Darryl Scott Pickering

List of Publications by Year
in descending order

102	2,202	236925	315739
papers	citations	25 h-index	38 g-index

103	103	103	2052
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Ionotropic glutamate-like receptor Î´2 binds <scp>d</scp> -serine and glycine. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 14116-14121.	7.1	138
2	A pharmacological characterization of the mGluR1Î± subtype of the metabotropic glutamate receptor expressed in a cloned baby hamster kidney cell line. Brain Research, 1993, 619, 22-28.	2.2	96
3	Correlation between Anticonvulsant Activity and Inhibitory Action on Glial Î³-Aminobutyric Acid Uptake of the Highly Selective Mouse Î³-Aminobutyric Acid Transporter 1 Inhibitor 3-Hydroxy-4-amino-4,5,6,7-tetrahydro-1,2-benzisoxazole and ItsN-Alkylated Analogs. Journal of Pharmacology and Experimental Therapeutics, 2002, 302, 636-644.	2.5	73
4	Structural Proof of a Dimeric Positive Modulator Bridging Two Identical AMPA Receptor-Binding Sites. Chemistry and Biology, 2007, 14, 1294-1303.	6.0	63
5	Identification of Amino Acid Residues in GluR1 Responsible for Ligand Binding and Desensitization. Journal of Neuroscience, 2001, 21, 3052-3062.	3.6	56
6	Full Domain Closure of the Ligand-binding Core of the Ionotropic Glutamate Receptor iGluR5 Induced by the High Affinity Agonist Dysiherbaine and the Functional Antagonist 8,9-Dideoxyneodysiherbaine. Journal of Biological Chemistry, 2009, 284, 14219-14229.	3.4	53
7	Tyr702 Is an Important Determinant of Agonist Binding and Domain Closure of the Ligand-Binding Core of GluR2. Molecular Pharmacology, 2005, 67, 703-713.	2.3	50
8	Chemo-Enzymatic Synthesis of a Series of 2,4-Syn-Functionalized (S)-Glutamate Analogues: New Insight into the Structureâ^'Activity Relation of Ionotropic Glutamate Receptor Subtypes 5, 6, and 7. Journal of Medicinal Chemistry, 2008, 51, 4093-4103.	6.4	50
9	Partial Agonism and Antagonism of the Ionotropic Glutamate Receptor iGLuR5. Journal of Biological Chemistry, 2007, 282, 25726-25736.	3.4	48
10	The Structure of a Mixed GluR2 Ligand-binding Core Dimer in Complex with (S)-Glutamate and the Antagonist (S)-NS1209. Journal of Molecular Biology, 2006, 357, 1184-1201.	4.2	47
11	Design, Synthesis, and Pharmacology of a Highly Subtype-Selective GluR1/2 Agonist, (RS)-2-Amino-3-(4-chloro-3-hydroxy-5-isoxazolyl)propionic Acid (Cl-HIBO). Journal of Medicinal Chemistry, 2003, 46, 2246-2249.	6.4	46
12	Chemoenzymatic Synthesis of New 2,4-syn-Functionalized (S)-Glutamate Analogues and Structureâ€“Activity Relationship Studies at Ionotropic Glutamate Receptors and Excitatory Amino Acid Transporters. Journal of Medicinal Chemistry, 2013, 56, 1614-1628.	6.4	42
13	Differential role of AMPA receptors in mouse tests of antidepressant and anxiolytic action. Brain Research, 2015, 1601, 117-126.	2.2	42
14	Lessons from crystal structures of kainate receptors. Neuropharmacology, 2017, 112, 16-28.	4.1	40
15	D -Aspartate and NMDA, but not L -aspartate, block AMPA receptors in rat hippocampal neurons. British Journal of Pharmacology, 2005, 145, 449-459.	5.4	37
16	Development of calcium-permeable ?-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid receptors in cultured neocortical neurons visualized by cobalt staining. Journal of Neuroscience Research, 1998, 54, 273-281.	2.9	36
17	Agonist discrimination between AMPA receptor subtypes. NeuroReport, 2000, 11, 2643-2648.	1.2	36
