Gunnar Schulte

List of Publications by Year
in descending order

95 papers	7,733 citations	71004 43 h-index	60403 85 g-index
101 all docs	101 docs citations	101 times ranked	10333 citing authors

#	Article	IF	Citations
1	NanoBRET and NanoBiT/BRET-Based Ligand Binding Assays Permit Quantitative Assessment of Small Molecule Ligand Binding to Smoothened. Methods in Molecular Biology, 2022, 2374, 195-204.	0.4	1
2	Deconvolution of WNT-induced Frizzled conformational dynamics with fluorescent biosensors. Biosensors and Bioelectronics, 2021, 177, 112948.	5.3	19
3	Quantitative Profiling of WNT-3A Binding to All Human Frizzled Paralogues in HEK293 Cells by NanoBiT/BRET Assessments. ACS Pharmacology and Translational Science, 2021, 4, 1235-1245.	2.5	15
4	Residue 6.43 defines receptor function in class F GPCRs. Nature Communications, 2021, 12, 3919.	5.8	14
5	Cryo-EM structure of constitutively active human Frizzled 7 in complex with heterotrimeric Gs. Cell Research, 2021, 31, 1311-1314.	5.7	23
6	Class Frizzled GPCRs in GtoPdb v.2021.3. IUPHAR/BPS Guide To Pharmacology CITE, 2021, 2021, .	0.2	0
7	Rare genetic variability in human drug target genes modulates drug response and can guide precision medicine. Science Advances, 2021, 7, eabi6856.	4.7	16
8	Quantitative assessment of constitutive G proteinâ€“coupled receptor activity with BRET-based G protein biosensors. Science Signaling, 2021, 14, eabf1653.	1.6	44
9	THE CONCISE GUIDE TO PHARMACOLOGY 2021/22: G proteinâ€coupled receptors. British Journal of Pharmacology, 2021, 178, S27-S156.	2.7	337
10	Employing Genetically Encoded, Biophysical Sensors to Understand WNT/Frizzled Interaction and Receptor Complex Activation. Handbook of Experimental Pharmacology, 2021, 269, 101-115.	0.9	0
11	Frizzled BRET sensors based on bioorthogonal labeling of unnatural amino acids reveal WNT-induced dynamics of the cysteine-rich domain. Science Advances, 2021, 7, eabj7917.	4.7	15
12	Structural insight into Class F receptors â€“ What have we learnt regarding agonistâ€induced activation?. Basic and Clinical Pharmacology and Toxicology, 2020, 126, 17-24.	1.2	16
13	Molecular Pharmacology of Class F Receptor Activation. Molecular Pharmacology, 2020, 97, 62-71.	1.0	28
14	eGFP-tagged Wnt-3a enables functional analysis of Wnt trafficking and signaling and kinetic assessment of Wnt binding to full-length Frizzled. Journal of Biological Chemistry, 2020, 295, 8759-8774.	1.6	26
15	Development of a Conformational Histamine H₃ Receptor Biosensor for the Synchronous Screening of Agonists and Inverse Agonists. ACS Sensors, 2020, 5, 1734-1742.	4.0	27
16	Structural insight into small molecule action on Frizzleds. Nature Communications, 2020, 11, 414.	5.8	38
17	A NanoBRET-Based Binding Assay for Smoothened Allows Real-time Analysis of Ligand Binding and Distinction of Two Binding Sites for BODIPY-cyclopamine. Molecular Pharmacology, 2020, 97, 23-34.	1.0	19
18	Wnt-3a Induces Cytokine Release in Human Mast Cells. Cells, 2019, 8, 1372.	1.8	8

