Karl-Wilhelm Koch

List of Publications by Year
in descending order

160 papers	5,765 citations	76196 40 h-index	88477 70 g-index
164 all docs	164 docs citations	164 times ranked	2522 citing authors

#	Article	IF	Citations
1	Highly cooperative feedback control of retinal rod guanylate cyclase by calcium ions. Nature, 1988, 334, 64-66.	13.7	706
2	Frequeninâ€”A novel calcium-binding protein that modulates synaptic efficacy in the drosophila nervous system. Neuron, 1993, 11, 15-28.	3.8	423
3	Role of cGMP and Ca2+ in Vertebrate Photoreceptor Excitation and Adaptation. Annual Review of Physiology, 1992, 54, 153-176.	5.6	252
4	Magnetic sensitivity of cryptochrome 4 from a migratory songbird. Nature, 2021, 594, 535-540.	13.7	171
5	Interaction of glutamic-acid-rich proteins with the cGMP signalling pathway in rod photoreceptors. Nature, 1999, 400, 761-766.	13.7	146
6	Double-Cone Localization and Seasonal Expression Pattern Suggest a Role in Magnetoreception for European Robin Cryptochrome 4. Current Biology, 2018, 28, 211-223.e4.	1.8	134
7	Functional Characterization of a Guanylyl Cyclase-activating Protein from Vertebrate Rods. Journal of Biological Chemistry, 1996, 271, 8022-8027.	1.6	125
8	Regulatory modes of rod outer segment membrane guanylate cyclase differ in catalytic efficiency and Ca2+-sensitivity. FEBS Journal, 2003, 270, 3814-3821.	0.2	105
9	Calmodulin controls the rod photoreceptor CNG channel through an unconventional binding site in the N-terminus of the beta -subunit. EMBO Journal, 1998, 17, 2273-2284.	3.5	100
10	Protein and Signaling Networks in Vertebrate Photoreceptor Cells. Frontiers in Molecular Neuroscience, 2015, 8, 67.	1.4	98
11	Calcium- and Myristoyl-Dependent Properties of Guanylate Cyclase-Activating Protein-1 and Protein-2. Biochemistry, 2002, 41, 13021-13028.	1.2	89
12	A Calcium-Relay Mechanism in Vertebrate Phototransduction. ACS Chemical Neuroscience, 2013, 4, 909-917.	1.7	85
13	Recoverin, a novel calcium-binding protein from vertebrate photoreceptors. BBA - Proteins and Proteomics, 1992, 1160, 63-66.	2.1	83
14	Mutations in the<i>GUCA1A</i>gene involved in hereditary cone dystrophies impair calcium-mediated regulation of guanylate cyclase. Human Mutation, 2009, 30, E782-E796.	1.1	83
15	Functional Consequences of a Rod Outer Segment Membrane Guanylate Cyclase (ROS-GC1) Gene Mutation Linked with Leber's Congenital Amaurosis. Biochemistry, 1999, 38, 509-515.	1.2	79
16	Regions in vertebrate photoreceptor guanylyl cyclase ROS-GC1 involved in Ca2+-dependent regulation by guanylyl cyclase-activating protein GCAP-1. FEBS Letters, 1999, 460, 27-31.	1.3	78
17	Calcium-Dependent Binding of Recoverin to Membranes Monitored by Surface Plasmon Resonance Spectroscopy in Real Timeâ€. Biochemistry, 1997, 36, 12019-12026.	1.2	75
18	Biochemical mechanism of light adaptation in vertebrate photoreceptors. Trends in Biochemical Sciences, 1992, 17, 307-311.	3.7	68

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19	Calcium binding, structural stability and guanylate cyclase activation in GCAP1 variants associated with human cone dystrophy. Cellular and Molecular Life Sciences, 2010, 67, 973-984.	2.4	67
20	Genotype-functional-phenotype correlations in photoreceptor guanylate cyclase (GC-E) encoded by GUCY2D. Progress in Retinal and Eye Research, 2018, 63, 69-91.	7.3	66
21	Glycosaminoglycan-Binding Properties and Secondary Structure of the C-Terminus of Netrin-1. Biochemical and Biophysical Research Communications, 2000, 271, 287-291.	1.0	65
