Evi Kostenis

List of Publications by Year
in descending order

96 papers	5,195 citations	109137 35 h-index	95083 68 g-index
103 all docs	103 docs citations	103 times ranked	6381 citing authors

#	Article	IF	Citations
1	The neuropeptide neuromedin U stimulates innate lymphoid cells and type 2 inflammation. Nature, 2017, 549, 282-286.	13.7	400
2	Heterotrimeric G-proteins: a short history. British Journal of Pharmacology, 2006, 147, S46-S55.	2.7	347
3	Pronounced pharmacologic deficits in M2 muscarinic acetylcholine receptor knockout mice. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 1692-1697.	3.3	325
4	Lack of beta-arrestin signaling in the absence of active G proteins. Nature Communications, 2018, 9, 341.	5.8	297
5	The experimental power of FR900359 to study Gq-regulated biological processes. Nature Communications, 2015, 6, 10156.	5.8	282
6	Deconvolution of complex G proteinâ€“coupled receptor signaling in live cells using dynamic mass redistribution measurements. Nature Biotechnology, 2010, 28, 943-949.	9.4	246
7	Emerging roles of DP and CRTH2 in allergic inflammation. Trends in Molecular Medicine, 2006, 12, 148-158.	3.5	195
8	A Platform of Synthetic Lethal Gene Interaction Networks Reveals that the GNAQ Uveal Melanoma Oncogene Controls the Hippo Pathway through FAK. Cancer Cell, 2019, 35, 457-472.e5.	7.7	169
9	Applying label-free dynamic mass redistribution technology to frame signaling of G proteinâ€“coupled receptors noninvasively in living cells. Nature Protocols, 2011, 6, 1748-1760.	5.5	154
10	The allosteric vestibule of a seven transmembrane helical receptor controls G-protein coupling. Nature Communications, 2012, 3, 1044.	5.8	117
11	Decoding Signaling and Function of the Orphan G Proteinâ€“Coupled Receptor GPR17 with a Small-Molecule Agonist. Science Signaling, 2013, 6, ra93.	1.6	111
12	Activity of dietary fatty acids on FFA1 and FFA4 and characterisation of pinolenic acid as a dual FFA1/FFA4 agonist with potential effect against metabolic diseases. British Journal of Nutrition, 2015, 113, 1677-1688.	1.2	93
13	The Gq signalling pathway inhibits brown and beige adipose tissue. Nature Communications, 2016, 7, 10895.	5.8	90
14	The Adhesion G Protein-Coupled Receptor GPR56/ADGRG1 Is an Inhibitory Receptor on Human NK Cells. Cell Reports, 2016, 15, 1757-1770.	2.9	84
15	Direct targeting of GÎ± _q and GÎ± ₁₁ oncoproteins in cancer cells. Science Signaling, 2019, 12, .	1.6	84
16	Community guidelines for GPCR ligand bias: IUPHAR review 32. British Journal of Pharmacology, 2022, 179, 3651-3674.	2.7	84
17	The atypical chemokine receptor ACKR3/CXCR7 is a broad-spectrum scavenger for opioid peptides. Nature Communications, 2020, 11, 3033.	5.8	74
18	Key Determinants of Nucleotide-Activated G Protein-Coupled P2Y₂ Receptor Function Revealed by Chemical and Pharmacological Experiments, Mutagenesis and Homology Modeling. Journal of Medicinal Chemistry, 2009, 52, 2762-2775.	2.9	73