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19	THE CONCISE GUIDE TO PHARMACOLOGY 2019/20: G proteinâ€coupled receptors. British Journal of Pharmacology, 2019, 176, S21-S141.	2.7	519
20	WNT-3Aâ€“induced Î²-catenin signaling does not require signaling through heterotrimeric G proteins. Journal of Biological Chemistry, 2019, 294, 11677-11684.	1.6	23
21	A conserved molecular switch in Class F receptors regulates receptor activation and pathway selection. Nature Communications, 2019, 10, 667.	5.8	56
22	Class Frizzled GPCRs (version 2019.4) in the IUPHAR/BPS Guide to Pharmacology Database. IUPHAR/BPS Guide To Pharmacology CITE, 2019, 2019, .	0.2	1
23	FZD ₅ is a GÎ± _q -coupled receptor that exhibits the functional hallmarks of prototypical GPCRs. Science Signaling, 2018, 11, .	1.6	46
24	Dishevelled enables casein kinase 1â€“mediated phosphorylation of Frizzled 6 required for cell membrane localization. Journal of Biological Chemistry, 2018, 293, 18477-18493.	1.6	13
25	Functional dissection of the N-terminal extracellular domains of Frizzled 6 reveals their roles for receptor localization and Dishevelled recruitment. Journal of Biological Chemistry, 2018, 293, 17875-17887.	1.6	18
26	Frizzleds as GPCRs â€“ More Conventional Than We Thought!. Trends in Pharmacological Sciences, 2018, 39, 828-842.	4.0	54
27	FZD10-GÎ±13 signalling axis points to a role of FZD10 in CNS angiogenesis. Cellular Signalling, 2017, 32, 93-103.	1.7	22
28	Agonist-induced dimer dissociation as a macromolecular step in G protein-coupled receptor signaling. Nature Communications, 2017, 8, 226.	5.8	57
29	WNT signalling: mechanisms and therapeutic opportunities. British Journal of Pharmacology, 2017, 174, 4543-4546.	2.7	8
30	The tyrosine Y2502.39 in Frizzled 4 defines a conserved motif important for structural integrity of the receptor and recruitment of Disheveled. Cellular Signalling, 2017, 38, 85-96.	1.7	16
31	WNT Stimulation Dissociates a Frizzled 4 Inactive-State Complex with G<i>Î±</i>_{12/13}. Molecular Pharmacology, 2016, 90, 447-459.	1.0	33
32	Dishevelled is a NEK2 kinase substrate controlling dynamics of centrosomal linker proteins. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 9304-9309.	3.3	55
33	CX₃CL1â€”a macrophage chemoattractant induced by a single bout of exercise in human skeletal muscle. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2016, 310, R297-R304.	0.9	45
34	WNT signaling in microglia and the glioma microenvironment. SpringerPlus, 2015, 4, L50.	1.2	0
35	Asymmetry of VANGL2 in migrating lymphocytes as a tool to monitor activity of the mammalian WNT/planar cell polarity pathway. Cell Communication and Signaling, 2015, 13, 2.	2.7	18
36	Systematic Mapping of WNT-FZD Protein Interactions Reveals Functional Selectivity by Distinct WNT-FZD Pairs. Journal of Biological Chemistry, 2015, 290, 6789-6798.	1.6	129

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37	High levels of WNT-5A in human glioma correlate with increased presence of tumor-associated microglia/monocytes. Experimental Cell Research, 2015, 339, 280-288.	1.2	28
38	Frizzleds and WNT/Î²-catenin signaling â€“ The black box of ligandâ€“receptor selectivity, complex stoichiometry and activation kinetics. European Journal of Pharmacology, 2015, 763, 191-195.	1.7	38
39	Disheveled regulates precoupling of heterotrimeric G proteins to Frizzled 6. FASEB Journal, 2014, 28, 2293-2305.	0.2	58
40	Î²-Arrestin Promotes Wnt-induced Low Density Lipoprotein Receptor-related Protein 6 (Lrp6) Phosphorylation via Increased Membrane Recruitment of Amer1 Protein. Journal of Biological Chemistry, 2014, 289, 1128-1141.	1.6	12
41	<scp>WNT</scp>/<scp>F</scp>rizzled signalling: receptorâ€“ligand selectivity with focus on <scp>FZD</scp>â€‹<scp>G</scp> protein signalling and its physiological relevance: IUPHAR Review 3. British Journal of Pharmacology, 2014, 171, 1195-1209.	2.7	163
42	Decreased hippocampal volume and increased anxiety in a transgenic mouse model expressing the human CYP2C19 gene. Molecular Psychiatry, 2014, 19, 733-741.	4.1	59
43	Adenosine increases LPS-induced nuclear factor kappa B activation in smooth muscle cells via an intracellular mechanism and modulates it via actions on adenosine receptors. Acta Physiologica, 2014, 210, 590-599.	1.8	9
44	Assessment of Frizzled 6 membrane mobility by FRAP supports G protein coupling and reveals WNT-Frizzled selectivity. Cellular Signalling, 2014, 26, 1943-1949.	1.7	48
45	Pertussis toxin-sensitive heterotrimeric GÎ±i/o proteins mediate WNT/Î²-catenin and WNT/ERK1/2 signaling in mouse primary microglia stimulated with purified WNT-3A. Cellular Signalling, 2013, 25, 822-828.	1.7	48
46	<scp>WNT</scp>â€3A and <scp>WNT</scp>â€5A counteract lipopolysaccharideâ€induced proâ€inflammatory changes in mouse primary microglia. Journal of Neurochemistry, 2013, 125, 803-808.	2.1	63
47	Heterotrimeric G protein-dependent WNT-5A signaling to ERK1/2 mediates distinct aspects of microglia proinflammatory transformation. Journal of Neuroinflammation, 2012, 9, 111.	3.1	92
48	19th <i>Acta Physiologica</i> international symposium â€˜WNT Signaling in Physiology and Diseaseâ€™â€“ a long way from developmental biology to physiology. Acta Physiologica, 2012, 204, 6-7.	1.8	1
49	Prolonged attenuation of acetylcholineâ€induced phosphorylation of extracellular signalâ€regulated kinase 1/2 following sevoflurane exposure. Acta Anaesthesiologica Scandinavica, 2012, 56, 608-615.	0.7	1
50	Recombinant WNTs differentially activate Î²â€cateninâ€dependent and â€independent signalling in mouse microgliaâ€like cells. Acta Physiologica, 2011, 203, 363-372.	1.8	45
51	Amer1/WTX couples Wnt-induced formation of PtdIns(4,5)P₂to LRP6 phosphorylation. EMBO Journal, 2011, 30, 1433-1443.	3.5	64
52	WNT-5A stimulates the GDP/GTP exchange at pertussis toxin-sensitive heterotrimeric G proteins. Cellular Signalling, 2011, 23, 550-554.	1.7	49
53	Mutations in Frizzled 6 Cause Isolated Autosomal-Recessive Nail Dysplasia. American Journal of Human Genetics, 2011, 88, 852-860.	2.6	58
54	WNT signaling in activated microglia is proinflammatory. Glia, 2011, 59, 119-131.	2.5	187

