

Theodore G Wensel

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/8865374/theodore-g-wensel-publications-by-year.pdf>

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

134
papers

6,412
citations

42
h-index

77
g-index

142
ext. papers

6,980
ext. citations

7.2
avg, IF

5.62
L-index

#	Paper	IF	Citations
134	The mGluR6 ligand-binding domain, but not the C-terminal domain, is required for synaptic localization in retinal ON-bipolar cells. <i>Journal of Biological Chemistry</i> , 2021 , 101418	5.4	0
133	Structure and dynamics of photoreceptor sensory cilia. <i>Pflugers Archiv European Journal of Physiology</i> , 2021 , 473, 1517-1537	4.6	2
132	LRRTM4 is a member of the transsynaptic complex between rod photoreceptors and bipolar cells. <i>Journal of Comparative Neurology</i> , 2021 , 529, 221-233	3.4	2
131	Super-resolution microscopy reveals photoreceptor-specific subcilium location and function of ciliopathy-associated protein CEP290. <i>JCI Insight</i> , 2021 , 6,	9.9	2
130	Phototransduction in Vertebrate Rods and Cones 2020 , 261-274		
129	Loss of Class III Phosphoinositide 3-Kinase Vps34 Results in Cone Degeneration. <i>Biology</i> , 2020 , 9,	4.9	2
128	MTOR-initiated metabolic switch and degeneration in the retinal pigment epithelium. <i>FASEB Journal</i> , 2020 , 34, 12502-12520	0.9	7
127	Phosphoinositides in Retinal Function and Disease. <i>Cells</i> , 2020 , 9,	7.9	14
126	Single-Atom Fluorescence Switch: A General Approach toward Visible-Light-Activated Dyes for Biological Imaging. <i>Journal of the American Chemical Society</i> , 2019 , 141, 14699-14706	16.4	50
125	Critical Role for Phosphatidylinositol-3 Kinase Vps34/PIK3C3 in ON-Bipolar Cells 2019 , 60, 2861-2874		11
124	Defining the layers of a sensory cilium with STORM and cryoelectron nanoscopy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 23562-23572	11.5	13
123	Residues and residue pairs of evolutionary importance differentially direct signaling bias of D2 dopamine receptors. <i>Journal of Biological Chemistry</i> , 2019 , 294, 19279-19291	5.4	2
122	Structures of TRPV2 in distinct conformations provide insight into role of the pore turret. <i>Nature Structural and Molecular Biology</i> , 2019 , 26, 40-49	17.6	30
121	Differential epitope masking reveals synapse-specific complexes of TRPM1. <i>Visual Neuroscience</i> , 2018 , 35, E001	1.7	4
120	SPATA7 maintains a novel photoreceptor-specific zone in the distal connecting cilium. <i>Journal of Cell Biology</i> , 2018 , 217, 2851-2865	7.3	26
119	A Large Endoplasmic Reticulum-Resident Pool of TRPM1 in Retinal ON-Bipolar Cells. <i>ENeuro</i> , 2018 , 5,	3.9	9
118	Phagocytosed photoreceptor outer segments activate mTORC1 in the retinal pigment epithelium. <i>Science Signaling</i> , 2018 , 11,	8.8	17

