

Carrie K Jones

List of Publications by Year in descending order

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90
papers

4,010
citations

117625

34
h-index

128289

60
g-index

95
all docs

95
docs citations

95
times ranked

3615
citing authors

#	ARTICLE	IF	CITATIONS
1	Activation of metabotropic glutamate receptors as a novel approach for the treatment of schizophrenia. Trends in Pharmacological Sciences, 2009, 30, 25-31.	8.7	325
2	Subtype-selective allosteric modulators of muscarinic receptors for the treatment of CNS disorders. Trends in Pharmacological Sciences, 2009, 30, 148-155.	8.7	258
3	Novel Selective Allosteric Activator of the M ₁ Muscarinic Acetylcholine Receptor Regulates Amyloid Processing and Produces Antipsychotic-Like Activity in Rats. Journal of Neuroscience, 2008, 28, 10422-10433.	3.6	219
4	Centrally Active Allosteric Potentiators of the M ₄ Muscarinic Acetylcholine Receptor Reverse Amphetamine-Induced Hyperlocomotor Activity in Rats. Journal of Pharmacology and Experimental Therapeutics, 2008, 327, 941-953.	2.5	177
5	Muscarinic and Nicotinic Acetylcholine Receptor Agonists and Allosteric Modulators for the Treatment of Schizophrenia. Neuropsychopharmacology, 2012, 37, 16-42.	5.4	177
6	Efficacy of Duloxetine, a Potent and Balanced Serotonergic and Noradrenergic Reuptake Inhibitor, in Inflammatory and Acute Pain Models in Rodents. Journal of Pharmacology and Experimental Therapeutics, 2005, 312, 726-732.	2.5	140
7	Biased mGlu 5 -Positive Allosteric Modulators Provide In Vivo Efficacy without Potentiating mGlu 5 Modulation of NMDAR Currents. Neuron, 2015, 86, 1029-1040.	8.1	121
8	Selective Activation of M ₄ Muscarinic Acetylcholine Receptors Reverses MK-801-Induced Behavioral Impairments and Enhances Associative Learning in Rodents. ACS Chemical Neuroscience, 2014, 5, 920-942.	3.5	116
9	Antipsychotic-like Effects of M ₄ Positive Allosteric Modulators Are Mediated by CB ₂ Receptor-Dependent Inhibition of Dopamine Release. Neuron, 2016, 91, 1244-1252.	8.1	110
10	The Role of Estrogen in Brain and Cognitive Aging. Neurotherapeutics, 2019, 16, 649-665.	4.4	98
11	The Metabotropic Glutamate Receptor 4-Positive Allosteric Modulator VU0364770 Produces Efficacy Alone and in Combination with L-DOPA or an Adenosine 2A Antagonist in Preclinical Rodent Models of Parkinson's Disease. Journal of Pharmacology and Experimental Therapeutics, 2012, 340, 404-421.	2.5	95
12	Discovery of the First Highly M ₅ -Preferring Muscarinic Acetylcholine Receptor Ligand, an M ₅ Positive Allosteric Modulator Derived from a Series of 5-Trifluoromethoxy <i>N</i> -Benzyl Isatins. Journal of Medicinal Chemistry, 2009, 52, 3445-3448.	6.4	92
13	Muscarinic Receptor Pharmacology and Circuitry for the Modulation of Cognition. Handbook of Experimental Pharmacology, 2012, , 121-166.	1.8	92
14	Antipsychotic Drug-Like Effects of the Selective M ₄ Muscarinic Acetylcholine Receptor Positive Allosteric Modulator VU0152100. Neuropsychopharmacology, 2014, 39, 1578-1593.	5.4	91
15	Discovery and Characterization of Novel Subtype-Selective Allosteric Agonists for the Investigation of M ₁ Receptor Function in the Central Nervous System. ACS Chemical Neuroscience, 2010, 1, 104-121.	3.5	88
16	Pharmacologic Interactions between the Muscarinic Cholinergic and Dopaminergic Systems in the Modulation of Prepulse Inhibition in Rats. Journal of Pharmacology and Experimental Therapeutics, 2005, 312, 1055-1063.	2.5	80
17	Discovery of a Selective and CNS Penetrant Negative Allosteric Modulator of Metabotropic Glutamate Receptor Subtype 3 with Antidepressant and Anxiolytic Activity in Rodents. Journal of Medicinal Chemistry, 2015, 58, 7485-7500.	6.4	62
18	An mGlu5-Positive Allosteric Modulator Rescues the Neuroplasticity Deficits in a Genetic Model of NMDA Receptor Hypofunction in Schizophrenia. Neuropsychopharmacology, 2016, 41, 2052-2061.	5.4	60

