John E Sondek

List of Publications by Year in descending order

103 papers	11,017 citations	41344 49 h-index	36028 97 g-index
109 all docs	109 docs citations	109 times ranked	10063 citing authors

#	Article	IF	Citations
1	GEF means go: turning on RHO GTPases with guanine nucleotide-exchange factors. Nature Reviews Molecular Cell Biology, 2005, 6, 167-180.	37.0	1,483
2	The 2.0 Ã... crystal structure of a heterotrimeric G protein. Nature, 1996, 379, 311-319.	27.8	1,159
3	Crystal structure of a GA protein Î²Î³dimer at 2.1 Ã... resolution. Nature, 1996, 379, 369-374.	27.8	770
4	GTPase mechanism of Gproteins from the 1.7-Ã... crystal structure of transducin Î± - GDP AlFâ¯4. Nature, 1994, 372, 276-279.	27.8	594
5	Crystal structure of Rac1 in complex with the guanine nucleotide exchange region of Tiam1. Nature, 2000, 408, 682-688.	27.8	332
6	Tiam1 mediates Ras activation of Rac by a PI(3)K-independent mechanism. Nature Cell Biology, 2002, 4, 621-625.	10.3	288
7	The experimental power of FR900359 to study Gq-regulated biological processes. Nature Communications, 2015, 6, 10156.	12.8	282
8	Structural determinants for GoLoco-induced inhibition of nucleotide release by GÎ± subunits. Nature, 2002, 416, 878-881.	27.8	252
9	The Pseudomonas syringae effector AvrRpt2 cleaves its C-terminally acylated target, RIN4, from Arabidopsis membranes to block RPM1 activation. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 6496-6501.	7.1	250
10	Kinetic Scaffolding Mediated by a Phospholipase Câ€“Î² and G _q Signaling Complex. Science, 2010, 330, 974-980.	12.6	209
11	A crystallographic view of interactions between Dbs and Cdc42: PH domain-assisted guanine nucleotide exchange. EMBO Journal, 2002, 21, 1315-1326.	7.8	198
12	Structural basis for the selective activation of Rho GTPases by Dbl exchange factors. Nature Structural Biology, 2002, 9, 468-475.	9.7	190
13	Phagocytosis of Apoptotic Cells Is Regulated by a UNC-73/TRIO-MIG-2/RhoG Signaling Module and Armadillo Repeats of CED-12/ELMO. Current Biology, 2004, 14, 2208-2216.	3.9	185
14	Tuba, a Novel Protein Containing Bin/Amphiphysin/Rvs and Dbl Homology Domains, Links Dynamin to Regulation of the Actin Cytoskeleton. Journal of Biological Chemistry, 2003, 278, 49031-49043.	3.4	161
15	Rac1b, a tumor associated, constitutively active Rac1 splice variant, promotes cellular transformation. Oncogene, 2004, 23, 9369-9380.	5.9	157
16	The Phospholipase C Isozymes and Their Regulation. Sub-Cellular Biochemistry, 2012, 58, 61-94.	2.4	149
17	TIR-only protein RBA1 recognizes a pathogen effector to regulate cell death in Arabidopsis. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E2053-E2062.	7.1	146
18	General and Versatile Autoinhibition of PLC Isozymes. Molecular Cell, 2008, 31, 383-394.	9.7	144

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19	GÎ±q Directly Activates p63RhoGEF and Trio via a Conserved Extension of the Dbl Homology-associated Pleckstrin Homology Domain. Journal of Biological Chemistry, 2007, 282, 29201-29210.	3.4	132
20	REGULATION OF PHOSPHOLIPASE C ISOZYMES BY RAS SUPERFAMILY GTPASES. Annual Review of Pharmacology and Toxicology, 2006, 46, 355-379.	9.4	124
