Dhirendra Kumar Simanshu

List of Publications by Year
in descending order

51 papers	3,954 citations	218677 26 h-index	197818 49 g-index
57 all docs	57 docs citations	57 times ranked	6913 citing authors

#	Article	IF	Citations
1	Machine learningâ€"driven multiscale modeling reveals lipid-dependent dynamics of RAS signaling proteins. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	44
2	A Structure is Worth a Thousand Words: New Insights for RAS and RAF Regulation. Cancer Discovery, 2022, 12, 899-912.	9.4	23
3	Insights into the Cross Talk between Effector and Allosteric Lobes of KRAS from Methyl Conformational Dynamics. Journal of the American Chemical Society, 2022, 144, 4196-4205.	13.7	14
4	Exploring CRD mobility during RAS/RAF engagement at the membrane. Biophysical Journal, 2022, 121, 3630-3650.	0.5	9
5	Purification of Cytosolic Phospholipase A2Î± C2-domain after Expression in Soluble Form in Escherichia coli. Bio-protocol, 2021, 11, e3906.	0.4	0
6	KRAS interaction with RAF1 RAS-binding domain and cysteine-rich domain provides insights into RAS-mediated RAF activation. Nature Communications, 2021, 12, 1176.	12.8	107
7	RAS interaction with Sin1 is dispensable for mTORC2 assembly and activity. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	21
8	Atypical KRASG12R Mutant Is Impaired in PI3K Signaling and Macropinocytosis in Pancreatic Cancer. Cancer Discovery, 2020, 10, 104-123.	9.4	131
9	Structural Insights into the SPRED1-Neurofibromin-KRAS Complex and Disruption of SPRED1-Neurofibromin Interaction by Oncogenic EGFR. Cell Reports, 2020, 32, 107909.	6.4	41
10	Uncovering a membrane-distal conformation of KRAS available to recruit RAF to the plasma membrane. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 24258-24268.	7.1	34
11	RAS internal tandem duplication disrupts GTPase-activating protein (GAP) binding to activate oncogenic signaling. Journal of Biological Chemistry, 2020, 295, 9335-9348.	3.4	8
12	The small molecule BI-2852 induces a nonfunctional dimer of KRAS. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 3363-3364.	7.1	46
13	Membrane interactions of the globular domain and the hypervariable region of KRAS4b define its unique diffusion behavior. ELife, 2020, 9, .	6.0	23
14	Structures of N-terminally processed KRAS provide insight into the role of N-acetylation. Scientific Reports, 2019, 9, 10512.	3.3	47
15	KRAS G13D sensitivity to neurofibromin-mediated GTP hydrolysis. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 22122-22131.	7.1	85
16	RIT1 oncoproteins escape LZTR1-mediated proteolysis. Science, 2019, 363, 1226-1230.	12.6	66
17	Structural basis of phosphatidylcholine recognition by the C2â€"domain of cytosolic phospholipase A2Î±. ELife, 2019, 8, .	6.0	31
18	Functional evaluation of tryptophans in glycolipid binding and membrane interaction by HET-C2, a fungal glycolipid transfer protein. Biochimica Et Biophysica Acta - Biomembranes, 2018, 1860, 1069-1076.	2.6	2

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19	Structural analyses of 4-phosphate adaptor protein 2 yield mechanistic insights into sphingolipid recognition by the glycolipid transfer protein family. Journal of Biological Chemistry, 2018, 293, 16709-16723.	3.4	9
20	Phosphatidylserine Stimulates Ceramide 1-Phosphate (C1P) Intermembrane Transfer by C1P Transfer Proteins. Journal of Biological Chemistry, 2017, 292, 2531-2541.	3.4	20
21	RAS Proteins and Their Regulators in Human Disease. Cell, 2017, 170, 17-33.	28.9	1,262
22	Structural basis of recognition of farnesylated and methylated KRAS4b by PDEÎ´. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E6766-E6775.	7.1	145
23	<scp>TUT</scp> 7 controls the fate of precursor micro <scp>RNA</scp> s by using three different uridylation mechanisms. EMBO Journal, 2015, 34, 1801-1815.	7.8	97
24	Sphingolipid transfer proteins defined by the GLTP-fold. Quarterly Reviews of Biophysics, 2015, 48, 281-322.	5.7	30
25	What makes Phosphatidylserine a Novel Regulator of Ceramideâ€1â€Phosphate Transfer Proteins?. FASEB Journal, 2015, 29, 886.23.	0.5	0
26	Uridylation by TUT4 and TUT7 Marks mRNA for Degradation. Cell, 2014, 159, 1365-1376.	28.9	243
27	Arabidopsis Accelerated Cell Death 11, ACD11, Is a Ceramide-1-Phosphate Transfer Protein and Intermediary Regulator of Phytoceramide Levels. Cell Reports, 2014, 6, 388-399.	6.4	69
28	A Phosphate-Binding Pocket within the Platform-PAZ-Connector Helix Cassette of Human Dicer. Molecular Cell, 2014, 53, 606-616.	9.7	111
29	Nonvesicular Trafficking of Ceramide-1-Phosphate by a Lipid Transfer Protein that Regulates Eicosanoid Production. Biophysical Journal, 2014, 106, 303a.	0.5	1
30	Single-Molecule View on the Duality of Microrna Uridylation. Biophysical Journal, 2014, 106, 698a.	0.5	0
31	Non-vesicular trafficking by a ceramide-1-phosphate transfer protein regulates eicosanoids. Nature, 2013, 500, 463-467.	27.8	159
32	Mechanistic features of Salmonella typhimurium propionate kinase (TdcD): Insights from kinetic and crystallographic studies. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2013, 1834, 2036-2044.	2.3	6
33	Structural Basis of mRNA Recognition and Cleavage by Toxin MazF and Its Regulation by Antitoxin MazE in Bacillus subtilis. Molecular Cell, 2013, 52, 447-458.	9.7	77
34	The glycolipid transfer protein (GLTP) domain of phosphoinositol 4-phosphate adaptor protein-2 (FAPP2): Structure drives preference for simple neutral glycosphingolipids. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2013, 1831, 417-427.	2.4	20
35	INVOLVED IN DE NOVO 2-containing complex involved in RNA-directed DNA methylation in <i>Arabidopsis</i>. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 8374-8381.	7.1	85
36	Dicer recognizes the 5â€² end of RNA for efficient and accurate processing. Nature, 2011, 475, 201-205.	27.8	444

