Mohammad R Ahmadian

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3369943/publications.pdf

Version: 2024-02-01

66	5,274	147801	102487
papers	citations	31 h-index	66 g-index

67	67	67	6846
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The Ras-RasGAP Complex: Structural Basis for GTPase Activation and Its Loss in Oncogenic Ras Mutants. Science, 1997, 277, 333-338.	12.6	1,378
2	GTPase-activating proteins: helping hands to complement an active site. Trends in Biochemical Sciences, 1998, 23, 257-262.	7.5	395
3	Confirmation of the arginine-finger hypothesis for the GAP-stimulated GTP-hydrolysis reaction of Ras. Nature Structural Biology, 1997, 4, 686-689.	9.7	333
4	A restricted spectrum of NRAS mutations causes Noonan syndrome. Nature Genetics, 2010, 42, 27-29.	21.4	271
5	Juvenile myelomonocytic leukemia displays mutations in components of the RAS pathway and the PRC2 network. Nature Genetics, 2015, 47, 1334-1340.	21.4	152
6	Always look on the bright site of Rho: structural implications for a conserved intermolecular interface. EMBO Reports, 2004, 5, 1130-1136.	4.5	141
7	Functional Dysregulation of CDC42 Causes Diverse Developmental Phenotypes. American Journal of Human Genetics, 2018, 102, 309-320.	6.2	138
8	Individual Rate Constants for the Interaction of Ras Proteins with GTPase-Activating Proteins Determined by Fluorescence Spectroscopy. Biochemistry, 1997, 36, 4535-4541.	2.5	135
9	A novel disorder involving dyshematopoiesis, inflammation, and HLH due to aberrant CDC42 function. Journal of Experimental Medicine, 2019, 216, 2778-2799.	8.5	132
10	Alternative Splicing of Rac1 Generates Rac1b, a Self-activating GTPase. Journal of Biological Chemistry, 2004, 279, 4743-4749.	3.4	127
11	Germline KRAS mutations cause aberrant biochemical and physical properties leading to developmental disorders. Human Mutation, 2011, 32, 33-43.	2.5	126
12	An Electrostatic Steering Mechanism of Cdc42 Recognition by Wiskott-Aldrich Syndrome Proteins. Molecular Cell, 2005, 20, 313-324.	9.7	117
13	Structural Insights into the Interaction of ROCKI with the Switch Regions of RhoA. Journal of Biological Chemistry, 2004, 279, 7098-7104.	3.4	116
14	Activating mutations in RRAS underlie a phenotype within the RASopathy spectrum and contribute to leukaemogenesis. Human Molecular Genetics, 2014, 23, 4315-4327.	2.9	114
15	The RHO Family GTPases: Mechanisms of Regulation and Signaling. Cells, 2021, 10, 1831.	4.1	113
16	Deciphering the Molecular and Functional Basis of Dbl Family Proteins. Journal of Biological Chemistry, 2013, 288, 4486-4500.	3.4	91
17	Deciphering the Molecular and Functional Basis of RHOGAP Family Proteins. Journal of Biological Chemistry, 2016, 291, 20353-20371.	3.4	87
18	The C2 domain of SynGAP is essential for stimulation of the Rap GTPase reaction. EMBO Reports, 2008, 9, 350-355.	4.5	82

