Hugh C Hemmings Jr

List of Publications by Year
in descending order

115 papers	6,489 citations	81743 39 h-index	66788 78 g-index
126 all docs	126 docs citations	126 times ranked	5223 citing authors

#	Article	IF	Citations
1	Effects of General Anesthetics on Synaptic Transmission and Plasticity. Current Neuropharmacology, 2022, 20, 27-54.	1.4	15
2	Distinct effects of volatile and intravenous anaesthetics on presynaptic calcium dynamics in mouse hippocampal GABAergic neurones. British Journal of Anaesthesia, 2022, 128, 1019-1028.	1.5	3
3	Editorsâ€™ Note: Ueshima H, Otake H. Addition of transversus thoracic muscle plane block to pectoral nerves block provides more effective perioperative pain relief than pectoral nerves block alone for breast cancer surgery. Br J Anaesth 2017;118:439â€“443. British Journal of Anaesthesia, 2022, 128, 597.	1.5	0
4	Modulation of dendritic spines by protein phosphatase-1. Advances in Pharmacology, 2021, 90, 117-144.	1.2	2
5	Improving perioperative brain health: an expert consensus review of key actions for the perioperative care team. British Journal of Anaesthesia, 2021, 126, 423-432.	1.5	78
6	Preprints in perioperative medicine: immediacy for the greater good. British Journal of Anaesthesia, 2021, 126, 915-918.	1.5	3
7	Isoflurane Suppresses Hippocampal High-frequency Ripples by Differentially Modulating Pyramidal Neurons and Interneurons in Mice. Anesthesiology, 2021, 135, 122-135.	1.3	4
8	Selective inhibition of gamma aminobutyric acid release from mouse hippocampal interneurone subtypes by the volatile anaesthetic isoflurane. British Journal of Anaesthesia, 2021, 127, 587-599.	1.5	8
9	Turning the page on 2021: an eventful year for the British Journal of Anaesthesia. British Journal of Anaesthesia, 2021, , .	1.5	1
10	Relevance of Cortical and Hippocampal Interneuron Functional Diversity to General Anesthetic Mechanisms: A Narrative Review. Frontiers in Synaptic Neuroscience, 2021, 13, 812905.	1.3	1
11	Further retractions of articles by Joachim Boldt. British Journal of Anaesthesia, 2020, 125, 409-411.	1.5	28
12	Excellence in editorials: fulfilling their critical role in the medical literature. British Journal of Anaesthesia, 2020, 125, 639-641.	1.5	4
13	Chronic pain diagnosis in refugee torture survivors: AÂprospective, blindedÂdiagnostic accuracy study. PLoS Medicine, 2020, 17, e1003108.	3.9	9
14	Women in anaesthesia, a special issue of the British Journal of Anaesthesia. British Journal of Anaesthesia, 2020, 124, e40-e43.	1.5	7
15	A special issue on respiration and the airway: critical topics at a challenging time. British Journal of Anaesthesia, 2020, 125, 1-4.	1.5	8
16	Towards a Comprehensive Understanding of Anesthetic Mechanisms of Action: A Decade of Discovery. Trends in Pharmacological Sciences, 2019, 40, 464-481.	4.0	156
17	Role of specific presynaptic calcium channel subtypes in isoflurane inhibition of synaptic vesicle exocytosis in rat hippocampal neurones. British Journal of Anaesthesia, 2019, 123, 219-227.	1.5	16
18	The good, the bad, and the ugly: the many faces of opioids. British Journal of Anaesthesia, 2019, 122, 705-707.	1.5	11