117	Adrenergic receptor activation mobilizes intracellular calcium via a non-canonical cAMP-independent signaling pathway. <i>Journal of Biological Chemistry</i> , 2017 , 292, 9967-9974	5.4	20
116	The ocular toxicity and pharmacokinetics of simvastatin following intravitreal injection in mice. <i>International Journal of Ophthalmology</i> , 2017 , 10, 1361-1369	1.4	3
115	Intramolecular allosteric communication in dopamine D2 receptor revealed by evolutionary amino acid covariation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 3539-44	11.5	29
114	Integrative subcellular proteomic analysis allows accurate prediction of human disease-causing genes. <i>Genome Research</i> , 2016 , 26, 660-9	9.7	17
113	Nonsense mutations in the rhodopsin gene that give rise to mild phenotypes trigger mRNA degradation in human cells by nonsense-mediated decay. <i>Experimental Eye Research</i> , 2016 , 145, 444-449	3.7	10
112	Structural and molecular bases of rod photoreceptor morphogenesis and disease. <i>Progress in Retinal and Eye Research</i> , 2016 , 55, 32-51	20.5	35
111	Phosphatidylinositol-3-phosphate is light-regulated and essential for survival in retinal rods. <i>Scientific Reports</i> , 2016 , 6, 26978	4.9	27
110	Determinants of endogenous ligand specificity divergence among metabotropic glutamate receptors. <i>Journal of Biological Chemistry</i> , 2015 , 290, 2870-8	5.4	15
109	Domain organization and conformational plasticity of the G protein effector, PDE6. <i>Journal of Biological Chemistry</i> , 2015 , 290, 12833-43	5.4	13
108	Three-dimensional architecture of murine rod cilium revealed by cryo-EM. <i>Methods in Molecular Biology</i> , 2015 , 1271, 267-92	1.4	8
107	Selectivity and evolutionary divergence of metabotropic glutamate receptors for endogenous ligands and G proteins coupled to phospholipase C or TRP channels. <i>Journal of Biological Chemistry</i> , 2014 , 289, 29961-74	5.4	11
106	The retromer complex is required for rhodopsin recycling and its loss leads to photoreceptor degeneration. <i>PLoS Biology</i> , 2014 , 12, e1001847	9.7	52
105	Oligomeric state of purified transient receptor potential melastatin-1 (TRPM1), a protein essential for dim light vision. <i>Journal of Biological Chemistry</i> , 2014 , 289, 27019-27033	5.4	17
104	Abrupt onset of mutations in a developmentally regulated gene during terminal differentiation of post-mitotic photoreceptor neurons in mice. <i>PLoS ONE</i> , 2014 , 9, e108135	3.7	11
103	Timing is everything: GTPase regulation in phototransduction 2013 , 54, 7725-33		39
102	Three-dimensional architecture of the rod sensory cilium and its disruption in retinal neurodegeneration. <i>Cell</i> , 2012 , 151, 1029-41	56.2	122
101	Rhodopsin gene expression determines rod outer segment size and rod cell resistance to a dominant-negative neurodegeneration mutant. <i>PLoS ONE</i> , 2012 , 7, e49889	3.7	38
100	Molecular Biology of Vision 2012 , 889-903		2

99	TRP channel gene expression in the mouse retina. <i>Vision Research</i> , 2011 , 51, 2440-52	2.1	61
98	Efficient mutagenesis of the rhodopsin gene in rod photoreceptor neurons in mice. <i>Nucleic Acids Research</i> , 2011 , 39, 5955-66	20.1	22
97	Mislocalization and degradation of human P23H-rhodopsin-GFP in a knockin mouse model of retinitis pigmentosa 2011 , 52, 9728-36		40
96	Functional and structural studies of TRP channels heterologously expressed in budding yeast. <i>Advances in Experimental Medicine and Biology</i> , 2011 , 704, 25-40	3.6	14
95	Biochemical Cascade of Phototransduction 2011 , 394-410		4
94	Distribution of RGS9-2 in neurons of the mouse striatum. <i>Journal of Neurochemistry</i> , 2010 , 112, 651-61	6	14
93	Topical mydriatics affect light-evoked retinal responses in anesthetized mice 2010 , 51, 567-76		12
92	Mutations of the opsin gene (Y102H and I307N) lead to light-induced degeneration of photoreceptors and constitutive activation of phototransduction in mice. <i>Journal of Biological Chemistry</i> , 2010 , 285, 14521-33	5.4	29
91	Evolution-guided discovery and recoding of allosteric pathway specificity determinants in psychoactive bioamine receptors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 7787-92	11.5	72
90	Evaluating retinal toxicity of intravitreal caspofungin in the mouse eye 2010 , 51, 5796-803		6
89	R9AP stabilizes RGS11-G beta5 and accelerates the early light response of ON-bipolar cells. <i>Visual Neuroscience</i> , 2010 , 27, 9-17	1.7	21
88	Two R7 regulator of G-protein signaling proteins shape retinal bipolar cell signaling. <i>Journal of Neuroscience</i> , 2009 , 29, 7753-65	6.6	41
87	Hot on the trail of TRP channel structure. <i>Journal of General Physiology</i> , 2009 , 133, 239-44	3.4	29
86	Multiphoton adaptation of a commercial low-cost confocal microscope for live tissue imaging. <i>Journal of Biomedical Optics</i> , 2009 , 14, 034048	3.5	13
85	New mouse models for recessive retinitis pigmentosa caused by mutations in the Pde6a gene. <i>Human Molecular Genetics</i> , 2009 , 18, 178-92	5.6	54
84	A synaptic vesicle-associated Ca ²⁺ channel promotes endocytosis and couples exocytosis to endocytosis. <i>Cell</i> , 2009 , 138, 947-60	56.2	114
83	Signal transducing membrane complexes of photoreceptor outer segments. <i>Vision Research</i> , 2008 , 48, 2052-61	2.1	96
82	Regulation of Photoresponses by Phosphorylation 2008 , 125-140		1

