

# Krzysztof Palczewski

## List of Publications by Year in descending order

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Version: 2024-02-01

438  
papers

31,847  
citations

2544

96  
h-index

6996

154  
g-index

449  
all docs

449  
docs citations

449  
times ranked

16934  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Structural evidence for visual arrestin priming via complexation of phosphoinositols. Structure, 2022, 30, 263-277.e5.  | 3.3  | 12        |
| 2  | A large animal model of <i>RDH5</i> -associated retinopathy recapitulates important features of the human phenotype. Human Molecular Genetics, 2022, 31, 1263-1277.               | 2.9  | 4         |
| 3  | MicroRNA regulation of critical retinal pigment epithelial functions. Trends in Neurosciences, 2022, 45, 78-90.   | 8.6  | 15        |
| 4  | In vivo imaging of the human eye using a 2-photon-excited fluorescence scanning laser ophthalmoscope. Journal of Clinical Investigation, 2022, 132, .                             | 8.2  | 18        |
| 5  | Inhibition of ceramide accumulation in AdipoR1 <sup>-/-</sup> mice increases photoreceptor survival and improves vision. JCI Insight, 2022, 7, .                                  | 5.0  | 12        |
| 6  | Engineered virus-like particles for efficient in vivo delivery of therapeutic proteins. Cell, 2022, 185, 250-265.e16.   | 28.9 | 251       |
| 7  | VCP/p97 inhibitor CB-5083 modulates muscle pathology in a mouse model of VCP inclusion body myopathy. Journal of Translational Medicine, 2022, 20, 21.                            | 4.4  | 6         |
| 8  | Capturing a rhodopsin receptor signalling cascade across a native membrane. Nature, 2022, 604, 384-390.   | 27.8 | 41        |
| 9  | In vivo base editing rescues cone photoreceptors in a mouse model of early-onset inherited retinal degeneration. Nature Communications, 2022, 13, 1830.                           | 12.8 | 42        |
| 10 | Regenerating Skeletal Muscle Compensates for the Impaired Macrophage Functions Leading to Normal Muscle Repair in Retinol Saturase Null Mice. Cells, 2022, 11, 1333.              | 4.1  | 3         |
| 11 | Stabilization of Meta <sup>+</sup> Rhodopsin Conformation by a Nanobody. FASEB Journal, 2022, 36, .   | 0.5  | 0         |
| 12 | Two-photon excited fluorescence scanning laser ophthalmoscope for in vivo imaging of the human eye. , 2022, , .   |      | 0         |
| 13 | Retinoids in the visual cycle: role of the retinal G protein-coupled receptor. Journal of Lipid Research, 2021, 62, 100040.   | 4.2  | 38        |
| 14 | Restoration of visual function in adult mice with an inherited retinal disease via adenine base editing. Nature Biomedical Engineering, 2021, 5, 169-178.                         | 22.5 | 90        |
| 15 | Pathways and disease-causing alterations in visual chromophore production for vertebrate vision. Journal of Biological Chemistry, 2021, 296, 100072.                              | 3.4  | 27        |
| 16 | Formulation and efficacy of ECO/pRHO-ABCA4-SV40 nanoparticles for nonviral gene therapy of Stargardt disease in a mouse model. Journal of Controlled Release, 2021, 330, 329-340. | 9.9  | 15        |
| 17 | An inducible Cre mouse for studying roles of the RPE in retinal physiology and disease. JCI Insight, 2021, 6, .   | 5.0  | 10        |
| 18 | Peptide Derivatives of Retinylamine Prevent Retinal Degeneration with Minimal Side Effects on Vision in Mice. Bioconjugate Chemistry, 2021, 32, 572-583.                          | 3.6  | 4         |