18	Does increasing the ratio of AMPA-to-NMDA receptor mediated neurotransmission engender antidepressant action? Studies in the mouse forced swim and tail suspension tests. Neuroscience Letters, 2013, 546, 6-10.	2.1	36

#	Article	IF	Citations
19	Characterization of the 1H-Cyclopentapyrimidine-2,4(1H,3H)-dione Derivative (S)-CPW399 as a Novel, Potent, and Subtype-Selective AMPA Receptor Full Agonist with Partial Desensitization Properties. Journal of Medicinal Chemistry, 2001, 44, 4501-4504.	6.4	35
20	Structural rearrangement of the intracellular domains during AMPA receptor activation. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E3950-9.	7.1	35
21	Systemic and Brain Pharmacokinetics of Perforin Inhibitor Prodrugs. Molecular Pharmaceutics, 2016, 13, 2484-2491.	4.6	32
22	Role of desensitization and subunit expression for kainate receptor-mediated neurotoxicity in murine neocortical cultures. , 1999, 55, 208-217.		29
23	A Tetrazolyl-Substituted Subtype-Selective AMPA Receptor AgonistâŠ¥. Journal of Medicinal Chemistry, 2007, 50, 2408-2414.	6.4	29
24	Augmentation of Anticancer Drug Efficacy in Murine Hepatocellular Carcinoma Cells by a Peripherally Acting Competitive N-Methyl-<scp>d</scp>-aspartate (NMDA) Receptor Antagonist. Journal of Medicinal Chemistry, 2017, 60, 9885-9904.	6.4	27
25	Expression of nanomolar-affinity binding sites for melatonin in Syrian hamster RPMI 1846 melanoma cells. Cellular Signalling, 1992, 4, 201-207.	3.6	26
26	Binding site and interlobe interactions of the ionotropic glutamate receptor GluK3 ligand binding domain revealed by high resolution crystal structure in complex with (S)-glutamate. Journal of Structural Biology, 2011, 176, 307-314.	2.8	26
27	Depolarization-induced release of [3H]d-aspartate from GABAergic neurons caused by reversal of glutamate transporters. International Journal of Developmental Neuroscience, 2000, 18, 309-315.	1.6	25
28	Convergent Synthesis and Pharmacology of Substituted Tetrazolyl-2-amino-3-(3-hydroxy-5-methyl-4-isoxazolyl)propionic acid Analogues. Journal of Medicinal Chemistry, 2005, 48, 3438-3442.	6.4	25
29	4-Hydroxy-1,2,5-oxadiazol-3-yl Moiety as Bioisoster of the Carboxy Function. Synthesis, Ionization Constants, and Molecular Pharmacological Characterization at Ionotropic Glutamate Receptors of Compounds Related to Glutamate and Its Homologues. Journal of Medicinal Chemistry, 2010, 53, 4110-4118.	6.4	24
30	Studies on an (S)-2-Amino-3-(3-hydroxy-5-methyl-4-isoxazolyl)propionic Acid (AMPA) Receptor Antagonist IKM-159: Asymmetric Synthesis, Neuroactivity, and Structural Characterization. Journal of Medicinal Chemistry, 2013, 56, 2283-2293.	6.4	23
31	1H-Cyclopentapyrimidine-2,4(1H,3H)-dione-Related Ionotropic Glutamate Receptors Ligands. Structureâ^'Activity Relationships and Identification of Potent and Selective iGluR5 Modulators. Journal of Medicinal Chemistry, 2008, 51, 6614-6618.	6.4	22
32	Crystal Structure and Pharmacological Characterization of a Novel N-Methyl-d-aspartate (NMDA) Receptor Antagonist at the GluN1 Glycine Binding Site. Journal of Biological Chemistry, 2013, 288, 33124-33135.	3.4	22
33	Exploring the GluR2 ligand-binding core in complex with the bicyclical AMPA analogue (S)-4-AHCP. FEBS Journal, 2005, 272, 1639-1648.	4.7	21
34	Effect of synthetic and natural phospholipids on N-acylphosphatidylethanolamine-hydrolyzing phospholipase D activity. Chemistry and Physics of Lipids, 2009, 162, 53-61.	3.2	21