81	Safety and pharmacokinetics of triamcinolone hexacetonide in rabbit eyes. <i>Journal of Ocular Pharmacology and Therapeutics</i> , 2008 , 24, 197-205	2.6	1
80	Targeted generation of DNA strand breaks using pyrene-conjugated triplex-forming oligonucleotides. <i>Biochemistry</i> , 2008 , 47, 6279-88	3.2	12
79	Activation-dependent hindrance of photoreceptor G protein diffusion by lipid microdomains. <i>Journal of Biological Chemistry</i> , 2008 , 283, 30015-24	5.4	46
78	Structure of TRPV1 channel revealed by electron cryomicroscopy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 7451-5	11.5	164
77	Chronic cold exposure increases RGS7 expression and decreases alpha(2)-autoreceptor-mediated inhibition of noradrenergic locus coeruleus neurons. <i>European Journal of Neuroscience</i> , 2008 , 27, 2433-43	3.5	28
76	Subcellular compartmentalization of two calcium binding proteins, calretinin and calbindin-28 kDa, in ganglion and amacrine cells of the rat retina. <i>Molecular Vision</i> , 2008 , 14, 1600-13	2.3	35
75	Neural reprogramming in retinal degeneration. <i>Investigative Ophthalmology and Visual Science</i> , 2007 , 48, 3364-71		237
74	Gbeta5-RGS complexes co-localize with mGluR6 in retinal ON-bipolar cells. <i>European Journal of Neuroscience</i> , 2007 , 26, 2899-905	3.5	56
73	Localization and differential interaction of R7 RGS proteins with their membrane anchors R7BP and R9AP in neurons of vertebrate retina. <i>Molecular and Cellular Neurosciences</i> , 2007 , 35, 311-9	4.8	39
72	Oral curcumin mitigates the clinical and neuropathologic phenotype of the Trembler-J mouse: a potential therapy for inherited neuropathy. <i>American Journal of Human Genetics</i> , 2007 , 81, 438-53	11	99
71	Defective development of photoreceptor membranes in a mouse model of recessive retinal degeneration. <i>Vision Research</i> , 2006 , 46, 4510-8	2.1	15
70	Clearance of intravitreal moxifloxacin. <i>Investigative Ophthalmology and Visual Science</i> , 2006 , 47, 317-9		29
69	Nicotinic acetylcholine receptor channel electrostatics determined by diffusion-enhanced luminescence energy transfer. <i>Biophysical Journal</i> , 2006 , 91, 1315-24	2.9	10
68	Electrostatic steering at acetylcholine binding sites. <i>Biophysical Journal</i> , 2006 , 91, 1302-14	2.9	17
67	RGS expression rate-limits recovery of rod photoresponses. <i>Neuron</i> , 2006 , 51, 409-16	13.9	220
66	Tokay Gecko Photoreceptors Achieve Rod-Like Physiology with Cone-Like Proteins□ <i>Photochemistry and Photobiology</i> , 2006 , 82, 1452-1460	3.6	21
65	Tokay gecko photoreceptors achieve rod-like physiology with cone-like proteins. <i>Photochemistry and Photobiology</i> , 2006 , 82, 1452-60	3.6	25
64	ABCA4 mutations causing mislocalization are found frequently in patients with severe retinal dystrophies. <i>Human Molecular Genetics</i> , 2005 , 14, 2769-78	5.6	76

