endosomal GTPase Rab5. Cell Reports, 2015, 11, 884-892.	2.9	47
38	Identification of siRNA delivery enhancers by a chemical library screen. Nucleic Acids Research, 2015, 43, 7984-8001.	6.5	58
39	APPL endosomes are not obligatory endocytic intermediates but act as stable cargo-sorting compartments. Journal of Cell Biology, 2015, 211, 123-144.	2.3	87
40	A Combination of Screening and Computational Approaches for the Identification of Novel Compounds That Decrease Mast Cell Degranulation. Journal of Biomolecular Screening, 2015, 20, 720-728.	2.6	7
41	A versatile pipeline for the multi-scale digital reconstruction and quantitative analysis of 3D tissue architecture. ELife, 2015, 4, .	2.8	84
42	Revealing Molecular Mechanisms by Integrating High-Dimensional Functional Screens with Protein Interaction Data. PLoS Computational Biology, 2014, 10, e1003801.	1.5	3
43	The virtual liver: state of the art and future perspectives. Archives of Toxicology, 2014, 88, 2071-2075.	1.9	41
44	Deducing the mechanism of action of compounds identified in phenotypic screens by integrating their multiparametric profiles with a reference genetic screen. Nature Protocols, 2014, 9, 474-490.	5.5	23
45	Endocytosis: Past, Present, and Future. Cold Spring Harbor Perspectives in Biology, 2014, 6, a022509-a022509.	2.3	50
46	Rab Proteins and the Compartmentalization of the Endosomal System. Cold Spring Harbor Perspectives in Biology, 2014, 6, a022616-a022616.	2.3	483
47	Nanoparticle-formulated siRNA targeting integrins inhibits hepatocellular carcinoma progression in mice. Nature Communications, 2014, 5, 3869.	5.8	76
48	A high throughput siRNA screen identifies genes that regulate mannose 6-phosphate receptor trafficking. Journal of Cell Science, 2014, 127, 5079-92.	1.2	15
49	Mammalian <scp>CORVET</scp> Is Required for Fusion and Conversion of Distinct Early Endosome Subpopulations. Traffic, 2014, 15, 1366-1389.	1.3	80
50	Image-based analysis of lipid nanoparticleâ€"mediated siRNA delivery, intracellular trafficking and endosomal escape. Nature Biotechnology, 2013, 31, 638-646.	9.4	1,060
51	Integration of Chemical and RNAi Multiparametric Profiles Identifies Triggers of Intracellular Mycobacterial Killing. Cell Host and Microbe, 2013, 13, 129-142.	5.1	74
52	The RhoD to centrosomal duplication. Small GTPases, 2013, 4, 116-122.	0.7	3
53	Cellular Uptake Mechanisms and Endosomal Trafficking of Supercharged Proteins. Chemistry and Biology, 2012, 19, 831-843.	6.2	80
54	Caenorhabditis elegans screen reveals role of PAR-5 in RAB-11-recycling endosome positioning and apicobasal cell polarity. Nature Cell Biology, 2012, 14, 666-676.	4.6	96

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55	Rab5 is necessary for the biogenesis of the endolysosomal system in vivo. Nature, 2012, 485, 465-470.	13.7	322
56	A General Theoretical Framework to Infer Endosomal Network Dynamics from Quantitative Image Analysis. Current Biology, 2012, 22, 1381-1390.	1.8	69
57	The Interaction Properties of the Human Rab GTPase Family â€" A Comparative Analysis Reveals Determinants of Molecular Binding Selectivity. PLoS ONE, 2012, 7, e34870.	1.1	38
58	A decade of molecular cell biology: achievements and challenges. Nature Reviews Molecular Cell Biology, 2011, 12, 669-674.	16.1	20
59	Systems survey of endocytosis by multiparametric image analysis. Nature, 2010, 464, 243-249.	13.7	407
60	MAPK signaling to the early secretory pathway revealed by kinase/phosphatase functional screening. Journal of Cell Biology, 2010, 189, 997-1011.	2.3	173
61	Targeted Delivery of RNAi Therapeutics With Endogenous and Exogenous Ligand-Based Mechanisms. Molecular Therapy, 2010, 18, 1357-1364.	3.7	831
62	Identification of the Switch in Early-to-Late Endosome Transition. Cell, 2010, 141, 497-508.	13.5	642
63	BIOLOGISTICS AND THE STRUGGLE FOR EFFICIENCY: CONCEPTS AND PERSPECTIVES. International Journal of Modeling, Simulation, and Scientific Computing, 2009, 12, 533-548.	0.9	33