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19	Differential Inhibition of Neuronal Sodium Channel Subtypes by the General Anesthetic Isoflurane. Journal of Pharmacology and Experimental Therapeutics, 2019, 369, 200-211.	1.3	15
20	Isoflurane Modulates Hippocampal Cornu Ammonis Pyramidal Neuron Excitability by Inhibition of Both Transient and Persistent Sodium Currents in Mice. Anesthesiology, 2019, 131, 94-104.	1.3	13
21	Change management: the British Journal of Anaesthesia in 2018. British Journal of Anaesthesia, 2019, 122, 1-3.	1.5	1
22	Pharmacology of Inhaled Anesthetics. , 2019, , 217-240.		5
23	Isoflurane Inhibits Dopaminergic Synaptic Vesicle Exocytosis Coupled to Ca_V2.1 and Ca_V2.2 in Rat Midbrain Neurons. ENeuro, 2019, 6, ENEURO.0278-18.2018.	0.9	14
24	Clinical concentrations of chemically diverse general anesthetics minimally affect lipid bilayer properties. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 3109-3114.	3.3	45
25	Isoflurane modulates activation and inactivation gating of the prokaryotic Na+ channel NaChBac. Journal of General Physiology, 2017, 149, 623-638.	0.9	32
26	A global vision for the British Journal of Anaesthesia. British Journal of Anaesthesia, 2017, 118, 1-2.	1.5	4
27	Divergent effects of anesthetics on lipid bilayer properties and sodium channel function. European Biophysics Journal, 2017, 46, 617-626.	1.2	30
28	Sodium channel subtypes are differentially localized to preâ€•and postâ€synaptic sites in rat hippocampus. Journal of Comparative Neurology, 2017, 525, 3563-3578.	0.9	15
29	Mechanisms of Intravenous Anesthetic Action. , 2017, , 79-95.		0
30	Î±2-Adrenergic Receptor and Isoflurane Modulation of Presynaptic Ca2+ Influx and Exocytosis in Hippocampal Neurons. Anesthesiology, 2016, 125, 535-546.	1.3	22
31	Relevance of Clinical Relevance. Anesthesiology, 2016, 125, 821-822.	1.3	0
32	Activity-dependent depression of neuronal sodium channels by the general anaesthetic isoflurane. British Journal of Anaesthesia, 2015, 115, 112-121.	1.5	22
33	Isoflurane inhibits synaptic vesicle exocytosis through reduced Ca ²⁺ influx, not Ca ²⁺ -exocytosis coupling. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 11959-11964.	3.3	78
34	Regulation of Protein Phosphatase 1I by Cdc25C-associated Kinase 1 (C-TAK1) and PFTAIRE Protein Kinase. Journal of Biological Chemistry, 2014, 289, 23893-23900.	1.6	5
35	Volatile anesthetics inhibit sodium channels without altering bulk lipid bilayer properties. Journal of General Physiology, 2014, 144, 545-560.	0.9	25
36	Phytochemicals Perturb Membranes and Promiscuously Alter Protein Function. ACS Chemical Biology, 2014, 9, 1788-1798.	1.6	241

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37	Sociosexual investigation in sexually experienced, hormonally manipulated male leopard geckos: Relation with phosphorylated DARPPâ€32 in dopaminergic pathways. Journal of Experimental Zoology, 2014, 321, 595-602.	1.2	3
38	Isoflurane Reversibly Destabilizes Hippocampal Dendritic Spines by an Actin-Dependent Mechanism. PLoS ONE, 2014, 9, e102978.	1.1	28
39	HCN1 Channels as Targets for Anesthetic and Nonanesthetic Propofol Analogs in the Amelioration of Mechanical and Thermal Hyperalgesia in a Mouse Model of Neuropathic Pain. Journal of Pharmacology and Experimental Therapeutics, 2013, 345, 363-373.	1.3	59
40	Pharmacology of Inhaled Anesthetics. , 2013, , 159-179.		1
41	Increased Risk of Awareness under Anesthesia. Anesthesiology, 2013, 119, 1236-1238.	1.3	5
42	Sodium Channels as Targets for Volatile Anesthetics. Frontiers in Pharmacology, 2012, 3, 50.	1.6	62
43	Regional differences in the effects of isoflurane on neurotransmitter release. Neuropharmacology, 2011, 61, 699-706.	2.0	22
44	Sleep and Anesthesia. Anesthesiology, 2011, 115, 8-9.	1.3	5
45	Thiazolidinedione insulin sensitizers alter lipid bilayer properties and voltage-dependent sodium channel function: implications for drug discovery. Journal of General Physiology, 2011, 138, 249-270.	0.9	48
46	The role and regulation of protein phosphataseâ€1 following oxygen and glucose deprivation in neuroblastoma cells. FASEB Journal, 2011, 25, 954.5.	0.2	0
47	Bidirectional modulation of isoflurane potency by intrathecal tetrodotoxin and veratridine in rats. British Journal of Pharmacology, 2010, 159, 872-878.	2.7	18
48	Regional differences in nerve terminal Na⁺ channel subtype expression and Na⁺ channelâ€dependent glutamate and GABA release in rat CNS. Journal of Neurochemistry, 2010, 113, 1611-1620.	2.1	15
49	AGAP1/AP-3-dependent endocytic recycling of M5 muscarinic receptors promotes dopamine release. EMBO Journal, 2010, 29, 2813-2826.	3.5	78
50	Inhaled Anesthetics: Mechanisms of Action. , 2010, , 515-538.		9
51	Positively Active. Anesthesiology, 2010, 113, 250-252.	1.3	7
52	Sodium channels and the synaptic mechanisms of inhaled anaesthetics. British Journal of Anaesthesia, 2009, 103, 61-69.	1.5	63
53	Molecular Targets of General Anesthetics in the Nervous System. , 2009, , 11-31.		3
54	Comparative Effects of Halogenated Inhaled Anesthetics on Voltage-gated Na+Channel Function. Anesthesiology, 2009, 110, 582-590.	1.3	61