22	Ca2+-Myristoyl Switch in the Neuronal Calcium Sensor Recoverin Requires Different Functions of Ca2+-binding Sites. Journal of Biological Chemistry, 2002, 277, 50365-50372.	1.6	61
23	Photoreceptor specific guanylate cyclases in vertebrate phototransduction. Molecular and Cellular Biochemistry, 2002, 230, 97-106.	1.4	61
24	Calcium as modulator of phototransduction in vertebrate photoreceptor cells. Reviews of Physiology, Biochemistry and Pharmacology, 1993, 125, 149-192.	0.9	57
25	Ca2+ sensor S100beta-modulated sites of membrane guanylate cyclase in thephotoreceptor-bipolar synapse. EMBO Journal, 2002, 21, 2547-2556.	3.5	56
26	Involvement of the recoverin C-terminal segment in recognition of the target enzyme rhodopsin kinase. Biochemical Journal, 2011, 435, 441-450.	1.7	56
27	Ca2+-modulated vision-linked ROS-GC guanylate cyclase transduction machinery. Molecular and Cellular Biochemistry, 2010, 334, 105-115.	1.4	55
28	Structural effects of Mg2+ on the regulatory states of three neuronal calcium sensors operating in vertebrate phototransduction. Biochimica Et Biophysica Acta - Molecular Cell Research, 2015, 1853, 2055-2065.	1.9	54
29	Ca2+-Dependent Control of Rhodopsin Phosphorylation: Recoverin And Rhodopsin Kinase. Advances in Experimental Medicine and Biology, 2002, 514, 69-99.	0.8	54
30	Tuning of a Neuronal Calcium Sensor. Journal of Biological Chemistry, 2006, 281, 37594-37602.	1.6	53
31	Mutations in the Rod Outer Segment Membrane Guanylate Cyclase in a Coneâˆ'Rod Dystrophy Cause Defects in Calcium Signaling. Biochemistry, 1999, 38, 13912-13919.	1.2	50
32	Mechanism of rhodopsin kinase regulation by recoverin. Journal of Neurochemistry, 2009, 110, 72-79.	2.1	50
33	Impairment of the Rod Outer Segment Membrane Guanylate Cyclase Dimerization in A Coneâˆ'Rod Dystrophy Results in Defective Calcium Signalingâ€. Biochemistry, 2000, 39, 12522-12533.	1.2	47
34	The Calcium-Sensor Guanylate Cyclase Activating Protein Type 2 Specific Site in Rod Outer Segment Membrane Guanylate Cyclase Type 1â€. Biochemistry, 2005, 44, 7336-7345.	1.2	47
35	Identification of a Domain in Guanylyl Cyclase-activating Protein 1 That Interacts with a Complex of Guanylyl Cyclase and Tubulin in Photoreceptors. Journal of Biological Chemistry, 1999, 274, 6244-6249.	1.6	46
36	Recoverin and Rhodopsin Kinase Activity in Detergent-resistant Membrane Rafts from Rod Outer Segments. Journal of Biological Chemistry, 2004, 279, 48647-48653.	1.6	46

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37	The Dimerization Domain in Outer Segment Guanylate Cyclase Is a Ca²⁺-Sensitive Control Switch Module. Biochemistry, 2013, 52, 5065-5074.	1.2	45
38	Dynamics of Conformational Ca²⁺-Switches in Signaling Networks Detected by a Planar Plasmonic Device. Analytical Chemistry, 2012, 84, 2982-2989.	3.2	44
39	Impact of N-terminal Myristoylation on the Ca2+-dependent Conformational Transition in Recoverin. Journal of Biological Chemistry, 2003, 278, 22972-22979.	1.6	42
40	Expression level and activity profile of membrane bound guanylate cyclase type 2 in rod outer segments. Journal of Neurochemistry, 2007, 103, 1439-1446.	2.1	42
41	A dynamic scaffolding mechanism for rhodopsin and transducin interaction in vertebrate vision. Biochemical Journal, 2011, 440, 263-271.	1.7	42
42	Irregular dimerization of guanylate cyclase-activating protein 1 mutants causes loss of target activation. FEBS Journal, 2004, 271, 3785-3793.	0.2	41
43	Distinct Molecular Recognition of Calmodulin-Binding Sites in the Neuronal and Macrophage Nitric Oxide Synthases:â€‰ A Surface Plasmon Resonance Study. Biochemistry, 1996, 35, 8742-8747.	1.2	40