35	The Glutamate Receptor GluR5 Agonist (S)-2-Amino-3-(3-hydroxy-7,8-dihydro-6H-cyclohepta[d]isoxazol-4-yl)propionic Acid and the 8-Methyl Analogue: Synthesis, Molecular Pharmacology, and Biostructural Characterizationâ€PDB ID: 2WKY.. Journal of Medicinal Chemistry, 2009, 52, 4911-4922.	6.4	21
36	Selective Kainate Receptor (GluK1) Ligands Structurally Based upon 1H-Cyclopentapyrimidin-2,4(1H,3H)-dione: Synthesis, Molecular Modeling, and Pharmacological and Biostructural Characterization. Journal of Medicinal Chemistry, 2011, 54, 4793-4805.	6.4	21

#	Article	IF	Citations
37	Binding Mode of an Î±-Amino Acid-Linked Quinoxaline-2,3-dione Analogue at Glutamate Receptor Subtype GluK1. ACS Chemical Neuroscience, 2015, 6, 845-854.	3.5	21
38	Investigation of antidepressant-like and anxiolytic-like actions and cognitive and motor side effects of four N-methyl-d-aspartate receptor antagonists in mice. Behavioural Pharmacology, 2017, 28, 37-47.	1.7	21
39	A stereochemical anomaly: the cyclised (R)-AMPA analogue (R)-3-hydroxy-4,5,6,7-tetrahydroisoxazolo[5,4-c]pyridine-5-carboxylic acid [(R)-5-HPCA] resembles (S)-AMPA at glutamate receptors. Organic and Biomolecular Chemistry, 2004, 2, 206.	2.8	20
40	Biostructural and Pharmacological Studies of Bicyclic Analogues of the 3-Isoxazolol Glutamate Receptor Agonist Ibotenic Acid. Journal of Medicinal Chemistry, 2010, 53, 8354-8361.	6.4	20
41	UCCB01-125, a dimeric inhibitor of PSD-95, reduces inflammatory pain without disrupting cognitive or motor performance: Comparison with the NMDA receptor antagonist MK-801. Neuropharmacology, 2013, 67, 193-200.	4.1	20
42	Enthalpy-Entropy Compensation in the Binding of Modulators at Ionotropic Glutamate Receptor GluA2. Biophysical Journal, 2016, 110, 2397-2406.	0.5	20
43	(S)-2-Amino-3-(5-methyl-3-hydroxyisoxazol-4-yl)propanoic Acid (AMPA) and Kainate Receptor Ligands: Further Exploration of Bioisosteric Replacements and Structural and Biological Investigation. Journal of Medicinal Chemistry, 2018, 61, 2124-2130.	6.4	20
44	Chemo-Enzymatic Synthesis of (2S,4R)-2-Amino-4-(3-(2,2-diphenylethylamino)-3-oxopropyl)pentanedioic Acid: A Novel Selective Inhibitor of Human Excitatory Amino Acid Transporter Subtype 2. Journal of Medicinal Chemistry, 2008, 51, 4085-4092.	6.4	19
45	A New Phenylalanine Derivative Acts as an Antagonist at the AMPA Receptor GluA2 and Introduces Partial Domain Closure: Synthesis, Resolution, Pharmacology, and Crystal Structure. Journal of Medicinal Chemistry, 2011, 54, 7289-7298.	6.4	19
46	Structureâ€“Activity Relationship Study of Ionotropic Glutamate Receptor Antagonist (2S,3R)-3-(3-Carboxyphenyl)pyrrolidine-2-carboxylic Acid. Journal of Medicinal Chemistry, 2015, 58, 6131-6150.	6.4	19
47	Synthesis and pharmacological characterization of the selective GluK1 radioligand (S)-2-amino-3-(6-[³H]-2,4-dioxo-3,4-dihydrothieno[3,2-d]pyrimidin-1(2H)-yl)propanoic acid ([³H]-NF608). MedChemComm, 2016, 7, 2136-2144.	3.4	19
48	Discovery of a New Class of Ionotropic Glutamate Receptor Antagonists by the Rational Design of (2S,3R)-3-(3-Carboxyphenyl)-pyrrolidine-2-carboxylic Acid. ACS Chemical Neuroscience, 2011, 2, 107-114.	3.5	18
49	Use of the 4-Hydroxytriazole Moiety as a Bioisosteric Tool in the Development of Ionotropic Glutamate Receptor Ligands. Journal of Medicinal Chemistry, 2019, 62, 4467-4482.	6.4	18