#	Article	IF	Citations
19	Comparative functional analysis of the Rac GTPases. FEBS Letters, 2003, 555, 556-560.	2.8	65
20	Galectin-1 dimers can scaffold Raf-effectors to increase H-ras nanoclustering. Scientific Reports, 2016, 6, 24165.	3.3	65
21	Structural Fingerprints of the Ras-GTPase Activating Proteins Neurofibromin and p120GAP. Journal of Molecular Biology, 2003, 329, 699-710.	4.2	58
22	Mechanistic Insights into Specificity, Activity, and Regulatory Elements of the Regulator of G-protein Signaling (RGS)-containing Rho-specific Guanine Nucleotide Exchange Factors (GEFs) p115, PDZ-RhoGEF (PRG), and Leukemia-associated RhoGEF (LARG). Journal of Biological Chemistry, 2011, 286, 18202-18212.	3.4	58
23	The RAS-Effector Interface: Isoform-Specific Differences in the Effector Binding Regions. PLoS ONE, 2016, 11, e0167145.	2.5	55
24	Subcellular Fractionation and Localization Studies Reveal a Direct Interaction of the Fragile X Mental Retardation Protein (FMRP) with Nucleolin. PLoS ONE, 2014, 9, e91465.	2.5	51
25	Guanine Nucleotide Exchange Factors Operate by a Simple Allosteric Competitive Mechanismâ€. Biochemistry, 2005, 44, 15423-15429.	2.5	49
26	Activating Mutations of RRAS2 Are a Rare Cause of Noonan Syndrome. American Journal of Human Genetics, 2019, 104, 1223-1232.	6.2	43
27	Fluorescence approaches for monitoring interactions of Rho GTPases with nucleotides, regulators, and effectors. Methods, 2005, 37, 173-182.	3.8	42
28	bFGF-mediated pluripotency maintenance in human induced pluripotent stem cells is associated with NRAS-MAPK signaling. Cell Communication and Signaling, 2018, 16, 96.	6.5	38
29	New insight into the molecular switch mechanism of human Rho family proteins: shifting a paradigm. Biological Chemistry, 2013, 394, 89-95.	2.5	35
30	In Vitro GEF and GAP Assays. Current Protocols in Cell Biology, 2009, 43, Unit 14.9.	2.3	34
31	Structural fingerprints, interactions, and signaling networks of RAS family proteins beyond RAS isoforms. Critical Reviews in Biochemistry and Molecular Biology, 2018, 53, 130-156.	5.2	34
32	Rigosertib potently protects against colitis-associated intestinal fibrosis and inflammation by regulating PI3K/AKT and NF-Î¹B signaling pathways. Life Sciences, 2020, 249, 117470.	4.3	34
33	Crystal structure of Rnd3/RhoE: functional implications1. FEBS Letters, 2002, 525, 100-104.	2.8	32
34	Accessory proteins of the RAS-MAPK pathway: moving from the side line to the front line. Communications Biology, 2021, 4, 696.	4.4	32
35	Functional Cross-talk between Ras and Rho Pathways. Journal of Biological Chemistry, 2014, 289, 6839-6849.	3.4	31
36	Novel FMRP interaction networks linked to cellular stress. FEBS Journal, 2021, 288, 837-860.	4.7	31

