Christopher B Marshall

List of Publications by Year
in descending order

58 papers	3,105 citations	156536 32 h-index	182931 54 g-index
61 all docs	61 docs citations	61 times ranked	4421 citing authors

#	Article	IF	Citations
1	Regulation of GTPase function by autophosphorylation. Molecular Cell, 2022, 82, 950-968.e14.	4.5	9
2	Hitting the hotspots. Nature Chemical Biology, 2022, 18, 578-579.	3.9	1
3	Structures of RGL1 RAS-Association Domain in Complex with KRAS and the Oncogenic G12V Mutant. Journal of Molecular Biology, 2022, 434, 167527.	2.0	4
4	Oncogenic KRAS G12D mutation promotes dimerization through a second, phosphatidylserineâ€“dependent interface: a model for KRAS oligomerization. Chemical Science, 2021, 12, 12827-12837.	3.7	19
5	Tankyrase regulates epithelial lumen formation via suppression of Rab11 GEFs. Journal of Cell Biology, 2021, 220, .	2.3	6
6	The Q61H mutation decouples KRAS from upstream regulation and renders cancer cells resistant to SHP2 inhibitors. Nature Communications, 2021, 12, 6274.	5.8	22
7	Real-Time In-Cell NMR Reveals the Intracellular Modulation of GTP-Bound Levels of RAS. Cell Reports, 2020, 32, 108074.	2.9	26
8	NMR in integrated biophysical drug discovery for RAS: past, present, and future. Journal of Biomolecular NMR, 2020, 74, 531-554.	1.6	9
9	Multivalent assembly of KRAS with the RAS-binding and cysteine-rich domains of CRAF on the membrane. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 12101-12108.	3.3	46
10	Two Distinct Structures of Membraneâ€Associated Homodimers of GTPâ€•and GDPâ€Bound KRAS4B Revealed by Paramagnetic Relaxation Enhancement. Angewandte Chemie - International Edition, 2020, 59, 11037-11045.	7.2	62
11	Calmodulin disrupts plasma membrane localization of farnesylated KRAS4b by sequestering its lipid moiety. Science Signaling, 2020, 13, .	1.6	23
12	Two Distinct Structures of Membraneâ€Associated Homodimers of GTPâ€•and GDPâ€Bound KRAS4B Revealed by Paramagnetic Relaxation Enhancement. Angewandte Chemie, 2020, 132, 11130-11138.	1.6	5
13	A Non-Canonical Calmodulin Target Motif Comprising a Polybasic Region and Lipidated Terminal Residue Regulates Localization. International Journal of Molecular Sciences, 2020, 21, 2751.	1.8	17
14	Spatiotemporal dynamics of GEF-H1 activation controlled by microtubule- and Src-mediated pathways. Journal of Cell Biology, 2019, 218, 3077-3097.	2.3	38
15	Expression and Purification of Calmodulin for NMR and Other Biophysical Applications. Methods in Molecular Biology, 2019, 1929, 207-221.	0.4	1
16	Tyrosyl phosphorylation of KRAS stalls GTPase cycle via alteration of switch I and II conformation. Nature Communications, 2019, 10, 224.	5.8	66
17	Real-Time NMR. , 2019, , 1-10.		0
18	Multiplexed Real-Time NMR GTPase Assay for Simultaneous Monitoring of Multiple Guanine Nucleotide Exchange Factor Activities from Human Cancer Cells and Organoids. Journal of the American Chemical Society, 2018, 140, 4473-4476.	6.6	9

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19	Inhibition of K-RAS4B by a Unique Mechanism of Action: Stabilizing Membrane-Dependent Occlusion of the Effector-Binding Site. Cell Chemical Biology, 2018, 25, 1327-1336.e4.	2.5	72
20	MARK3-mediated phosphorylation of ARHGEF2 couples microtubules to the actin cytoskeleton to establish cell polarity. Science Signaling, 2017, 10, .	1.6	52
21	Biochemical Classification of Disease-associated Mutants of RAS-like Protein Expressed in Many Tissues (RIT1). Journal of Biological Chemistry, 2016, 291, 15641-15652.	1.6	14
22	Multiple Calmodulin-binding Sites Positively and Negatively Regulate Arabidopsis CYCLIC NUCLEOTIDE-GATED CHANNEL12. Plant Cell, 2016, 28, tpc.00870.2015.	3.1	81
23	Point mutations of the mTOR-RHEB pathway in renal cell carcinoma. Oncotarget, 2015, 6, 17895-17910.	0.8	63
24	Calmodulin and STIM proteins: Two major calcium sensors in the cytoplasm and endoplasmic reticulum. Biochemical and Biophysical Research Communications, 2015, 460, 5-21.	1.0	61
25	Real-time NMR monitoring of biological activities in complex physiological environments. Current Opinion in Structural Biology, 2015, 32, 39-47.	2.6	63
26	Forkhead followed by disordered tail: The intrinsically disordered regions of FOXO3a. Intrinsically Disordered Proteins, 2015, 3, e1056906.	1.9	14
27	Oncogenic and RASopathy-associated K-RAS mutations relieve membrane-dependent occlusion of the effector-binding site. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 6625-6630.	3.3	191
28	p120RasGAP Is a Mediator of Rho Pathway Activation and Tumorigenicity in the DLD1 Colorectal Cancer Cell Line. PLoS ONE, 2014, 9, e86103.	1.1	15
29	Structure-guided Mutation of the Conserved G3-box Glycine in Rheb Generates a Constitutively Activated Regulator of Mammalian Target of Rapamycin (mTOR). Journal of Biological Chemistry, 2014, 289, 12195-12201.	1.6	18
30	The RhoGEF GEF-H1 Is Required for Oncogenic RAS Signaling via KSR-1. Cancer Cell, 2014, 25, 181-195.	7.7	76
31	Mechanistic insight into GPCR-mediated activation of the microtubule-associated RhoA exchange factor GEF-H1. Nature Communications, 2014, 5, 4857.	5.8	49
32	Structure and Function of the mTOR Activator Rheb. , 2014, , 281-324.		1
33	Transcriptional/epigenetic regulator CBP/p300 in tumorigenesis: structural and functional versatility in target recognition. Cellular and Molecular Life Sciences, 2013, 70, 3989-4008.	2.4	239
34	Membrane-Dependent Modulation of the mTOR Activator Rheb: NMR Observations of a GTPase Tethered to a Lipid-Bilayer Nanodisc. Journal of the American Chemical Society, 2013, 135, 3367-3370.	6.6	64
35	A Comparative CEST NMR Study of Slow Conformational Dynamics of Small GTPases Complexed with GTP and GTP Analogues. Angewandte Chemie - International Edition, 2013, 52, 10771-10774.	7.2	38
36	Calmodulin. , 2013, , 545-555.		3