44	Surface Plasmon Resonance Study of G Protein/Receptor Coupling in a Lipid Bilayer-Free System. Analytical Chemistry, 2006, 78, 1228-1234.	3.2	40
45	Involvement of the calcium sensor GCAP1 in hereditary cone dystrophies. Biological Chemistry, 2010, 391, 631-7.	1.2	40
46	Protein-protein interaction of the putative magnetoreceptor cryptochrome 4 expressed in the avian retina. Scientific Reports, 2020, 10, 7364.	1.6	38
47	The myristoylation of the neuronal Ca2+-sensors guanylate cyclase-activating protein 1 and 2. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2002, 1600, 111-117.	1.1	36
48	Differential Calcium Signaling by Cone Specific Guanylate Cyclase-Activating Proteins from the Zebrafish Retina. PLoS ONE, 2011, 6, e23117.	1.1	36
49	Divalent cations modulate membrane binding and pore formation of a potent antibiotic peptide analog of alamethicin. Cell Calcium, 2013, 53, 180-186.	1.1	36
50	Two retinal dystrophy-associated missense mutations in<i>GUCA1A</i>with distinct molecular properties result in a similar aberrant regulation of the retinal guanylate cyclase. Human Molecular Genetics, 2015, 24, 6653-6666.	1.4	36
51	Expression profiles of three novel sensory guanylate cyclases and guanylate cyclase-activating proteins in the zebrafish retina. Biochimica Et Biophysica Acta - Molecular Cell Research, 2009, 1793, 1110-1114.	1.9	35
52	Conformational Changes in Calciumâ€Sensor Proteins under Molecular Crowding Conditions. Chemistry - A European Journal, 2014, 20, 6756-6762.	1.7	35
53	Photoreceptor specific guanylate cyclases in vertebrate phototransduction. Molecular and Cellular Biochemistry, 2002, 230, 97-106.	1.4	35
54	Calcium-Modulated Guanylate Cyclase Transduction Machinery in the Photoreceptorâˆ’Bipolar Synaptic Regionâ€. Biochemistry, 2003, 42, 5640-5648.	1.2	34

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55	Dysfunction of cGMP signalling in photoreceptors by a macular dystrophy-related mutation in the calcium sensor GCAP1. Human Molecular Genetics, 2017, 26, ddw374.	1.4	34
56	Nucleotidyl Cyclase Activity of Particulate Guanylyl Cyclase A: Comparison with Particulate Guanylyl Cyclases E and F, Soluble Guanylyl Cyclase and Bacterial Adenylyl Cyclases Cyaa and Edema Factor. PLoS ONE, 2013, 8, e70223.	1.1	34
57	Quantitative detection of conformational transitions in a calcium sensor protein by surface plasmon resonance. Chemical Communications, 2010, 46, 7316.	2.2	33
58	A comprehensive model of the phototransduction cascade in mouse rod cells. Molecular BioSystems, 2014, 10, 1481-1489.	2.9	33
59	Mechanism of photoreception in vertebrate vision. Trends in Biochemical Sciences, 1986, 11, 43-47.	3.7	31
60	Surface anchoring reduces the lifetime of single specific bonds. Europhysics Letters, 2003, 61, 845-851.	0.7	29
61	A G86R mutation in the calcium-sensor protein GCAP1 alters regulation of retinal guanylyl cyclase and causes dominant cone-rod degeneration. Journal of Biological Chemistry, 2019, 294, 3476-3488.	1.6	29
62	Phosphorylation of recoverin, the calcium-sensitive activator of photoreceptor guanylyl cyclase. FEBS Letters, 1991, 294, 207-209.	1.3	28
63	Synergetic Effect of Recoverin and Calmodulin on Regulation of Rhodopsin Kinase. Frontiers in Molecular Neuroscience, 2012, 5, 28.	1.4	26
64	Impact of cone dystrophy-related mutations in GCAP1 on a kinetic model of phototransduction. Cellular and Molecular Life Sciences, 2014, 71, 3829-3840.	2.4	26
65	Ligand sensitivity of the Î±2 subunit from the bovine cone cGMPâ€gated channel is modulated by protein kinase C but not by calmodulin. Journal of Physiology, 2001, 532, 399-409.	1.3	23