#	Article	IF	Citations
37	Activating MRAS mutations cause Noonan syndrome associated with hypertrophic cardiomyopathy. Human Molecular Genetics, 2020, 29, 1772-1783.	2.9	30
38	Structural snapshots of RAF kinase interactions. Biochemical Society Transactions, 2018, 46, 1393-1406.	3.4	28
39	Biophysical Characterization of Nucleophosmin Interactions with Human Immunodeficiency Virus Rev and Herpes Simplex Virus US11. PLoS ONE, 2015, 10, e0143634.	2.5	27
40	IQGAP1 Interaction with RHO Family Proteins Revisited. Journal of Biological Chemistry, 2016, 291, 26364-26376.	3.4	26
41	The Role of Embryonic Stem Cell-expressed RAS (ERAS) in the Maintenance of Quiescent Hepatic Stellate Cells. Journal of Biological Chemistry, 2016, 291, 8399-8413.	3.4	26
42	Biochemical Assays to Characterize Rho GTPases. Methods in Molecular Biology, 2012, 827, 37-58.	0.9	24
43	Rho inhibition by lovastatin affects apoptosis and DSB repair of primary human lung cells in vitro and lung tissue in vivo following fractionated irradiation. Cell Death and Disease, 2017, 8, e2978-e2978.	6.3	24
44	Purification and Biochemical Properties of Rac1, 2, 3 and the Splice Variant Rac1b. Methods in Enzymology, 2006, 406, 1-11.	1.0	22
45	Subcellular Localization and Mitotic Interactome Analyses Identify SIRT4 as a Centrosomally Localized and Microtubule Associated Protein. Cells, 2020, 9, 1950.	4.1	19
46	New model for the interaction of IQGAP1 with CDC42 and RAC1. Small GTPases, 2020, 11, 16-22.	1.6	17
47	Interaction characteristics of Plexin-B1 with Rho family proteins. Biochemical and Biophysical Research Communications, 2013, 434, 785-790.	2.1	16
48	The Function of Embryonic Stem Cell-expressed RAS (E-RAS), a Unique RAS Family Member, Correlates with Its Additional Motifs and Its Structural Properties. Journal of Biological Chemistry, 2015, 290, 15892-15903.	3.4	15
49	The intramolecular allostery of GRB2 governing its interaction with SOS1 is modulated by phosphotyrosine ligands. Biochemical Journal, 2021, 478, 2793-2809.	3.7	15
50	From basic researches to new achievements in therapeutic strategies of KRAS-driven cancers. Cancer Biology and Medicine, 2019, 16, 435-461.	3.0	15
51	AberrantHRAStranscript processing underlies a distinctive phenotype within the RASopathy clinical spectrum. Human Mutation, 2017, 38, 798-804.	2.5	14
52	Fragile X mental retardation protein protects against tumour necrosis factor-mediated cell death and liver injury. Gut, 2020, 69, 133-145.	12.1	14
53	A comprehensive analysis of RAS-effector interactions reveals interaction hotspots and new binding partners. Journal of Biological Chemistry, 2021, 296, 100626.	3.4	14
54	Selective inhibition of IL-6 trans-signaling by a miniaturized, optimized chimeric soluble gp130 inhibits T _H 17 cell expansion. Science Signaling, 2021, 14, .	3.6	13

#	Article	IF	Citations
55	Liposome Reconstitution and Modulation of Recombinant Prenylated Human Rac1 by GEFs, GDI1 and Pak1. PLoS ONE, 2014, 9, e102425.	2.5	13
56	The Pseudoâ€Natural Product Rhonin Targets RHOGDI. Angewandte Chemie - International Edition, 2022, 61, .	13.8	11
57	KRAS-related long noncoding RNAs in human cancers. Cancer Gene Therapy, 2022, 29, 418-427.	4.6	8
58	IL-2 Inducible Kinase ITK is Critical for HIV-1 Infection of Jurkat T-cells. Scientific Reports, 2018, 8, 3217.	3.3	7
59	RHO GTPase-Related Long Noncoding RNAs in Human Cancers. Cancers, 2021, 13, 5386.	3.7	7
60	Electrostatic Forces Mediate the Specificity of RHO GTPase-GDI Interactions. International Journal of Molecular Sciences, 2021, 22, 12493.	4.1	6
61	Selectivity Determinants of RHO GTPase Binding to IQGAPs. International Journal of Molecular Sciences, 2021, 22, 12596.	4.1	6
62	Inhibition of the RacGEF VAV3 by the small molecule IODVA1 impedes RAC signaling and overcomes resistance to tyrosine kinase inhibition in acute lymphoblastic leukemia. Leukemia, 2022, 36, 637-647.	7.2	5
63	MRI-based molecular imaging of epicardium-derived stromal cells (EpiSC) by peptide-mediated active targeting. Scientific Reports, 2020, 10, 21669.	3.3	4
64	Spotlight on Accessory Proteins: RTK-RAS-MAPK Modulators as New Therapeutic Targets. Biomolecules, 2021, 11, 895.	4.0	4
65	Allosteric regulation of GRB2 modulates RAS activation. Small GTPases, 2022, 13, 282-286.	1.6	3
66	Physical Interaction between Embryonic Stem Cell-Expressed Ras (ERas) and Arginase-1 in Quiescent Hepatic Stellate Cells. Cells, 2022, 11, 508.	4.1	2