

# Johannes Broichhagen

## List of Publications by Year in descending order

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Version: 2024-02-01

61  
papers

2,753  
citations

257101

24  
h-index

197535

49  
g-index

86  
all docs

86  
docs citations

86  
times ranked

3391  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Roadmap to Success in Photopharmacology. <i>Accounts of Chemical Research</i> , 2015, 48, 1947-1960.	7.6	561
2	Beta Cell Hubs Dictate Pancreatic Islet Responses to Glucose. <i>Cell Metabolism</i> , 2016, 24, 389-401.	7.2	370
3	Strain-Promoted Alkyne Azide Cycloaddition for the Functionalization of Poly(amide)-Based Dendrons and Dendrimers. <i>Journal of the American Chemical Society</i> , 2010, 132, 3923-3931.	6.6	129
4	Optical control of insulin release using a photoswitchable sulfonyleurea. <i>Nature Communications</i> , 2014, 5, 5116.	5.8	106
5	Orthogonal Optical Control of a G Protein-Coupled Receptor with a SNAP-Tethered Photochromic Ligand. <i>ACS Central Science</i> , 2015, 1, 383-393.	5.3	104
6	Super-resolution microscopy compatible fluorescent probes reveal endogenous glucagon-like peptide-1 receptor distribution and dynamics. <i>Nature Communications</i> , 2020, 11, 467.	5.8	88
7	Optical Control of Insulin Secretion Using an Incretin Switch. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 15565-15569.	7.2	80
8	Optical Control of Acetylcholinesterase with a Tacrine Switch. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 7657-7660.	7.2	79
9	Dual optical control and mechanistic insights into photoswitchable group II and III metabotropic glutamate receptors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E3546-E3554.	3.3	72
10	Restoration of patterned vision with an engineered photoactivatable G protein-coupled receptor. <i>Nature Communications</i> , 2017, 8, 1862.	5.8	65
11	Branched Photoswitchable Tethered Ligands Enable Ultra-efficient Optical Control and Detection of G Protein-Coupled Receptors In Vivo. <i>Neuron</i> , 2020, 105, 446-463.e13.	3.8	58
12	The in vivo chemistry of photoswitched tethered ligands. <i>Current Opinion in Chemical Biology</i> , 2014, 21, 121-127.	2.8	56
13	Genetically Targeted Optical Control of an Endogenous G Protein-Coupled Receptor. <i>Journal of the American Chemical Society</i> , 2019, 141, 11522-11530.	6.6	51
14	AzoCholine Enables Optical Control of Alpha 7 Nicotinic Acetylcholine Receptors in Neural Networks. <i>ACS Chemical Neuroscience</i> , 2015, 6, 701-707.	1.7	49
15	Allosteric Optical Control of a Class B G Protein-Coupled Receptor. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 5865-5868.	7.2	45
16	Optical control of GPR40 signalling in pancreatic $\beta$ -cells. <i>Chemical Science</i> , 2017, 8, 7604-7610.	3.7	41
17	SNAP-Tagged Nanobodies Enable Reversible Optical Control of a G Protein-Coupled Receptor via a Remotely Tethered Photoswitchable Ligand. <i>ACS Chemical Biology</i> , 2018, 13, 2682-2688.	1.6	41
18	Optical tools for understanding the complexity of $\beta$ -cell signalling and insulin release. <i>Nature Reviews Endocrinology</i> , 2018, 14, 721-737.	4.3	36

