Steven J Charlton

List of Publications by Year
in descending order

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Version: 2024-02-01

75 papers	3,778 citations	147566 31 h-index	128067 60 g-index
78 all docs	78 docs citations	78 times ranked	4246 citing authors

#	Article	IF	Citations
1	Exploring the kinetic selectivity of drugs targeting the Î² ₁ â€adrenoceptor. Pharmacology Research and Perspectives, 2022, 10, .	1.1	1
2	Inhibition of the Proliferation of Human Lung Fibroblasts by Prostacyclin Receptor Agonists is Linked to a Sustained cAMP Signal in the Nucleus. Frontiers in Pharmacology, 2021, 12, 669227.	1.6	16
3	Kinetic Profiling of Ligands and Fragments Binding to GPCRs by TR-FRET. Topics in Medicinal Chemistry, 2021, , 1-32.	0.4	0
4	Kinetics of ligand binding and signaling. , 2020, , 171-194.		2
5	Investigating the Influence of Tracer Kinetics on Competition-Kinetic Association Binding Assays: Identifying the Optimal Conditions for Assessing the Kinetics of Low-Affinity Compounds. Molecular Pharmacology, 2019, 96, 378-392.	1.0	10
6	Structureâ€“Kinetic Profiling of Haloperidol Analogues at the Human Dopamine D₂ Receptor. Journal of Medicinal Chemistry, 2019, 62, 9488-9520.	2.9	12
7	Pharmacological Characterization of a Novel 5-Hydroxybenzothiazolone-Derived Î²₂-Adrenoceptor Agonist with Functional Selectivity for Anabolic Effects on Skeletal Muscle Resulting in a Wider Cardiovascular Safety Window in Preclinical Studies. Journal of Pharmacology and Experimental Therapeutics, 2019, 369, 188-199.	1.3	16
8	Micro-pharmacokinetics: Quantifying local drug concentration at live cell membranes. Scientific Reports, 2018, 8, 3479.	1.6	38
9	Biased Agonism in Drug Discoveryâ€”Is It Too Soon to Choose a Path?. Molecular Pharmacology, 2018, 93, 259-265.	1.0	76
10	The inhibition of human lung fibroblast proliferation and differentiation by Gs-coupled receptors is not predicted by the magnitude of cAMP response. Respiratory Research, 2018, 19, 56.	1.4	27
11	Airway remodeling disease: primary human structural cells and phenotypic and pathway assays to identify targets with potential to prevent or reverse remodeling. Journal of Experimental Pharmacology, 2018, Volume 10, 75-85.	1.5	10
12	Reply to â€˜Antipsychotics with similar association kinetics at dopamine D2 receptors differ in extrapyramidal side-effectsâ€™. Nature Communications, 2018, 9, 3568.	5.8	2
13	Preassembled GPCR signaling complexes mediate distinct cellular responses to ultralow ligand concentrations. Science Signaling, 2018, 11, .	1.6	36
14	Single Step Determination of Unlabeled Compound Kinetics Using a Competition Association Binding Method Employing Time-Resolved FRET. Methods in Molecular Biology, 2018, 1824, 177-194.	0.4	11
15	Kinetic investigations into G protein activation and biased agonism at the dopamine D2 receptor. Proceedings for Annual Meeting of the Japanese Pharmacological Society, 2018, WCP2018, PO1-1-118.	0.0	0
16	Discovery of Fevipiprant (NVP-QAW039), a Potent and Selective DP₂ Receptor Antagonist for Treatment of Asthma. ACS Medicinal Chemistry Letters, 2017, 8, 582-586.	1.3	30
17	Extrapyramidal side effects of antipsychotics are linked to their association kinetics at dopamine D2 receptors. Nature Communications, 2017, 8, 763.	5.8	148
18	Fevipiprant (QAW039), a Slowly Dissociating CRTh2 Antagonist with the Potential for Improved Clinical Efficacy. Molecular Pharmacology, 2016, 89, 593-605.	1.0	56