21	Crystal structure of Rac1 bound to its effector phospholipase C-Î²2. Nature Structural and Molecular Biology, 2006, 13, 1135-1140.	8.2	122
22	PH domain of ELMO functions in trans to regulate Rac activation via Dock180. Nature Structural and Molecular Biology, 2004, 11, 756-762.	8.2	121
23	GÎ³-like (ggl) domains: new frontiers in g-protein signaling and Î²-propeller scaffolding22Abbreviations: DEP, dishevelled/EGL-10/pleckstrin-related domain; DH, dbl-homology domain; GAP, guanosine triphosphatase-activating protein; GEF, guanine nucleotide exchange factor; GGL, G-gamma-like; GIRK, G-protein-gated inwardly rectifying potassium channel; GPCR, G-protein-coupled receptor; G protein, guanine nucleotide binding protein; GTPase, guanosine triphosphatase; mAChR, muscarinic acetylcholine receptor; MAPK. Biochemical Pharmacology, 2001, 61, 1329-1337.	4.4	117
24	Leukemia-associated Rho Guanine Nucleotide Exchange Factor, a Dbl Family Protein Found Mutated in Leukemia, Causes Transformation by Activation of RhoA. Journal of Biological Chemistry, 2001, 276, 27145-27151.	3.4	112
25	Direct Activation of Phospholipase C-Ïµ by Rho. Journal of Biological Chemistry, 2003, 278, 41253-41258.	3.4	100
26	Crystal structure of the multifunctional GÎ²5â€"RGS9 complex. Nature Structural and Molecular Biology, 2008, 15, 155-162.	8.2	97
27	A Steric-Inhibition Model for Regulation of Nucleotide Exchange via the Dock180 Family of GEFs. Current Biology, 2005, 15, 371-377.	3.9	96
28	Mechanism of Phosphorylation-induced Activation of Phospholipase C-Î³ Isozymes. Journal of Biological Chemistry, 2010, 285, 35836-35847.	3.4	96
29	The Pleckstrin Homology Domain of Phospholipase C-Î²2 as an Effector Site for Rac. Journal of Biological Chemistry, 2003, 278, 21099-21104.	3.4	95
30	Structural and Biochemical Characterization of CIB1 Delineates a New Family of EF-hand-containing Proteins. Journal of Biological Chemistry, 2005, 280, 8407-8415.	3.4	95
31	A unique fold of phospholipase C-Î² mediates dimerization and interaction with GÎ±q. Nature Structural Biology, 2002, 9, 32-36.	9.7	93
32	Type III Effector Activation via Nucleotide Binding, Phosphorylation, and Host Target Interaction. PLoS Pathogens, 2007, 3, e48.	4.7	89
33	Molecular basis for Rac1 recognition by guanine nucleotide exchange factors. Nature Structural Biology, 2001, 8, 1037-1041.	9.7	84
34	Molecular cloning and characterization of PLC-Î·2. Biochemical Journal, 2005, 391, 667-676.	3.7	84
35	Accommodation of single amino acid insertions by the native state of staphylococcal nuclease. Proteins: Structure, Function and Bioinformatics, 1990, 7, 299-305.	2.6	83
36	Quantitative Analysis of the Effect of Phosphoinositide Interactions on the Function of Dbl Family Proteins. Journal of Biological Chemistry, 2001, 276, 45868-45875.	3.4	83

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37	Release of autoinhibition of ASEF by APC leads to CDC42 activation and tumor suppression. Nature Structural and Molecular Biology, 2007, 14, 814-823.	8.2	83
38	Multifunctional Roles for the PH Domain of Dbs in Regulating Rho GTPase Activation. Journal of Biological Chemistry, 2003, 278, 18393-18400.	3.4	76
39	Structure of GÎ±i1 Bound to a GDP-Selective Peptide Provides Insight into Guanine Nucleotide Exchange. Structure, 2005, 13, 1069-1080.	3.3	74