63	Rhodopsin-EGFP knock-ins for imaging quantal gene alterations. <i>Vision Research</i> , 2005 , 45, 3445-53	2.1	8
62	Purification, reconstitution on lipid vesicles, and assays of PDE6 and its activator G protein, transducin. <i>Methods in Molecular Biology</i> , 2005 , 307, 289-313	1.4	9
61	Characterization of R9AP, a membrane anchor for the photoreceptor GTPase-accelerating protein, RGS9-1. <i>Methods in Enzymology</i> , 2004 , 390, 178-96	1.7	9
60	Enhancement of phototransduction g protein-effector interactions by phosphoinositides. <i>Journal of Biological Chemistry</i> , 2004 , 279, 8986-90	5.4	23
59	Knock-in human rhodopsin-GFP fusions as mouse models for human disease and targets for gene therapy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004 , 101, 9109-14	11.5	70
58	Evolutionary trace of G protein-coupled receptors reveals clusters of residues that determine global and class-specific functions. <i>Journal of Biological Chemistry</i> , 2004 , 279, 8126-32	5.4	157
57	How a G protein binds a membrane. <i>Journal of Biological Chemistry</i> , 2004 , 279, 33937-45	5.4	32
56	Targeted expression of the dominant-negative FGFR4a in the eye using Xrx1A regulatory sequences interferes with normal retinal development. <i>Development (Cambridge)</i> , 2003 , 130, 4177-86	6.6	23
55	Identification of protein kinase C isozymes responsible for the phosphorylation of photoreceptor-specific RGS9-1 at Ser475. <i>Journal of Biological Chemistry</i> , 2003 , 278, 8316-25	5.4	24
54	Activation of RGS9-1GTPase acceleration by its membrane anchor, R9AP. <i>Journal of Biological Chemistry</i> , 2003 , 278, 14550-4	5.4	65
53	GTPase regulators and photoresponses in cones of the eastern chipmunk. <i>Journal of Neuroscience</i> , 2003 , 23, 1287-97	6.6	85
52	Acceleration of key reactions as a strategy to elucidate the rate-limiting chemistry underlying phototransduction inactivation. <i>Investigative Ophthalmology and Visual Science</i> , 2003 , 44, 1016-22		8
51	The nature of dominant mutations of rhodopsin and implications for gene therapy. <i>Molecular Neurobiology</i> , 2003 , 28, 149-58	6.2	64
50	From molecules to behavior: new clues for RGS function in the striatum. <i>Neuron</i> , 2003 , 38, 853-6	13.9	9
49	Instability of GGL domain-containing RGS proteins in mice lacking the G protein beta-subunit Gbeta5. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003 , 100, 6604-9	11.5	172
48	Characterization of retinal guanylate cyclase-activating protein 3 (GCAP3) from zebrafish to man. <i>European Journal of Neuroscience</i> , 2002 , 15, 63-78	3.5	88
47	R9AP, a membrane anchor for the photoreceptor GTPase accelerating protein, RGS9-1. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002 , 99, 9755-60	11.5	146
46	RGS function in visual signal transduction. <i>Methods in Enzymology</i> , 2002 , 344, 724-40	1.7	5