50	Bloodâ€“Brain Barrier Permeability and Brain Uptake Mechanism of Kainic Acid and Dihydrokainic Acid. Neurochemical Research, 2015, 40, 542-549.	3.3	17
51	Binding and functional pharmacological characteristics of gepant-type antagonists in rat brain and mesenteric arteries. Vascular Pharmacology, 2017, 90, 36-43.	2.1	17
52	Revisiting the Quinoxalinedione Scaffold in the Construction of New Ligands for the Ionotropic Glutamate Receptors. ACS Chemical Neuroscience, 2017, 8, 2477-2495.	3.5	17
53	Expression of functional metabotropic and ionotropic glutamate receptors in baculovirus-infected insect cells. Neuroscience Letters, 1994, 173, 139-142.	2.1	16
54	3-Substituted phenylalanines as selective AMPA- and kainate receptor ligands. Bioorganic and Medicinal Chemistry, 2009, 17, 6390-6401.	3.0	16

#	Article	IF	Citations
55	Structural basis for positive allosteric modulation of AMPA and kainate receptors. Journal of Physiology, 2022, 600, 181-200.	2.9	16
56	3-Hydroxypyridazine 1-oxides as carboxylate bioisosteres: A new series of subtype-selective AMPA receptor agonists. Neuropharmacology, 2006, 51, 52-59.	4.1	15
57	<scp>L</scp>â€Asp is a useful tool in the purification of the ionotropic glutamate receptorÂA2 ligandâ€binding domain. FEBS Journal, 2014, 281, 2422-2430.	4.7	15
58	Structure and Affinity of Two Bicyclic Glutamate Analogues at AMPA and Kainate Receptors. ACS Chemical Neuroscience, 2017, 8, 2056-2064.	3.5	15
59	Vascular and molecular pharmacology of the metabolically stable CGRP analogue, SAX. European Journal of Pharmacology, 2018, 829, 85-92.	3.5	15
60	Role of GluR2 expression in AMPA-induced toxicity in cultured murine cerebral cortical neurons. Journal of Neuroscience Research, 2001, 65, 267-277.	2.9	14
61	Pharmacological and structural characterization of conformationally restricted (S)-glutamate analogues at ionotropic glutamate receptors. Journal of Structural Biology, 2012, 180, 39-46.	2.8	14
62	In vitro and inÂvivo effects of a novel dimeric inhibitor of <scp>PSD</scp>â€95 on excitotoxicity and functional recovery after experimental traumatic brain injury. European Journal of Neuroscience, 2017, 45, 238-248.	2.6	14
63	Molecular mechanism of agonist recognition by the ligandâ€binding core of the ionotropic glutamate receptor 4. FEBS Letters, 2008, 582, 4089-4094.	2.8	13
64	Structural analysis of the positive AMPA receptor modulators CX516 and Me-CX516 in complex with the GluA2 ligand-binding domain. Acta Crystallographica Section D: Biological Crystallography, 2013, 69, 1645-1652.	2.5	13
65	N1-Substituted Quinoxaline-2,3-diones as Kainate Receptor Antagonists: X-ray Crystallography, Structureâ€“Affinity Relationships, and in Vitro Pharmacology. ACS Chemical Neuroscience, 2019, 10, 1841-1853.	3.5	13
66	Comparison of the agonist binding site of homomeric, heteromeric, and chimeric GluR1o and GluR3o AMPA receptors. , 1997, 49, 176-185.		12
67	Synthesis and in vitro pharmacology at AMPA and kainate preferring glutamate receptors of 4-heteroarylmethylidene glutamate analogues. Bioorganic and Medicinal Chemistry, 2003, 11, 4341-4349.	3.0	12
68	Pharmacological characterization of (4R)-alkyl glutamate analogues at the ionotropic glutamate receptors â€" Focus on subtypes iGlu5â€"7. European Journal of Pharmacology, 2009, 609, 1-4.	3.5	12
69	Molecular Recognition of Two 2,4â€synâ€Functionalized (S)â€Glutamate Analogues by the Kainate Receptor GluK3 Ligand Binding Domain. ChemMedChem, 2014, 9, 2254-2259.	3.2	12
