

# Willem DeGrip

## List of Publications by Year in descending order

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188  
papers

7,139  
citations

44069

48  
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74163

75  
g-index

191  
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191  
docs citations

191  
times ranked

5462  
citing authors

#	ARTICLE	IF	CITATIONS
1	Melanopsin ( <i>Opn4</i> ) Requirement for Normal Light-Induced Circadian Phase Shifting. <i>Science</i> , 2002, 298, 2213-2216.	12.6	768
2	Survival of red blood cells after transfusion: a comparison between red cells concentrates of different storage periods. <i>Transfusion</i> , 2008, 48, 1478-1485.	1.6	200
3	Monitoring of biomass composition from microbiological sources by means of FTIR spectroscopy. <i>Biotechnology and Bioengineering</i> , 2009, 103, 123-129.	3.3	147
4	Synthesis and properties of alkylglucosides with mild detergent action: improved synthesis and purification of 1-octyl-, -nonyl-, and -decyl-glucose. Synthesis of 1-undecylglucose and 1-dodecylmaltose. <i>Chemistry and Physics of Lipids</i> , 1979, 23, 321-335.	3.2	139
5	Quantitative determination of retinals with complete retention of their geometric configuration. <i>Lipids and Lipid Metabolism</i> , 1980, 617, 430-438.	2.6	139
6	[38] Thermal stability of rhodopsin and opsin in some novel detergents. <i>Methods in Enzymology</i> , 1982, 81, 256-265.	1.0	136
7	X-ray structure of human aquaporin 2 and its implications for nephrogenic diabetes insipidus and trafficking. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 6305-6310.	7.1	124
8	<sup>1</sup> H and <sup>13</sup> C MAS NMR evidence for pronounced ligand-protein interactions involving the ionone ring of the retinylidene chromophore in rhodopsin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002, 99, 9101-9106.	7.1	117
9	Short and mid-wavelength cone distribution in a nocturnal Strepsirrhine primate ( <i>Microcebus</i> ) Tj ETQq1 1 0.784314 rgBT /Overlock 10	1.6	109
10	Studies towards the crystallization of the rod visual pigment rhodopsin. <i>Journal of Crystal Growth</i> , 1992, 122, 375-384.	1.5	106
11	Enrichment of rhodopsin in rod outer segment membrane preparations. <i>Vision Research</i> , 1972, 12, 1697-1707.	1.4	104
12	Identification of vertebrate deep brain photoreceptors. <i>Neuroscience and Biobehavioral Reviews</i> , 1994, 18, 541-546.	6.1	104
13	Internalization and desensitization of adenosine receptors. <i>Purinergic Signalling</i> , 2008, 4, 21-37.	2.2	101
14	The proteome of red cell membranes and vesicles during storage in blood bank conditions. <i>Transfusion</i> , 2008, 48, 827-835.	1.6	99
15	Patterns of cell proliferation and cell death in the developing retina and optic tectum of the brown trout. <i>Developmental Brain Research</i> , 2005, 154, 101-119.	1.7	96
16	[36] Isolation and purification of bovine rhodopsin. <i>Methods in Enzymology</i> , 1980, 67, 301-320.	1.0	93
17	Fourier transform infrared difference spectroscopy of rhodopsin mutants: Light activation of rhodopsin causes hydrogen-bonding change in residue aspartic acid-83 during meta II formation. <i>Biochemistry</i> , 1993, 32, 10277-10282.	2.5	90
18	[30] Purification of bovine rhodopsin over concanavalin A-sepharose. <i>Methods in Enzymology</i> , 1982, 81, 197-207.	1.0	89