64	Regulation of Epidermal Growth Factor Receptor Trafficking by Lysine Deacetylase HDAC6. Science Signaling, 2009, 2, ra84.	1.6	140
65	Reconstitution of Rab- and SNARE-dependent membrane fusion by synthetic endosomes. Nature, 2009, 459, 1091-1097.	13.7	201
66	A large-scale chemical modification screen identifies design rules to generate siRNAs with high activity, high stability and low toxicity. Nucleic Acids Research, 2009, 37, 2867-2881.	6.5	315
67	Regulation of Endosome Dynamics by Rab5 and Huntingtinâ€HAP40 Effector Complex in Physiological versus Pathological Conditions. Methods in Enzymology, 2008, 438, 239-257.	0.4	32
68	The Endosomal Protein Appl1 Mediates Akt Substrate Specificity and Cell Survival in Vertebrate Development. Cell, 2008, 133, 486-497.	13.5	307
69	Survival of the weakest: signaling aided by endosomes. Journal of Cell Biology, 2008, 182, 823-825.	2.3	16
70	Membrane identity and GTPase cascades regulated by toggle and cutâ€out switches. Molecular Systems Biology, 2008, 4, 206.	3.2	117
71	Natural Product-Derived Modulators of Cell Cycle Progression and Viral Entry by Enantioselective Oxa Diels-Alder Reactions on the Solid Phase. Chemistry and Biology, 2007, 14, 443-451.	6.2	58
72	Unraveling the design principles of endocytosis and signaling using multiâ€parametric image analysis.. FASEB Journal, 2007, 21, .	0.2	0

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73	Huntingtinâ€"HAP40 complex is a novel Rab5 effector that regulates early endosome motility and is up-regulated in Huntington's disease. Journal of Cell Biology, 2006, 172, 605-618.	2.3	196
74	Rab Domains on Endosomes. , 2006, , 23-35.		0
75	Phosphorylation of EEA1 by p38 MAP kinase regulates Î¼ opioid receptor endocytosis. EMBO Journal, 2005, 24, 3235-3246.	3.5	129
76	Genome-wide analysis of human kinases in clathrin- and caveolae/raft-mediated endocytosis. Nature, 2005, 436, 78-86.	13.7	580
77	Kinase-regulated quantal assemblies and kiss-and-run recycling of caveolae. Nature, 2005, 436, 128-133.	13.7	312
78	Regulated Localization of Rab18 to Lipid Droplets. Journal of Biological Chemistry, 2005, 280, 42325-42335.	1.6	257
79	An enzymatic cascade of Rab5 effectors regulates phosphoinositide turnover in the endocytic pathway. Journal of Cell Biology, 2005, 170, 607-618.	2.3	354
80	Modulation of Receptor Recycling and Degradation by the Endosomal Kinesin KIF16B. Cell, 2005, 121, 437-450.	13.5	288
81	Rab Conversion as a Mechanism of Progression from Early to Late Endosomes. Cell, 2005, 122, 735-749.	13.5	1,434
82	Not just a sink: endosomes in control of signal transduction. Current Opinion in Cell Biology, 2004, 16, 400-406.	2.6	481
83	Caveolin-Stabilized Membrane Domains as Multifunctional Transport and Sorting Devices in Endocytic Membrane Traffic. Cell, 2004, 118, 767-780.	13.5	470
84	APPL Proteins Link Rab5 to Nuclear Signal Transduction via an Endosomal Compartment. Cell, 2004, 116, 445-456.	13.5	496
85	The Rab5 Effector Rabankyrin-5 Regulates and Coordinates Different Endocytic Mechanisms. PLoS Biology, 2004, 2, e261.	2.6	192
86	Divalent interaction of the GGAs with the Rabaptin-5-Rabex-5 complex. EMBO Journal, 2003, 22, 78-88.	3.5	135
87	RhoD regulates endosome dynamics through Diaphanous-related Formin and Src tyrosine kinase. Nature Cell Biology, 2003, 5, 195-204.	4.6	200
88	Observing the growth of individual actin filaments in cell extracts by time-lapse atomic force microscopy. FEBS Letters, 2003, 551, 25-28.	1.3	16
89	Early Endosomal Regulation of Smad-dependent Signaling in Endothelial Cells. Journal of Biological Chemistry, 2002, 277, 18046-18052.	1.6	132
90	Mosaic Organization of the Endocytic Pathway. Experimental Cell Research, 2002, 272, 8-14.	1.2	158

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91	Divalent Rab effectors regulate the sub-compartmental organization and sorting of early endosomes. Nature Cell Biology, 2002, 4, 124-133.	4.6	297