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|----|--|-----|-----------|
| 19 | A p97/Valosin-Containing Protein Inhibitor Drug CB-5083 Has a Potent but Reversible Off-Target Effect on Phosphodiesterase-6. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2021, 378, 31-41.   | 2.5 | 17        |
| 20 | Rational Alteration of Pharmacokinetics of Chiral Fluorinated and Deuterated Derivatives of Emixustat for Retinal Therapy. <i>Journal of Medicinal Chemistry</i> , 2021, 64, 8287-8302.  | 6.4 | 12        |
| 21 | Nano-scale resolution of native retinal rod disk membranes reveals differences in lipid composition. <i>Journal of Cell Biology</i> , 2021, 220, .   | 5.2 | 23        |
| 22 | Regulation of Adrenergic, Serotonin, and Dopamine Receptors to Inhibit Diabetic Retinopathy: Monotherapies versus Combination Therapies. <i>Molecular Pharmacology</i> , 2021, 100, 470-479.   | 2.3 | 6         |
| 23 | New focus on regulation of the rod photoreceptor phosphodiesterase. <i>Current Opinion in Structural Biology</i> , 2021, 69, 99-107.   | 5.7 | 6         |
| 24 | Theoretical Study of the Photoisomerization Mechanism of All- <i>trans</i> -Retinyl Acetate. <i>Journal of Physical Chemistry A</i> , 2021, 125, 8358-8372.  | 2.5 | 1         |
| 25 | Function of mammalian M-cones depends on the level of CRALBP in M $\lambda$ /l cells. <i>Journal of General Physiology</i> , 2021, 153, .  | 1.9 | 9         |
| 26 | Two-photon microperimetry with picosecond pulses. <i>Biomedical Optics Express</i> , 2021, 12, 462.  | 2.9 | 8         |
| 27 | THE LOSS OF INFRARED LIGHT SENSITIVITY OF PHOTORECEPTOR CELLS MEASURED WITH TWO-PHOTON EXCITATION AS AN INDICATOR OF DIABETIC RETINOPATHY. <i>Retina</i> , 2021, 41, 1302-1308.  | 1.7 | 9         |
| 28 | Identification of small-molecule allosteric modulators that act as enhancers/disrupters of rhodopsin oligomerization. <i>Journal of Biological Chemistry</i> , 2021, 297, 101401.  | 3.4 | 5         |
| 29 | Determinants shaping the nanoscale architecture of the mouse rod outer segment. <i>ELife</i> , 2021, 10, .   | 6.0 | 25        |
| 30 | Straightforward Access to Terminally Disubstituted Electron-Deficient Alkylidene Cyclopent-2-en-4-ones through Olefination with $\alpha$ -Carbonyl and $\alpha$ -Cyano Secondary Alkyl Sulfones. <i>European Journal of Organic Chemistry</i> , 2021, 2021, 6725-6736. | 2.4 | 0         |
| 31 | Non-viral Gene Therapy for Stargardt Disease with ECO/pRHO-ABCA4 Self-Assembled Nanoparticles. <i>Molecular Therapy</i> , 2020, 28, 293-303.   | 8.2 | 32        |
| 32 | Development of chiral fluorinated alkyl derivatives of emixustat as drug candidates for the treatment of retinal degenerative diseases. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2020, 30, 127421.  | 2.2 | 0         |
| 33 | Epigenetic hallmarks of age-related macular degeneration are recapitulated in a photosensitive mouse model. <i>Human Molecular Genetics</i> , 2020, 29, 2611-2624.   | 2.9 | 10        |
| 34 | Clinical Application of Infrared-Light Microperimetry in the Assessment of Scotopic-Eye Sensitivity. <i>Translational Vision Science and Technology</i> , 2020, 9, 7.  | 2.2 | 9         |
| 35 | Shedding new light on the generation of the visual chromophore. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 19629-19638.   | 7.1 | 51        |
| 36 | Single particle cryo-EM of the complex between interphotoreceptor retinoid-binding protein and a monoclonal antibody. <i>FASEB Journal</i> , 2020, 34, 13918-13934.  | 0.5 | 6         |

