Frederick J Ehlert

List of Publications by Year
in descending order

87	3,134	159585 30	161849 54
papers	citations	h-index	g-index

88	88	88	1926
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Quantifying GPCR allostery and biased signaling. , 2020, , 143-169.		0
2	Comparison of Pharmacological Properties between the Kappa Opioid Receptor Agonist Nalfurafine and 42B, Its 3-Dehydroxy Analogue: Disconnect between in Vitro Agonist Bias and in Vivo Pharmacological Effects. ACS Chemical Neuroscience, 2020, 11, 3036-3050.	3.5	17
3	Quantitating Ligand Bias Using the Competitive Model of Ligand Activity. Methods in Molecular Biology, 2019, 1957, 235-247.	0.9	4
4	PDE8 Is Expressed in Human Airway Smooth Muscle and Selectively Regulates cAMP Signaling by Î²₂-Adrenergic Receptors and Adenylyl Cyclase 6. American Journal of Respiratory Cell and Molecular Biology, 2018, 58, 530-541.	2.9	39
5	Analysis of Biased Agonism. Progress in Molecular Biology and Translational Science, 2018, 160, 63-104.	1.7	17
6	Comparison of agonist occupancy of M₂ muscarinic receptorâ€G protein complexes in myocardial homogenates with functional estimates of active receptorâ€state affinity in isolated atria. FASEB Journal, 2018, 32, 555.20.	0.5	0
7	Estimation of the receptor-state affinity constants of ligands in functional studies using wild type and constitutively active mutant receptors: Implications for estimation of agonist bias. Journal of Pharmacological and Toxicological Methods, 2017, 83, 94-106.	0.7	3
8	Cooperativity Has Empirical and Ultimate Levels of Explanation. Trends in Pharmacological Sciences, 2016, 37, 620-623.	8.7	4
9	A kinetic model of GPCRs: analysis of G protein activity, occupancy, coupling and receptor-state affinity constants. Journal of Receptor and Signal Transduction Research, 2015, 35, 269-283.	2.5	8
10	A Novel Method for Analyzing Extremely Biased Agonism at G Proteinâ€"Coupled Receptors. Molecular Pharmacology, 2015, 87, 866-877.	2.3	69
11	Functional studies cast light on receptor states. Trends in Pharmacological Sciences, 2015, 36, 596-604.	8.7	29
12	Intrinsic relative activities of Îº opioid agonists in activating GÎ± proteins and internalizing receptor: Differences between human and mouse receptors. European Journal of Pharmacology, 2015, 761, 235-244.	3.5	32
13	Estimation of ligand affinity constants for receptor states in functional studies involving the allosteric modulation of G protein-coupled receptors: Implications for ligand bias. Journal of Pharmacological and Toxicological Methods, 2014, 69, 253-279.	0.7	13
14	International Union of Basic and Clinical Pharmacology. XC. Multisite Pharmacology: Recommendations for the Nomenclature of Receptor Allosterism and Allosteric Ligands. Pharmacological Reviews, 2014, 66, 918-947.	16.0	189
15	Using In Vitro Mutagenesis to Characterize Structure-Function Relationships in G Protein-Coupled Receptors. Methods in Pharmacology and Toxicology, 2014, , 177-195.	0.2	1
16	What Ligand-Gated Ion Channels Can Tell Us About the Allosteric Regulation of G Protein-Coupled Receptors. Progress in Molecular Biology and Translational Science, 2013, 115, 291-347.	1.7	2
17	Effects of Asparagine Mutagenesis of Conserved Aspartic Acids in Helix 2 (D2.50) and 3 (D3.32) of M₁â€"M₄ Muscarinic Receptors on the Irreversible Binding of Nitrogen Mustard Analogs of Acetylcholine and McN-A-343. Biochemistry, 2013, 52, 4914-4928.	2.5	8
18	Muscarinic Agonists and Antagonists: Effects on Gastrointestinal Function. Handbook of Experimental Pharmacology, 2012, , 343-374.	1.8	31