#	ARTICLE	IF	CITATIONS
19	A possible role of rhodopsin in maintaining bilayer structure in the photoreceptor membrane. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1979, 558, 330-337.	2.6	83
20	Light detection in a 'blind' mammal. <i>Nature Neuroscience</i> , 1998, 1, 655-656.	14.8	81
21	Erythrocyte membrane characteristics indicate abnormal cellular aging in patients with Alzheimer's disease. <i>Neurobiology of Aging</i> , 1991, 12, 13-18.	3.1	76
22	Solid State <sup>15</sup> N NMR Evidence for a Complex Schiff Base Counterion in the Visual G-Protein-Coupled Receptor Rhodopsin. <i>Biochemistry</i> , 1999, 38, 7195-7199.	2.5	75
23	Biochemical aspects of the visual process XX. The molecular weight of rhodopsin. <i>Biochimica Et Biophysica Acta (BBA) - Protein Structure</i> , 1972, 271, 419-428.	1.7	73
24	PHOTOEXCITATION OF RHODOPSIN: CONFORMATION CHANGES IN THE CHROMOPHORE, PROTEIN AND ASSOCIATED LIPIDS AS DETERMINED BY FTIR DIFFERENCE SPECTROSCOPY. <i>Photochemistry and Photobiology</i> , 1988, 48, 497-504.	2.5	72
25	A new template for rhodopsin (vitamin A1 based) visual pigments. <i>Vision Research</i> , 1991, 31, 619-630.	1.4	72
26	Identification and distribution of photoreceptor subtypes in the neotenic tiger salamander retina. <i>Visual Neuroscience</i> , 1998, 15, 1175-1187.	1.0	72
27	High-resolution solid-state <sup>13</sup> C-NMR study of carbons C-5 and C-12 of the chromophore of bovine rhodopsin. Evidence for a 6-S-cis conformation with negative-charge perturbation near C-12. <i>FEBS Journal</i> , 1987, 163, 9-14.	0.2	71
28	In vitro expression of bovine opsin using recombinant baculovirus: the role of glutamic acid (134) in opsin biosynthesis and glycosylation. <i>Biochimica Et Biophysica Acta Gene Regulatory Mechanisms</i> , 1991, 1089, 68-76.	2.4	68
29	Determination of a molecular torsional angle in the metarhodopsin-I photointermediate of rhodopsin by double-quantum solid-state NMR. <i>Journal of Biomolecular NMR</i> , 2000, 16, 1-8.	2.8	66
30	pH Dependence of Copper Geometry, Reduction Potential, and Nitrite Affinity in Nitrite Reductase. <i>Journal of Biological Chemistry</i> , 2007, 282, 6347-6355.	3.4	66
31	Reversible modulation of rhodopsin photolysis in pure phosphatidylserine membranes. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1983, 734, 168-179.	2.6	65
32	10,20-Methanorhodopsins: (7E, 9E, 13E)-10, 20-methanorhodopsin and (7E, 9Z, 13Z)-10, 20-methanorhodopsin. 11-cis-Locked rhodopsin analog pigments with unusual thermal and photo-stability. <i>FEBS Journal</i> , 1990, 191, 211-220.	0.2	65
33	The proteome of red cell membranes and vesicles during storage in blood bank conditions. <i>Transfusion</i> , 2008, 48, 827-835.	1.6	64
34	Identification and characterization of syn- and anti-isomers of retinaloximes. <i>Analytical Biochemistry</i> , 1979, 99, 304-310.	2.4	63
35	An Additional Methyl Group at the 10-Position of Retinal Dramatically Slows down the Kinetics of the Rhodopsin Photocascade. <i>Biochemistry</i> , 1998, 37, 1411-1420.	2.5	62
36	Protein-Induced Bonding Perturbation of the Rhodopsin Chromophore Detected by Double-Quantum Solid-State NMR. <i>Journal of the American Chemical Society</i> , 2004, 126, 3948-3953.	13.7	58