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55	Isoflurane Inhibits the Tetrodotoxin-resistant Voltage-gated Sodium Channel Nav1.8. Anesthesiology, 2009, 111, 591-599.	1.3	43
56	Protein phosphatase-2A is activated in pig brain following cardiac arrest and resuscitation. Metabolic Brain Disease, 2008, 23, 95-104.	1.4	2
57	Activation of brain protein phosphatase-1Ifollowing cardiac arrest and resuscitation involving an interaction with 14-3-3Î³. Journal of Neurochemistry, 2008, 105, 2029-2038.	2.1	7
58	Is a New Paradigm Needed to Explain How Inhaled Anesthetics Produce Immobility?. Anesthesia and Analgesia, 2008, 107, 832-848.	1.1	87
59	Intrathecal Veratridine Administration Increases Minimum Alveolar Concentration in Rats. Anesthesia and Analgesia, 2008, 107, 875-878.	1.1	16
60	Xenon and the Pharmacology of Fear. Anesthesiology, 2008, 109, 954-955.	1.3	5
61	Isoflurane Inhibits NaChBac, a Prokaryotic Voltage-Gated Sodium Channel. Journal of Pharmacology and Experimental Therapeutics, 2007, 322, 1076-1083.	1.3	45
62	Regulation of Protein Phosphatase Inhibitor-1 by Cyclin-dependent Kinase 5. Journal of Biological Chemistry, 2007, 282, 16511-16520.	1.6	27
63	Isoform-selective Effects of Isoflurane on Voltage-gated Na+ Channels. Anesthesiology, 2007, 107, 91-98.	1.3	56
64	General anesthetics selectively modulate glutamatergic and dopaminergic signaling via site-specific phosphorylation in vivo. Neuropharmacology, 2007, 53, 619-630.	2.0	42
65	Differential regulation of protein phosphatase-1I by neurabin. Biochemical and Biophysical Research Communications, 2007, 358, 140-144.	1.0	1
66	Phosphorylation of CREB and DARPP-32 during late LTP at hippocampal to prefrontal cortex synapses in vivo. Synapse, 2007, 61, 24-28.	0.6	26
67	Reduced inhibition of cortical glutamate and GABA release by halothane in mice lacking the K⁺ channel, TREKâ€1. British Journal of Pharmacology, 2007, 152, 939-945.	2.7	30
68	D1 receptor modulation of memory retrieval performance is associated with changes in pCREB and pDARPP-32 in rat prefrontal cortex. Behavioural Brain Research, 2006, 171, 127-133.	1.2	62
69	Do General Anesthetics Add Up?. Anesthesiology, 2006, 104, 1120-1122.	1.3	9
70	Volatile Anesthetic Effects on Glutamate versus GABA Release from Isolated Rat Cortical Nerve Terminals: 4-Aminopyridine-Evoked Release. Journal of Pharmacology and Experimental Therapeutics, 2006, 316, 216-223.	1.3	39
71	Volatile Anesthetic Effects on Glutamate versus GABA Release from Isolated Rat Cortical Nerve Terminals: Basal Release. Journal of Pharmacology and Experimental Therapeutics, 2006, 316, 208-215.	1.3	63
72	The General Anesthetic Isoflurane Depresses Synaptic Vesicle Exocytosis. Molecular Pharmacology, 2005, 67, 1591-1599.	1.0	65