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19	Characterization of Muscarinic Receptors in the Human Bladder Mucosa: Direct Quantification of Subtypes Using 4-DAMP Mustard. Urology, 2011, 78, 721.e7-721.e12.	1.0	9
20	Analysis of Agonism and Inverse Agonism in Functional Assays with Constitutive Activity: Estimation of Orthosteric Ligand Affinity Constants for Active and Inactive Receptor States. Journal of Pharmacology and Experimental Therapeutics, 2011, 338, 671-686.	2.5	29
21	Quantifying Agonist Activity at G Protein-Coupled Receptors. Journal of Visualized Experiments, 2011, , e3179.	0.3	6
22	Analysis of Functional Responses at G Protein-Coupled Receptors: Estimation of Relative Affinity Constants for the Inactive Receptor State. Journal of Pharmacology and Experimental Therapeutics, 2011, 338, 658-670.	2.5	13
23	Investigating the interaction of McN-A-343 with the M2 muscarinic receptor using its nitrogen mustard derivative. Biochemical Pharmacology, 2010, 79, 1025-1035.	4.4	6
24	A Conserved Motif in the Membrane Proximal C-Terminal Tail of Human Muscarinic M₁Acetylcholine Receptors Affects Plasma Membrane Expression. Journal of Pharmacology and Experimental Therapeutics, 2010, 332, 76-86.	2.5	22
25	Mutagenesis of Nucleophilic Residues near the Orthosteric Binding Pocket of M₁and M₂Muscarinic receptors: Effect on the Binding of Nitrogen Mustard Analogs of Acetylcholine and McN-A-343. Molecular Pharmacology, 2010, 78, 745-755.	2.3	8
26	Effect of streptozotocin on neurogenic M 2 and M 3 muscarinic receptorâ€mediated contractions in mouse urinary bladder. FASEB Journal, 2010, 24, 579.6.	0.5	0
27	Estimation of Relative Microscopic Affinity Constants of Agonists for the Active State of the Receptor in Functional Studies on M2 and M3 Muscarinic Receptors. Molecular Pharmacology, 2009, 75, 381-396.	2.3	42
28	Selectivity of Agonists for the Active State of M₁ to M₄ Muscarinic Receptor Subtypes. Journal of Pharmacology and Experimental Therapeutics, 2009, 328, 331-342.	2.5	65
29	The guinea pig ileum lacks the direct, high-potency, M2-muscarinic, contractile mechanism characteristic of the mouse ileum. Naunyn-Schmiedeberg's Archives of Pharmacology, 2009, 380, 327-335.	3.0	8
30	On the analysis of ligand-directed signaling at G protein-coupled receptors. Naunyn-Schmiedeberg's Archives of Pharmacology, 2008, 377, 549-577.	3.0	78
31	Cysteine Pairs in the Third Intracellular Loop of the Muscarinic M1 Acetylcholine Receptor Play a Role in Agonist-Induced Internalization. Journal of Pharmacology and Experimental Therapeutics, 2008, 324, 196-205.	2.5	6
32	Use of Acetylcholine Mustard to Study Allosteric Interactions at the M2 Muscarinic Receptor. Journal of Pharmacology and Experimental Therapeutics, 2008, 327, 518-528.	2.5	7
33	Two-State Models and the Analysis of the Allosteric Effect of Gallamine at the M2Muscarinic Receptor. Journal of Pharmacology and Experimental Therapeutics, 2008, 325, 1039-1060.	2.5	25
34	A simple method for estimation of agonist activity at GPCRs: characterization of responses elicited by M 2 and M 3 muscarinic receptors. FASEB Journal, 2008, 22, 724.10.	0.5	0
35	Estimation of Agonist Activity at G Protein-Coupled Receptors: Analysis of M2 Muscarinic Receptor Signaling through Gi/o,Gs, and G15. Journal of Pharmacology and Experimental Therapeutics, 2007, 321, 1193-1207.	2.5	115
36	Neuronally Released Acetylcholine Acts on the M2 Muscarinic Receptor to Oppose the Relaxant Effect of Isoproterenol on Cholinergic Contractions in Mouse Urinary Bladder. Journal of Pharmacology and Experimental Therapeutics, 2007, 322, 631-637.	2.5	33