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37	Biochemical aspects of the visual process. XXIII. Sulfhydryl groups and rhodopsin photolysis. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1973, 325, 315-322.	1.0	57
38	Development and degeneration of retina in rds mutant mice: Ultraimmunohistochemical localization of opsin. <i>Experimental Eye Research</i> , 1987, 44, 347-361.	2.6	57
39	Pigmented epithelium induces complete retinal reconstitution from dispersed embryonic chick retinae in reaggregation culture. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 1997, 264, 1293-1302.	2.6	57
40	Macroscopic Orientation of Natural and Model Membranes for Structural Studies. <i>Analytical Biochemistry</i> , 1997, 254, 132-138.	2.4	56
41	Early development of the retina and pineal complex in the sea lamprey: Comparative immunocytochemical study. <i>Journal of Comparative Neurology</i> , 2002, 442, 250-265.	1.6	56
42	Assembly of the Major Light-Harvesting Complex II in Lipid Nanodiscs. <i>Biophysical Journal</i> , 2011, 101, 2507-2515.	0.5	54
43	Degradation of rhodopsin by a lysosomal fraction of retinal pigment epithelium: Biochemical aspects of the visual process. XLI. <i>Experimental Eye Research</i> , 1980, 30, 183-191.	2.6	52
44	Carboxyl group involvement in the meta I and meta II stages in rhodopsin bleaching. A Fourier transform infrared spectroscopic study. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1985, 809, 97-106.	1.0	51
45	Histidine Tagging Both Allows Convenient Single-step Purification of Bovine Rhodopsin and Exerts Ionic Strength-dependent Effects on Its Photochemistry. <i>Journal of Biological Chemistry</i> , 1995, 270, 11222-11229.	3.4	51
46	Large-scale overproduction, functional purification and ligand affinities of the His-tagged human histamine H1 receptor. <i>FEBS Journal</i> , 2004, 271, 2636-2646.	0.2	51
47	Expression of the candidate circadian photopigment melanopsin (Opn4) in the mouse retinal pigment epithelium. <i>Molecular Brain Research</i> , 2004, 123, 132-135.	2.3	50
48	The Ring of the Rhodopsin Chromophore in a Hydrophobic Activation Switch Within the Binding Pocket. <i>Journal of Molecular Biology</i> , 2004, 343, 719-730.	4.2	50
49	Eye lens $\alpha$ - and $\beta$ -crystallin: complex stability versus chaperone-like activity. <i>BBA - Proteins and Proteomics</i> , 1999, 1434, 114-123.	2.1	48
50	Ultra-High-Field MAS NMR Assay of a Multispin Labeled Ligand Bound to Its G-Protein Receptor Target in the Natural Membrane Environment: $\Delta$ Electronic Structure of the Retinylidene Chromophore in Rhodopsin. <i>Biochemistry</i> , 2001, 40, 3282-3288.	2.5	48
51	Magnetically controlled gravity for protein crystal growth. <i>Applied Physics Letters</i> , 2007, 90, .	3.3	47
52	Conformational Similarities in the $\beta$ -Ionone Ring Region of the Rhodopsin Chromophore in Its Ground State and after Photoactivation to the Metarhodopsin-I Intermediate. <i>Biochemistry</i> , 2003, 42, 13371-13378.	2.5	46
53	Retinal-Based Proton Pumping in the Near Infrared. <i>Journal of the American Chemical Society</i> , 2017, 139, 2338-2344.	13.7	45
54	Effect of carboxyl mutations on functional properties of bovine rhodopsin. <i>Biophysical Chemistry</i> , 1995, 56, 79-87.	2.8	44

