Henrik G Dohlman

List of Publications by Year
in descending order

116 papers	10,538 citations	49 h-index (41258)	100 g-index (32761)
123 all docs	123 docs citations	123 times ranked	6911 citing authors

#	Article	IF	Citations
1	Model Systems for the Study of Seven-Transmembrane-Segment Receptors. Annual Review of Biochemistry, 1991, 60, 653-688.	5.0	1,351
2	Cloning of the gene and cDNA for mammalian Î²-adrenergic receptor and homology with rhodopsin. Nature, 1986, 321, 75-79.	13.7	1,284
3	cDNA for the human beta 2-adrenergic receptor: a protein with multiple membrane-spanning domains and encoded by a gene whose chromosomal location is shared with that of the receptor for platelet-derived growth factor.. Proceedings of the National Academy of Sciences of the United States of America, 1987, 84, 46-50.	3.3	646
4	RGS Proteins and Signaling by Heterotrimeric G Proteins. Journal of Biological Chemistry, 1997, 272, 3871-3874.	1.6	477
5	Regulators of G-Protein Signaling (RGS) Proteins: Region-Specific Expression of Nine Subtypes in Rat Brain. Journal of Neuroscience, 1997, 17, 8024-8037.	1.7	408
6	Regulation of G Proteinâ€"Initiated Signal Transduction in Yeast: Paradigms and Principles. Annual Review of Biochemistry, 2001, 70, 703-754.	5.0	400
7	Sst2, a Negative Regulator of Pheromone Signaling in the Yeast <i>Saccharomyces cerevisiae</i>: Expression, Localization, and Genetic Interaction and Physical Association with Gpa1 (the G-Protein Î±) Tj ETQq1 1 0.784314 rg BT /Ov	1.1	[illegible]
8	The experimental power of FR900359 to study Gq-regulated biological processes. Nature Communications, 2015, 6, 10156.	5.8	282
9	Control of yeast mating signal transduction by a mammalian beta 2-adrenergic receptor and Gs alpha subunit. Science, 1990, 250, 121-123.	6.0	238
10	Activation of the Phosphatidylinositol 3-Kinase Vps34 by a G Protein Î± Subunit at the Endosome. Cell, 2006, 126, 191-203.	13.5	202
11	Inhibition of G-Protein Signaling by Dominant Gain-of-Function Mutations in Sst2p, a Pheromone Desensitization Factor in <i>Saccharomyces cerevisiae</i>. Molecular and Cellular Biology, 1995, 15, 3635-3643.	1.1	196
12	DEP-Domain-Mediated Regulation of GPCR Signaling Responses. Cell, 2006, 126, 1079-1093.	13.5	166
13	A Point Mutation in GÎ±o and GÎ±i1Blocks Interaction with Regulator of G Protein Signaling Proteins. Journal of Biological Chemistry, 1998, 273, 12794-12797.	1.6	152
14	G Proteins and Pheromone Signaling. Annual Review of Physiology, 2002, 64, 129-152.	5.6	118
15	Sst2 Is a GTPase-Activating Protein for Gpa1:â€‰ Purification and Characterization of a Cognate RGSâˆ’GÎ± Protein Pair in Yeast. Biochemistry, 1998, 37, 4815-4822.	1.2	116
16	The Crystal Structure of a Self-Activating G Protein Î± Subunit Reveals Its Distinct Mechanism of Signal Initiation. Science Signaling, 2011, 4, ra8.	1.6	115
17	Identification of Allosteric Peptide Agonists of CXCR4. Journal of Biological Chemistry, 2003, 278, 896-907.	1.6	112
18	Regulation of Cell Signaling Dynamics by the Protein Kinase-Scaffold Ste5. Molecular Cell, 2008, 30, 649-656.	4.5	110