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19	mGlu ₇ potentiation rescues cognitive, social, and respiratory phenotypes in a mouse model of Rett syndrome. <i>Science Translational Medicine</i> , 2017, 9, .	12.4	55
20	Discovery, Synthesis, and Structure-Activity Relationship Development of a Series of N-(2,5-Dioxopyrrolidin-1-yl)phenylpicolinamides (VU0400195, ML182): Characterization of a Novel Positive Allosteric Modulator of the Metabotropic Glutamate Receptor 4 (mGlu ₄) with Oral Efficacy in an Antiparkinsonian Animal Model. <i>Journal of Medicinal Chemistry</i> , 2011, 54, 7639-7647.	6.4	52
21	Phospholipase D Facilitates Efficient Entry of Influenza Virus, Allowing Escape from Innate Immune Inhibition. <i>Journal of Biological Chemistry</i> , 2014, 289, 25405-25417.	3.4	52
22	mGlu ₅ positive allosteric modulation normalizes synaptic plasticity defects and motor phenotypes in a mouse model of Rett syndrome. <i>Human Molecular Genetics</i> , 2016, 25, 1990-2004.	2.9	48
23	Pharmacological stimulation of metabotropic glutamate receptor type 4 in a rat model of Parkinson's disease and L-DOPA-induced dyskinesia: Comparison between a positive allosteric modulator and an orthosteric agonist. <i>Neuropharmacology</i> , 2015, 95, 121-129.	4.1	46
24	OCD candidate gene <i>SLC1A1</i> /EAAT3 impacts basal ganglia-mediated activity and stereotypic behavior. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 5719-5724.	7.1	46
25	A Rodent Model of Traumatic Stress Induces Lasting Sleep and Quantitative Electroencephalographic Disturbances. <i>ACS Chemical Neuroscience</i> , 2015, 6, 485-493.	3.5	45
26	Diverse Effects on M ₁ Signaling and Adverse Effect Liability within a Series of M ₁ Ago-PAMs. <i>ACS Chemical Neuroscience</i> , 2017, 8, 866-883.	3.5	44
27	Discovery of VU0467485/AZ13713945: An M ₄ PAM Evaluated as a Preclinical Candidate for the Treatment of Schizophrenia. <i>ACS Medicinal Chemistry Letters</i> , 2017, 8, 233-238.	2.8	43
28	Cholinergic Projections to the Substantia Nigra Pars Reticulata Inhibit Dopamine Modulation of Basal Ganglia through the M4 Muscarinic Receptor. <i>Neuron</i> , 2017, 96, 1358-1372.e4.	8.1	43
29	A Novel M ₁ PAM VU0486846 Exerts Efficacy in Cognition Models without Displaying Agonist Activity or Cholinergic Toxicity. <i>ACS Chemical Neuroscience</i> , 2018, 9, 2274-2285.	3.5	43
30	Discovery of VU0409551/JNJ-46778212: An mGlu ₅ Positive Allosteric Modulator Clinical Candidate Targeting Schizophrenia. <i>ACS Medicinal Chemistry Letters</i> , 2015, 6, 716-720.	2.8	41
31	VU0477573: Partial Negative Allosteric Modulator of the Subtype 5 Metabotropic Glutamate Receptor with In Vivo Efficacy. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2015, 356, 123-136.	2.5	41
32	Allosteric activation of M4 muscarinic receptors improve behavioral and physiological alterations in early symptomatic YAC128 mice. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 14078-14083.	7.1	41
33	Relationship between In Vivo Receptor Occupancy and Efficacy of Metabotropic Glutamate Receptor Subtype 5 Allosteric Modulators with Different In Vitro Binding Profiles. <i>Neuropsychopharmacology</i> , 2015, 40, 755-765.	5.4	40
34	Prefrontal Cortex-Mediated Impairments in a Genetic Model of NMDA Receptor Hypofunction Are Reversed by the Novel M ₁ PAM VU6004256. <i>ACS Chemical Neuroscience</i> , 2016, 7, 1706-1716.	3.5	39
35	Classics in Chemical Neuroscience: Xanomeline. <i>ACS Chemical Neuroscience</i> , 2017, 8, 435-443.	3.5	39
36	Design and Synthesis of N-Aryl Phenoxyethoxy Pyridinones as Highly Selective and CNS Penetrant mGlu ₃ NAMs. <i>ACS Medicinal Chemistry Letters</i> , 2017, 8, 925-930.	2.8	38