45	Evolution of the regulators of G-protein signaling multigene family in mouse and human. <i>Genomics</i> , 2002 , 79, 177-85	4.3	82
44	RGS9-1 phosphorylation and Ca ²⁺ . <i>Advances in Experimental Medicine and Biology</i> , 2002 , 514, 125-9	3.6	7
43	Prediction and confirmation of a site critical for effector regulation of RGS domain activity. <i>Nature Structural Biology</i> , 2001 , 8, 234-7		104
42	Structural determinants for regulation of phosphodiesterase by a G protein at 2.0 Å. <i>Nature</i> , 2001 , 409, 1071-7	50.4	228
41	Dependence of RGS9-1 membrane attachment on its C-terminal tail. <i>Journal of Biological Chemistry</i> , 2001 , 276, 48961-6	5.4	9
40	Phosphorylation of RGS9-1 by an endogenous protein kinase in rod outer segments. <i>Journal of Biological Chemistry</i> , 2001 , 276, 22287-95	5.4	38
39	RGS proteins: lessons from the RGS9 subfamily. <i>Progress in Molecular Biology and Translational Science</i> , 2001 , 65, 341-59		41
38	Cosegregation and functional analysis of mutant ABCR (ABCA4) alleles in families that manifest both Stargardt disease and age-related macular degeneration. <i>Human Molecular Genetics</i> , 2001 , 10, 2671-8	5.6	90
37	Enzymology of GTPase acceleration in phototransduction. <i>Methods in Enzymology</i> , 2000 , 315, 524-38	1.7	29
36	Slowed recovery of rod photoresponse in mice lacking the GTPase accelerating protein RGS9-1. <i>Nature</i> , 2000 , 403, 557-60	50.4	413
35	Do phosphatidylinositides modulate vertebrate phototransduction?. <i>Journal of Neuroscience</i> , 2000 , 20, 2792-9	6.6	77
34	Multiple zinc binding sites in retinal rod cGMP phosphodiesterase, PDE6alpha beta. <i>Journal of Biological Chemistry</i> , 2000 , 275, 20572-7	5.4	41
33	Enhancement of phototransduction protein interactions by lipid surfaces. <i>Journal of Biological Chemistry</i> , 2000 , 275, 3535-42	5.4	41
32	Co-expression of Gbeta5 enhances the function of two Ggamma subunit-like domain-containing regulators of G protein signaling proteins. <i>Journal of Biological Chemistry</i> , 2000 , 275, 3397-402	5.4	74
31	Modules in the photoreceptor RGS9-1.Gbeta 5L GTPase-accelerating protein complex control effector coupling, GTPase acceleration, protein folding, and stability. <i>Journal of Biological Chemistry</i> , 2000 , 275, 37093-100	5.4	76
30	Psoralen photo-cross-linking by triplex-forming oligonucleotides at multiple sites in the human rhodopsin gene. <i>Biochemistry</i> , 1999 , 38, 12850-9	3.2	18
29	Formation of helical protein assemblies of IgG and transducin on varied lipid tubules. <i>Journal of Structural Biology</i> , 1999 , 128, 119-30	3.4	21
28	RGS9, a GTPase accelerator for phototransduction. <i>Neuron</i> , 1998 , 20, 95-102	13.9	325