40	Crystal Structures of the Type III Effector Protein AvrPphF and Its Chaperone Reveal Residues Required for Plant Pathogenesis. Structure, 2004, 12, 1669-1681.	3.3	73
41	The DH and PH Domains of Trio Coordinately Engage Rho GTPases for their Efficient Activation. Journal of Molecular Biology, 2007, 368, 1307-1320.	4.2	73
42	A PLCÎ²/PI3KÎ³-GSK3 Signaling Pathway Regulates Cofilin Phosphatase Slingshot2 and Neutrophil Polarization and Chemotaxis. Developmental Cell, 2011, 21, 1038-1050.	7.0	72
43	Novel mutations in RASGRP2, which encodes CalDAG-GEFI, abrogate Rap1 activation, causing platelet dysfunction. Blood, 2016, 128, 1282-1289.	1.4	68
44	An Effector Site That Stimulates G-protein GTPase in Photoreceptors. Journal of Biological Chemistry, 1995, 270, 14319-14324.	3.4	67
45	Calcium-dependent properties of CIB binding to the integrin Î±IIb cytoplasmic domain and translocation to the platelet cytoskeleton. Biochemical Journal, 1999, 342, 729-735.	3.7	67
46	Loss of Phosphatidylinositol 3-Phosphate Binding by the C-terminal Tiam-1 Pleckstrin Homology Domain Prevents in Vivo Rac1 Activation without Affecting Membrane Targeting. Journal of Biological Chemistry, 2003, 278, 11457-11464.	3.4	59
47	SmgGDS Is a Guanine Nucleotide Exchange Factor That Specifically Activates RhoA and RhoC. Journal of Biological Chemistry, 2011, 286, 12141-12148.	3.4	56
48	RhoA Activates Purified Phospholipase C-Ïµ by a Guanine Nucleotide-dependent Mechanism. Journal of Biological Chemistry, 2004, 279, 47992-47997.	3.4	54
49	Molecular Basis of CIB Binding to the Integrin Î±IIb Cytoplasmic Domain. Journal of Biological Chemistry, 2002, 277, 28877-28883.	3.4	53
50	Direct Activation of Human Phospholipase C by Its Well Known Inhibitor U73122. Journal of Biological Chemistry, 2011, 286, 12407-12416.	3.4	53
51	Structural basis for the activation of PLC-Î³ isozymes by phosphorylation and cancer-associated mutations. ELife, 2019, 8, .	6.0	52
52	Requirement For C-terminal Sequences in Regulation of Ect2 Guanine Nucleotide Exchange Specificity and Transformation. Journal of Biological Chemistry, 2004, 279, 25226-25233.	3.4	49
53	A Cell-Permeable Inhibitor to Trap GÎ±q Proteins in the Empty Pocket Conformation. Chemistry and Biology, 2014, 21, 890-902.	6.0	47
54	The emerging role of insertions and deletions in protein engineering. Current Opinion in Biotechnology, 1995, 6, 387-393.	6.6	46

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55	Inhibition of NF-ÎºB Activity by IÎºBÎ² in Association with Î²B-Ras. Molecular and Cellular Biology, 2004, 24, 3048-3056.	2.3	46
56	Mechanism of Activation and Inactivation of Gq/Phospholipase C-Î² Signaling Nodes. Chemical Reviews, 2011, 111, 6120-6129.	47.7	46
57	The Dbs PH domain contributes independently to membrane targeting and regulation of guanine nucleotide-exchange activity. Biochemical Journal, 2006, 400, 563-572.	3.7	42
58	Structural Insights into Fibronectin Type III Domain-mediated Signaling. Journal of Molecular Biology, 2007, 367, 303-309.	4.2	42
59	High-Throughput Screening for Small-Molecule Inhibitors of LARG-Stimulated RhoA Nucleotide Binding via a Novel Fluorescence Polarization Assay. Journal of Biomolecular Screening, 2009, 14, 161-172.	2.6	42