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19	MAPK kinase kinases (MKKKs) as a target class for small-molecule inhibition to modulate signaling networks and gene expression. Current Opinion in Chemical Biology, 2005, 9, 325-331.	2.8	108
20	Mathematical and Computational Analysis of Adaptation via Feedback Inhibition in Signal Transduction Pathways. Biophysical Journal, 2007, 93, 806-821.	0.2	107
21	Selective Uncoupling of RGS Action by a Single Point Mutation in the G Protein Î±-Subunit. Journal of Biological Chemistry, 1998, 273, 5780-5784.	1.6	106
22	The a-factor transporter (STE6 gene product) and cell polarity in the yeast Saccharomyces cerevisiae.. Journal of Cell Biology, 1993, 120, 1203-1215.	2.3	104
23	Pheromone Signaling Mechanisms in Yeast: A Prototypical Sex Machine. Science, 2004, 306, 1508-1509.	6.0	97
24	A Systems-Biology Analysis of Feedback Inhibition in the Sho1 Osmotic-Stress-Response Pathway. Current Biology, 2007, 17, 659-667.	1.8	97
25	Direct Identification of a G Protein Ubiquitination Site by Mass Spectrometryâ€. Biochemistry, 2002, 41, 5067-5074.	1.2	96
26	The RACK1 Ortholog Asc1 Functions as a G-protein Î² Subunit Coupled to Glucose Responsiveness in Yeast. Journal of Biological Chemistry, 2007, 282, 25168-25176.	1.6	96
27	Coactivation of G Protein Signaling by Cell-Surface Receptors and an Intracellular Exchange Factor. Current Biology, 2008, 18, 211-215.	1.8	93
28	Identification of Triton X-100 Insoluble Membrane Domains in the Yeast Saccharomyces cerevisiae. Journal of Biological Chemistry, 1996, 271, 32975-32980.	1.6	92
29	Regulation of Membrane and Subunit Interactions by N-Myristoylation of a G Protein Î± Subunit in Yeast. Journal of Biological Chemistry, 1996, 271, 20273-20283.	1.6	81
30	Defining MAP3 kinases required for MDA-MB-231 cell tumor growth and metastasis. Oncogene, 2012, 31, 3889-3900.	2.6	80
31	Site-specific monoubiquitination activates Ras by impeding GTPase-activating protein function. Nature Structural and Molecular Biology, 2013, 20, 46-52.	3.6	80
32	Cell Division Regulation by BIR1, a Member of the Inhibitor of Apoptosis Family in Yeast. Journal of Biological Chemistry, 2000, 275, 6707-6711.	1.6	76
33	Kinetic insulation as an effective mechanism for achieving pathway specificity in intracellular signaling networks. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 16146-16151.	3.3	74
34	Feedback Phosphorylation of an RGS Protein by MAP Kinase in Yeast. Journal of Biological Chemistry, 1999, 274, 36387-36391.	1.6	73
35	Analysis of RGS Proteins in Saccharomyces cerevisiae. Methods in Enzymology, 2002, 344, 617-631.	0.4	73
36	Bistability, Stochasticity, and Oscillations in the Mitogen-Activated Protein Kinase Cascade. Biophysical Journal, 2006, 90, 1961-1978.	0.2	73