66	Retinal diseases linked with photoreceptor guanylate cyclase. Molecular and Cellular Biochemistry, 2002, 230, 129-138.	1.4	23
67	Diaminoterephthalate Turnâ€On Fluorescence Probes for Thiolsâ€"Tagging of Recoverin and Tracking of its Conformational Change. ChemBioChem, 2012, 13, 993-998.	1.3	23
68	Control of photoreceptor proteins by Ca2+. Cell Calcium, 1995, 18, 314-321.	1.1	21
69	Turning On Fluorescence with Thiols â€" Synthetic and Computational Studies on Diaminoterephthalates and Monitoring the Switch of the Ca²⁺ Sensor Recoverin. European Journal of Organic Chemistry, 2012, 2012, 5712-5722.	1.2	21
70	Zinc Is Involved in Depression by Modulating G Protein-Coupled Receptor Heterodimerization. Molecular Neurobiology, 2016, 53, 2003-2015.	1.9	21
71	Bovine retinal rod guanyl cyclase represents a new N-glycosylated subtype of membrane-bound guanyl cyclases. FEBS Journal, 1994, 222, 589-595.	0.2	20
72	Calcium-dependent conformational changes in guanylate cyclase-activating protein 2 monitored by cysteine accessibility. Biochemical and Biophysical Research Communications, 2007, 356, 687-692.	1.0	20

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73	Diversity of sensory guanylate cyclases in teleost fishes. Molecular and Cellular Biochemistry, 2010, 334, 207-214.	1.4	20
74	Exploring the rate-limiting steps in visual phototransduction recovery by bottom-up kinetic modeling. Cell Communication and Signaling, 2013, 11, 36.	2.7	20
75	Photoreceptor Guanylate Cyclase (GUCY2D) Mutations Cause Retinal Dystrophies by Severe Malfunction of Ca2+-Dependent Cyclic GMP Synthesis. Frontiers in Molecular Neuroscience, 2018, 11, 348.	1.4	19
76	Purified retinal nitric oxide synthase enhances ADP-ribosylation of rod outer segment proteins. FEBS Letters, 1995, 357, 178-182.	1.3	18
77	Impact of Strong and Weak Lipid-Protein Interactions on the Structure of a Lipid Bilayer on a Gold Electrode Surface. ChemPhysChem, 2011, 12, 1066-1079.	1.0	18
78	Label-free quantification of calcium-sensor targeting to photoreceptor guanylate cyclase and rhodopsin kinase by backscattering interferometry. Scientific Reports, 2017, 7, 45515.	1.6	18
79	Fingerprints of Calcium-Binding Protein Conformational Dynamics Monitored by Surface Plasmon Resonance. ACS Chemical Biology, 2016, 11, 2390-2397.	1.6	17
80	Photoreceptor calcium sensor proteins in detergent-resistant membrane rafts are regulated via binding to caveolin-1. Cell Calcium, 2018, 73, 55-69.	1.1	17
81	Introduction of a Phosphate at Serine741 of the Calmodulin-Binding Domain of the Neuronal Nitric Oxide Synthase (NOS-I) Prevents Binding of Calmodulin. Biological Chemistry, 1997, 378, 851-858.	1.2	16
82	Application of Different Surface Plasmon Resonance Biosensor Chips to Monitor the Interaction of the CaM-Binding Site of Nitric Oxide Synthase I and Calmodulin. Biochemical and Biophysical Research Communications, 2001, 285, 463-469.	1.0	16
83	Dynamic cellular translocation of caldendrin is facilitated by the Ca²⁺â€myristoyl switch of recoverin. Journal of Neurochemistry, 2010, 113, 1150-1162.	2.1	16
84	Operation profile of zebrafish guanylate cyclaseâ€activating protein 3. Journal of Neurochemistry, 2012, 121, 54-65.	2.1	16
85	[52] Identification and characterization of calmodulin binding sites in cGMP-gated channel using surface plasmon resonance spectroscopy. Methods in Enzymology, 2000, 315, 785-797.	0.4	15
86	Target Recognition of Apocalmodulin by Nitric Oxide Synthase I Peptides. Biochemistry, 2002, 41, 8598-8604.	1.2	15