27	Triplex targets in the human rhodopsin gene. <i>Biochemistry</i> , 1998 , 37, 11315-22	3.2	23
26	High expression levels in cones of RGS9, the predominant GTPase accelerating protein of rods. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1998 , 95, 5351-6	11.5	150
25	High-efficiency triple-helix-mediated photo-cross-linking at a targeted site within a selectable mammalian gene. <i>Biochemistry</i> , 1996 , 35, 10712-9	3.2	43
24	High affinity interactions of GTPgammaS with the heterotrimeric G protein, transducin. Evidence at high and low protein concentrations. <i>Journal of Biological Chemistry</i> , 1996 , 271, 12919-24	5.4	27
23	Biosynthesis of the unsaturated 14-carbon fatty acids found on the N termini of photoreceptor-specific proteins. <i>Journal of Biological Chemistry</i> , 1996 , 271, 5007-16	5.4	29
22	Low affinity interactions of GDPbetaS and ribose- or phosphoryl-substituted GTP analogues with the heterotrimeric G protein, transducin. <i>Journal of Biological Chemistry</i> , 1996 , 271, 12925-31	5.4	9
21	Intensely luminescent immunoreactive conjugates of proteins and dipicolinate-based polymeric Tb (III) chelates. <i>Bioconjugate Chemistry</i> , 1995 , 6, 88-92	6.3	22
20	High-affinity triple helix formation by synthetic oligonucleotides at a site within a selectable mammalian gene. <i>Biochemistry</i> , 1995 , 34, 7243-51	3.2	62
19	Luminescence Properties of Terbium(III) Complexes with 4-Substituted Dipicolinic Acid Analogs. <i>Inorganic Chemistry</i> , 1995 , 34, 864-869	5.1	95
18	More answers about cGMP-gated channels pose more questions. <i>Behavioral and Brain Sciences</i> , 1995 , 18, 492	0.9	
17	A GTPase-accelerating factor for transducin, distinct from its effector cGMP phosphodiesterase, in rod outer segment membranes. <i>Neuron</i> , 1993 , 11, 939-49	13.9	200
16	A novel reagent for labelling macromolecules with intensely luminescent lanthanide complexes. <i>Tetrahedron Letters</i> , 1993 , 34, 4141-4144	2	20
15	Membrane stimulation of cGMP phosphodiesterase activation by transducin: comparison of phospholipid bilayers to rod outer segment membranes. <i>Biochemistry</i> , 1992 , 31, 9502-12	3.2	55
14	Nucleotide exchange and cGMP phosphodiesterase activation by pertussis toxin inactivated transducin. <i>Biochemistry</i> , 1991 , 30, 11637-45	3.2	45
13	Activation mechanism of retinal rod cyclic GMP phosphodiesterase probed by fluorescein-labeled inhibitory subunit. <i>Biochemistry</i> , 1990 , 29, 2155-61	3.2	80
12	Study of biological macromolecules by diffusion-enhanced lanthanide energy transfer. <i>Journal of the Less Common Metals</i> , 1989 , 149, 143-160		4
11	Nanosecond Motions Of Genetically-Engineered Antibodies: Structural Elements Controlling Segmental Flexibility Defined By Time-Resolved Emission Anisotropy 1988 , 0909, 108		
10	Membrane-Bound GTP-Transducin Efficiently Activates Retinal cGMP Phosphodiesterase 1988 , 102-112		6

9	Metabolizable ¹¹¹ In chelate conjugated anti-idiotypic monoclonal antibody for radioimmunodetection of lymphoma in mice. <i>European Journal of Nuclear Medicine and Molecular Imaging</i> , 1986 , 12, 455-60		40
8	Reciprocal control of retinal rod cyclic GMP phosphodiesterase by its gamma subunit and transducin. <i>Proteins: Structure, Function and Bioinformatics</i> , 1986 , 1, 90-9	4.2	129
7	Diffusion-enhanced lanthanide energy-transfer study of DNA-bound cobalt(III) bleomycins: comparisons of accessibility and electrostatic potential with DNA complexes of ethidium and acridine orange. <i>Biochemistry</i> , 1985 , 24, 3060-9	3.2	26
6	Metal chelates as probes of biological systems. <i>Accounts of Chemical Research</i> , 1984 , 17, 202-209	24.3	164
5	Electrostatic properties of myoglobin probed by diffusion-enhanced energy transfer. <i>Biochemistry</i> , 1983 , 22, 6247-6254	3.2	23
4	Defining the Layers of a Sensory Cilium with STORM and Cryo-Electron Nanoscopy. <i>SSRN Electronic Journal</i> ,	1	2
3	Multiple phosphatidylinositol(3)phosphate roles in retinal pigment epithelium membrane recycling		2
2	Superresolution microscopy reveals photoreceptor-specific subciliary location and function of Cep290		2
1	Defining the Layers of a Sensory Cilium with STORM and Cryo-Electron Nanoscopies		2