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19	Temporal Bias: Time-Encoded Dynamic GPCR Signaling. Trends in Pharmacological Sciences, 2017, 38, 1110-1124.	4.0	68
20	Structureâ^'Activity Relationships in a Series of Bisquaternary Bisphthalimidine Derivatives Modulating the Muscarinic M2-Receptor Allosterically. Journal of Medicinal Chemistry, 2000, 43, 2155-2164.	2.9	67
21	A Novel Allosteric Activator of Free Fatty Acid 2 Receptor Displays Unique Gi-functional Bias. Journal of Biological Chemistry, 2016, 291, 18915-18931.	1.6	66
22	The Orphan G Protein-coupled Receptor GPR17 Negatively Regulates Oligodendrocyte Differentiation via GÎ±i/o and Its Downstream Effector Molecules. Journal of Biological Chemistry, 2016, 291, 705-718.	1.6	66
23	Heterotrimeric Gq proteins as therapeutic targets?. Journal of Biological Chemistry, 2020, 295, 5206-5215.	1.6	58
24	Heterologous Expression, Biosynthetic Studies, and Ecological Function of the Selective Gqâ€Signaling Inhibitor FR900359. Angewandte Chemie - International Edition, 2018, 57, 836-840.	7.2	57
25	Structureâ^'Activity Study of Dihydrocinnamic Acids and Discovery of the Potent FFA1 (GPR40) Agonist TUG-469. ACS Medicinal Chemistry Letters, 2010, 1, 345-349.	1.3	56
26	The C-terminal Tail of CRTH2 Is a Key Molecular Determinant That Constrains GÎ±i and Downstream Signaling Cascade Activation. Journal of Biological Chemistry, 2009, 284, 1324-1336.	1.6	54
27	Heterotrimeric G Protein Subunit GÎ±q Is a Master Switch for GÎ²Î³-Mediated Calcium Mobilization by Gi-Coupled GPCRs. Molecular Cell, 2020, 80, 940-954.e6.	4.5	54
28	GPCR kinase knockout cells reveal the impact of individual GRKs on arrestin binding and GPCR regulation. Nature Communications, 2022, 13, 540.	5.8	54
29	Targeted inhibition of G _q signaling induces airway relaxation in mouse models of asthma. Science Translational Medicine, 2017, 9, .	5.8	50
30	A Cell-Permeable Inhibitor to Trap GÎ±q Proteins in the Empty Pocket Conformation. Chemistry and Biology, 2014, 21, 890-902.	6.2	47
31	Chemokine receptor trafficking coordinates neutrophil clustering and dispersal at wounds in zebrafish. Nature Communications, 2019, 10, 5166.	5.8	47
32	Mapping physiological G protein-coupled receptor signaling pathways reveals a role for receptor phosphorylation in airway contraction. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 4524-4529.	3.3	46
33	FZD ₅ is a GÎ± _q -coupled receptor that exhibits the functional hallmarks of prototypical GPCRs. Science Signaling, 2018, 11, .	1.6	46
34	Local IP ₃ receptorâ€“mediated Ca ²⁺ signals compound to direct blood flow in brain capillaries. Science Advances, 2021, 7, .	4.7	46
35	Dynamic ligand binding dictates partial agonism at a G proteinâ€“coupled receptor. Nature Chemical Biology, 2014, 10, 18-20.	3.9	45
36	N-Benzylbenzamides: A Novel Merged Scaffold for Orally Available Dual Soluble Epoxide Hydrolase/Peroxisome Proliferator-Activated Receptor Î³ Modulators. Journal of Medicinal Chemistry, 2016, 59, 61-81.	2.9	44

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37	Arrestins as rheostats of GPCR signalling. Nature Reviews Molecular Cell Biology, 2018, 19, 615-616.	16.1	44
38	Impaired endothelium-mediated cerebrovascular reactivity promotes anxiety and respiration disorders in mice. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 1753-1761.	3.3	39
39	Pilot the pulse: controlling the multiplicity of receptor dynamics. Trends in Pharmacological Sciences, 2014, 35, 630-638.	4.0	34
40	WNT Stimulation Dissociates a Frizzled 4 Inactive-State Complex with GÎ±_{12/13}. Molecular Pharmacology, 2016, 90, 447-459.	1.0	33
41	Rational design of a heterotrimeric G protein Î± subunit with artificial inhibitor sensitivity. Journal of Biological Chemistry, 2019, 294, 5747-5758.	1.6	32
42	Thioesterase-mediated side chain transesterification generates potent Gq signaling inhibitor FR900359. Nature Communications, 2021, 12, 144.	5.8	32
43	Reactivation of GÎ±i-coupled formyl peptide receptors is inhibited by GÎ±q-selective inhibitors when induced by signals generated by the platelet-activating factor receptor. Journal of Leukocyte Biology, 2017, 102, 871-880.	1.5	31
44	A Molecular Mechanism for Sequential Activation of a G Protein-Coupled Receptor. Cell Chemical Biology, 2016, 23, 392-403.	2.5	30
45	G _{q/11} -dependent regulation of endosomal cAMP generation by parathyroid hormone class B GPCR. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 7455-7460.	3.3	30
46	Prostaglandin E2 glyceryl ester is an endogenous agonist of the nucleotide receptor P2Y6. Scientific Reports, 2017, 7, 2380.	1.6	29
47	Deciphering Specificity Determinants for FR900359â€Derived G_qÎ± Inhibitors Based on Computational and Structureâ€“Activity Studies. ChemMedChem, 2018, 13, 1634-1643.	1.6	29
48	Label-Free Biosensor Assays in GPCR Screening. Methods in Molecular Biology, 2015, 1272, 199-213.	0.4	29
49	Functional selectivity and dualsteric/bitopic GPCR targeting. Current Opinion in Pharmacology, 2017, 32, 85-90.	1.7	27
50	Repurposing HAMI3379 to Block GPR17 and Promote Rodent and Human Oligodendrocyte Differentiation. Cell Chemical Biology, 2018, 25, 775-786.e5.	2.5	27
51	Applying Molecular Networking for the Detection of Natural Sources and Analogues of the Selective Gq Protein Inhibitor FR900359. Journal of Natural Products, 2018, 81, 1628-1635.	1.5	27
52	GÎ²Î³ signaling to the chemotactic effector P-REX1 and mammalian cell migration is directly regulated by GÎ±q and GÎ±13 proteins. Journal of Biological Chemistry, 2019, 294, 531-546.	1.6	27
53	Superagonism at G proteinâ€coupled receptors and beyond. British Journal of Pharmacology, 2016, 173, 3018-3027.	2.7	25
54	A Chemical Biology Toolbox Targeting the Intracellular Binding Site of CCR9: Fluorescent Ligands, New Drug Leads and PROTACs. Angewandte Chemie - International Edition, 2022, 61, .	7.2	24

