

# Beata Jastrzebska

## List of Publications by Year in descending order

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56  
papers

2,646  
citations

257450

24  
h-index

189892

50  
g-index

59  
all docs

59  
docs citations

59  
times ranked

2471  
citing authors

#	ARTICLE	IF	CITATIONS
1	Crystal structure of a photoactivated deprotonated intermediate of rhodopsin. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 16123-16128.	7.1	431
2	Structure of the rhodopsin dimer: a working model for G-protein-coupled receptors. Current Opinion in Structural Biology, 2006, 16, 252-259.	5.7	253
3	Efficient Coupling of Transducin to Monomeric Rhodopsin in a Phospholipid Bilayer. Journal of Biological Chemistry, 2008, 283, 4387-4394.	3.4	233
4	Structural waters define a functional channel mediating activation of the GPCR, rhodopsin. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 14367-14372.	7.1	181
5	Functional and Structural Characterization of Rhodopsin Oligomers. Journal of Biological Chemistry, 2006, 281, 11917-11922.	3.4	125
6	Functional Characterization of Rhodopsin Monomers and Dimers in Detergents. Journal of Biological Chemistry, 2004, 279, 54663-54675.	3.4	118
7	Disruption of Rhodopsin Dimerization with Synthetic Peptides Targeting an Interaction Interface. Journal of Biological Chemistry, 2015, 290, 25728-25744.	3.4	71
8	Conformational Dynamics of Activation for the Pentameric Complex of Dimeric G Protein-Coupled Receptor and Heterotrimeric G Protein. Structure, 2012, 20, 826-840.	3.3	63
9	Role of membrane integrity on G protein-coupled receptors: Rhodopsin stability and function. Progress in Lipid Research, 2011, 50, 267-277.	11.6	59
10	Asymmetry of the rhodopsin dimer in complex with transducin. FASEB Journal, 2013, 27, 1572-1584.	0.5	58
11	Time-Resolved Fluorescence Spectroscopy Measures Clustering and Mobility of a G Protein-Coupled Receptor Opsin in Live Cell Membranes. Journal of the American Chemical Society, 2014, 136, 8342-8349.	13.7	56
12	Rhodopsin-transducin heteropentamer: Three-dimensional structure and biochemical characterization. Journal of Structural Biology, 2011, 176, 387-394.	2.8	55
13	Role of Bulk Water in Hydrolysis of the Rhodopsin Chromophore. Journal of Biological Chemistry, 2011, 286, 18930-18937.	3.4	51
14	Inherent Instability of the Retinitis Pigmentosa P23H Mutant Opsin. Journal of Biological Chemistry, 2014, 289, 9288-9303.	3.4	48
15	A novel small molecule chaperone of rod opsin and its potential therapy for retinal degeneration. Nature Communications, 2018, 9, 1976.	12.8	48
16	Complexes between photoactivated rhodopsin and transducin: progress and questions. Biochemical Journal, 2010, 428, 1-10.	3.7	47
17	Omicron SARS-CoV-2 Variant Spike Protein Shows an Increased Affinity to the Human ACE2 Receptor: An In Silico Analysis. Pathogens, 2022, 11, 45.	2.8	44
18	Class A G Protein-Coupled Receptor Antagonist Famotidine as a Therapeutic Alternative against SARS-CoV2: An In Silico Analysis. Biomolecules, 2020, 10, 954.	4.0	43