87	Retina specific GCAPs in zebrafish acquire functional selectivity in Ca2+-sensing by myristoylation and Mg2+-binding. Scientific Reports, 2015, 5, 11228.	1.6	15
88	Ca2+-dependent conformational changes in the neuronal Ca2+-sensor recoverin probed by the fluorescent dye Alexa647. Proteins: Structure, Function and Bioinformatics, 2006, 66, 492-499.	1.5	14
89	Membrane binding of the neuronal calcium sensor recoverin â€" modulatory role of the charged carboxy-terminus. BMC Biochemistry, 2007, 8, 24.	4.4	14
90	Application of Surface Plasmon Resonance Spectroscopy to Study G-Protein Coupled Receptor Signalling. Methods in Molecular Biology, 2010, 627, 249-260.	0.4	14

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91	Zebrafish Guanylate Cyclase Type 3 Signaling in Cone Photoreceptors. PLoS ONE, 2013, 8, e69656.	1.1	14
92	Binding of a Myristoylated Protein to the Lipid Membrane Influenced by Interactions with the Polar Head Group Region. Langmuir, 2018, 34, 14022-14032.	1.6	14
93	Functional Restoration of the Ca2+-myristoyl Switch in a Recoverin Mutant. Journal of Molecular Biology, 2003, 330, 409-418.	2.0	13
94	The cone-specific calcium sensor guanylate cyclase activating protein 4 from the zebrafish retina. Journal of Biological Inorganic Chemistry, 2009, 14, 89-99.	1.1	13
95	CaF₂nanoparticles as surface carriers of GCAP1, a calcium sensor protein involved in retinal dystrophies. Nanoscale, 2017, 9, 11773-11784.	2.8	13
96	Structural Characterization of Ferrous Ion Binding to Retinal Guanylate Cyclase Activator Protein 5 from Zebrafish Photoreceptors. Biochemistry, 2017, 56, 6652-6661.	1.2	13
97	Impact of the protein myristoylation on the structure of a model cell membrane in a protein bound state. Bioelectrochemistry, 2018, 124, 13-21.	2.4	13
98	Target Recognition of Guanylate Cyclase By Guanylate Cyclase-Activating Proteins. Advances in Experimental Medicine and Biology, 2002, 514, 349-360.	0.8	13
99	Bifunctional Diaminoterephthalate Fluorescent Dye as Probe for Crossâ€Linking Proteins. Chemistry - A European Journal, 2017, 23, 6535-6543.	1.7	12
100	Control of the Nucleotide Cycle in Photoreceptor Cell Extracts by Retinal Degeneration Protein 3. Frontiers in Molecular Neuroscience, 2018, 11, 52.	1.4	12
101	Retinal diseases linked with photoreceptor guanylate cyclase. Molecular and Cellular Biochemistry, 2002, 230, 129-38.	1.4	12
102	Calcium-dependent cysteine reactivities in the neuronal calcium sensor guanylate cyclase-activating protein 1. FEBS Letters, 2001, 508, 355-359.	1.3	11
103	The Neuronal Functions of EF-Hand Ca2+-Binding Proteins. Frontiers in Molecular Neuroscience, 2012, 5, 92.	1.4	11
104	Dysfunction of outer segment guanylate cyclase caused by retinal disease related mutations. Frontiers in Molecular Neuroscience, 2014, 7, 4.	1.4	11
105	Regulatory function of the C-terminal segment of guanylate cyclase-activating protein 2. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2015, 1854, 1325-1337.	1.1	11
106	Direct Interaction of Avian Cryptochrome 4 with a Cone Specific G-Protein. Cells, 2022, 11, 2043.	1.8	11
107	On-chip photoactivation of heterologously expressed rhodopsin allows kinetic analysis of G-protein signaling by surface plasmon resonance spectroscopy. Analytical and Bioanalytical Chemistry, 2010, 397, 2967-2976.	1.9	10
108	Probing the Ca²⁺ Switch of the Neuronal Ca²⁺ Sensor GCAP2 by Time-Resolved Fluorescence Spectroscopy. ACS Chemical Biology, 2012, 7, 1006-1014.	1.6	10

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109	Antithetical modes of and the Ca2+ sensors targeting in ANF-RGC and ROS-GC1 membrane guanylate cyclases. Frontiers in Molecular Neuroscience, 2012, 5, 44.	1.4	10