60	Larger than Dbl: new structural insights into RhoA activation. Trends in Biochemical Sciences, 2005, 30, 163-165.	7.5	41
61	Dual Activation of Phospholipase C-Ïµ by Rho and Ras GTPases. Journal of Biological Chemistry, 2008, 283, 29690-29698.	3.4	40
62	Auto-inhibition of the Dbl Family Protein Tim by an N-terminal Helical Motif. Journal of Biological Chemistry, 2007, 282, 13813-13823.	3.4	39
63	Phospholipase C isozymes as effectors of Ras superfamily GTPases. Journal of Lipid Research, 2009, 50, S243-S248.	4.2	39
64	Spatiotemporal dynamics of GEF-H1 activation controlled by microtubule- and Src-mediated pathways. Journal of Cell Biology, 2019, 218, 3077-3097.	5.2	38
65	Calcium-dependent properties of CIB binding to the integrin Î±IIb cytoplasmic domain and translocation to the platelet cytoskeleton. Biochemical Journal, 1999, 342, 729.	3.7	38
66	Role of the C-Terminal SH3 Domain and N-Terminal Tyrosine Phosphorylation in Regulation of Tim and Related Dbl-Family Proteins. Biochemistry, 2008, 47, 6827-6839.	2.5	36
67	Activation of Human Phospholipase C-Î·2 by GÎ²Î³. Biochemistry, 2008, 47, 4410-4417.	2.5	36
68	Established and Emerging Fluorescence-Based Assays for G-Protein Function: Ras-Superfamily GTPases. Combinatorial Chemistry and High Throughput Screening, 2003, 6, 409-418.	1.1	36
69	Autoinhibition and Phosphorylation-Induced Activation of Phospholipase C-Î³ Isozymes. Biochemistry, 2013, 52, 4810-4819.	2.5	35
70	Structural and energetic differences between insertions and substitutions in staphylococcal nuclease. Proteins: Structure, Function and Bioinformatics, 1992, 13, 132-140.	2.6	34
71	Membrane-induced Allosteric Control of Phospholipase C-Î² Isozymes. Journal of Biological Chemistry, 2014, 289, 29545-29557.	3.4	33
72	A Fluorogenic, Small Molecule Reporter for Mammalian Phospholipase C Isozymes. ACS Chemical Biology, 2011, 6, 223-228.	3.4	32

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73	Functional Analysis of Cdc42 Residues Required for Guanine Nucleotide Exchange. Journal of Biological Chemistry, 2002, 277, 50893-50898.	3.4	30
74	Crystal Structure of the DH/PH Fragment of Dbs without Bound GTPase. Structure, 2004, 12, 1079-1086.	3.3	30
75	Structure and Function of Vps15 in the Endosomal G Protein Signaling Pathway[,]. Biochemistry, 2009, 48, 6390-6401.	2.5	30
76	Small Molecule Inhibitors of Phospholipase C from a Novel High-throughput Screen*. Journal of Biological Chemistry, 2013, 288, 5840-5848.	3.4	29
77	RhoGEF Specificity Mutants Implicate RhoA as a Target for Dbs Transforming Activity. Molecular and Cellular Biology, 2002, 22, 6895-6905.	2.3	27
78	Potent and Selective Peptide-based Inhibition of the G Protein Gî±q. Journal of Biological Chemistry, 2016, 291, 25608-25616.	3.4	26
79	Quantification of Isozymeâ€Specific Activation of Phospholipase Câ€î²2 by Rac GTPases and Phospholipase Câ€É› by Rho GTPases in an Intact Cell Assay System. Methods in Enzymology, 2006, 406, 489-499.	1.0	25
80	AvrRpm1 Missense Mutations Weakly Activate RPS2-Mediated Immune Response in Arabidopsis thaliana. PLoS ONE, 2012, 7, e42633.	2.5	25