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55	Double-Quantum <sup>13</sup> C Nuclear Magnetic Resonance of Bathorhodopsin, the First Photointermediate in Mammalian Vision. <i>Journal of the American Chemical Society</i> , 2008, 130, 10490-10491.	13.7	44
56	Modulation of the Metarhodopsin I/Metarhodopsin II Equilibrium of Bovine Rhodopsin by Ionic Strength. Evidence for a Surface-Charge Effect. <i>FEBS Journal</i> , 1997, 243, 174-180.	0.2	42
57	Photoactivation of Rhodopsin Causes an Increased Hydrogen-Deuterium Exchange of Buried Peptide Groups. <i>Biophysical Journal</i> , 1998, 74, 192-198.	0.5	42
58	Large-scale purification of functional recombinant human aquaporin-2. <i>FEBS Letters</i> , 2001, 504, 200-205.	2.8	42
59	GPCR Proteomics: Mass Spectrometric and Functional Analysis of Histamine H <sub>1</sub> Receptor after Baculovirus-Driven and <i>in Vitro</i> Cell Free Expression. <i>Journal of Proteome Research</i> , 2008, 7, 621-629.	3.7	42
60	Tyrosine Structural Changes Detected during the Photoactivation of Rhodopsin. <i>Journal of Biological Chemistry</i> , 1998, 273, 23735-23739.	3.4	40
61	Large-scale production and purification of functional recombinant bovine rhodopsin with the use of the baculovirus expression system. <i>Biochemical Journal</i> , 1999, 342, 293-300.	3.7	40
62	Solid-State NMR Evidence for a Protonation Switch in the Binding Pocket of the H1 Receptor upon Binding of the Agonist Histamine. <i>Journal of the American Chemical Society</i> , 2007, 129, 867-872.	13.7	40
63	Use of a density modification technique for isolation of the plasma membrane of rod outer segments. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1982, 687, 296-302.	2.6	39
64	Rhodopsin-induced experimental autoimmune uveoretinitis: Dose-dependent clinicopathological features. <i>Experimental Eye Research</i> , 1988, 47, 135-145.	2.6	39
65	A Fully Functional Rod Visual Pigment in a Blind Mammal. <i>Journal of Biological Chemistry</i> , 2000, 275, 38674-38679.	3.4	38
66	Accurate Measurements of <sup>13</sup> C- <sup>13</sup> C-Couplings in the Rhodopsin Chromophore by Double-Quantum Solid-State NMR Spectroscopy. <i>Journal of the American Chemical Society</i> , 2006, 128, 3878-3879.	13.7	38
67	The eye of the african mole-rat <i>Cryptomys anselli</i> : to see or not to see?. <i>European Journal of Neuroscience</i> , 2003, 17, 709-720.	2.6	37
68	Eye development and retinal differentiation in an altricial fish species, the senegalese sole ( <i>Solea</i> ) <i>Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 Evolution</i> , 2010, 314B, 580-605.	1.3	37
69	Conformational activation of visual rhodopsin in native disc membranes. <i>Science Signaling</i> , 2015, 8, ra26.	3.6	37
70	Biochemical aspects of the visual process XXII. Amino group modification in bovine rod photoreceptor membranes. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1973, 323, 125-142.	2.6	35
71	Uniform stable-isotope labeling in mammalian cells: formulation of a cost-effective culture medium. <i>Applied Microbiology and Biotechnology</i> , 2011, 89, 397-406.	3.6	35
72	Biochemical aspects of the visual process XXVIII. Classification of sulfhydryl groups in rhodopsin and other photoreceptor membrane proteins. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1975, 396, 104-115.	1.0	34