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37	Protons as Second Messenger Regulators of G Protein Signaling. Molecular Cell, 2013, 51, 531-538.	4.5	70
38	Use of G-protein fusions to monitor integral membrane proteinâ€"protein interactions in yeast. Nature Biotechnology, 2000, 18, 1075-1079.	9.4	67
39	Regulators of G Protein Signaling and Transient Activation of Signaling. Journal of Biological Chemistry, 2003, 278, 46506-46515.	1.6	66
40	Differences in the Regulation of K-Ras and H-Ras Isoforms by Monoubiquitination. Journal of Biological Chemistry, 2013, 288, 36856-36862.	1.6	65
41	Control of MAPK Specificity by Feedback Phosphorylation of Shared Adaptor Protein Ste50. Journal of Biological Chemistry, 2008, 283, 33798-33802.	1.6	61
42	Genome-Scale Analysis Reveals Sst2 as the Principal Regulator of Mating Pheromone Signaling in the Yeast Saccharomyces cerevisiae. Eukaryotic Cell, 2006, 5, 330-346.	3.4	60
43	Partial Constitutive Activation of Pheromone Responses by a Palmitoylation-Site Mutant of a G Protein Î± Subunit in Yeastâ€. Biochemistry, 1996, 35, 14806-14817.	1.2	58
44	Functional Reconstitution of an Atypical G Protein Heterotrimer and Regulator of G Protein Signaling Protein (RGS1) from Arabidopsis thaliana. Journal of Biological Chemistry, 2011, 286, 13143-13150.	1.6	58
45	Pheromone action regulates G-protein alpha-subunit myristoylation in the yeast Saccharomyces cerevisiae.. Proceedings of the National Academy of Sciences of the United States of America, 1993, 90, 9688-9692.	3.3	56
46	Dose-to-Duration Encoding and Signaling beyond Saturation in Intracellular Signaling Networks. PLoS Computational Biology, 2008, 4, e1000197.	1.5	56
47	The Yeast G Protein Î± Subunit Gpa1 Transmits a Signal through an RNA Binding Effector Protein Scp160. Molecular Cell, 2003, 12, 517-524.	4.5	55
48	Functional Analysis of Plp1 and Plp2, Two Homologues of Phosducin in Yeast. Journal of Biological Chemistry, 2000, 275, 18462-18469.	1.6	54
49	Pheromone Signaling Pathways in Yeast. Science's STKE: Signal Transduction Knowledge Environment, 2006, 2006, cm6-cm6.	4.1	54
50	Differences in intradomain and interdomain motion confer distinct activation properties to structurally similar GÎ± proteins. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 7275-7279.	3.3	54
51	Persistent Activation by Constitutive Ste7 Promotes Kss1-Mediated Invasive Growth but Fails To Support Fus3-Dependent Mating in Yeast. Molecular and Cellular Biology, 2004, 24, 9221-9238.	1.1	51
52	Checkpoints in a Yeast Differentiation Pathway Coordinate Signaling during Hyperosmotic Stress. PLoS Genetics, 2012, 8, e1002437.	1.5	50
53	G Protein Signaling in Yeast: New Components, New Connections, New Compartments. Science, 2006, 314, 1412-1413.	6.0	49
54	Yeast Dynamically Modify Their Environment to Achieve Better Mating Efficiency. Science Signaling, 2011, 4, ra54.	1.6	48

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55	Regulation of G protein signalling in yeast. Seminars in Cell and Developmental Biology, 1998, 9, 135-141.	2.3	46
56	MAPK feedback encodes a switch and timer for tunable stress adaptation in yeast. Science Signaling, 2015, 8, ra5.	1.6	46
57	Endoproteolytic Processing of Sst2, a Multidomain Regulator of G Protein Signaling in Yeast. Journal of Biological Chemistry, 2000, 275, 37533-37541.	1.6	43
58	Pheromone-dependent Ubiquitination of the Mitogen-activated Protein Kinase Kinase Ste7. Journal of Biological Chemistry, 2002, 277, 15766-15772.	1.6	41
59	Regulation of Stress Response Signaling by the N-terminal Dishevelled/EGL-10/Pleckstrin Domain of Sst2, a Regulator of G Protein Signaling in Saccharomyces cerevisiae. Journal of Biological Chemistry, 2002, 277, 22156-22167.	1.6	40
60	Regulation of Ste7 Ubiquitination by Ste11 Phosphorylation and the Skp1-Cullin-F-box Complex. Journal of Biological Chemistry, 2003, 278, 22284-22289.	1.6	40
61	RGS Proteins and Septins Cooperate to Promote Chemotropism by Regulating Polar Cap Mobility. Current Biology, 2015, 25, 275-285.	1.8	39
62	Buried ionizable networks are an ancient hallmark of G protein-coupled receptor activation. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 5702-5707.	3.3	38
63	Systems biology analysis of G protein and MAP kinase signaling in yeast. Oncogene, 2007, 26, 3254-3266.	2.6	35
64	Differential Regulation of G Protein Î± Subunit Trafficking by Mono- and Polyubiquitination. Journal of Biological Chemistry, 2005, 280, 284-291.	1.6	34
65	Structures of Get3, Get4, and Get5 Provide New Models for TA Membrane Protein Targeting. Structure, 2010, 18, 897-902.	1.6	34
66	Regulation of Yeast G Protein Signaling by the Kinases That Activate the AMPK Homolog Snf1. Science Signaling, 2013, 6, ra78.	1.6	34
67	A universal allosteric mechanism for G protein activation. Molecular Cell, 2021, 81, 1384-1396.e6.	4.5	33
68	Cellular Noise Suppression by the Regulator of G Protein Signaling Sst2. Molecular Cell, 2014, 55, 85-96.	4.5	32
69	Structure and Function of Vps15 in the Endosomal G Protein Signaling Pathway[,]. Biochemistry, 2009, 48, 6390-6401.	1.2	30
70	Systematic Analysis of Essential Genes Reveals Important Regulators of G Protein Signaling. Molecular Cell, 2010, 38, 746-757.	4.5	29
71	Coordinated regulation of intracellular pH by two glucose-sensing pathways in yeast. Journal of Biological Chemistry, 2018, 293, 2318-2329.	1.6	28
72	Regulation of large and small G proteins by ubiquitination. Journal of Biological Chemistry, 2019, 294, 18613-18623.	1.6	28

