Paul A Davies

List of Publications by Year
in descending order

53 papers	3,396 citations	159585 30 h-index	189892 50 g-index
55 all docs	55 docs citations	55 times ranked	2942 citing authors

#	Article	IF	Citations
1	Preventing Phosphorylation of the GABAAR Î²3 Subunit Compromises the Behavioral Effects of Neuroactive Steroids. Frontiers in Molecular Neuroscience, 2022, 15, 817996.	2.9	4
2	Delineation of the functional properties exhibited by the Zinc-Activated Channel (ZAC) and its high-frequency Thr128Ala variant (rs2257020) in Xenopus oocytes. Pharmacological Research, 2021, 169, 105653.	7.1	3
3	Discovery and functional characterization of N-(thiazol-2-yl)-benzamide analogs as the first class of selective antagonists of the Zinc-Activated Channel (ZAC). Biochemical Pharmacology, 2021, 193, 114782.	4.4	2
4	Probing the molecular basis for signal transduction through the Zinc-Activated Channel (ZAC). Biochemical Pharmacology, 2021, 193, 114781.	4.4	4
5	KCC2 is required for the survival of mature neurons but not for their development. Journal of Biological Chemistry, 2021, 296, 100364.	3.4	15
6	Isolation and Characterization of Multi-Protein Complexes Enriched in the K-Cl Co-transporter 2 From Brain Plasma Membranes. Frontiers in Molecular Neuroscience, 2020, 13, 563091.	2.9	15
7	Preclinical characterization of zuranolone (SAGE-217), a selective neuroactive steroid GABAA receptor positive allosteric modulator. Neuropharmacology, 2020, 181, 108333.	4.1	65
8	Identification of a Core Amino Acid Motif within the Î± Subunit of GABAARs that Promotes Inhibitory Synaptogenesis and Resilience to Seizures. Cell Reports, 2019, 28, 670-681.e8.	6.4	16
9	Metabotropic, but not allosteric, effects of neurosteroids on GABAergic inhibition depend on the phosphorylation of GABAA receptors. Journal of Biological Chemistry, 2019, 294, 12220-12230.	3.4	32
10	Neuroactive Steroids Reverse Tonic Inhibitory Deficits in Fragile X Syndrome Mouse Model. Frontiers in Molecular Neuroscience, 2019, 12, 15.	2.9	16
11	Pharmacological Characterization of the Zinc-Activated Channel: A Cys-Loop Receptor Gated by Zn2+, Cu2+ And Protons. Biophysical Journal, 2019, 116, 396a.	0.5	0
12	Inhibitory Synapse Formation at the Axon Initial Segment. Frontiers in Molecular Neuroscience, 2019, 12, 266.	2.9	10
13	The small molecule CLP257 does not modify activity of the K+â€“Clâ¯ co-transporter KCC2 but does potentiate GABAA receptor activity. Nature Medicine, 2017, 23, 1394-1396.	30.7	47
14	Endogenous and synthetic neuroactive steroids evoke sustained increases in the efficacy of GABAergic inhibition via a protein kinaseÂC-dependent mechanism. Neuropharmacology, 2017, 113, 314-322.	4.1	56
15	Proteomic Characterization of Inhibitory Synapses Using a Novel pHluorin-tagged Î³-Aminobutyric Acid Receptor, Type A (GABAA), Î±2 Subunit Knock-in Mouse. Journal of Biological Chemistry, 2016, 291, 12394-12407.	3.4	68
16	Compromising KCC2 transporter activity enhances the development of continuous seizure activity. Neuropharmacology, 2016, 108, 103-110.	4.1	42
17	Regulating the Efficacy of Inhibition Through Trafficking of Î³-Aminobutyric Acid Type A Receptors. Anesthesia and Analgesia, 2016, 123, 1220-1227.	2.2	5
18	Copper and protons directly activate the zinc-activated channel. Biochemical Pharmacology, 2016, 103, 109-117.	4.4	16