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73	Enzyme-linked immunosorbent assay for quantitative determination of the visual pigment rhodopsin in total-eye extracts. <i>Experimental Eye Research</i> , 1986, 43, 431-439.	2.6	34
74	Coexpression of three opsins in cone photoreceptors of the salamander <i>Ambystoma tigrinum</i> . <i>Journal of Comparative Neurology</i> , 2014, 522, 2249-2265.	1.6	31
75	Development and degeneration of retina in rds mutant mice: immunoassay of the rod visual pigment rhodopsin. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 1990, 1033, 103-109.	2.4	29
76	Deconvolution as a tool to remove fringes from an FT-IR spectrum. <i>Vibrational Spectroscopy</i> , 2004, 36, 89-95.	2.2	28
77	Functional expression of human cone pigments using recombinant baculovirus: compatibility with histidine tagging and evidence for N-glycosylation. <i>FEBS Letters</i> , 1996, 396, 26-30.	2.8	27
78	Selective Interface Detection: Mapping Binding Site Contacts in Membrane Proteins by NMR Spectroscopy. <i>Journal of the American Chemical Society</i> , 2005, 127, 5734-5735.	13.7	27
79	Rhodopsin reconstitution in vesicles formed from simple, fully synthetic amphiphiles. <i>Journal of the American Chemical Society</i> , 1982, 104, 1069-1072.	13.7	26
80	Large-scale production and purification of the human green cone pigment: characterization of late photo-intermediates. <i>Biochemical Journal</i> , 1998, 330, 1201-1208.	3.7	26
81	A Comparative Study of Impurity Effects on Protein Crystallization: Diffusive versus Convective Crystal Growth. <i>Crystal Growth and Design</i> , 2015, 15, 1150-1159.	3.0	26
82	Modulation of spectral properties and pump activity of proteorhodopsins by retinal analogues. <i>Biochemical Journal</i> , 2015, 467, 333-343.	3.7	26
83	The binding site of retinaldehyde in cattle rhodopsin. <i>Biochimica Et Biophysica Acta (BBA) - Protein Structure</i> , 1973, 303, 189-193.	1.7	25
84	Chapter 6 Immunochemistry of rhodopsin. <i>Progress in Retinal and Eye Research</i> , 1985, 4, 137-180.	0.8	24
85	Immunoassay of rod visual pigment (opsin) in the eyes of rds mutant mice lacking receptor outer segments. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 1985, 839, 122-126.	2.4	24
86	Asp83, Glu113 and Glu134 are not specifically involved in Schiff base protonation or wavelength regulation in bovine rhodopsin. <i>FEBS Letters</i> , 1990, 260, 113-118.	2.8	24
87	Erythrocyte membrane changes of individuals with Down's Syndrome in various stages of Alzheimer-type dementia. <i>Neurobiology of Aging</i> , 1993, 14, 223-228.	3.1	24
88	Cell differentiation in the retina of an epibenthonic teleost, the Tench ( <i>Tinca tinca</i> , Linneo 1758). <i>Experimental Eye Research</i> , 2009, 89, 398-415.	2.6	24
89	Expression of the anion exchanger (AE) gene family in human brain. Identification of a new AE protein: AEO. <i>Molecular Brain Research</i> , 1994, 25, 97-104.	2.3	23
90	Pigmented Epithelium Sustains Cell Proliferation and Decreases Expression of Opsins and Acetylcholinesterase in Reaggregated Chicken Retinospheroids. <i>European Journal of Neuroscience</i> , 1997, 9, 1795-1803.	2.6	22

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91	Rapid transfer of overexpressed integral membrane protein from the host membrane into soluble lipid nanodiscs without previous purification. <i>Biological Chemistry</i> , 2015, 396, 903-915.	2.5	22
92	Strong pH-Dependent Near-Infrared Fluorescence in a Microbial Rhodopsin Reconstituted with a Red-Shifting Retinal Analogue. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 6469-6474.	4.6	22
93	[33] Sulfhydryl chemistry of rhodopsin. <i>Methods in Enzymology</i> , 1982, 81, 223-236.	1.0	21
94	Phase behavior of isolated photoreceptor membrane lipids is modulated by bivalent cations. <i>FEBS Letters</i> , 1984, 169, 256-260.	2.8	21
95	Solid-State NMR Analysis of Ligand-Receptor Interactions Reveals an Induced Misfit in the Binding Site of Isorhodopsin. <i>Biochemistry</i> , 2004, 43, 16011-16018.	2.5	21
96	Biochemical aspects of the visual process. <i>Biochimica Et Biophysica Acta (BBA) - Protein Structure</i> , 1978, 537, 145-152.	1.7	20
97	Detergent-induced specificity of an antirhodopsin serum for opsin micro-complement fixation studies. <i>BBA - Proteins and Proteomics</i> , 1983, 742, 463-470.	2.1	20
98	Erythrocyte anion transporter and antibrain immunoreactivity in chorea-acanthocytosis. A contribution to etiology, genetics, and diagnosis. <i>Brain Research Bulletin</i> , 1994, 33, 523-528.	3.0	20
99	Probing Intramolecular Orientations in Rhodopsin and Metarhodopsin II by Polarized Infrared Difference Spectroscopy. <i>Biochemistry</i> , 1999, 38, 13200-13209.	2.5	20
100	Fluoro Derivatives of Retinal Illuminate the Decisive Role of the C <sub>12</sub> -H Element in Photoisomerization and Rhodopsin Activation. <i>Journal of the American Chemical Society</i> , 2009, 131, 17933-17942.	13.7	20
101	Allosteric modulators affect the internalization of human adenosine A1 receptors. <i>European Journal of Pharmacology</i> , 2005, 522, 1-8.	3.5	19
102	Methyl Substituents at the 11 or 12 Position of Retinal Profoundly and Differentially Affect Photochemistry and Signalling Activity of Rhodopsin. <i>Journal of Molecular Biology</i> , 2006, 363, 98-113.	4.2	19
103	Red cell concentrates of hemochromatosis patients comply with the storage guidelines for transfusion purposes. <i>Transfusion</i> , 2008, 48, 436-441.	1.6	19
104	High Resolution Protein Crystals Using an Efficient Convection-Free Geometry. <i>Crystal Growth and Design</i> , 2013, 13, 775-781.	3.0	19
105	Use of photoreceptor membrane suspensions for the study of rhodopsin and associated enzyme activities. <i>Experimental Eye Research</i> , 1974, 18, 77-88.	2.6	18
106	Large-scale production and purification of functional recombinant bovine rhodopsin with the use of the baculovirus expression system. <i>Biochemical Journal</i> , 1999, 342, 293.	3.7	18
107	Identification of circadian brain photoreceptors mediating photic entrainment of behavioural rhythms in lizards. <i>European Journal of Neuroscience</i> , 2003, 18, 364-372.	2.6	18
108	Differences in the pharmacological activation of visual opsins. <i>Visual Neuroscience</i> , 2006, 23, 899-908.	1.0	18