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73	Second Site Suppressor Mutations of a GTPase-deficient G-Protein Î±-Subunit. Journal of Biological Chemistry, 1998, 273, 28597-28602.	1.6	27
74	Pheromone-regulated Sumoylation of Transcription Factors That Mediate the Invasive to Mating Developmental Switch in Yeast. Journal of Biological Chemistry, 2006, 281, 1964-1969.	1.6	26
75	Hormone signal response system. Nature, 1993, 366, 307-308.	13.7	25
76	Dominant-negative Inhibition of Pheromone Receptor Signaling by a Single Point Mutation in the G Protein Î± Subunit. Journal of Biological Chemistry, 2004, 279, 35287-35297.	1.6	25
77	G Protein Mono-ubiquitination by the Rsp5 Ubiquitin Ligase. Journal of Biological Chemistry, 2009, 284, 8940-8950.	1.6	25
78	RGS Proteins: G Protein-Coupled Receptors Meet Their Match. Assay and Drug Development Technologies, 2003, 1, 357-364.	0.6	24
79	Regulation of G Protein and Mitogen-Activated Protein Kinase Signaling by Ubiquitination. Circulation Research, 2006, 99, 1305-1314.	2.0	23
80	Cell Cycle-dependent Phosphorylation and Ubiquitination of a G Protein Î± Subunit. Journal of Biological Chemistry, 2011, 286, 20208-20216.	1.6	23
81	Thematic Minireview Series: New Directions in G Protein-coupled Receptor Pharmacology. Journal of Biological Chemistry, 2015, 290, 19469-19470.	1.6	23
82	Signal Activation and Inactivation by the GÎ± Helical Domain: A Long-Neglected Partner in G Protein Signaling. Science Signaling, 2012, 5, re2.	1.6	21
83	Signal inhibition by a dynamically regulated pool of monophosphorylated MAPK. Molecular Biology of the Cell, 2015, 26, 3359-3371.	0.9	21
84	Effect of pertussis toxin on Î±2 -adrenoceptors: decreased formation of the high-affinity state for agonists. FEBS Letters, 1984, 172, 95-98.	1.3	19
85	Identification of Novel Pheromone-response Regulators through Systematic Overexpression of 120 Protein Kinases in Yeast. Journal of Biological Chemistry, 2001, 276, 26472-26478.	1.6	18
86	Quantitative analysis of the yeast pheromone pathway. Yeast, 2019, 36, 495-518.	0.8	18
87	Combined computational and experimental analysis reveals mitogen-activated protein kinaseâ€“mediated feedback phosphorylation as a mechanism for signaling specificity. Molecular Biology of the Cell, 2012, 23, 3899-3910.	0.9	17
88	Dynamic Ubiquitination of the Mitogen-activated Protein Kinase Kinase (MAPKK) Ste7 Determines Mitogen-activated Protein Kinase (MAPK) Specificity. Journal of Biological Chemistry, 2013, 288, 18660-18671.	1.6	16
89	Amino acid metabolites that regulate G protein signaling during osmotic stress. PLoS Genetics, 2017, 13, e1006829.	1.5	16
90	Pheromone- and RSP5-dependent Ubiquitination of the G Protein Î² Subunit Ste4 in Yeast. Journal of Biological Chemistry, 2011, 286, 27147-27155.	1.6	15