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55	Molecular reorganization of endocannabinoid signalling in Alzheimerâ€™s disease. Brain, 2011, 134, 1041-1060.	3.7	164
56	Mitogen-Activated Protein Kinases Promote WNT/Î²-Catenin Signaling via Phosphorylation of LRP6. Molecular and Cellular Biology, 2011, 31, 179-189.	1.1	99
57	Sequential Activation and Inactivation of Dishevelled in the Wnt/Î²-Catenin Pathway by Casein Kinases. Journal of Biological Chemistry, 2011, 286, 10396-10410.	1.6	96
58	Â-Arrestin and dishevelled coordinate biased signaling. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 19839-19840.	3.3	11
59	Î²â€arrestins â€" scaffolds and signalling elements essential for WNT/Frizzled signalling pathways?. British Journal of Pharmacology, 2010, 159, 1051-1058.	2.7	27
60	Vang-like protein 2 and Rac1 interact to regulate adherens junctions. Journal of Cell Science, 2010, 123, 472-483.	1.2	50
61	International Union of Basic and Clinical Pharmacology. LXXX. The Class Frizzled Receptors. Pharmacological Reviews, 2010, 62, 632-667.	7.1	198
62	Peripheral adenosine A2A receptors are involved in carrageenan-induced mechanical hyperalgesia in mice. Neuroscience, 2010, 170, 923-928.	1.1	38
63	The Human Carotid Body. Anesthesiology, 2010, 113, 1270-1279.	1.3	50
64	Vang-like protein 2 and Rac1 interact to regulate adherens junctions. Development (Cambridge), 2010, 137, e406-e406.	1.2	0
65	Î²â€Arrestin and casein kinase 1/2 define distinct branches of nonâ€canonical WNT signalling pathways. EMBO Reports, 2008, 9, 1244-1250.	2.0	71
66	Adenosine A2A receptor dynamics studied with the novel fluorescent agonist Alexa488-APEC. European Journal of Pharmacology, 2008, 590, 36-42.	1.7	29
67	beta-Arrestin is a necessary component of Wnt/beta-catenin signaling in vitro and in vivo. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 6690-6695.	3.3	140
68	Wnt-5a induces Dishevelled phosphorylation and dopaminergic differentiation via a CK1-dependent mechanism. Journal of Cell Science, 2007, 120, 586-595.	1.2	160
69	The Frizzled family of unconventional G-protein-coupled receptors. Trends in Pharmacological Sciences, 2007, 28, 518-525.	4.0	210
70	Modulation of glial cell functions by adenosine receptors. Physiology and Behavior, 2007, 92, 15-20.	1.0	124
71	A Nordic meeting on G-protein-coupled receptors: from molecular aspects to novel therapy. Acta Physiologica, 2007, 190, 1-1.	1.8	0
72	Inhibition of endocytosis blocks Wnt signalling to ?-catenin by promoting dishevelled degradation. Acta Physiologica, 2007, 190, 55-61.	1.8	36