81	Multiplexed GTPase and GEF biosensor imaging enables network connectivity analysis. Nature Chemical Biology, 2020, 16, 826-833.	8.0	25
82	Prediction of Proteinâ€“Protein Interfaces on G-Protein Î² Subunits Reveals a Novel Phospholipase C Î²2 Binding Domain. Journal of Molecular Biology, 2009, 392, 1044-1054.	4.2	19
83	Accommodation of insertion mutations on the surface and in the interior of staphylococcal nuclease. Protein Science, 1994, 3, 391-401.	7.6	18
84	Role of the pleckstrin homology domain in intersectin-L Dbl homology domain activation of Cdc42 and signaling. Biochimica Et Biophysica Acta - Molecular Cell Research, 2003, 1640, 61-68.	4.1	18
85	A membrane-associated, fluorogenic reporter for mammalian phospholipase C isozymes. Journal of Biological Chemistry, 2018, 293, 1728-1735.	3.4	17
86	Calcium-induced structural rearrangements release autoinhibition in the Rap-GEF CalDAG-GEFI. Journal of Biological Chemistry, 2018, 293, 8521-8529.	3.4	16
87	TheSalmonellaTyphimurium effector SteC inhibits Cdc42-mediated signaling through binding to the exchange factor Cdc24 inSaccharomyces cerevisiae. Molecular Biology of the Cell, 2012, 23, 4430-4443.	2.1	14
88	High-Throughput Fluorescence Polarization Assay for the Enzymatic Activity of GTPase-Activating Protein of ADP-Ribosylation Factor (ARFGAP). Journal of Biomolecular Screening, 2011, 16, 717-723.	2.6	11
89	A negative-feedback loop regulating ERK1/2 activation and mediated by RasGPR2 phosphorylation. Biochemical and Biophysical Research Communications, 2016, 474, 193-198.	2.1	11
90	A Cdc42 Mutant Specifically Activated by Intersectinâ€. Biochemistry, 2005, 44, 13282-13290.	2.5	8

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91	Fluorescent Phosphatidylinositol 4,5-Bisphosphate Derivatives with Modified 6-Hydroxy Group as Novel Substrates for Phospholipase C. Biochemistry, 2012, 51, 5300-5306.	2.5	8
92	Assays of Complex Formation between RGS Protein GÎ³ Subunit-like Domains and GÎ² Subunits. Methods in Enzymology, 2002, 344, 702-723.	1.0	7
93	Designer proteins that competitively inhibit GÎ±q by targeting its effector site. Journal of Biological Chemistry, 2021, 297, 101348.	3.4	7
94	Direct Activation of Purified Phospholipase C Epsilon by RhoA Studied in Reconstituted Phospholipid Vesicles. Methods in Enzymology, 2006, 406, 260-271.	1.0	5
95	A High-Throughput Assay to Identify Allosteric Inhibitors of the PLC-Î³ Isozymes Operating at Membranes. Biochemistry, 2020, 59, 4029-4038.	2.5	5
96	Dynamics of allosteric regulation of the phospholipase C-Î³ isozymes upon recruitment to membranes. ELife, 0, 11, .	6.0	4
97	Regulation of PLCÎ² Isoforms by Rac. Methods in Enzymology, 2006, 406, 272-280.	1.0	2
98	Fluorogenic XY-69 in Lipid Vesicles for Measuring Activity of Phospholipase C Isozymes. Methods in Molecular Biology, 2021, 2251, 225-236.	0.9	2
99	Structural Features of RhoGEFs. , 2003, , 751-755.		0
100	Molecular cloning and characterization of PLCâ€Î2. FASEB Journal, 2006, 20, A693.	0.5	0
101	Activation of Human PLCâ€eta2 by Gbetagamma. FASEB Journal, 2008, 22, 728.3.	0.5	0
102	Structural studies of RGS9/GÎ²5. FASEB Journal, 2008, 22, 539.2.	0.5	0
103	Structural Features of RhoGEFs. , 2010, , 1843-1847.		0