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19	KCC2 activity is critical in limiting the onset and severity of status epilepticus. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 3523-3528.	7.1	139
20	Compromising the phosphodependent regulation of the GABA _A R Î²3 subunit reproduces the core phenotypes of autism spectrum disorders. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 14805-14810.	7.1	41
21	GABAA Receptor Genetics and Clinical Pharmacology. Current Anesthesiology Reports, 2014, 4, 42-48.	2.0	3
22	Neural circuits with long-distance axon tracts for determining functional connectivity. Journal of Neuroscience Methods, 2014, 222, 82-90.	2.5	14
23	Phosphorylation of GABAA receptors influences receptor trafficking and neurosteroid actions. Psychopharmacology, 2014, 231, 3453-3465.	3.1	47
24	Neurosteroids promote phosphorylation and membrane insertion of extrasynaptic GABA _A receptors. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 7132-7137.	7.1	95
25	Disrupted Cl^{â^'} homeostasis contributes to reductions in the inhibitory efficacy of diazepam during hyperexcited states. European Journal of Neuroscience, 2013, 38, 2453-2467.	2.6	32
26	Enhanced Tonic Inhibition Influences the Hypnotic and Amnestic Actions of the Intravenous Anesthetics Etomidate and Propofol. Journal of Neuroscience, 2013, 33, 7264-7273.	3.6	31
27	Functional regulation of GABAA receptors in nervous system pathologies. Current Opinion in Neurobiology, 2012, 22, 552-558.	4.2	114
28	Memory Deficits Induced by Inflammation Are Regulated by Î±5-Subunit-Containing GABAA Receptors. Cell Reports, 2012, 2, 488-496.	6.4	147
29	Allosteric modulation of the 5-HT3 receptor. Current Opinion in Pharmacology, 2011, 11, 75-80.	3.5	45
30	NMDA receptor activity downregulates KCC2 resulting in depolarizing GABAA receptorâ€“mediated currents. Nature Neuroscience, 2011, 14, 736-743.	14.8	268
31	Hyperpolarizing GABAergic transmission depends on KCC2 function and membrane potential. Channels, 2011, 5, 475-481.	2.8	16
32	The Residence Time of GABA_ARs at Inhibitory Synapses Is Determined by Direct Binding of the Receptor Î±1 Subunit to Gephyrin. Journal of Neuroscience, 2011, 31, 14677-14687.	3.6	134
33	Highâ€level expression and purification of Cysâ€loop ligandâ€gated ion channels in a tetracyclineâ€inducible stable mammalian cell line: GABA_A and serotonin receptors. Protein Science, 2010, 19, 1728-1738.	7.6	40
34	Ethanol Stabilizes the Open State of Single 5-Hydroxytryptamine3A(QDA) Receptors. Journal of Pharmacology and Experimental Therapeutics, 2010, 333, 896-902.	2.5	9
35	Protein Kinase C Phosphorylation Regulates Membrane Insertion of GABAA Receptor Subtypes That Mediate Tonic Inhibition. Journal of Biological Chemistry, 2010, 285, 41795-41805.	3.4	87
36	3B but which 3B? And that's just one of the questions: the heterogeneity of human 5-HT3 receptors. Trends in Pharmacological Sciences, 2008, 29, 437-444.	8.7	67

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37	High-frequency HTR3B variant associated with major depression dramatically augments the signaling of the human 5-HT _{3AB} receptor. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 722-727.	7.1	72
38	Characterization of the effects of four HTR3B polymorphisms on human 5-HT3AB receptor expression and signalling. Pharmacogenetics and Genomics, 2008, 18, 1027-1040.	1.5	8
39	Differential Effects of Serotonin and Dopamine on Human 5-HT_{3A}Receptor Kinetics: Interpretation within an Allosteric Kinetic Model. Journal of Neuroscience, 2007, 27, 13151-13160.	3.6	46
40	Molecular Properties Important for Inhaled Anesthetic Action on Human 5-HT3A Receptors. Anesthesia and Analgesia, 2005, 100, 1696-1703.	2.2	40
41	Modulation of Human 5-Hydroxytryptamine Type 3AB Receptors by Volatile Anesthetics and n-Alcohols. Journal of Pharmacology and Experimental Therapeutics, 2005, 314, 338-345.	2.5	50
42	General Anesthetic-Induced Channel Gating Enhancement of 5-Hydroxytryptamine Type 3 Receptors Depends on Receptor Subunit Composition. Journal of Pharmacology and Experimental Therapeutics, 2005, 315, 771-776.	2.5	52
43	5-HT3A receptor kinetics: Agonist and anesthetic action. International Congress Series, 2005, 1283, 247-250.	0.2	0
44	General anesthetic action on 5-HT3 receptors: Influence of subunit composition. International Congress Series, 2005, 1283, 79-84.	0.2	0
45	Introduction of the 5-HT3B subunit alters the functional properties of 5-HT3 receptors native to neuroblastoma cells. Neuropharmacology, 2003, 44, 214-223.	4.1	55
46	A Novel Class of Ligand-gated Ion Channel Is Activated by Zn2+. Journal of Biological Chemistry, 2003, 278, 712-717.	3.4	130
47	Alternative transcripts of the GABAA receptor Îµ subunit in human and rat. Neuropharmacology, 2002, 43, 467-475.	4.1	18
48	Evidence for Expression of Heteromeric Serotonin 5-HT3 Receptors in Rodents. Journal of Neurochemistry, 2001, 75, 240-247.	3.9	82
49	Evidence for the formation of functionally distinct Î±Î²Î³Îµ GABA A receptors. Journal of Physiology, 2001, 537, 101-113.	2.9	35
50	The influence of an endogenous Î²3 subunit on recombinant GABAA receptor assembly and pharmacology in WSS-1 cells and transiently transfected HEK293 cells. Neuropharmacology, 2000, 39, 611-620.	4.1	22
51	The 5-HT3B subunit is a major determinant of serotonin-receptor function. Nature, 1999, 397, 359-363.	27.8	559
52	Modulation by general anaesthetics of rat GABAA receptors comprised of Î± 1Î² 3 and Î² 3 subunits expressed in human embryonic kidney 293 cells. British Journal of Pharmacology, 1997, 120, 899-909.	5.4	88
53	Insensitivity to anaesthetic agents conferred by a class of GABAA receptor subunit. Nature, 1997, 385, 820-823.	27.8	392