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37	Conformational Folding and Stability of the HET-C2 Glycolipid Transfer Protein Fold: Does a Molten Globule-like State Regulate Activity?. Biochemistry, 2011, 50, 5163-5171.	2.5	14
38	Multimeric assembly and biochemical characterization of the Traxâ€“translin endonuclease complex. Nature Structural and Molecular Biology, 2011, 18, 658-664.	8.2	60
39	A dual flip-out mechanism for 5mC recognition by the <i>Arabidopsis</i> SUVH5 SRA domain and its impact on DNA methylation and H3K9 dimethylation in vivo. Genes and Development, 2011, 25, 137-152.	5.9	108
40	Structural basis for piRNA 2'-O-methylated 3'-end recognition by Piwi PAZ (Piwi/Argonaute/Zwille) domains. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 903-910.	7.1	91
41	Structural Determination and Tryptophan Fluorescence of Heterokaryon Incompatibility C2 Protein (HET-C2), a Fungal Glycolipid Transfer Protein (GLTP), Provide Novel Insights into Glycolipid Specificity and Membrane Interaction by the GLTP Fold. Journal of Biological Chemistry, 2010, 285, 13066-13078.	3.4	22
42	Crystal structures of <i>Salmonella typhimurium</i> propionate kinase and its complex with Ap₄A: Evidence for a novel Ap₄A synthetic activity. Proteins: Structure, Function and Bioinformatics, 2008, 70, 1379-1388.	2.6	9
43	Systematic study on crystal-contact engineering of diphthine synthase: influence of mutations at crystal-packing regions on X-ray diffraction quality. Acta Crystallographica Section D: Biological Crystallography, 2008, 64, 1020-1033.	2.5	17
44	Structure of the putative mutarotase YeaD fromSalmonella typhimurium: structural comparison with galactose mutarotases. Acta Crystallographica Section D: Biological Crystallography, 2007, 63, 197-205.	2.5	4
45	Structure and function of enzymes involved in the anaerobic degradation of L-threonine to propionate. Journal of Biosciences, 2007, 32, 1195-1206.	1.1	23
46	Crystallization and preliminary X-ray crystallographic analysis of biodegradative threonine deaminase (TdcB) fromSalmonella typhimurium. Acta Crystallographica Section F: Structural Biology Communications, 2006, 62, 275-278.	0.7	1
47	Crystal Structures of Salmonella typhimurium Biodegradative Threonine Deaminase and Its Complex with CMP Provide Structural Insights into Ligand-induced Oligomerization and Enzyme Activation. Journal of Biological Chemistry, 2006, 281, 39630-39641.	3.4	40
48	Cloning, expression, purification, crystallization and preliminary X-ray diffraction analysis of propionate kinase (TdcD) fromSalmonella typhimurium. Acta Crystallographica Section F: Structural Biology Communications, 2005, 61, 52-55.	0.7	4
49	Crystal Structures of ADP and AMPPNP-bound Propionate Kinase (TdcD) from Salmonella typhimurium: Comparison with Members of Acetate and Sugar Kinase/Heat Shock Cognate 70/Actin Superfamily. Journal of Molecular Biology, 2005, 352, 876-892.	4.2	29
50	Crystal structure of Salmonella typhimurium 2-methylisocitrate lyase (PrpB) and its complex with pyruvate and Mg2+. Biochemical and Biophysical Research Communications, 2003, 311, 193-201.	2.1	17
51	Cloning, expression, purification and preliminary X-ray crystallographic studies of 2-methylisocitrate lyase fromSalmonella typhimurium. Acta Crystallographica Section D: Biological Crystallography, 2002, 58, 2159-2161.	2.5	2