92	Cellular dynamics observed at sub-nanometer resolution using atomic force microscopy. Microscopy and Microanalysis, 2002, 8, 892-893.	0.2	0
93	Vps9, Rabex-5 and DSS4: proteins with weak but distinct nucleotide-exchange activities for Rab proteins11Edited by J. Karn. Journal of Molecular Biology, 2001, 310, 141-156.	2.0	67
94	Mice with a homozygous gene trap vector insertion in mgcRacGAP die during pre-implantation development. Mechanisms of Development, 2001, 102, 33-44.	1.7	37
95	[15] Expression, purification, and characterization of Rab5 effector complex, rabaptin-5/rabex-5. Methods in Enzymology, 2001, 329, 132-145.	0.4	19
96	[14] Purification of EEA1 from bovine brain cytosol using Rab5 affinity chromatography and activity assays. Methods in Enzymology, 2001, 329, 120-132.	0.4	9
97	Automatedde novo sequencing of proteins using the differential scanning technique. Proteomics, 2001, 1, 668-682.	1.3	45
98	Rab proteins as membrane organizers. Nature Reviews Molecular Cell Biology, 2001, 2, 107-117.	16.1	3,011
99	Dual function of rhoD in vesicular movement and cell motility. European Journal of Cell Biology, 2001, 80, 391-398.	1.6	31
100	Functional Synergy between Rab5 Effector Rabaptin-5 and Exchange Factor Rabex-5 When Physically Associated in a Complex. Molecular Biology of the Cell, 2001, 12, 2219-2228.	0.9	180
101	The Eps8 protein coordinates EGF receptor signalling through Rac and trafficking through Rab5. Nature, 2000, 408, 374-377.	13.7	271
102	In Vivo Interaction of the Adapter Protein CD2-associated Protein with the Type 2 Polycystic Kidney Disease Protein, Polycystin-2. Journal of Biological Chemistry, 2000, 275, 32888-32893.	1.6	86
103	Rabenosyn-5, a Novel Rab5 Effector, Is Complexed with Hvps45 and Recruited to Endosomes through a Fyve Finger Domain. Journal of Cell Biology, 2000, 151, 601-612.	2.3	338
104	Selective Membrane Recruitment of EEA1 Suggests a Role in Directional Transport of Clathrin-coated Vesicles to Early Endosomes. Journal of Biological Chemistry, 2000, 275, 3745-3748.	1.6	149
105	Distinct Membrane Domains on Endosomes in the Recycling Pathway Visualized by Multicolor Imaging of Rab4, Rab5, and Rab11. Journal of Cell Biology, 2000, 149, 901-914.	2.3	883
106	Purification and Identification of Novel Rab Effectors Using Affinity Chromatography. Methods, 2000, 20, 403-410.	1.9	94
107	Phosphatidylinositol-3-OH kinases are Rab5 effectors. Nature Cell Biology, 1999, 1, 249-252.	4.6	572
108	The Rab5 effector EEA1 is a core component of endosome docking. Nature, 1999, 397, 621-625.	13.7	752

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109	Rab5 regulates motility of early endosomes on microtubules. Nature Cell Biology, 1999, 1, 376-382.	4.6	433
110	Oligomeric Complexes Link Rab5 Effectors with NSF and Drive Membrane Fusion via Interactions between EEA1 and Syntaxin 13. Cell, 1999, 98, 377-386.	13.5	460
111	Two distinct effectors of the small GTPase Rab5 cooperate in endocytic membrane fusion. EMBO Journal, 1998, 17, 1930-1940.	3.5	99
112	Distinct Rab-binding domains mediate the interaction of Rabaptin-5 with GTP-bound rab4 and rab5. EMBO Journal, 1998, 17, 1941-1951.	3.5	214
113	EEA1 links PI(3)K function to Rab5 regulation of endosome fusion. Nature, 1998, 394, 494-498.	13.7	1,036
114	Rab17 Regulates Membrane Trafficking through Apical Recycling Endosomes in Polarized Epithelial Cells. Journal of Cell Biology, 1998, 140, 1039-1053.	2.3	132
115	The diversity of Rab proteins in vesicle transport. Current Opinion in Cell Biology, 1997, 9, 496-504.	2.6	732
116	A Novel Rab5 GDP/GTP Exchange Factor Complexed to Rabaptin-5 Links Nucleotide Exchange to Effector Recruitment and Function. Cell, 1997, 90, 1149-1159.	13.5	552
117	Genetic mapping of Rab20 on mouse Chromosome 8. Mammalian Genome, 1997, 8, 291-292.	1.0	3
118	Rab7: NMR and kinetics analysis of intact and C-terminal truncated constructs. , 1997, 27, 204-209.		16