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19	The role of kinetic context in apparent biased agonism at GPCRs. Nature Communications, 2016, 7, 10842.	5.8	270
20	Uncoupling the Structureâ€“Activity Relationships of Î²2 Adrenergic Receptor Ligands from Membrane Binding. Journal of Medicinal Chemistry, 2016, 59, 5780-5789.	2.9	27
21	Long Receptor Residence Time of C26 Contributes to Super Agonist Activity at the Human Î²₂ Adrenoceptor. Molecular Pharmacology, 2016, 89, 467-475.	1.0	12
22	An Alternative Thiol-Reactive Dye to Analyze Ligand Interactions with the Chemokine Receptor CXCR2 Using a New Thermal Shift Assay Format. Journal of Biomolecular Screening, 2016, 21, 243-251.	2.6	15
23	Functional desensitization of the Î²₂ adrenoceptor is not dependent on agonist efficacy. Pharmacology Research and Perspectives, 2015, 3, e00101.	1.1	10
24	Simulating the influence of plasma protein on measured receptor affinity in biochemical assays reveals the utility of Schild analysis for estimating compound affinity for plasma proteins. British Journal of Pharmacology, 2015, 172, 5037-5049.	2.7	11
25	Comparing the cardiovascular therapeutic indices of glycopyrronium and tiotropium in an integrated rat pharmacokinetic, pharmacodynamic and safety model. Toxicology and Applied Pharmacology, 2015, 287, 9-16.	1.3	7
26	â€˜Partialâ€™ competition of heterobivalent ligand binding may be mistaken for allosteric interactions: a comparison of different target interaction models. British Journal of Pharmacology, 2015, 172, 2300-2315.	2.7	10
27	Observed Drug-Receptor Association Rates Are Governed by Membrane Affinity: The Importance of Establishing â€œMicro-Pharmacokinetic/Pharmacodynamic Relationshipsâ€•at the Î²₂-Adrenoceptor. Molecular Pharmacology, 2014, 85, 608-617.	1.0	91
28	The identification of 7-[(R)-2-((1S,2S)-2-benzyloxycyclopentylamino)-1-hydroxyethyl]-4-hydroxybenzothiazolone as an inhaled long-acting Î²2-adrenoceptor agonist. Bioorganic and Medicinal Chemistry Letters, 2014, 24, 4341-4347.	1.0	1
29	The Design of the Indacaterol Molecule. Milestones in Drug Therapy, 2014, , 39-65.	0.1	1
30	The Antiallergic Mast Cell Stabilizers Lodoxamide and Bufrolin as the First High and Equipotent Agonists of Human and Rat GPR35. Molecular Pharmacology, 2014, 85, 91-104.	1.0	53
31	Identification of novel IP receptor agonists using historical ligand biased chemical arrays. Bioorganic and Medicinal Chemistry Letters, 2014, 24, 2247-2250.	1.0	1
32	The discovery of potent, orally bioavailable pyrazolo and triazolopyrimidine CXCR2 receptor antagonists. Bioorganic and Medicinal Chemistry Letters, 2014, 24, 72-76.	1.0	17
33	Investigating the molecular mechanisms through which <scp>FTY</scp>720â€<scp>P</scp> causes persistent <scp>S1P₁</scp> receptor internalization. British Journal of Pharmacology, 2014, 171, 4797-4807.	2.7	46
34	The discovery of potent, orally bioavailable pyrimidine-5-carbonitrile-6-alkyl CXCR2 receptor antagonists. Bioorganic and Medicinal Chemistry Letters, 2014, 24, 3285-3290.	1.0	16
35	The pharmacological rationale for combining muscarinic receptor antagonists and Î²-adrenoceptor agonists in the treatment of airway and bladder disease. Current Opinion in Pharmacology, 2014, 16, 31-42.	1.7	45
36	High Throughput Mutagenesis for Identification of Residues Regulating Human Prostacyclin (hIP) Receptor Expression and Function. PLoS ONE, 2014, 9, e97973.	1.1	13