70	Structural and Pharmacological Characterization of Phenylalanineâ€Based AMPA Receptor Antagonists at Kainate Receptors. ChemMedChem, 2012, 7, 1793-1798.	3.2	11
71	The Presence of Calcitonin Gene-Related Peptide and Its Receptors in Rat, Pig and Human Brain: Species Differences in Calcitonin Gene-Related Peptide Pharmacology. Pharmacology, 2019, 104, 332-341.	2.2	11
72	The Structure of a High-Affinity Kainate Receptor: GluK4 Ligand-Binding Domain Crystallized with Kainate. Structure, 2016, 24, 1582-1589.	3.3	10

#	Article	IF	Citations
73	Positive allosteric modulation of Î±-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid glutamate receptors differentially modulates the behavioural effects of citalopram in mouse models of antidepressant and anxiolytic action. Behavioural Pharmacology, 2016, 27, 549-555.	1.7	10
74	Structural requirements for specific inhibition of microsomal aminopeptidase by mercaptoamines. Archives of Biochemistry and Biophysics, 1985, 239, 368-374.	3.0	9
75	Structures of the Ligand-Binding Core of iGluR2 in Complex with the Agonists (R- and (S)-2-Amino-3-(4-hydroxy-1,2,5-thiadiazol-3-yl)propionic Acid Explain Their Unusual Equipotency. Journal of Medicinal Chemistry, 2008, 51, 1459-1463.	6.4	9
76	Age-related changes in GABA and benzodiazepine receptor binding in rat brain are influenced by sampling time. Progress in Neuro-Psychopharmacology and Biological Psychiatry, 1988, 12, 337-344.	4.8	8
77	A pharmacological profile of the high-affinity GluK5 kainate receptor. European Journal of Pharmacology, 2016, 788, 315-320.	3.5	8
78	Effects of sertraline, duloxetine, vortioxetine, and idazoxan in the rat affective bias test. Psychopharmacology, 2016, 233, 3763-3770.	3.1	8
79	Studies on Aryl-Substituted Phenylalanines: Synthesis, Activity, and Different Binding Modes at AMPA Receptors. Journal of Medicinal Chemistry, 2016, 59, 448-461.	6.4	8
80	N-(7-(1H-Imidazol-1-yl)-2,3-dioxo-6-(trifluoromethyl)-3,4-dihydroquinoxalin-1(2H)-yl)benzamide, a New Kainate Receptor Selective Antagonist and Analgesic: Synthesis, X-ray Crystallography, Structureâ€“Affinity Relationships, and in Vitro and in Vivo Pharmacology. ACS Chemical Neuroscience, 2019, 10, 4685-4695.	3.5	8
81	Ionotropic Glutamate Receptor GluA2 in Complex with Bicyclic Pyrimidinedione-Based Compounds: When Small Compound Modifications Have Distinct Effects on Binding Interactions. ACS Chemical Neuroscience, 2020, 11, 1791-1800.	3.5	8
82	Utilizing a C(sp3)â€“H Activation Strategy and Structureâ€“Activity Relationship Studies at the Ionotropic Glutamate Receptors. ACS Chemical Neuroscience, 2020, 11, 674-701.	3.5	8
83	4,4â€Dimethylâ€and Diastereomeric 4â€Hydroxyâ€4â€methylâ€(2S)â€Glutamate Analogues Display Distinct Pharmacological Profiles at Ionotropic Glutamate Receptors and Excitatory Amino Acid Transporters. ChemMedChem, 2009, 4, 1925-1929.	3.2	7
84	Rational Design, Synthesis and Pharmacological Evaluation of the (2R)- and (2S)-Stereoisomers of 3-(2-Carboxypyrrolidinyl)-2-methyl Acetic Acid as Ligands for the Ionotropic Glutamate Receptors. ChemMedChem, 2011, 6, 498-504.	3.2	7
85	A Diversity Oriented Synthesis Approach to New 2,3-trans-Substituted <scp>l</scp>-Proline Analogs as Potential Ligands for the Ionotropic Glutamate Receptors. ACS Chemical Neuroscience, 2020, 11, 702-714.	3.5	7
86	Cognitive enhancing effects of an AMPA receptor positive modulator on place learning in mice. Behavioural Brain Research, 2012, 226, 18-25.	2.2	6