119	Mouse metanephric kidney as a model system for identifying developmentally regulated genes. Journal of Cellular Physiology, 1997, 173, 147-151.	2.0	7
120	GTPase activity of Rab5 acts as a timer for endocytic membrane fusion. Nature, 1996, 383, 266-269.	13.7	317
121	Endosome dynamics regulated by a Rho protein. Nature, 1996, 384, 427-432.	13.7	209
122	Kinetics of Interaction of Rab5 and Rab7 with Nucleotides and Magnesium Ions. Journal of Biological Chemistry, 1996, 271, 20470-20478.	1.6	108
123	[2] Purification of posttranslationally modified and unmodified Rab5 protein expressed in Spodoptera frugiperda cells. Methods in Enzymology, 1995, 257, 9-15.	0.4	18
124	[19] Expression of Rab GTPases using recombinant vaccinia viruses. Methods in Enzymology, 1995, 257, 155-164.	0.4	39
125	[22] Using oligonucleotides for cloning of rab proteins by polymerase chain reaction. Methods in Enzymology, 1995, 257, 189-199.	0.4	3
126	[27] Use of Rab-GDP dissociation inhibitor for solubilization and delivery of Rab proteins to biological membranes in streptolysin O-permeabilized cells. Methods in Enzymology, 1995, 257, 243-253.	0.4	27

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127	[34] Expression of Rab proteins during mouse embryonic development. Methods in Enzymology, 1995, 257, 324-332.	0.4	2
128	A GDP/GTP Exchange-stimulatory Activity for the Rab5-RabGDI Complex on Clathrin-coated Vesicles from Bovine Brain. Journal of Biological Chemistry, 1995, 270, 11257-11262.	1.6	52
129	Isolation of a murine cDNA clone encoding Rab 19, a novel tissue-specific small GTPase. Gene, 1995, 155, 257-260.	1.0	23
130	Rabaptin-5 is a direct effector of the small GTPase Rab5 in endocytic membrane fusion. Cell, 1995, 83, 423-432.	13.5	451
131	The Rab Protein Family: Genetic Mapping of Six Rab Genes in the Mouse. Genomics, 1995, 30, 439-444.	1.3	30
132	Co-operative regulation of endocytosis by three RAB5 isoforms. FEBS Letters, 1995, 366, 65-71.	1.3	144
133	Membrane association of Rab5 mediated by GDP-dissociation inhibitor and accompanied by GDP/GTP exchange. Nature, 1994, 368, 157-160.	13.7	296
134	Isolation of a mouse cDNA encoding Rab23, a small novel GTPase expressed predominantly in the brain. Gene, 1994, 138, 207-211.	1.0	44
135	The involvement of the small GTP-binding protein Rab5a in neuronal endocytosis. Neuron, 1994, 13, 11-22.	3.8	140
136	Rab proteins and the road maps for intracellular transport. Neuron, 1993, 11, 789-799.	3.8	294
137	Rab GTPases in vesicular transport. Current Opinion in Cell Biology, 1993, 5, 613-620.	2.6	383
138	[37] Localization of Rab family members in animal cells. Methods in Enzymology, 1992, 219, 398-407.	0.4	40
139	The complexity of the Rab and Rho GTP-binding protein subfamilies revealed by a PCR cloning approach. Gene, 1992, 112, 261-264.	1.0	119
140	The small GTPase rab5 functions as a regulatory factor in the early endocytic pathway. Cell, 1992, 70, 715-728.	13.5	1,280
141	rab5 controls early endosome fusion in vitro. Cell, 1991, 64, 915-925.	13.5	1,020
142	Hypervariable C-termmal domain of rab proteins acts as a targeting signal. Nature, 1991, 353, 769-772.	13.7	386
143	Localization of low molecular weight GTP binding proteins to exocytic and endocytic compartments. Cell, 1990, 62, 317-329.	13.5	1,122
144	Nonrandom distribution of MMTV proviral sequences in the mouse genome. Nucleic Acids Research, 1987, 15, 3009-3022.	6.5	30

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145	Foreign transmembrane peptides replacing the internal signal sequence of transferrin receptor allow its translocation and membrane binding. Cell, 1987, 48, 147-155.	13.5	84
146	Gene distribution and nucleotide sequence organization in the mouse genome. FEBS Journal, 1986, 160, 469-478.	0.2	70
147	Gene distribution and nucleotide sequence organization in the human genome. FEBS Journal, 1986, 160, 479-485.	0.2	78
148	Genomic localization of hepatitis B virus in a human hepatoma cell line. Nucleic Acids Research, 1986, 14, 8373-8386.	6.5	40