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73	Depression by Isoflurane of the Action Potential and Underlying Voltage-Gated Ion Currents in Isolated Rat Neurohypophysial Nerve Terminals. Journal of Pharmacology and Experimental Therapeutics, 2005, 312, 801-808.	1.3	53
74	Phosphorylation of spinophilin by ERK and cyclin-dependent PK 5 (Cdk5). Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 3489-3494.	3.3	48
75	Emerging molecular mechanisms of general anesthetic action. Trends in Pharmacological Sciences, 2005, 26, 503-510.	4.0	487
76	Distinct rat neurohypophysial nerve terminal populations identified by size, electrophysiological properties and neuropeptide content. Brain Research, 2004, 1024, 203-211.	1.1	7
77	Rapamycin causes activation of protein phosphatase-2A1 and nuclear translocation of PCNA in CD4+ T cells. Biochemical and Biophysical Research Communications, 2004, 323, 645-651.	1.0	17
78	Neuroprotection by Na+ Channel Blockade. Journal of Neurosurgical Anesthesiology, 2004, 16, 100-101.	0.6	11
79	Isoflurane and Propofol Inhibit Voltage-Gated Sodium Channels in Isolated Rat Neurohypophysial Nerve Terminals. Molecular Pharmacology, 2003, 64, 373-381.	1.0	101
80	Selective Depression by General Anesthetics of Glutamate Versus GABA Release from Isolated Cortical Nerve Terminals. Journal of Pharmacology and Experimental Therapeutics, 2003, 304, 1188-1196.	1.3	90
81	Effects of Isoflurane and Propofol on Glutamate and GABA Transporters in Isolated Cortical Nerve Terminals. Anesthesiology, 2003, 98, 364-372.	1.3	40
82	General Anesthetic Actions on Norepinephrine, Dopamine, and Î³-Aminobutyric Acid Transporters in Stably Transfected Cells. Anesthesia and Analgesia, 2002, 95, 893-899.	1.1	19
83	The Effects of General Anesthetics on Norepinephrine Release from Isolated Rat Cortical Nerve Terminals. Anesthesia and Analgesia, 2002, 95, 1274-1281.	1.1	26
84	Selective Depression by Isoflurane and Propofol of Glutamate vs. GABA Release from Isolated Cortical Nerve Terminals. Anesthesiology, 2002, 96, A818.	1.3	2
85	Isoflurane and Propofol Inhibit Presynaptic Na+ Channels. Anesthesiology, 2002, 96, A776.	1.3	0
86	Distribution of DARPP-32 immunoreactive structures in the quail brain: anatomical relationship with dopamine and aromatase. Journal of Chemical Neuroanatomy, 2001, 21, 23-39.	1.0	32
87	Opposing Changes in Phosphorylation of Specific Sites in Synapsin I During Ca²⁺-Dependent Glutamate Release in Isolated Nerve Terminals. Journal of Neuroscience, 2001, 21, 7944-7953.	1.7	169
88	Isoflurane Pretreatment Ameliorates Postischemic Neurologic Dysfunction and Preserves Hippocampal Ca2+/Calmodulin-dependent Protein Kinase in a Canine Cardiac Arrest Model. Anesthesiology, 2000, 93, 1285-1293.	1.3	66
89	Drugs of abuse modulate the phosphorylation of ARPP-21, a cyclic AMP-regulated phosphoprotein enriched in the basal ganglia. Neuropharmacology, 2000, 39, 1637-1644.	2.0	36
90	Inhibition of voltage-dependent sodium channels by Ro 31-8220, a â€˜specificâ€™ protein kinase C inhibitor. FEBS Letters, 2000, 473, 265-268.	1.3	34