87	Design, synthesis and in vitro pharmacology of GluK1 and GluK3 antagonists. Studies towards the design of subtype-selective antagonists through 2-carboxyethyl-phenylalanines with substituents interacting with non-conserved residues in the GluK binding sites. Bioorganic and Medicinal Chemistry, 2014, 22, 5368-5377.	3.0	6
88	Effects of the dimeric PSD-95 inhibitor UCCB01-144 in mouse models of pain, cognition and motor function. European Journal of Pharmacology, 2016, 780, 166-173.	3.5	6
89	Design and Synthesis of a Series of <scp>l</scp>-trans-4-Substituted Prolines as Selective Antagonists for the Ionotropic Glutamate Receptors Including Functional and X-ray Crystallographic Studies of New Subtype Selective Kainic Acid Receptor Subtype 1 (GluK1) Antagonist (2S,4R)-4-(2-Carboxyphenoxy)pyrrolidine-2-carboxylic Acid. Journal of Medicinal Chemistry, 2017, 60, 441-457.	6.4	6
90	Investigation of the presence and antinociceptive function of muscarinic acetylcholine receptors in the African naked mole-rat (Heterocephalus glaber). Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2016, 202, 7-15.	1.6	5

#	Article	IF	Citations
91	Effects of Dimeric PSD-95 Inhibition on Excitotoxic Cell Death and Outcome After Controlled Cortical Impact in Rats. Neurochemical Research, 2017, 42, 3401-3413.	3.3	5
92	Pharmacological characterization and binding modes of novel racemic and optically active phenylalanine-based antagonists of AMPA receptors. European Journal of Medicinal Chemistry, 2017, 138, 874-883.	5.5	5
93	Analogues of 3-Hydroxyisoxazole-Containing Glutamate Receptor Ligands Based on the 3-Hydroxypyrazole-Moiety: Design, Synthesis and Pharmacological Characterization. Neurochemical Research, 2014, 39, 1895-1905.	3.3	4
94	Neto2 Influences on Kainate Receptor Pharmacology and Function. Basic and Clinical Pharmacology and Toxicology, 2016, 119, 141-148.	2.5	4
95	Tweaking Subtype Selectivity and Agonist Efficacy at (S)-2-Amino-3-(3-hydroxy-5-methyl-isoxazol-4-yl)propionic acid (AMPA) Receptors in a Small Series of BnTetAMPA Analogues. Journal of Medicinal Chemistry, 2016, 59, 2244-2254.	6.4	4
96	Design and Synthesis of 2,3-trans-Proline Analogues as Ligands for Ionotropic Glutamate Receptors and Excitatory Amino Acid Transporters. ACS Chemical Neuroscience, 2019, 10, 2989-3007.	3.5	4
97	Î³-Glutamyl-dipeptides: Easy tools to rapidly probe the stereoelectronic properties of the ionotropic glutamate receptor binding pocket. Tetrahedron, 2016, 72, 8486-8492.	1.9	3
98	Arylâ€•and heteroarylâ€substituted phenylalanines as <scp>AMPA</scp> receptor ligands. Chemical Biology and Drug Design, 2017, 90, 1271-1281.	3.2	3
99	Design, synthesis and structureâ€“activity relationships of novel phenylalanine-based amino acids as kainate receptors ligands. Bioorganic and Medicinal Chemistry Letters, 2016, 26, 5568-5572.	2.2	2
100	Effects of the dimeric PSD-95 inhibitor UCCB01-144 on functional recovery after fimbria-fornix transection in rats. Pharmacology Biochemistry and Behavior, 2017, 161, 62-67.	2.9	2
101	(S)-2-Mercaptohistidine: A First Selective Orthosteric GluK3 Antagonist. ACS Chemical Neuroscience, 2022, 13, 1580-1587.	3.5	2
102	Molecular determinants of desensitization and assembly of the chimeric GABAA receptor subunits (Î±1/Î²2) and (Î²2/Î±1) in combinations with Î²2 and Î³2. Neurochemistry International, 2001, 38, 581-592.	3.8	1