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55	Selective optogenetic control of Gq signaling using human Neuropsin. Nature Communications, 2022, 13, 1765.	5.8	24
56	The Orphan Receptor GPR17 Is Unresponsive to Uracil Nucleotides and Cysteinyl Leukotrienes. Molecular Pharmacology, 2017, 91, 518-532.	1.0	23
57	FZD10-GÎ±13 signalling axis points to a role of FZD10 in CNS angiogenesis. Cellular Signalling, 2017, 32, 93-103.	1.7	22
58	An experimental strategy to probe Gq contribution to signal transduction in living cells. Journal of Biological Chemistry, 2021, 296, 100472.	1.6	22
59	RXFP1 Receptor Activation by Relaxin-2 Induces Vascular Relaxation in Mice via a GÎ±i2-Protein/PI3KÃŸ/Î³/Nitric Oxide-Coupled Pathway. Frontiers in Physiology, 2018, 9, 1234.	1.3	21
60	3-(2-Carboxyethyl)indole-2-carboxylic Acid Derivatives: Structural Requirements and Properties of Potent Agonists of the Orphan G Protein-Coupled Receptor GPR17. Journal of Medicinal Chemistry, 2018, 61, 8136-8154.	2.9	19
61	5-HT2A receptor-dependent phosphorylation of mGlu2 receptor at Serine 843 promotes mGlu2 receptor-operated Gi/o signaling. Molecular Psychiatry, 2019, 24, 1610-1626.	4.1	17
62	FFA2-, but not FFA3-agonists inhibit GSIS of human pseudoislets: a comparative study with mouse islets and rat INS-1E cells. Scientific Reports, 2020, 10, 16497.	1.6	17
63	Development of [³H]2-Carboxy-4,6-dichloro-1H-indole-3-propionic Acid ([³H]PSB-12150): A Useful Tool for Studying GPR17. ACS Medicinal Chemistry Letters, 2014, 5, 326-330.	1.3	16
64	New insight into active muscarinic receptors with the novel radioagonist [3H]iperoxo. Biochemical Pharmacology, 2014, 90, 307-319.	2.0	16
65	NOP receptor pharmacological profile â€“ A dynamic mass redistribution study. PLoS ONE, 2018, 13, e0203021.	1.1	15
66	Ligand-Specific Allosteric Coupling Controls G-Protein-Coupled Receptor Signaling. ACS Pharmacology and Translational Science, 2020, 3, 859-867.	2.5	15
67	Atypical opioid receptors: unconventional biology and therapeutic opportunities. , 2022, 233, 108014.		15
68	A New Molecular Mechanism To Engineer Protean Agonism at a G Proteinâ€“Coupled Receptor. Molecular Pharmacology, 2017, 91, 348-356.	1.0	13
69	Adipocyte Gq signaling is a regulator of glucose and lipid homeostasis in mice. Nature Communications, 2022, 13, 1652.	5.8	13
70	A concise synthesis of the potent inflammatory mediator 5-oxo-ETE. MedChemComm, 2012, 3, 195-198.	3.5	12
71	Î²-Arrestin 2 Inhibits Proinflammatory Chemokine Production and Attenuates Contact Allergic Inflammation in the Skin. Journal of Investigative Dermatology, 2014, 134, 2131-2137.	0.3	12
72	Improved synthesis of 4-/6-substituted 2-carboxy-1H-indole-3-propionic acid derivatives and structureâ€“activity relationships as GPR17 agonists. MedChemComm, 2014, 5, 86-92.	3.5	11