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|----|---|-----|-----------|
| 37 | Noninvasive two-photon optical biopsy of retinal fluorophores. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 22532-22543.   | 7.1 | 25        |
| 38 | PAR4 activation involves extracellular loop 3 and transmembrane residue Thr153. Blood, 2020, 136, 2217-2228.  | 1.4 | 22        |
| 39 | PCARE and WASF3 regulate ciliary F-actin assembly that is required for the initiation of photoreceptor outer segment disk formation. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 9922-9931. | 7.1 | 58        |
| 40 | Stable Retinoid Analogue Targeted Dual pH-Sensitive Smart Lipid ECO/pDNA Nanoparticles for Specific Gene Delivery in the Retinal Pigment Epithelium. ACS Applied Bio Materials, 2020, 3, 3078-3086.   | 4.6 | 11        |
| 41 | Melanopsin Carboxy-terminus phosphorylation plasticity and bulk negative charge, not strict site specificity, achieves phototransduction deactivation. PLoS ONE, 2020, 15, e0228121.  | 2.5 | 9         |
| 42 | Homeostatic plasticity in the retina is associated with maintenance of night vision during retinal degenerative disease. ELife, 2020, 9, .  | 6.0 | 31        |
| 43 | Title is missing!. , 2020, 15, e0228121.  |     | 0         |
| 44 | Title is missing!. , 2020, 15, e0228121.  |     | 0         |
| 45 | Title is missing!. , 2020, 15, e0228121.  |     | 0         |
| 46 | Title is missing!. , 2020, 15, e0228121.  |     | 0         |
| 47 | Cryo-EM structure of the native rhodopsin dimer in nanodiscs. Journal of Biological Chemistry, 2019, 294, 14215-14230.  | 3.4 | 64        |
| 48 | Tissue- and Species-Specific Patterns of RNA metabolism in Post-Mortem Mammalian Retina and Retinal Pigment Epithelium. Scientific Reports, 2019, 9, 14821.   | 3.3 | 9         |
| 49 | Photoc generation of 11-cis-retinal in bovine retinal pigment epithelium. Journal of Biological Chemistry, 2019, 294, 19137-19154.  | 3.4 | 33        |
| 50 | Z-isomerization of retinoids through combination of monochromatic photoisomerization and metal catalysis. Organic and Biomolecular Chemistry, 2019, 17, 8125-8139.  | 2.8 | 8         |
| 51 | Sensitivity of Mammalian Cone Photoreceptors to Infrared Light. Neuroscience, 2019, 416, 100-108.   | 2.3 | 9         |
| 52 | Retinal Gene Distribution and Functionality Implicated in Inherited Retinal Degenerations Can Reveal Disease-Relevant Pathways for Pharmacologic Intervention. Pharmaceuticals, 2019, 12, 74.   | 3.8 | 5         |
| 53 | Stereospecific modulation of dimeric rhodopsin. FASEB Journal, 2019, 33, 9526-9539.   | 0.5 | 6         |
| 54 | Catalytic synthesis of 9-cis-retinoids: mechanistic insights. Dalton Transactions, 2019, 48, 10581-10595.   | 3.3 | 6         |

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|----|---|------|-----------|
| 55 | The selective estrogen receptor modulator raloxifene mitigates the effect of all-trans-retinal toxicity in photoreceptor degeneration. <i>Journal of Biological Chemistry</i> , 2019, 294, 9461-9475. | 3.4  | 11        |
| 56 | Transducin1, Phototransduction and the Development of Early Diabetic Retinopathy. , 2019, 60, 1538.   |      | 43        |
| 57 | Cryo-EM structure of phosphodiesterase 6 reveals insights into the allosteric regulation of type I phosphodiesterases. <i>Science Advances</i> , 2019, 5, eaav4322.                                   | 10.3 | 34        |
| 58 | A Mixture of U.S. Food and Drug Administrationâ€‘Approved Monoaminergic Drugs Protects the Retina From Light Damage in Diverse Models of Night Blindness. , 2019, 60, 1442.                           |      | 11        |
| 59 | Human red and green cone opsins are O-glycosylated at an N-terminal Ser/Thrâ€‘rich domain conserved in vertebrates. <i>Journal of Biological Chemistry</i> , 2019, 294, 8123-8133.                    | 3.4  | 10        |
| 60 | Specificity of the chromophore-binding site in human cone opsins. <i>Journal of Biological Chemistry</i> , 2019, 294, 6082-6093.  | 3.4  | 11        |
| 61 | Retinol Saturase Knock-Out Mice are Characterized by Impaired Clearance of Apoptotic Cells and Develop Mild Autoimmunity. <i>Biomolecules</i> , 2019, 9, 737.   | 4.0  | 9         |
| 62 | Apo-Opsin Exists in Equilibrium Between a Predominant Inactive and a Rare Highly Active State. <i>Journal of Neuroscience</i> , 2019, 39, 212-223.  | 3.6  | 13        |
| 63 | Müller glia phagocytose dead photoreceptor cells in a mouse model of retinal degenerative disease. <i>FASEB Journal</i> , 2019, 33, 3680-3692.  | 0.5  | 51        |
| 64 | Conditional deletion of <i>Des1</i> in the mouse retina does not impair the visual cycle in cones. <i>FASEB Journal</i> , 2019, 33, 5782-5792.  | 0.5  | 22        |
| 65 | Noninvasive Two-Photon Microscopy Imaging of Mouse Retina and Retinal Pigment Epithelium. <i>Methods in Molecular Biology</i> , 2019, 1834, 333-343.  | 0.9  | 5         |
| 66 | Two-photon microperimetry: sensitivity of human photoreceptors to infrared light. <i>Biomedical Optics Express</i> , 2019, 10, 4551.  | 2.9  | 21        |
| 67 | Immuno-TEM/STEM in Retinal Research. <i>Methods in Molecular Biology</i> , 2019, 1834, 311-332.   | 0.9  | 0         |
| 68 | Human aging and disease: Lessons from age-related macular degeneration. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 2866-2872.                | 7.1  | 59        |
| 69 | Insights into the pathogenesis of dominant retinitis pigmentosa associated with a D477G mutation in RPE65. <i>Human Molecular Genetics</i> , 2018, 27, 2225-2243.                                     | 2.9  | 26        |
| 70 | Retinal-chitosan Conjugates Effectively Deliver Active Chromophores to Retinal Photoreceptor Cells in Blind Mice and Dogs. <i>Molecular Pharmacology</i> , 2018, 93, 438-452.                         | 2.3  | 15        |
| 71 | Increasing the Stability of Recombinant Human Green Cone Pigment. <i>Biochemistry</i> , 2018, 57, 1022-1030.  | 2.5  | 7         |
| 72 | Retinoid isomerase inhibitors impair but do not block mammalian cone photoreceptor function. <i>Journal of General Physiology</i> , 2018, 150, 571-590.   | 1.9  | 28        |