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73	Novel aspects of G-protein-coupled receptor signalling ? different ways to achieve specificity. Acta Physiologica, 2007, 190, 33-38.	1.8	26
74	Wnt-3a utilizes a novel low dose and rapid pathway that does not require casein kinase 1-mediated phosphorylation of Dvl to activate Î²-catenin. Cellular Signalling, 2007, 19, 610-616.	1.7	81
75	Purified Wnt-5a increases differentiation of midbrain dopaminergic cells and dishevelled phosphorylation. Journal of Neurochemistry, 2005, 92, 1550-1553.	2.1	117
76	Endocannabinoids regulate interneuron migration and morphogenesis by transactivating the TrkB receptor. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 19115-19120.	3.3	251
77	PKC 412 sensitizes U1810 non-small cell lung cancer cells to DNA damage. Experimental Cell Research, 2005, 305, 200-213.	1.2	19
78	Endocannabinoid-Independent Retrograde Signaling at Inhibitory Synapses in Layer 2/3 of Neocortex: Involvement of Vesicular Glutamate Transporter 3. Journal of Neuroscience, 2004, 24, 4978-4988.	1.7	90
79	Brain-derived neurotrophic factor controls functional differentiation and microcircuit formation of selectively isolated fast-spiking GABAergic interneurons. European Journal of Neuroscience, 2004, 20, 1290-1306.	1.2	88
80	Adenosine A1 receptors are necessary for protection of the murine heart by remote, delayed adaptation to ischaemia. Acta Physiologica Scandinavica, 2004, 182, 133-143.	2.3	55
81	Adenosine A3 receptor-mediated regulation of p38 and extracellular-regulated kinase ERK1/2 via phosphatidylinositol-3â€²-kinase. Biochemical Pharmacology, 2004, 67, 129-134.	2.0	41
82	Signalling from adenosine receptors to mitogen-activated protein kinases. Cellular Signalling, 2003, 15, 813-827.	1.7	686
83	Consequences of eliminating adenosine A1receptors in mice. Drug Development Research, 2003, 58, 350-353.	1.4	0
84	Evidence for functional adenosine A3 receptors in microglia cells. Journal of Neurochemistry, 2003, 86, 1051-1054.	2.1	101
85	Adenosine A2B receptors modulate cAMP levels and induce CREB but not ERK1/2 and p38 phosphorylation in rat skeletal muscle cells. Biochemical and Biophysical Research Communications, 2003, 307, 180-187.	1.0	33
86	The Gs-coupled adenosine A2b receptor recruits divergent pathways to regulate ERK1/2 and p38â˜†. Experimental Cell Research, 2003, 290, 168-176.	1.2	83
87	Distribution of antinociceptive adenosine a1 receptors in the spinal cord dorsal horn, and relationship to primary afferents and neuronal subpopulations. Neuroscience, 2003, 121, 907-916.	1.1	62
88	Signaling Pathway from the Human Adenosine A3Receptor Expressed in Chinese Hamster Ovary Cells to the Extracellular Signal-Regulated Kinase 1/2. Molecular Pharmacology, 2002, 62, 1137-1146.	1.0	324
89	A1 receptors mediate delayed remote preconditioning, possible involvement of mapk. Journal of Molecular and Cellular Cardiology, 2002, 34, A59.	0.9	0
90	Diverse inhibitors of intracellular signalling act as adenosine receptor antagonists. Cellular Signalling, 2002, 14, 109-113.	1.7	30

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91	Adenosine receptor signaling in vitro and in vivo. Drug Development Research, 2001, 52, 274-282.	1.4	20
92	Comparison of the potency of adenosine as an agonist at human adenosine receptors expressed in Chinese hamster ovary cells11Abbreviations: cAMP, cyclic adenosine 3â€²,5â€²-monophosphate; CHO, Chinese hamster ovary; NBMPR, nitrobenzylthioinosine; and NECA, 5â€²-N-ethyl carboxamido adenosine.. Biochemical Pharmacology, 2001, 61, 443-448.	2.0	388
93	Structure and function of adenosine receptors and their genes. Naunyn-Schmiedeberg's Archives of Pharmacology, 2000, 362, 364-374.	1.4	490
94	Human Adenosine A₁, A_{2A}, A_{2B}, and A₃ Receptors Expressed in Chinese Hamster Ovary Cells All Mediate the Phosphorylation of Extracellular-Regulated Kinase 1/2. Molecular Pharmacology, 2000, 58, 477-482.	1.0	429
95	Effects of sciatic nerve injuries on Î´-opioid receptor and substance P immunoreactivities in the superficial dorsal horn of the rat. European Journal of Pain, 1999, 3, 115-129.	1.4	27