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37	Expression and localization of adenylyl cyclases and G proteinâ€coupled receptors in guinea pig ileum caveolae and lipid rafts. FASEB Journal, 2007, 21, A792.	0.5	0
38	McNâ€Aâ€343 directs signaling through the M ₂ muscarinic receptorâ€Gî± ₁₅ complex relative to that of G _i. FASEB Journal, 2007, 21, A430.	0.5	0
39	Use of Intrinsic Relative Activity to determine agonist dependent Gâ€protein signaling at the M4 muscarinic receptor. FASEB Journal, 2007, 21, A424.	0.5	0
40	Determination of the rate of muscarinic M1 receptor plasma membrane delivery using a regulated secretion/aggregation system. Journal of Pharmacological and Toxicological Methods, 2006, 53, 219-233.	0.7	7
41	Differential Coupling of Muscarinic M1, M2, and M3 Receptors to Phosphoinositide Hydrolysis in Urinary Bladder and Longitudinal Muscle of the Ileum of the Mouse. Journal of Pharmacology and Experimental Therapeutics, 2006, 318, 649-656.	2.5	21
42	Analysis of Allosterism in Functional Assays. Journal of Pharmacology and Experimental Therapeutics, 2005, 315, 740-754.	2.5	150
43	The M2 Muscarinic Receptor Mediates Contraction through Indirect Mechanisms in Mouse Urinary Bladder. Journal of Pharmacology and Experimental Therapeutics, 2005, 313, 368-378.	2.5	79
44	Comparison of the Antimuscarinic Action of p-Fluorohexahydrosiladifenidol in Ileal and Tracheal Smooth Muscle. Journal of Pharmacology and Experimental Therapeutics, 2005, 312, 592-600.	2.5	7
45	Muscarinic Agonist-Mediated Heterologous Desensitization in Isolated Ileum Requires Activation of Both Muscarinic M2 and M3 Receptors. Journal of Pharmacology and Experimental Therapeutics, 2004, 308, 339-349.	2.5	20
46	Functional analysis of muscarinic acetylcholine receptors using knockout mice. Life Sciences, 2004, 75, 2971-2981.	4.3	80
47	Comparison of the pharmacological antagonism of M2 and M3 muscarinic receptors expressed in isolation and in combination. Biochemical Pharmacology, 2003, 65, 1227-1241.	4.4	20
48	Contractile role of M2 and M3 muscarinic receptors in gastrointestinal, airway and urinary bladder smooth muscle. Life Sciences, 2003, 74, 355-366.	4.3	87
49	Increased Relaxant Action of Forskolin and Isoproterenol against Muscarinic Agonist-Induced Contractions in Smooth Muscle from M2 Receptor Knockout Mice. Journal of Pharmacology and Experimental Therapeutics, 2003, 305, 106-113.	2.5	65
50	Pharmacological Analysis of the Contractile Role of M 2 and M 3 Muscarinic Receptors in Smooth Muscle. Receptors and Channels, 2003, 9, 261-277.	1.1	12
51	Pharmacological Analysis of the Contractile Role of M 2 and M 3 Muscarinic Receptors in Smooth Muscle. Receptors and Channels, 2003, 9, 261-277.	1.1	25
52	Pharmacological analysis of the contractile role of M2 and M3 muscarinic receptors in smooth muscle. Receptors and Channels, 2003, 9, 261-77.	1.1	10
53	Functional role of muscarinic M2 receptors in Î±,Î² -methylene ATP induced, neurogenic contractions in guinea-pig ileum. British Journal of Pharmacology, 2000, 129, 1458-1464.	5.4	16
54	Human urotensin II mediates vasoconstriction via an increase in inositol phosphates. European Journal of Pharmacology, 2000, 406, 265-271.	3.5	99