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|----|--|------|-----------|
| 73 | Structural biology of 11- <i>cis</i> -retinaldehyde production in the classical visual cycle. Biochemical Journal, 2018, 475, 3171-3188.   | 3.7  | 18        |
| 74 | New GABA modulators protect photoreceptor cells from light-induced degeneration in mouse models. FASEB Journal, 2018, 32, 3289-3300.   | 0.5  | 14        |
| 75 | A novel small molecule chaperone of rod opsin and its potential therapy for retinal degeneration. Nature Communications, 2018, 9, 1976.  | 12.8 | 48        |
| 76 | Targeting G protein-coupled receptor signaling at the G protein level with a selective nanobody inhibitor. Nature Communications, 2018, 9, 1996.   | 12.8 | 65        |
| 77 | A Small Chaperone Improves Folding and Routing of Rhodopsin Mutants Linked to Inherited Blindness. IScience, 2018, 4, 1-19.  | 4.1  | 50        |
| 78 | Exploring a new ligand binding site of G protein-coupled receptors. Chemical Science, 2018, 9, 6480-6489.  | 7.4  | 37        |
| 79 | Protective Effect of a Locked Retinal Chromophore Analog against Light-Induced Retinal Degeneration. Molecular Pharmacology, 2018, 94, 1132-1144.  | 2.3  | 15        |
| 80 | A Combination of G Protein-Coupled Receptor Modulators Protects Photoreceptors from Degeneration. Journal of Pharmacology and Experimental Therapeutics, 2018, 364, 207-220.   | 2.5  | 20        |
| 81 | Two-photon imaging of the mammalian retina with ultrafast pulsing laser. JCI Insight, 2018, 3, .   | 5.0  | 24        |
| 82 | An Expedient Synthesis of CMF-019: (S)-5-Methyl-3-{1-(pentan-3-yl)-2-(thiophen-2-ylmethyl)-1H-benzo[d]imidazole-5-carboxamido}hexanoic Acid, a Potent Apelin Receptor (APJ) Agonist. Medicinal Chemistry, 2018, 14, 688-694. | 1.5  | 10        |
| 83 | Rescue of mutant rhodopsin traffic by metformin-induced AMPK activation accelerates photoreceptor degeneration. Human Molecular Genetics, 2017, 26, ddx387.  | 2.9  | 39        |
| 84 | MicroRNA-processing Enzymes Are Essential for Survival and Function of Mature Retinal Pigmented Epithelial Cells in Mice. Journal of Biological Chemistry, 2017, 292, 3366-3378.   | 3.4  | 22        |
| 85 | Epi-direction detected multimodal imaging of an unstained mouse retina with a Yb-fiber laser. , 2017, 10069, .   |      | 0         |
| 86 | Hydrogen/Deuterium Exchange Mass Spectrometry of Human Green Opsin Reveals a Conserved Pro-Pro Motif in Extracellular Loop 2 of Monostable Visual G Protein-Coupled Receptors. Biochemistry, 2017, 56, 2338-2348.            | 2.5  | 8         |
| 87 | Structure and Spectroscopy of Alkene-Cleaving Dioxygenases Containing an Atypically Coordinated Non-Heme Iron Center. Biochemistry, 2017, 56, 2836-2852.   | 2.5  | 23        |
| 88 | Rational Tuning of Visual Cycle Modulator Pharmacodynamics. Journal of Pharmacology and Experimental Therapeutics, 2017, 362, 131-145.   | 2.5  | 19        |
| 89 | Targeted Multifunctional Lipid ECO Plasmid DNA Nanoparticles as Efficient Non-viral Gene Therapy for Leber's Congenital Amaurosis. Molecular Therapy - Nucleic Acids, 2017, 7, 42-52.  | 5.1  | 35        |
| 90 | Photocyclic behavior of rhodopsin induced by an atypical isomerization mechanism. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E2608-E2615.                                   | 7.1  | 28        |