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109	Expression of holo-proteorhodopsin in <i>Synechocystis</i> sp. PCC 6803. <i>Metabolic Engineering</i> , 2016, 35, 83-94.	7.0	18
110	Production of yeastolates for uniform stable isotope labelling in eukaryotic cell culture. <i>Applied Microbiology and Biotechnology</i> , 2009, 84, 575-581.	3.6	17
111	Comparison of the Structural Changes Occurring during the Primary Phototransition of Two Different Channelrhodopsins from <i>Chlamydomonas</i> Algae. <i>Biochemistry</i> , 2015, 54, 377-388.	2.5	17
112	Rhodopsins: An Excitingly Versatile Protein Species for Research, Development and Creative Engineering. <i>Frontiers in Chemistry</i> , 0, 10, .	3.6	17
113	RECENT CHEMICAL STUDIES RELATED TO VISION. <i>Photochemistry and Photobiology</i> , 1988, 48, 799-810.	2.5	16
114	Are thrombocyte membranes altered in Alzheimer's disease? A morphometric and biochemical study. <i>Neurobiology of Aging</i> , 1992, 13, 711-716.	3.1	16
115	Functional Expression, Targeting and Ca <sup>2+</sup> Signaling of a Mouse Melanopsin-YFP Fusion Protein in a Retinal Pigment Epithelium Cell Line. <i>Photochemistry and Photobiology</i> , 2008, 84, 990-995.	2.5	16
116	Light Penetration and Photoisomerization in Rhodopsin studied by Numerical Simulations and Double-Quantum Solid-State NMR Spectroscopy. <i>Journal of the American Chemical Society</i> , 2009, 131, 6133-6140.	13.7	16
117	Towards an interpretation of <sup>13</sup> C chemical shifts in bathorhodopsin, a functional intermediate of a G-protein coupled receptor. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2009, 1788, 1350-1357.	2.6	16
118	Salamander Blue-sensitive Cones Lost During Metamorphosis. <i>Photochemistry and Photobiology</i> , 2008, 84, 855-862.	2.5	15
119	The pineal complex of Senegalese sole ( <i>Solea senegalensis</i> ): Anatomical, histological and immunohistochemical study. <i>Aquaculture</i> , 2008, 285, 207-215.	3.5	15
120	Light sensitivity in a vertebrate mechanoreceptor?. <i>Journal of Experimental Biology</i> , 2015, 218, 2826-9.	1.7	15
121	In Vitro Synthesis of Bovine Rhodopsin Using Recombinant Baculovirus. <i>Methods in Neurosciences</i> , 1993, 15, 307-321.	0.5	15
122	Co-localization of mesotocin and opsin immunoreactivity in the hypothalamic preoptic nucleus of <i>Xenopus laevis</i> . <i>Brain Research</i> , 2003, 969, 36-43.	2.2	14
123	7,8-Dihydro Retinals Outperform the Native Retinals in Conferring Photosensitivity to Visual Opsin. <i>Journal of the American Chemical Society</i> , 2007, 129, 13265-13269.	13.7	14
124	Combining retinal-based and chlorophyll-based (oxygenic) photosynthesis: Proteorhodopsin expression increases growth rate and fitness of a $\Delta$ PSI strain of <i>Synechocystis</i> sp. PCC6803. <i>Metabolic Engineering</i> , 2019, 52, 68-76.	7.0	14
125	Membrane matters: The impact of a nanodisc-bilayer or a detergent microenvironment on the properties of two eubacterial rhodopsins. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2020, 1862, 183113.	2.6	14
126	Involvement of Neuronal Anion Exchange Proteins in Cell Death in Alzheimer's Disease. <i>Gerontology</i> , 1997, 43, 67-78.	2.8	13