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55	Contractile role of M2 and M3 muscarinic receptors in gastrointestinal smooth muscle. Life Sciences, 1999, 64, 387-394.	4.3	79
56	The use of irreversible ligands to inactivate receptor subtypes: 4-DAMP mustard and muscarinic receptors in smooth muscle. Life Sciences, 1998, 62, 1659-1664.	4.3	9
57	SUBTYPES OF THE MUSCARINIC RECEPTOR IN SMOOTH MUSCLE. Life Sciences, 1997, 61, 1729-1740.	4.3	95
58	The interaction of 4-DAMP mustard with subtypes of the muscarinic receptor. Life Sciences, 1996, 58, 1971-1978.	4.3	24
59	Involvement of the M2 muscarinic receptor in contractions of the guinea pig trachea, guinea pig esophagus, and rat fundus. Biochemical Pharmacology, 1996, 51, 779-788.	4.4	40
60	Stimulation of cyclic AMP accumulation and phosphoinositide hydrolysis by M3 muscarinic receptors in the rat peripheral lung. Biochemical Pharmacology, 1996, 52, 643-658.	4.4	29
61	Functional role of M2 muscarinic receptors in the guinea pig ileum. Life Sciences, 1995, 56, 965-971.	4.3	37
62	Muscarinic receptors and novel strategies for the treatment of age-related brain disorders. Life Sciences, 1994, 55, 2135-2145.	4.3	24
63	Tertiary (2-haloethyl)amine derivatives of the muscarinic agent McN-A-343, [4-[[N-(3-chlorophenyl)carbamoyl]oxy]-2-butynyl]trimethylammonium chloride. Journal of Medicinal Chemistry, 1990, 33, 281-286.	6.4	19
64	Muscarinic M1 receptors stimulate phosphoinositide hydrolysis in bovine cerebral arteries. Life Sciences, 1990, 47, 2163-2169.	4.3	9
65	Correlation between the Binding Parameters of Muscarinic Agonists and thier Inhibition of Adenylate Cyclase Activity. Advances in Experimental Medicine and Biology, 1988, 236, 265-276.	1.6	5
66	â€˜Inverse agonistsâ€™, cooperativity and drug action at benzodiazepine receptors. Trends in Pharmacological Sciences, 1986, 7, 28-32.	8.7	46
67	Relation between behaviorally augmented tolerance and upregulation of muscarinic receptors in the CNS: Effects of chronic administration of scopolamine. Psychopharmacology, 1986, 88, 33-39.	3.1	21
68	A comparison of the effects of cinnarizine and related compounds on [3H]nitrendipine binding in the brain, heart and ileum. Life Sciences, 1984, 34, 2347-2355.	4.3	2
69	Heterogeneity of Benzodiazepine Receptors. , 1984, , 575-593.		6
70	MUSCARINIC RECEPTOR [3H]LIGAND BINDING METHODS. , 1984, , 339-355.		0
71	An allosteric model for benzodiazepine receptor function. Biochemical Pharmacology, 1983, 32, 2375-2383.	4.4	101
72	The Nature of Muscarinic Receptor Binding. , 1983, , 241-283.		8

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73	The binding of [3H]nitrendipine to receptors for calcium channel antagonists in the heart, cerebral cortex, and ileum of rats. Life Sciences, 1982, 30, 2191-2202.	4.3	221
74	A simple and rapid radio-receptor assay for the estimation of acetylcholine. Life Sciences, 1982, 31, 347-354.	4.3	13
75	The influence of temperature and gamma-aminobutyric acid on benzodiazepine receptor subtypes in the hippocampus of the rat. Biochemical and Biophysical Research Communications, 1982, 106, 1134-1140.	2.1	17
76	Modulation of benzodiazepine receptor binding: Insight into pharmacological efficacy. European Journal of Pharmacology, 1982, 78, 249-253.	3.5	50
77	The interaction of [3H]nitrendipine with receptors for calcium antagonists in the cerebral cortex and heart of rats. Biochemical and Biophysical Research Communications, 1982, 104, 937-943.	2.1	182
78	Muscarinic cholinergic receptor heterogeneity. Trends in Neurosciences, 1982, 5, 336-339.	8.6	25
79	Î³-Aminobutyric acid regulation of the benzodiazepine receptor: biochemical evidence for pharmacologically different effects of benzodiazepines and propyl Î²-carboline-3-carboxylate. European Journal of Pharmacology, 1981, 70, 593-595.	3.5	40
80	Multiple benzodiazepine receptors and their regulation by Î³-aminobutyric. Life Sciences, 1981, 29, 235-248.	4.3	78
81	Striatal muscarinic receptors: Regulation by dopaminergic agonists. Life Sciences, 1981, 28, 2441-2448.	4.3	29
82	Regulation of muscarinic receptor binding by guanine nucleotides and N-ethylmaleimide. Journal of Supramolecular Structure, 1980, 14, 149-162.	2.3	61
83	Muscarinic receptor binding in rat brain using the agonist, [3H]cis methyldioxolane. Life Sciences, 1980, 26, 961-967.	4.3	68
84	The influence of guanyl-5â€²-yl imidodiphosphate and sodium on muscarinic receptor binding in the rat brain and longitudinal muscle of the rat ileum. Life Sciences, 1980, 26, 245-252.	4.3	67
85	Muscarinic receptor subsensitivity in the longitudinal muscle of the rat ileum following chronic anticholinesterase treatment with diisopropylfluorophosphate. Biochemical Pharmacology, 1980, 29, 1391-1397.	4.4	40
86	The influence of guanyl-5â€²-yl imidodiphosphate and sodium chloride on the binding of the muscarinic agonist, [3H] cis methyldioxolane. European Journal of Pharmacology, 1980, 61, 317-318.	3.5	18
87	Differential regulation of muscarinic agonist binding sites following chronic cholinesterase inhibition. European Journal of Pharmacology, 1980, 66, 379-380.	3.5	35