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|-----|---|-----|-----------|
| 91  | Quantitative phosphoproteomics reveals involvement of multiple signaling pathways in early phagocytosis by the retinal pigmented epithelium. <i>Journal of Biological Chemistry</i> , 2017, 292, 19826-19839.   | 3.4 | 17        |
| 92  | Dephosphorylation by protein phosphatase 2A regulates visual pigment regeneration and the dark adaptation of mammalian photoreceptors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E9675-E9684. | 7.1 | 11        |
| 93  | Designing Safer Analgesics via $\mu$ -Opioid Receptor Pathways. <i>Trends in Pharmacological Sciences</i> , 2017, 38, 1016-1037.  | 8.7 | 53        |
| 94  | Skunkworks project for Big Pharma. <i>Pharmacological Research</i> , 2017, 124, 167-168.  | 7.1 | 1         |
| 95  | Photoreceptor cells produce inflammatory products that contribute to retinal vascular permeability in a mouse model of diabetes. <i>Diabetologia</i> , 2017, 60, 2111-2120.   | 6.3 | 63        |
| 96  | Crowd sourcing difficult problems in protein science <sup>*</sup> . <i>Protein Science</i> , 2017, 26, 2118-2125.   | 7.6 | 1         |
| 97  | Complex binding pathways determine the regeneration of mammalian green cone opsin with a locked retinal analogue. <i>Journal of Biological Chemistry</i> , 2017, 292, 10983-10997.  | 3.4 | 11        |
| 98  | The role of retinol dehydrogenase 10 in the cone visual cycle. <i>Scientific Reports</i> , 2017, 7, 2390.   | 3.3 | 15        |
| 99  | A G Protein-Coupled Receptor Dimerization Interface in Human Cone Opsins. <i>Biochemistry</i> , 2017, 56, 61-72.  | 2.5 | 22        |
| 100 | Transcriptome profiling of NIH3T3 cell lines expressing opsin and the P23H opsin mutant identifies candidate drugs for the treatment of retinitis pigmentosa. <i>Pharmacological Research</i> , 2017, 115, 1-13.  | 7.1 | 7         |
| 101 | Context-dependent compensation among phosphatidylserine-recognition receptors. <i>Scientific Reports</i> , 2017, 7, 14623.  | 3.3 | 23        |
| 102 | Multimodal nonlinear optical imaging of unstained retinas in the epi-direction with a sub-40 fs Yb-fiber laser. <i>Biomedical Optics Express</i> , 2017, 8, 5228.   | 2.9 | 12        |
| 103 | Towards Treatment of Stargardt Disease: Workshop Organized and Sponsored by the Foundation Fighting Blindness. <i>Translational Vision Science and Technology</i> , 2017, 6, 6.   | 2.2 | 44        |
| 104 | Formation and Clearance of All-Trans-Retinol in Rods Investigated in the Living Primate Eye With Two-Photon Ophthalmoscopy. , 2017, 58, 604.  |     | 23        |
| 105 | Photoreceptor Cells Influence Retinal Vascular Degeneration in Mouse Models of Retinal Degeneration and Diabetes. , 2016, 57, 4272.   |     | 55        |
| 106 | Two-Photon Autofluorescence Imaging Reveals Cellular Structures Throughout the Retina of the Living Primate Eye. , 2016, 57, 632.   |     | 56        |
| 107 | In Vivo Two-Photon Fluorescence Kinetics of Primate Rods and Cones. , 2016, 57, 647.  |     | 33        |
| 108 | Image registration and averaging of low laser power two-photon fluorescence images of mouse retina. <i>Biomedical Optics Express</i> , 2016, 7, 2671.   | 2.9 | 19        |