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37	Structures of KIX domain of CBP in complex with two FOXO3a transactivation domains reveal promiscuity and plasticity in coactivator recruitment. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 6078-6083.	3.3	95
38	Probing the GTPase cycle with real-time NMR: GAP and GEF activities in cell extracts. Methods, 2012, 57, 473-485.	1.9	38
39	Antifreeze Protein from Freeze-Tolerant Grass Has a Beta-Roll Fold with an Irregularly Structured Ice-Binding Site. Journal of Molecular Biology, 2012, 416, 713-724.	2.0	120
40	Mechanistic Insight into the Microtubule and Actin Cytoskeleton Coupling through Dynein-Dependent RhoGEF Inhibition. Molecular Cell, 2012, 45, 642-655.	4.5	85
41	An Autoinhibited Noncanonical Mechanism of GTP Hydrolysis by Rheb Maintains mTORC1 Homeostasis. Structure, 2012, 20, 1528-1539.	1.6	31
42	Real-time NMR Study of Three Small GTPases Reveals That Fluorescent 2â€²(3â€²)-O-(N-Methylanthraniloyl)-tagged Nucleotides Alter Hydrolysis and Exchange Kinetics. Journal of Biological Chemistry, 2010, 285, 5132-5136.	1.6	40
43	Real-time NMR Study of Guanine Nucleotide Exchange and Activation of RhoA by PDZ-RhoGEF. Journal of Biological Chemistry, 2010, 285, 5137-5145.	1.6	33
44	High water mobility on the ice-binding surface of a hyperactive antifreeze protein. Physical Chemistry Chemical Physics, 2010, 12, 10189.	1.3	52
45	Characterization of the Intrinsic and TSC2-GAPâ€“Regulated GTPase Activity of Rheb by Real-Time NMR. Science Signaling, 2009, 2, ra3.	1.6	55
46	Synergistic Interplay between Promoter Recognition and CBP/p300 Coactivator Recruitment by FOXO3a. ACS Chemical Biology, 2009, 4, 1017-1027.	1.6	36
47	Direct Visualization of Spruce Budworm Antifreeze Protein Interacting with Ice Crystals: Basal Plane Affinity Confers Hyperactivity. Biophysical Journal, 2008, 95, 333-341.	0.2	104
48	Biochemical and Structural Characterization of an Intramolecular Interaction in FOXO3a and Its Binding with p53. Journal of Molecular Biology, 2008, 384, 590-603.	2.0	102
49	Hyperactive Antifreeze Protein from Fish Contains Multiple Ice-Binding Sites. Biochemistry, 2008, 47, 2051-2063.	1.2	34
50	Fluorescence Microscopy Evidence for Quasi-Permanent Attachment of Antifreeze Proteins to Ice Surfaces. Biophysical Journal, 2007, 92, 3663-3673.	0.2	107
51	The basis for hyperactivity of antifreeze proteins. Cryobiology, 2006, 53, 229-239.	0.3	225
52	Hyperactive antifreeze protein in flounder species. The sole freeze protectant in American plaice. FEBS Journal, 2005, 272, 4439-4449.	2.2	23
53	Hyperactive Antifreeze Protein from Winter Flounder Is a Very Long Rod-like Dimer of Î±-Helices*. Journal of Biological Chemistry, 2005, 280, 17920-17929.	1.6	73
54	Hyperactive antifreeze protein in a fish. Nature, 2004, 429, 153-153.	13.7	110

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55	Enhancing the Activity of a Î²-Helical Antifreeze Protein by the Engineered Addition of Coilsâ€. Biochemistry, 2004, 43, 11637-11646.	1.2	84
56	Partitioning of Fish and Insect Antifreeze Proteins into Ice Suggests They Bind with Comparable Affinityâ€. Biochemistry, 2004, 43, 148-154.	1.2	33
57	A facile method for determining ice recrystallization inhibition by antifreeze proteins. Biochemical and Biophysical Research Communications, 2003, 311, 1041-1046.	1.0	77
58	Identification of the ice-binding face of antifreeze protein fromTenebrio molitor. FEBS Letters, 2002, 529, 261-267.	1.3	66