110	Differential Nanosecond Protein Dynamics in Homologous Calcium Sensors. ACS Chemical Biology, 2015, 10, 2344-2352.	1.6	10
111	Mapping Calcium-Sensitive Regions in the Neuronal Calcium Sensor GCAP2 by Site-Specific Fluorescence Labeling. Biochemistry, 2016, 55, 2567-2577.	1.2	10
112	Thermodynamics of apocalmodulin and nitric oxide synthase II peptide interaction. FEBS Letters, 2004, 577, 465-468.	1.3	9
113	One of the Ca2+ binding sites of recoverin exclusively controls interaction with rhodopsin kinase. Biological Chemistry, 2005, 386, 285-9.	1.2	9
114	Systems biochemistry approaches to vertebrate phototransduction: towards a molecular understanding of disease. Biochemical Society Transactions, 2010, 38, 1275-1280.	1.6	9
115	Zebrafish Recoverin Isoforms Display Differences in Calcium Switch Mechanisms. Frontiers in Molecular Neuroscience, 2018, 11, 355.	1.4	9
116	A hybrid stochastic/deterministic model of single photon response and light adaptation in mouse rods. Computational and Structural Biotechnology Journal, 2021, 19, 3720-3734.	1.9	9
117	Molecular Recognition of Rhodopsin Kinase GRK1 and Recoverin Is Tuned by Switching Intra- and Intermolecular Electrostatic Interactions. Biochemistry, 2019, 58, 4374-4385.	1.2	8
118	Neuronal Calcium Sensor GCAP1 Encoded by <i>GUCA1A</i> Exhibits Heterogeneous Functional Properties in Two Cases of Retinitis Pigmentosa. ACS Chemical Neuroscience, 2020, 11, 1458-1470.	1.7	8
119	Molecular properties of human guanylate cyclaseâ€“activating protein 2 (GCAP2) and its retinal dystrophyâ€“associated variant G157R. Journal of Biological Chemistry, 2021, 296, 100619.	1.6	8
120	Biophysical investigation of retinal calcium sensor function. Biochimica Et Biophysica Acta - General Subjects, 2012, 1820, 1228-1233.	1.1	7
121	Cyclic GMP releases calcium from leaky rod outer segments. Vision Research, 1984, 24, 1477-1479.	0.7	6
122	Calcium-modulated membrane guanylate cyclase in synaptic transmission?. Molecular and Cellular Biochemistry, 2002, 230, 107-116.	1.4	6
123	Transient Complexes between Dark Rhodopsin and Transducin: Circumstantial Evidence or Physiological Necessity?. Biophysical Journal, 2015, 108, 775-777.	0.2	6
124	Constitutive Activation of Guanylate Cyclase by the G86R GCAP1 Variant Is Due to â€œLockingâ€•Cation-Ï€ Interactions that Impair the Activator-to-Inhibitor Structural Transition. International Journal of Molecular Sciences, 2020, 21, 752.	1.8	6
125	Application of Different Lipid Surfaces to Monitor Proteinâ€“Membrane Interactions by Surface Plasmon Resonance Spectroscopy. Spectroscopy, 2002, 16, 271-279.	0.8	5
126	Interaction of G protein-coupled receptor kinases and recoverin isoforms is determined by localization in zebrafish photoreceptors. Biochimica Et Biophysica Acta - Molecular Cell Research, 2021, 1868, 118946.	1.9	5

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127	Where vision begins. Pflugers Archiv European Journal of Physiology, 2021, 473, 1333-1337.	1.3	5
128	Incorporating phototransduction proteins in zebrafish green cone with pressure-polished patch pipettes. Biophysical Chemistry, 2019, 253, 106230.	1.5	4
129	Editorial: Neuronal Calcium Sensors in Health and Disease. Frontiers in Molecular Neuroscience, 2019, 12, 278.	1.4	4
130	Bringing the Ca ²⁺ sensitivity of myristoylated recoverin into the physiological range. Open Biology, 2021, 11, 200346.	1.5	4
131	The secrets of cryptochromes: photoreceptors, clock proteins, and magnetic sensors. Neuroforum, 2021, 27, 151-157.	0.2	4