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|-----|---|------|-----------|
| 109 | Safety assessment in macaques of light exposures for functional two-photon ophthalmoscopy in humans. <i>Biomedical Optics Express</i> , 2016, 7, 5148.  | 2.9  | 26        |
| 110 | Mechanistic Studies on the Stereoselectivity of the Serotonin 5-HT <sub>1A</sub> Receptor. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 8661-8665.                                      | 13.8 | 27        |
| 111 | Mechanistic Studies on the Stereoselectivity of the Serotonin 5-HT <sub>1A</sub> Receptor. <i>Angewandte Chemie</i> , 2016, 128, 8803-8807.   | 2.0  | 2         |
| 112 | Receptor MER Tyrosine Kinase Proto-oncogene (MERTK) Is Not Required for Transfer of Bis-retinoids to the Retinal Pigmented Epithelium. <i>Journal of Biological Chemistry</i> , 2016, 291, 26937-26949. | 3.4  | 17        |
| 113 | Retinoids and Retinal Diseases. <i>Annual Review of Vision Science</i> , 2016, 2, 197-234.  | 4.4  | 85        |
| 114 | Conformational Change of Human Checkpoint Kinase 1 (Chk1) Induced by DNA Damage. <i>Journal of Biological Chemistry</i> , 2016, 291, 12951-12959.   | 3.4  | 18        |
| 115 | A small molecule mitigates hearing loss in a mouse model of Usher syndrome III. <i>Nature Chemical Biology</i> , 2016, 12, 444-451.   | 8.0  | 43        |
| 116 | Key Residues for Catalytic Function and Metal Coordination in a Carotenoid Cleavage Dioxygenase. <i>Journal of Biological Chemistry</i> , 2016, 291, 19401-19412.                                       | 3.4  | 25        |
| 117 | Eyes on systems pharmacology. <i>Pharmacological Research</i> , 2016, 114, 39-41.   | 7.1  | 39        |
| 118 | Dynamic peptides of human TPP1 fulfill diverse functions in telomere maintenance. <i>Nucleic Acids Research</i> , 2016, 44, gkw846.   | 14.5 | 10        |
| 119 | Structure and Function of G-Protein-Coupled Receptor Kinases 1 and 7. <i>Methods in Pharmacology and Toxicology</i> , 2016, , 25-43.  | 0.2  | 3         |
| 120 | The Molecular Mechanism of P2Y <sub>1</sub> Receptor Activation. <i>Angewandte Chemie</i> , 2016, 128, 10487-10491.   | 2.0  | 2         |
| 121 | The Molecular Mechanism of P2Y <sub>1</sub> Receptor Activation. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 10331-10335.  | 13.8 | 49        |
| 122 | Transcriptome analysis reveals rod/cone photoreceptor specific signatures across mammalian retinas. <i>Human Molecular Genetics</i> , 2016, 25, ddw268.   | 2.9  | 36        |
| 123 | Synergistically acting agonists and antagonists of G protein-coupled receptors prevent photoreceptor cell degeneration. <i>Science Signaling</i> , 2016, 9, ra74.                                       | 3.6  | 33        |
| 124 | Structural Insights into the <i>Drosophila melanogaster</i> Retinol Dehydrogenase, a Member of the Short-Chain Dehydrogenase/Reductase Family. <i>Biochemistry</i> , 2016, 55, 6545-6557.               | 2.5  | 19        |
| 125 | Dominant and recessive mutations in rhodopsin activate different cell death pathways. <i>Human Molecular Genetics</i> , 2016, 25, ddw137.   | 2.9  | 41        |
| 126 | Lecithin:Retinol Acyltransferase: A Key Enzyme Involved in the Retinoid (visual) Cycle. <i>Biochemistry</i> , 2016, 55, 3082-3091.  | 2.5  | 23        |