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19	The rhodopsin-transducin complex houses two distinct rhodopsin molecules. <i>Journal of Structural Biology</i> , 2013, 182, 164-172.	2.8	41
20	GPCR: G protein complexes—the fundamental signaling assembly. <i>Amino Acids</i> , 2013, 45, 1303-1314.	2.7	38
21	Phospholipids Are Needed for the Proper Formation, Stability, and Function of the Photoactivated Rhodopsin–Transducin Complex. <i>Biochemistry</i> , 2009, 48, 5159-5170.	2.5	36
22	Modulation of Molecular Interactions and Function by Rhodopsin Palmitylation. <i>Biochemistry</i> , 2009, 48, 4294-4304.	2.5	31
23	Photocyclic behavior of rhodopsin induced by an atypical isomerization mechanism. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E2608-E2615.	7.1	28
24	Isolation and functional characterization of a stable complex between photoactivated rhodopsin and the G protein, transducin. <i>FASEB Journal</i> , 2009, 23, 371-381.	0.5	27
25	Flavonoids enhance rod opsin stability, folding, and self-association by directly binding to ligand-free opsin and modulating its conformation. <i>Journal of Biological Chemistry</i> , 2019, 294, 8101-8122.	3.4	27
26	Contribution of Cotranslational Folding Defects to Membrane Protein Homeostasis. <i>Journal of the American Chemical Society</i> , 2019, 141, 204-215.	13.7	27
27	Autosomal recessive retinitis pigmentosa E150K opsin mice exhibit photoreceptor disorganization. <i>Journal of Clinical Investigation</i> , 2013, 123, 121-137.	8.2	26
28	Protective Effects of Flavonoids in Acute Models of Light-Induced Retinal Degeneration. <i>Molecular Pharmacology</i> , 2021, 99, 60-77.	2.3	23
29	Different Properties of the Native and Reconstituted Heterotrimeric G Protein Transducin. <i>Biochemistry</i> , 2008, 47, 12409-12419.	2.5	22
30	A G Protein-Coupled Receptor Dimerization Interface in Human Cone Opsins. <i>Biochemistry</i> , 2017, 56, 61-72.	2.5	22
31	Autosomal Recessive Retinitis Pigmentosa and E150K Mutation in the Opsin Gene. <i>Journal of Biological Chemistry</i> , 2006, 281, 22289-22298.	3.4	21
32	3D imaging and quantitative analysis of small solubilized membrane proteins and their complexes by transmission electron microscopy. <i>Microscopy (Oxford, England)</i> , 2013, 62, 95-107.	1.5	21
33	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
34	The Retinitis Pigmentosa-Linked Mutations in Transmembrane Helix 5 of Rhodopsin Disrupt Cellular Trafficking Regardless of Oligomerization State. <i>Biochemistry</i> , 2018, 57, 5188-5201.	2.5	19
35	Neuroinflammation as a Therapeutic Target in Retinitis Pigmentosa and Quercetin as Its Potential Modulator. <i>Pharmaceutics</i> , 2021, 13, 1935.	4.5	19
36	The Retinoid and Non-Retinoid Ligands of the Rod Visual G Protein-Coupled Receptor. <i>International Journal of Molecular Sciences</i> , 2019, 20, 6218.	4.1	16

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37	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
38	Protective Effect of a Locked Retinal Chromophore Analog against Light-Induced Retinal Degeneration. <i>Molecular Pharmacology</i> , 2018, 94, 1132-1144.	2.3	15
39	Understanding Severe Acute Respiratory Syndrome Coronavirus 2 Replication to Design Efficient Drug Combination Therapies. <i>Intervirology</i> , 2020, 63, 2-9.	2.8	15
40	Class A GPCR: Light Sensing G Protein-Coupled Receptor – Focus on Rhodopsin Dimer. , 2017, , 79-97.		14
41	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
42	Substrate-Induced Changes in the Dynamics of Rhodopsin Kinase (G Protein-Coupled Receptor Kinase 1). <i>Biochemistry</i> , 2012, 51, 3404-3411.	2.5	12
43	Structural approaches to understanding retinal proteins needed for vision. <i>Current Opinion in Cell Biology</i> , 2014, 27, 32-43.	5.4	12
44	Oligomeric State of Rhodopsin Within Rhodopsin-Transducin Complex Probed with Succinylated Concanavalin A. <i>Methods in Molecular Biology</i> , 2015, 1271, 221-233.	0.9	12
45	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
46	Specificity of the chromophore-binding site in human cone opsins. <i>Journal of Biological Chemistry</i> , 2019, 294, 6082-6093.	3.4	11
47	Mutations in the SARS-CoV-2 spike protein modulate the virus affinity to the human ACE2 receptor, an analysis. <i>EXCLI Journal</i> , 2021, 20, 585-600.	0.7	11
48	Flavonoids improve the stability and function of P23H rhodopsin slowing down the progression of retinitis pigmentosa in mice. <i>Journal of Neuroscience Research</i> , 2022, 100, 1063-1083.	2.9	11
49	The vitamin A transporter STRA6 adjusts the stoichiometry of chromophore and opsins in visual pigment synthesis and recycling. <i>Human Molecular Genetics</i> , 2022, 31, 548-560.	2.9	9
50	Systematic profiling of temperature- and retinal-sensitive rhodopsin variants by deep mutational scanning. <i>Journal of Biological Chemistry</i> , 2021, 297, 101359.	3.4	9
51	Molecular basis for variations in the sensitivity of pathogenic rhodopsin variants to 9-cis-retinal. <i>Journal of Biological Chemistry</i> , 2022, 298, 102266.	3.4	7
52	Expression of Mammalian G Protein-Coupled Receptors in <i>Caenorhabditis elegans</i> . <i>Methods in Enzymology</i> , 2013, 520, 239-256.	1.0	6
53	Retinoid analogs and polyphenols as potential therapeutics for age-related macular degeneration. <i>Experimental Biology and Medicine</i> , 2020, 245, 1615-1625.	2.4	6
54	Rhodopsin as a Molecular Target to Mitigate Retinitis Pigmentosa. <i>Advances in Experimental Medicine and Biology</i> , 2021, , 61-77.	1.6	4

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55	Chromenone derivatives as novel pharmacological chaperones for retinitis pigmentosa-linked rod opsin mutants. Human Molecular Genetics, 2022, 31, 3439-3457.	2.9	2
56	Supramolecular structure of opsins. , 2020, , 81-95.		1