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37	Emerging approaches for treatment of schizophrenia: modulation of cholinergic signaling. <i>Discovery Medicine</i> , 2012, 14, 413-20.	0.5	36
38	Cognitive enhancement and antipsychotic-like activity following repeated dosing with the selective M4 PAM VU0467154. <i>Neuropharmacology</i> , 2018, 128, 492-502.	4.1	35
39	Partial mGlu5 Negative Allosteric Modulators Attenuate Cocaine-Mediated Behaviors and Lack Psychotomimetic-Like Effects. <i>Neuropsychopharmacology</i> , 2016, 41, 1166-1178.	5.4	33
40	Design and Synthesis of mGlu ₂ NAMs with Improved Potency and CNS Penetration Based on a Truncated Picolinamide Core. <i>ACS Medicinal Chemistry Letters</i> , 2017, 8, 919-924.	2.8	33
41	Muscarinic M5 receptors modulate ethanol seeking in rats. <i>Neuropsychopharmacology</i> , 2018, 43, 1510-1517.	5.4	33
42	Disabling the G α ^q -SNARE interaction disrupts GPCR-mediated presynaptic inhibition, leading to physiological and behavioral phenotypes. <i>Science Signaling</i> , 2019, 12, .	3.6	33
43	Challenges in the development of an M4 PAM in vivo tool compound: The discovery of VU0467154 and unexpected DMPK profiles of close analogs. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2017, 27, 171-175.	2.2	32
44	Total RNA Sequencing of Rett Syndrome Autopsy Samples Identifies the M ₄ Muscarinic Receptor as a Novel Therapeutic Target. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2018, 365, 291-300.	2.5	29
45	Selective inhibition of M ₅ muscarinic acetylcholine receptors attenuates cocaine self-administration in rats. <i>Addiction Biology</i> , 2018, 23, 1106-1116.	2.6	29
46	Discovery of VU6005649, a CNS Penetrant mGlu _{7/8} Receptor PAM Derived from a Series of Pyrazolo[1,5- <i>a</i>]pyrimidines. <i>ACS Medicinal Chemistry Letters</i> , 2017, 8, 1110-1115.	2.8	28
47	Activation of the mGlu1 metabotropic glutamate receptor has antipsychotic-like effects and is required for efficacy of M4 muscarinic receptor allosteric modulators. <i>Molecular Psychiatry</i> , 2020, 25, 2786-2799.	7.9	28
48	Acute Negative Allosteric Modulation of M ₅ Muscarinic Acetylcholine Receptors Inhibits Oxycodone Self-Administration and Cue-Induced Reactivity with No Effect on Antinociception. <i>ACS Chemical Neuroscience</i> , 2019, 10, 3740-3750.	3.5	27
49	Phenotypic profiling of mGlu ₇ knockout mice reveals new implications for neurodevelopmental disorders. <i>Genes, Brain and Behavior</i> , 2020, 19, e12654.	2.2	25
50	Acetylcholine Muscarinic M4 Receptors as a Therapeutic Target for Alcohol Use Disorder: Converging Evidence From Humans and Rodents. <i>Biological Psychiatry</i> , 2020, 88, 898-909.	1.3	24
51	Anatomical localization of Ca _v 3.1 calcium channels and electrophysiological effects of T-type calcium channel blockade in the motor thalamus of MPTP-treated monkeys. <i>Journal of Neurophysiology</i> , 2016, 115, 470-485.	1.8	23
52	State-dependent alterations in sleep/wake architecture elicited by the M4 PAM VU0467154 – Relation to antipsychotic-like drug effects. <i>Neuropharmacology</i> , 2016, 102, 244-253.	4.1	23
53	Continued optimization of the M5 NAM ML375: Discovery of VU6008667, an M5 NAM with high CNS penetration and a desired short half-life in rat for addiction studies. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2017, 27, 1356-1359.	2.2	23
54	Discovery and optimization of a novel series of highly CNS penetrant M4 PAMs based on a 5,6-dimethyl-4-(piperidin-1-yl)thieno[2,3- <i>d</i>]pyrimidine core. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2016, 26, 3029-3033.	2.2	22