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|-----|---|------|-----------|
| 127 | An effective thiol-reactive probe for differential scanning fluorimetry with a standard real-time polymerase chain reaction device. <i>Analytical Biochemistry</i> , 2016, 499, 63-65.              | 2.4  | 29        |
| 128 | The Biochemical Basis of Vitamin A <sub>3</sub> Production in Arthropod Vision. <i>ACS Chemical Biology</i> , 2016, 11, 1049-1057.  | 3.4  | 27        |
| 129 | The impact of microRNA gene regulation on the survival and function of mature cell types in the eye. <i>FASEB Journal</i> , 2016, 30, 23-33.  | 0.5  | 39        |
| 130 | Systems Pharmacology Links GPCRs with Retinal Degenerative Disorders. <i>Annual Review of Pharmacology and Toxicology</i> , 2016, 56, 273-298.  | 9.4  | 24        |
| 131 | The Mechanism of Ligand-Induced Activation or Inhibition of $\mu$ - and $\kappa$ -Opioid Receptors. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 7560-7563.                         | 13.8 | 47        |
| 132 | Retinol dehydrogenase 8 and ATP-binding cassette transporter 4 modulate dark adaptation of M-cones in mammalian retina. <i>Journal of Physiology</i> , 2015, 593, 4923-4941.                        | 2.9  | 12        |
| 133 | Manganese-Enhanced MRI for Preclinical Evaluation of Retinal Degeneration Treatments. , 2015, 56, 4936.   |      | 13        |
| 134 | A High-Throughput Drug Screening Strategy for Detecting Rhodopsin P23H Mutant Rescue and Degradation. , 2015, 56, 2553.   |      | 17        |
| 135 | Utilization of Dioxygen by Carotenoid Cleavage Oxygenases. <i>Journal of Biological Chemistry</i> , 2015, 290, 30212-30223.   | 3.4  | 48        |
| 136 | Conditional Ablation of Retinol Dehydrogenase 10 in the Retinal Pigmented Epithelium Causes Delayed Dark Adaption in Mice. <i>Journal of Biological Chemistry</i> , 2015, 290, 27239-27247.         | 3.4  | 19        |
| 137 | Adrenergic and serotonin receptors affect retinal superoxide generation in diabetic mice: relationship to capillary degeneration and permeability. <i>FASEB Journal</i> , 2015, 29, 2194-2204.      | 0.5  | 45        |
| 138 | Animals deficient in C2Orf71, an autosomal recessive retinitis pigmentosa-associated locus, develop severe early-onset retinal degeneration. <i>Human Molecular Genetics</i> , 2015, 24, 2627-2640. | 2.9  | 21        |
| 139 | Isotopic labeling of mammalian G protein-coupled receptors heterologously expressed in <i>Caenorhabditis elegans</i> . <i>Analytical Biochemistry</i> , 2015, 472, 30-36.                           | 2.4  | 7         |
| 140 | Protein misfolding and the pathogenesis of ABCA4-associated retinal degenerations. <i>Human Molecular Genetics</i> , 2015, 24, 3220-3237.   | 2.9  | 69        |
| 141 | Expansion of First-in-Class Drug Candidates That Sequester Toxic All- <i>Trans</i> -Retinal and Prevent Light-Induced Retinal Degeneration. <i>Molecular Pharmacology</i> , 2015, 87, 477-491.      | 2.3  | 19        |
| 142 | Improvement in vision: a new goal for treatment of hereditary retinal degenerations. <i>Expert Opinion on Orphan Drugs</i> , 2015, 3, 563-575.  | 0.8  | 23        |
| 143 | Prolonged prevention of retinal degeneration with retinylamine loaded nanoparticles. <i>Biomaterials</i> , 2015, 44, 103-110.   | 11.4 | 20        |
| 144 | Catalytic mechanism of a retinoid isomerase essential for vertebrate vision. <i>Nature Chemical Biology</i> , 2015, 11, 409-415.  | 8.0  | 66        |

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