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73	Delineation of molecular determinants for FR900359 inhibition of Gq/11 unlocks inhibition of GÎ±s. Journal of Biological Chemistry, 2020, 295, 13850-13861.	1.6	11
74	Gq signaling in Î± cells is critical for maintaining euglycemia. JCI Insight, 2021, 6, .	2.3	11
75	Label-Free Whole Cell Biosensing for High-Throughput Discovery of Activators and Inhibitors Targeting G Protein-Activated Inwardly Rectifying Potassium Channels. ACS Omega, 2018, 3, 14814-14823.	1.6	10
76	Unraveling binding mechanism and kinetics of macrocyclic GÎ±q protein inhibitors. Pharmacological Research, 2021, 173, 105880.	3.1	10
77	Disentangling bias between Gq, GRK2, and arrestin3 recruitment to the M3 muscarinic acetylcholine receptor. ELife, 2021, 10, .	2.8	10
78	Pro-Angiogenic Effects of Latent Heparanase and Thrombin Receptor-Mediated Pathwaysâ€"Do They Share a Common Ground in Melanoma Cells?. Thrombosis and Haemostasis, 2018, 118, 1803-1814.	1.8	8
79	Exploring Biased Agonism at FPR1 as a Means to Encode Danger Sensing. Cells, 2020, 9, 1054.	1.8	8
80	Class A Orphans (version 2019.5) in the IUPHAR/BPS Guide to Pharmacology Database. IUPHAR/BPS Guide To Pharmacology CITE, 2019, 2019, .	0.2	8
81	Holistic Methods for the Analysis of cNMP Effects. Handbook of Experimental Pharmacology, 2015, 238, 339-357.	0.9	7
82	Activation of Gq signaling by Pasteurella multocida toxin inhibits the osteoblastogenic-like actions of Activin A in C2C12 myoblasts, a cell model of fibrodysplasia ossificans progressiva. Bone, 2019, 127, 592-601.	1.4	7
83	Tetrahydroimidazo[1,2â€a]pyrazine Derivatives: Synthesis and Evaluation as GÎ±_qâ€Protein Ligands. Chemistry - A European Journal, 2020, 26, 12615-12623.	1.7	7
84	Feature-Based Molecular Networking for the Targeted Identification of G_q-Inhibiting FR900359 Derivatives. Journal of Natural Products, 2021, 84, 1941-1953.	1.5	7
85	Class A Orphans (version 2020.5) in the IUPHAR/BPS Guide to Pharmacology Database. IUPHAR/BPS Guide To Pharmacology CITE, 2020, 2020, .	0.2	7
86	Brutonâ€™s tyrosine kinase and RAC1 promote cell survival in MLL-rearranged acute myeloid leukemia. Leukemia, 2018, 32, 846-849.	3.3	6
87	Biased signaling of Ca2+-sensing receptors in cardiac myocytes regulates GIRK channel activity. Journal of Molecular and Cellular Cardiology, 2019, 130, 107-121.	0.9	6
88	Heterologe Expression, Biosynthese und Ã¶kologische Funktion des selektiven Gqâ€Signaltransduktionsinhibitors FR900359. Angewandte Chemie, 2018, 130, 844-849.	1.6	5
89	BIM-46174 fragments as potential ligands of G proteins. MedChemComm, 2019, 10, 1838-1843.	3.5	5
90	Engineered Context-Sensitive Agonism: Tissue-Selective Drug Signaling through a G Protein-Coupled Receptor. Journal of Pharmacology and Experimental Therapeutics, 2017, 360, 289-299.	1.3	4

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91	Class A Orphans in GtoPdb v.2021.3. IUPHAR/BPS Guide To Pharmacology CITE, 2021, 2021, .	0.2	3
92	Heterotrimeric G Protein Subunit GÎ±q is a Master Switch for GÎ²Î³-Mediated Calcium Mobilization by Gi-Coupled GPCRs. SSRN Electronic Journal, 0, , .	0.4	1
93	A GPCR's back door. Nature Chemical Biology, 2014, 10, 609-610.	3.9	0
94	The endophyte Candidatus Burkholderia crenata of the TCM plant Ardisia crenata produces the selective Gq-inhibitor FR900359. Planta Medica, 2016, 81, S1-S381.	0.7	0
95	Class A Orphans (version 2019.4) in the IUPHAR/BPS Guide to Pharmacology Database. IUPHAR/BPS Guide To Pharmacology CITE, 2019, 2019, .	0.2	0
96	Chemischâ€biologischer Werkzeugkasten fÃ¼r die intrazellulÃre Bindungsstelle von CCR9: Fluoreszierende Liganden, neue Leitstrukturen und PROTACs. Angewandte Chemie, 0, , .	1.6	0