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55	Optimization of M4 positive allosteric modulators (PAMs): The discovery of VU0476406, a non-human primate <i>in vivo</i> tool compound for translational pharmacology. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2017, 27, 2296-2301.	2.2	17
56	Challenges in the development of an M4 PAM preclinical candidate: The discovery, SAR, and biological characterization of a series of azetidione-derived tertiary amides. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2017, 27, 5179-5184.	2.2	17
57	Discovery of VU2957 (Valiglurax): An mGlu4 Positive Allosteric Modulator Evaluated as a Preclinical Candidate for the Treatment of Parkinson's Disease. <i>ACS Medicinal Chemistry Letters</i> , 2019, 10, 255-260.	2.8	17
58	Discovery and Characterization of ML398, a Potent and Selective Antagonist of the D4 Receptor <i>in Vivo</i> . <i>ACS Medicinal Chemistry Letters</i> , 2014, 5, 1060-1064.	2.8	16
59	Challenges in the development of an M4 PAM preclinical candidate: The discovery, SAR, and <i>in vivo</i> characterization of a series of 3-aminoazetidione-derived amides. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2017, 27, 2990-2995.	2.2	16
60	Discovery, Structure-Activity Relationship, and Biological Characterization of a Novel Series of 6-((1 <i>H</i> -Pyrazolo[4,3- <i>b</i>]pyridin-3-yl)amino)-benzo[<i>d</i>]isothiazole-3-carboxamides as Positive Allosteric Modulators of the Metabotropic Glutamate Receptor 4 (mGlu ₄). <i>Journal of Medicinal Chemistry</i> , 2019, 62, 342-358.	6.4	16
61	Ligand-based virtual screen for the discovery of novel M5 inhibitor chemotypes. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2016, 26, 4487-4491.	2.2	15
62	Analgesic Effects of the GIRK Activator, VU0466551, Alone and in Combination with Morphine in Acute and Persistent Pain Models. <i>ACS Chemical Neuroscience</i> , 2019, 10, 1294-1299.	3.5	15
63	Discovery and Optimization of Potent and CNS Penetrant M ₅ -Preferring Positive Allosteric Modulators Derived from a Novel, Chiral <i>N</i> -(Indanyl)piperidine Amide Scaffold. <i>ACS Chemical Neuroscience</i> , 2018, 9, 1572-1581.	3.5	13
64	Modulation of arousal and sleep/wake architecture by M1 PAM VU0453595 across young and aged rodents and nonhuman primates. <i>Neuropsychopharmacology</i> , 2020, 45, 2219-2228.	5.4	13
65	Selective allosteric modulation of muscarinic acetylcholine receptors for the treatment of schizophrenia and substance use disorders. <i>Advances in Pharmacology</i> , 2019, 86, 153-196.	2.0	12
66	Discovery of VU0431316: A negative allosteric modulator of mGlu5 with activity in a mouse model of anxiety. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2014, 24, 3307-3314.	2.2	9
67	Discovery and SAR of novel series of imidazopyrimidinones and dihydroimidazopyrimidinones as positive allosteric modulators of the metabotropic glutamate receptor 5 (mGlu5). <i>Bioorganic and Medicinal Chemistry Letters</i> , 2015, 25, 1310-1317.	2.2	9
68	<i>N</i> -Alkylpyrido[1,5- <i>b</i>]pyrazolo-[4,3- <i>d</i>]pyrimidin-4-amines: A new series of negative allosteric modulators of mGlu _{1/5} with CNS exposure in rodents. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2016, 26, 1894-1900.	2.2	9
69	Novel GlyT1 inhibitor chemotypes by scaffold hopping. Part 1: Development of a potent and CNS penetrant [3.1.0]-based lead. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2014, 24, 1067-1070.	2.2	8
70	Discovery of imidazo[1,2- <i>a</i>]-, [1,2,4]triazolo[4,3- <i>a</i>]-, and [1,2,4]triazolo[1,5- <i>a</i>]pyridine-8-carboxamide negative allosteric modulators of metabotropic glutamate receptor subtype 5. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2017, 27, 4858-4866.	2.2	8
71	Development of VU6019650: A Potent, Highly Selective, and Systemically Active Orthosteric Antagonist of the M ₅ Muscarinic Acetylcholine Receptor for the Treatment of Opioid Use Disorder. <i>Journal of Medicinal Chemistry</i> , 2022, 65, 6273-6286.	6.4	8
72	Discovery and SAR of a novel series of metabotropic glutamate receptor 5 positive allosteric modulators with high ligand efficiency. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2014, 24, 3641-3646.	2.2	7