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19	Signalling, trafficking and glucoregulatory properties of glucagon-like peptide-1 receptor agonists exendin-4 and lixisenatide. <i>British Journal of Pharmacology</i> , 2020, 177, 3905-3923.	2.7	36
20	A fine-tuned azobenzene for enhanced photopharmacology in vivo. <i>Cell Chemical Biology</i> , 2021, 28, 1648-1663.e16.	2.5	35
21	Remote control of glucose homeostasis in vivo using photopharmacology. <i>Scientific Reports</i> , 2017, 7, 291.	1.6	33
22	GLP1R Attenuates Sympathetic Response to High Glucose via Carotid Body Inhibition. <i>Circulation Research</i> , 2022, 130, 694-707.	2.0	33
23	The Influence of Peptide Context on Signaling and Trafficking of Glucagon-like Peptide-1 Receptor Biased Agonists. <i>ACS Pharmacology and Translational Science</i> , 2020, 3, 345-360.	2.5	32
24	Potent Prearranged Positive Allosteric Modulators of the Glucagon-like Peptide-1 Receptor. <i>ChemistryOpen</i> , 2017, 6, 501-505.	0.9	31
25	A (+)-Larixol Congener with High Affinity and Subtype Selectivity toward TRPC6. <i>ChemMedChem</i> , 2018, 13, 1028-1035.	1.6	31
26	Interrogating surface versus intracellular transmembrane receptor populations using cell-impermeable SNAP-tag substrates. <i>Chemical Science</i> , 2020, 11, 7871-7883.	3.7	30
27	A New Fluorogenic Small-Molecule Labeling Tool for Surface Diffusion Analysis and Advanced Fluorescence Imaging of $\beta$ -Site Amyloid Precursor Protein-Cleaving Enzyme 1 Based on Silicone Rhodamine: SiR-BACE1. <i>Journal of Medicinal Chemistry</i> , 2018, 61, 6121-6139.	2.9	29
28	Ligand-Specific Factors Influencing GLP-1 Receptor Post-Endocytic Trafficking and Degradation in Pancreatic Beta Cells. <i>International Journal of Molecular Sciences</i> , 2020, 21, 8404.	1.8	28
29	Conditional and Reversible Activation of Class A and B G Protein-Coupled Receptors Using Tethered Pharmacology. <i>ACS Central Science</i> , 2018, 4, 166-179.	5.3	27
30	Optical Control of a Biological Reaction-Diffusion System. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 2362-2366.	7.2	25
31	Photohormones Enable Optical Control of the Peroxisome Proliferator-Activated Receptor $\beta$ (PPAR $\beta$ ). <i>Journal of Medicinal Chemistry</i> , 2020, 63, 10908-10920.	2.9	25
32	Azobenzene-based inhibitors of human carbonic anhydrase II. <i>Beilstein Journal of Organic Chemistry</i> , 2015, 11, 1129-1135.	1.3	24
33	Optical control of a receptor-linked guanylyl cyclase using a photoswitchable peptidic hormone. <i>Chemical Science</i> , 2017, 8, 4644-4653.	3.7	23
34	A Predictive Approach for the Optical Control of Carbonic Anhydrase II Activity. <i>ACS Chemical Biology</i> , 2018, 13, 793-800.	1.6	19
35	Differences in interactions between transmembrane domains tune the activation of metabotropic glutamate receptors. <i>eLife</i> , 2021, 10, .	2.8	18
36	Structural and compositional diversity in the kainate receptor family. <i>Cell Reports</i> , 2021, 37, 109891.	2.9	17