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91	A Scaffold Makes the Switch. Science Signaling, 2008, 1, pe46.	1.6	14
92	Selective Regulation of MAP Kinase Signaling by an Endomembrane Phosphatidylinositol 4-Kinase. Journal of Biological Chemistry, 2011, 286, 14852-14860.	1.6	14
93	Desensitization: Diminishing returns. Nature, 2002, 418, 591-591.	13.7	13
94	Multi-omics analysis of glucose-mediated signaling by a moonlighting GÎ² protein Asc1/RACK1. PLoS Genetics, 2021, 17, e1009640.	1.5	13
95	Mathematical Modeling of RGS and G-Protein Regulation in Yeast. Methods in Enzymology, 2004, 389, 383-398.	0.4	12
96	Modulation of receptor dynamics by the regulator of G protein signaling Sst2. Molecular Biology of the Cell, 2015, 26, 4124-4134.	0.9	12
97	Identification of Yeast Pheromone Pathway Modulators by High-Throughput Agonist Response Profiling of a Yeast Gene Knockout Strain Collection. Methods in Enzymology, 2004, 389, 399-409.	0.4	11
98	Chapter 1 RGS Proteins. Progress in Molecular Biology and Translational Science, 2009, 86, 1-14.	0.9	10
99	Guanine Nucleotide-binding Protein (GÎ±) Endocytosis by a Cascade of Ubiquitin Binding Domain Proteins Is Required for Sustained Morphogenesis and Proper Mating in Yeast. Journal of Biological Chemistry, 2014, 289, 15052-15063.	1.6	10
100	Regulation of Ras Paralog Thermostability by Networks of Buried Ionizable Groups. Biochemistry, 2016, 55, 534-542.	1.2	10
101	Proper Protein Glycosylation Promotes Mitogen-Activated Protein Kinase Signal Fidelity. Biochemistry, 2013, 52, 115-124.	1.2	9
102	Multi-Omics Analysis of Multiple Glucose-Sensing Receptor Systems in Yeast. Biomolecules, 2022, 12, 175.	1.8	9
103	Systematic analysis of F-box proteins reveals a new branch of the yeast mating pathway. Journal of Biological Chemistry, 2019, 294, 14717-14731.	1.6	8
104	Potassium starvation induces autophagy in yeast. Journal of Biological Chemistry, 2020, 295, 14189-14202.	1.6	8
105	Thematic Minireview Series: Cell Biology of G Protein Signaling. Journal of Biological Chemistry, 2015, 290, 6679-6680.	1.6	6
106	Thematic Minireview Series: Complexities of Cellular Signaling Revealed by Simple Model Organisms. Journal of Biological Chemistry, 2016, 291, 7786-7787.	1.6	4
107	Illuminating GÎ²₅ Signaling. Molecular Pharmacology, 2007, 72, 810-811.	1.0	3
108	Gradient Tracking by Yeast GPCRs in a Microfluidics Chamber. Methods in Molecular Biology, 2021, 2268, 275-287.	0.4	3

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109	Purification of RGS Protein, Sst2, from Saccharomyces cerevisiae and Escherichia coli. Methods in Enzymology, 2002, 344, 632-647.	0.4	2
110	A predictive model of gene expression reveals the role of network motifs in the mating response of yeast. Science Signaling, 2021, 14, .	1.6	2
111	Cells Prioritize Responses When Faced With a Decision Between an Environmental Stress and a Developmental Cue. FASEB Journal, 2010, 24, lb171.	0.2	0
112	Pheromoneâ€•and Rsp5â€Dependent Ubiquitinaton of G Beta Subunit Ste4 in Yeast. FASEB Journal, 2010, 24, lb212.	0.2	0
113	Systematic analysis of essential genes reveals new regulators of G protein signaling. FASEB Journal, 2010, 24, lb167.	0.2	0
114	Ras Activity Regulation by Monoubiquitination. FASEB Journal, 2013, 27, 1046.3.	0.2	0
115	Protons as second messenger regulators of cell signaling. FASEB Journal, 2013, 27, 598.10.	0.2	0
116	Systematic Analysis of Yeast Fâ€box Proteins Reveals a New Role of Ubiquitination in Polarity Establishment. FASEB Journal, 2015, 29, 618.17.	0.2	0