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73	Further optimization of the mGlu5 PAM clinical candidate VU0409551/JNJ-46778212: Progress and challenges towards a back-up compound. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2015, 25, 3515-3519.	2.2	7
74	Preliminary investigation of 6,7-dihydropyrazolo[1,5-a]pyrazin-4-one derivatives as a novel series of mGlu 5 receptor positive allosteric modulators with efficacy in preclinical models of schizophrenia. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2016, 26, 429-434.	2.2	7
75	<i>In Vitro</i> to <i>In Vivo</i> Translation of Allosteric Modulator Concentration-Effect Relationships: Implications for Drug Discovery. <i>ACS Pharmacology and Translational Science</i> , 2019, 2, 442-452.	4.9	7
76	Novel GlyT1 inhibitor chemotypes by scaffold hopping. Part 2: Development of a [3.3.0]-based series and other piperidine bioisosteres. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2014, 24, 1062-1066.	2.2	6
77	VU6005806/AZN-00016130, an advanced M4 positive allosteric modulator (PAM) profiled as a potential preclinical development candidate. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2019, 29, 1714-1718.	2.2	6
78	The discovery of VU0652957 (VU2957, Valiglurax): SAR and DMPK challenges en route to an mGlu4 PAM development candidate. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2019, 29, 342-346.	2.2	6
79	Acyl dihydropyrazolo[1,5-a]pyrimidinones as metabotropic glutamate receptor 5 positive allosteric modulators. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2015, 25, 5115-5120.	2.2	5
80	Discovery of 4-alkoxy-6-methylpicolinamide negative allosteric modulators of metabotropic glutamate receptor subtype 5. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2019, 29, 47-50.	2.2	5
81	Sexual Dimorphism in Stress-Induced Hyperthermia in SNAP25 ³ mice, a mouse model with disabled G α 2 β 3 regulation of the exocytotic fusion apparatus. <i>European Journal of Neuroscience</i> , 2020, 52, 2815-2826.	2.6	5
82	Partial mGlu5 Negative Allosteric Modulator M-5MPEP Demonstrates Antidepressant-Like Effects on Sleep Without Affecting Cognition or Quantitative EEG. <i>Frontiers in Neuroscience</i> , 2021, 15, 700822.	2.8	5
83	SAR inspired by aldehyde oxidase (AO) metabolism: Discovery of novel, CNS penetrant tricyclic M4 PAMs. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2019, 29, 2224-2228.	2.2	4
84	Discovery of 3-aminopicolinamides as metabotropic glutamate receptor subtype 4 (mGlu4) positive allosteric modulator warheads engendering CNS exposure and in vivo efficacy. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2016, 26, 2915-2919.	2.2	3
85	Selective Antagonism of mGlu5 Alters Sleep-Wake and Spectral EEG and Ameliorates Behavioral Abnormalities in a Rodent Model of Traumatic Stress. <i>FASEB Journal</i> , 2015, 29, 615.8.	0.5	1
86	Characterization of novel selective positive allosteric modulators (PAMS) of the M4 muscarinic acetylcholine receptor (mAChR). <i>FASEB Journal</i> , 2008, 22, 714.2.	0.5	0
87	Effects of M1 and M4 muscarinic acetylcholine receptor positive allosteric modulators on sleep and cognition in rodents. <i>FASEB Journal</i> , 2013, 27, 661.8.	0.5	0
88	M4 muscarinic acetylcholine receptor modulation of associative learning and behavioral flexibility in a novel touchscreen cognitive assessment (845.8). <i>FASEB Journal</i> , 2014, 28, 845.8.	0.5	0
89	The Effects of the M 1 Muscarinic Acetylcholine Receptor Positive Allosteric Modulator VU0486846 on Cognitive Performance in Aged Nonhuman Primates. <i>FASEB Journal</i> , 2020, 34, 1-1.	0.5	0
90	Age and circadian rhythm-dependent effects of M 1 muscarinic acetylcholine receptor positive allosteric modulators and donepezil on sleep-wake architecture and arousal. <i>Alzheimer's and Dementia</i> , 2021, 17, .	0.8	0