132	The interaction network of rhodopsin involving the heterotrimeric Gâ€protein transducin and the monomeric <scp>GTP</scp>ase Rac1 is determined by distinct binding processes. FEBS Journal, 2014, 281, 5175-5185.	2.2	3
133	First 3D-Structural Data of Full-Length Guanylyl Cyclase 1 in Rod-Outer-Segment Preparations of Bovine Retina by Cross-Linking/Mass Spectrometry. Journal of Molecular Biology, 2021, 433, 166947.	2.0	3
134	Quantitative Determination of Ca2+-binding to Ca2+-sensor Proteins by Isothermal Titration Calorimetry. Bio-protocol, 2020, 10, e3580.	0.2	3
135	NMR and EPR-DEER Structure of a Dimeric Guanylate Cyclase Activator Protein-5 from Zebrafish Photoreceptors. Biochemistry, 2021, 60, 3058-3070.	1.2	3
136	Molecular Properties of Human Guanylate Cyclase-Activating Protein 3 (GCAP3) and Its Possible Association with Retinitis Pigmentosa. International Journal of Molecular Sciences, 2022, 23, 3240.	1.8	3
137	The guanylate cyclase signaling system in zebrafish photoreceptors. FEBS Letters, 2013, 587, 2055-2059.	1.3	2
138	An Assessment of GUCA1C Variants in Primary Congenital Glaucoma. Genes, 2021, 12, 359.	1.0	2
139	Crucial steps in photoreceptor adaptation: Regulation of phosphodiesterase and guanylate cyclase activities and Ca²⁺-buffering. Behavioral and Brain Sciences, 1995, 18, 480-481.	0.4	1
140	Surface Plasmon Resonance. , 2006, , 1832-1835.		1
141	Real-Time Modulation of Zebrafish Cone Phototransduction by Whole-Cell Delivery of zGCAP3 and of its Monoclonal Antibody. Biophysical Journal, 2013, 104, 103a.	0.2	1
142	Calcium-modulated membrane guanylate cyclase in synaptic transmission?. , 2002, , 107-116.		1
143	Label-free Quantification of Direct Protein-protein Interactions with Backscattering Interferometry. Bio-protocol, 2021, 11, e4256.	0.2	1
144	Calcium-modulated membrane guanylate cyclase in synaptic transmission?. Molecular and Cellular Biochemistry, 2002, 230, 107-16.	1.4	1

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145	The Transition of Photoreceptor Guanylate Cyclase Type 1 to the Active State. International Journal of Molecular Sciences, 2022, 23, 4030.	1.8	1
146	Ca++ blockers and the release of Ca++ by cyclic GMP in visual rods. Cell Calcium, 1984, 5, 288.	1.1	0
147	Monitoring of small conformational changes by high-precision measurements of hydrodynamic radius with 2-focus fluorescence correlation spectroscopy (2fFCS). , 2007, , .		0
148	Frontispiece: Bifunctional Diaminoterephthalate Fluorescent Dye as Probe for Crossâ€Linking Proteins. Chemistry - A European Journal, 2017, 23, .	1.7	0
149	Mapping Calcium-Sensitive Regions in GCAPs by Site-Specific Fluorescence Labelling. Methods in Molecular Biology, 2019, 1929, 583-594.	0.4	0
150	Farnesylation of Zebrafish G-Protein-Coupled Receptor Kinase Using Bio-orthogonal Labeling. ACS Chemical Neuroscience, 2021, 12, 1824-1832.	1.7	0
151	Photoreceptor specific guanylate cyclases in vertebrate phototransduction. , 2002, , 97-106.		0
152	Retinal diseases linked with photoreceptor guanylate cyclase. , 2002, , 129-138.		0
153	Spatial-temporal differences of the expression profiles of the GCAP isoforms in the zebrafish retina. , 0, 2007, .		0
154	Guanylate cyclase 2e. The AFCS-nature Molecule Pages, 0, , .	0.2	0
155	Guanylate Cyclase. , 2012, , 832-838.		0
156	GCAP (Guanylate Cyclaseâ€“Activating Protein). , 2012, , 769-773.		0
157	Guanylate Cyclase. , 2016, , 1-7.		0
158	GCAP (Guanylate Cyclaseâ€“Activating Protein). , 2016, , 1-5.		0
159	Guanylate Cyclase. , 2018, , 2294-2301.		0
160	GCAP (Guanylate Cyclaseâ€“Activating Protein). , 2018, , 2041-2045.		0