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37	<i>N</i> -Methyl deuterated rhodamines for protein labelling in sensitive fluorescence microscopy. <i>Chemical Science</i> , 2022, 13, 8605-8617.	3.7	16
38	Transformation of Receptor Tyrosine Kinases into Glutamate Receptors and Photoreceptors. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 6720-6723.	7.2	13
39	Acylation of the Incretin Peptide Exendin-4 Directly Impacts Glucagon-Like Peptide-1 Receptor Signaling and Trafficking. <i>Molecular Pharmacology</i> , 2021, 100, 319-334.	1.0	13
40	Sulfonated red and far-red rhodamines to visualize SNAP- and Halo-tagged cell surface proteins. <i>Organic and Biomolecular Chemistry</i> , 2022, 20, 5967-5980.	1.5	12
41	Detection of cannabinoid receptor type 2 in native cells and zebrafish with a highly potent, cell-permeable fluorescent probe. <i>Chemical Science</i> , 2022, 13, 5539-5545.	3.7	12
42	Reagents and models for detecting endogenous GLP1R and GIPR. <i>EBioMedicine</i> , 2021, 74, 103739.	2.7	12
43	14-3-3 $\eta$ Constrains insulin secretion by regulating mitochondrial function in pancreatic $\beta$ cells. <i>JCI Insight</i> , 2022, 7, .	2.3	11
44	Allosterische optische Steuerung eines Klasseâ€Bâ€Gâ€Proteinâ€gekoppelten Rezeptors. <i>Angewandte Chemie</i> , 2016, 128, 5961-5965.	1.6	10
45	Photopharmacology for vision restoration. <i>Current Opinion in Pharmacology</i> , 2022, 65, 102259.	1.7	10
46	Bilirubin in a New Light. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 13868-13870.	7.2	8
47	Evaluation of efficacy- versus affinity-driven agonism with biased GLP-1R ligands P5 and exendin-F1. <i>Biochemical Pharmacology</i> , 2021, 190, 114656.	2.0	8
48	SNAP-tag-enabled super-resolution imaging reveals constitutive and agonist-dependent trafficking of GPR56 in pancreatic $\beta$ -cells. <i>Molecular Metabolism</i> , 2021, 53, 101285.	3.0	8
49	Optical Control of a Biological Reactionâ€Diffusion System. <i>Angewandte Chemie</i> , 2018, 130, 2386-2390.	1.6	7
50	Unusual mode of dimerization of retinitis pigmentosa-associated F220C rhodopsin. <i>Scientific Reports</i> , 2021, 11, 10536.	1.6	7
51	Sequential in vivo labeling of insulin secretory granule pools in <i>INS</i> - <i>SNAP</i> transgenic pigs. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	7
52	Advances in tethered photopharmacology for precise optical control of signaling proteins. <i>Current Opinion in Pharmacology</i> , 2022, 63, 102196.	1.7	7
53	Photocaged Hoechst Enables Subnuclear Visualization and Cell Selective Staining of DNA <i>in vivo</i> . <i>ChemBioChem</i> , 2021, 22, 548-556.	1.3	6
54	Expanded LUXendin Color Palette for GLP1R Detection and Visualization In Vitro and In Vivo. <i>Jacs Au</i> , 2022, 2, 1007-1017.	3.6	6

#	ARTICLE	IF	CITATIONS
55	Optical Regulation of Class C GPCRs by Photoswitchable Orthogonal Remotely Tethered Ligands. <i>Methods in Molecular Biology</i> , 2019, 1947, 103-136.	0.4	5
56	Chemical Biology Tools To Investigate Malaria Parasites. <i>ChemBioChem</i> , 2021, 22, 2219-2236.	1.3	5
57	Cholinergic Photopharmacology – Controlling nicotinic and muscarinic Acetylcholine Receptors with Photoswitchable Molecules. <i>FASEB Journal</i> , 2015, 29, 933.5.	0.2	1
58	Crystal structure of (E)-1,2-bis(4-bromo-2,6-difluorophenyl)diazene. <i>Acta Crystallographica Section E: Crystallographic Communications</i> , 2015, 71, o459-o460.	0.2	1
59	Transformation of Receptor Tyrosine Kinases into Glutamate Receptors and Photoreceptors. <i>Angewandte Chemie</i> , 2020, 132, 6786-6789.	1.6	0
60	A Family of Photoswitchable Metabotropic Glutamate Receptors for High-Efficiency Optical Interrogation of Specific Receptor Populations in vivo. <i>FASEB Journal</i> , 2019, 33, 503.20.	0.2	0
61	Branched Photoswitchable Tethered Ligands for Optical Interrogation of Metabotropic Glutamate Receptor-Mediated Modulation of Prefrontal Cortex Circuits. <i>FASEB Journal</i> , 2020, 34, 1-1.	0.2	0