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37	The Preclinical Pharmacology of Indacaterol. Milestones in Drug Therapy, 2014, , 25-37.	0.1	2
38	Exploring avidity: understanding the potential gains in functional affinity and target residence time of bivalent and heterobivalent ligands. British Journal of Pharmacology, 2013, 168, 1771-1785.	2.7	182
39	The Influence of Receptor Kinetics on the Onset and Duration of Action and the Therapeutic Index of NVA237 and Tiotropium. Journal of Pharmacology and Experimental Therapeutics, 2012, 343, 520-528.	1.3	112
40	Analysis of Multiple Histamine H₄ Receptor Compound Classes Uncovers GÎ±_i Protein- and Î²-Arrestin2-Biased Ligands. Molecular Pharmacology, 2012, 82, 1174-1182.	1.0	51
41	Reassessment of the pharmacology of Sphingosineâ€1â€phosphate S1P₃ receptor ligands using the DiscoveRx PathHunterâ„¢ and Ca²⁺ release functional assays. British Journal of Pharmacology, 2012, 167, 868-880.	2.7	13
42	An investigation into the structureâ€“activity relationships associated with the systematic modification of the Î²2-adrenoceptor agonist indacaterol. Bioorganic and Medicinal Chemistry Letters, 2012, 22, 6280-6285.	1.0	25
43	Slow receptor dissociation is not a key factor in the duration of action of inhaled longâ€acting Î²₂â€adrenoceptor agonists. British Journal of Pharmacology, 2012, 165, 2672-2683.	2.7	70
44	Endomorphin-2: A Biased Agonist at the Î¼-Opioid Receptor. Molecular Pharmacology, 2012, 82, 178-188.	1.0	88
45	HDL-like discs for assaying membrane proteins in drug discovery. Biophysical Chemistry, 2012, 165-166, 56-61.	1.5	6
46	The in vitro metabolism of sphingosine-1-phosphate: Identification; inhibition and pharmacological implications. European Journal of Pharmacology, 2011, 672, 56-61.	1.7	3
47	Design and synthesis of a library of chemokine antagonists. Bioorganic and Medicinal Chemistry Letters, 2011, 21, 6249-6252.	1.0	7
48	Agonist-Biased Signaling at the Histamine H₄ Receptor: JNJ7777120 Recruits Î²-Arrestin without Activating G Proteins. Molecular Pharmacology, 2011, 79, 749-757.	1.0	103
49	Efficacy is a contributing factor to the clinical onset of bronchodilation of inhaled Î²2-adrenoceptor agonists. Naunyn-Schmiedeberg's Archives of Pharmacology, 2010, 382, 255-263.	1.4	38
50	Synthesis and evaluation of two series of 4â€²-aza-carbocyclic nucleosides as adenosine A2A receptor agonists. Bioorganic and Medicinal Chemistry Letters, 2010, 20, 1219-1224.	1.0	10
51	A physical properties based approach for the exploration of a 4-hydroxybenzothiazolone series of Î²2-adrenoceptor agonists as inhaled long-acting bronchodilators. Bioorganic and Medicinal Chemistry Letters, 2010, 20, 5302-5307.	1.0	25
52	Elusive equilibrium: the challenge of interpreting receptor pharmacology using calcium assays. British Journal of Pharmacology, 2010, 161, 1250-1265.	2.7	88
53	Longâ€lasting target binding and rebinding as mechanisms to prolong in vivo drug action. British Journal of Pharmacology, 2010, 161, 488-508.	2.7	250
54	BJP issue on drug discovery. British Journal of Pharmacology, 2010, 161, 1201-1202.	2.7	0