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127	Retinitis pigmentosa-associated rhodopsin mutations in three membrane-located cysteine residues present three different biochemical phenotypes. <i>Biochemical and Biophysical Research Communications</i> , 2002, 297, 847-853.	2.1	13
128	Structural Changes in an Anion Channelrhodopsin: Formation of the K and L Intermediates at 80 K. <i>Biochemistry</i> , 2017, 56, 2197-2208.	2.5	13
129	Redshifted and Near-Infrared Active Analog Pigments Based upon Archaerhodopsin-3. <i>Photochemistry and Photobiology</i> , 2019, 95, 959-968.	2.5	13
130	[2] Baculovirus expression system for expression and characterization of functional recombinant visual pigments. <i>Methods in Enzymology</i> , 2000, 315, 12-29.	1.0	12
131	A Structural Role for Asp83 in the Photoactivation of Rhodopsin. <i>Biological Chemistry</i> , 2001, 382, 1263-1270.	2.5	12
132	Expression of CNTF Receptor- $\beta$ in Chick Violet-Sensitive Cones with Unique Morphologic Properties. , 2004, 45, 655.		12
133	The area centralis in the chicken retina contains efferent target amacrine cells. <i>Visual Neuroscience</i> , 2009, 26, 249-254.	1.0	12
134	The development of the depletion zone during ceiling crystallization: phase shifting interferometry and simulation results. <i>CrystEngComm</i> , 2013, 15, 2275.	2.6	12
135	Cyclopropyl and Isopropyl Derivatives of 11-cis and 9-cis Retinals at C-9 and C-13: Subtle Steric Differences with Major Effects on Ligand Efficacy in Rhodopsin. <i>Journal of Natural Products</i> , 2011, 74, 383-390.	3.0	11
136	Heterologous expression of melanopsin: Present, problems and prospects. <i>Progress in Retinal and Eye Research</i> , 2016, 52, 1-21.	15.5	11
137	Functional Expression of Gloeobacter Rhodopsin in <i>Synechocystis</i> sp. PCC6803. <i>Photochemistry and Photobiology</i> , 2017, 93, 772-781.	2.5	11
138	Raman spectroscopy of a near infrared absorbing proteorhodopsin: Similarities to the bacteriorhodopsin O photointermediate. <i>PLoS ONE</i> , 2018, 13, e0209506.	2.5	11
139	Point mutations in bovine opsin can be classified in four groups with respect to their effect on the biosynthetic pathway of opsin. <i>Biochemical Journal</i> , 1996, 320, 807-815.	3.7	10
140	Opsin-like immunoreactivity in the circadian pacemaker neurons and photoreceptors of the eye of the opisthobranch mollusc <i>Bulla gouldiana</i> . <i>Cell and Tissue Research</i> , 1996, 287, 203-210.	2.9	10
141	A radioimmunoassay specific for opsin. <i>BBA - Proteins and Proteomics</i> , 1983, 742, 471-476.	2.1	9
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