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55	M ₃ -muscarinic receptor promotes insulin release via receptor phosphorylation/arrestin-dependent activation of protein kinase D1. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 21181-21186.	3.3	82
56	Î¼-Opioid Receptors: Correlation of Agonist Efficacy for Signalling with Ability to Activate Internalization. Molecular Pharmacology, 2010, 78, 756-766.	1.0	236
57	Measuring Receptor Target Coverage: A Radioligand Competition Binding Protocol for Assessing the Association and Dissociation Rates of Unlabeled Compounds. Current Protocols in Pharmacology, 2010, 50, Unit 9.14.	4.0	9
58	The M ₃ -muscarinic receptor regulates learning and memory in a receptor phosphorylation/arrestin-dependent manner. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 9440-9445.	3.3	134
59	The Identification of Indacaterol as an Ultralong-Acting Inhaled Î²₂-Adrenoceptor Agonist. Journal of Medicinal Chemistry, 2010, 53, 3675-3684.	2.9	90
60	Exploring the Mechanism of Agonist Efficacy: A Relationship between Efficacy and Agonist Dissociation Rate at the Muscarinic M₃ Receptor. Molecular Pharmacology, 2009, 76, 543-551.	1.0	108
61	The longâ€acting Î²â€adrenoceptor agonist, indacaterol, inhibits IgEâ€dependent responses of human lung mast cells. British Journal of Pharmacology, 2009, 158, 267-276.	2.7	26
62	Agonist efficacy and receptor desensitization: from partial truths to a fuller picture. British Journal of Pharmacology, 2009, 158, 165-168.	2.7	57
63	Miniaturized Receptor Binding Assays: Complications Arising from Ligand Depletion. Journal of Biomolecular Screening, 2007, 12, 255-266.	2.6	57
64	Quantifying the association and dissociation rates of unlabelled antagonists at the muscarinic M3 receptor. British Journal of Pharmacology, 2006, 148, 927-937.	2.7	111
65	In Vitro and in Vivo Pharmacological Characterization of 5-[(R)-2-(5,6-Diethyl-indan-2-ylamino)-1-hydroxy-ethyl]-8-hydroxy-1H-quinolin-2-one (Indacaterol), a Novel Inhaled Î²2 Adrenoceptor Agonist with a 24-h Duration of Action. Journal of Pharmacology and Experimental Therapeutics, 2006, 317, 762-770.	1.3	155
66	A Single Point Mutation (N514Y) in the Human M3 Muscarinic Acetylcholine Receptor Reveals Differences in the Properties of Antagonists: Evidence for Differential Inverse Agonism. Journal of Pharmacology and Experimental Therapeutics, 2006, 317, 1134-1142.	1.3	16
67	Assessing the Minimum Number of Data Points Required for Accurate IC50 Determination. Assay and Drug Development Technologies, 2005, 3, 525-531.	0.6	20
68	ATP priming of macrophage-derived chemokine responses in CHO cells expressing the CCR4 receptor. Naunyn-Schmiedeberg's Archives of Pharmacology, 2004, 370, 64-70.	1.4	9
69	Expression and Characterization of a 5-oxo-6E,8Z,11Z,14Z-Eicosatetraenoic Acid Receptor Highly Expressed on Human Eosinophils and Neutrophils. Molecular Pharmacology, 2003, 63, 471-477.	1.0	115
70	PPARÎ³ Is Not a Critical Mediator of Primary Monocyte Differentiation or Foam Cell Formation. Biochemical and Biophysical Research Communications, 2002, 290, 707-712.	1.0	20
71	Evidence that P2Y4 nucleotide receptors are involved in the regulation of rat aortic smooth muscle cells by UTP and ATP. British Journal of Pharmacology, 1998, 124, 703-710.	2.7	89
72	Enhancement of the response to purinergic agonists in P2Y1 transfected 1321N1 cells by antagonists suramin and PPADS. British Journal of Pharmacology, 1997, 120, 1049-1052.	2.7	6

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73	PPADS and suramin as antagonists at cloned P_{2Y}â€•and P_{2U}â€purinoceptors. British Journal of Pharmacology, 1996, 118, 704-710.	2.7	131
74	Cloned and transfected P2Y₄ receptors: characterization of a suramin and PPADSâ€insensitive response to UTP. British Journal of Pharmacology, 1996, 119, 1301-1303.	2.7	85
75	Interaction With the Lipid Membrane Influences Fentanyl Pharmacology. Advances in Drug and Alcohol Research, 0, 2, .	2.5	8