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91	Phosphorylation of DARPP-32 by Cdk5 modulates dopamine signalling in neurons. Nature, 1999, 402, 669-671.	13.7	538
92	Regulation of Neurabin I Interaction with Protein Phosphatase 1 by Phosphorylationâ€. Biochemistry, 1999, 38, 12943-12949.	1.2	92
93	Effects of anticonvulsants on veratridine- and KCl-evoked glutamate release from rat cortical synaptosomes. Neuroscience Letters, 1999, 276, 127-130.	1.0	67
94	General anesthetic effects on protein kinase C. Toxicology Letters, 1998, 100-101, 89-95.	0.4	22
95	Localization of dopamine D1 receptors and dopaminoceptive neurons in the chick forebrain. , 1997, 388, 146-168.		66
96	CHEB, a convulsant barbiturate, evokes calcium-dependent spontaneous glutamate release from rat cerebrocortical synaptosomes. Neuropharmacology, 1996, 35, 695-701.	2.0	7
97	A comparison: The efficacy of sevoflurane-nitrous oxide or propofol-nitrous oxide for the induction and maintenance of general anesthesia. Journal of Clinical Anesthesia, 1996, 8, 639-643.	0.7	25
98	Stimulus-dependent Phosphorylation of MacMARCKS, a Protein Kinase C Substrate, in Nerve Termini and PC12 Cells. Journal of Biological Chemistry, 1996, 271, 1174-1178.	1.6	22
99	Biochemical Characterization of the Stimulatory Effects of Halothane and Propofol on Purified Brain Protein Kinase C. Anesthesia and Analgesia, 1995, 81, 1216-1222.	1.1	29
100	Modulation of calcium currents by a D1 dopaminergic protein kinase/phosphatase cascade in rat neostriatal neurons. Neuron, 1995, 14, 385-397.	3.8	514
101	DARPP-32 (dopamine and cAMP-regulated phosphoprotein,Mr32,000) is a membrane protein in the bovine parathyroid. FEBS Letters, 1995, 364, 67-74.	1.3	8
102	Distribution of Protein Phosphatase Inhibitor-1 in Brain and Peripheral Tissues of Various Species: Comparison with DARPP-32. Journal of Neurochemistry, 1992, 59, 1053-1061.	2.1	65
103	Dopamine- and adenosine-3â€²:5â€²-monophosphate (cAMP)-regulated phosphoprotein of Mr 32,000 (DARPP-32) in the retina of cat, monkey and human. Neuroscience Letters, 1991, 131, 66-70.	1.0	8
104	Dopamine- and adenosine-3â€²,5â€²-monophosphate (cAMP)-regulated phosphoprotein of 32 kDa (DARRP-32) in the adrenal gland: immunohistochemical localization. Journal of the Autonomic Nervous System, 1991, 36, 75-84.	1.9	7
105	Immunocytochemical localization of phosphatase inhibitor-1 in rat brain. Journal of Comparative Neurology, 1991, 310, 170-188.	0.9	46
106	Characterization in Mammalian Brain of a DARPP-32 Serine Kinase Identical to Casein Kinase II. Journal of Neurochemistry, 1990, 55, 1772-1783.	2.1	69
107	Role of protein phosphorylation in neuronal signal transduction 1. FASEB Journal, 1989, 3, 1583-1592.	0.2	183
108	Inhibitors of protein phosphatase-1. Inhibitor-1 of bovine adipose tissue and a dopamine- and cAMP-regulated phosphoprotein of bovine brain are identical. FEBS Journal, 1989, 180, 143-148.	0.2	17

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109	DARPP-32 and Phosphatase Inhibitor-1, Two Structurally Related Inhibitors of Protein Phosphatase-1, Are Both Present in Striatonigral Neurons. Journal of Neurochemistry, 1988, 50, 257-262.	2.1	48
110	Dopaminergic regulation of protein phosphorylation in the striatum: DARPP-32. Trends in Neurosciences, 1987, 10, 377-383.	4.2	94
111	The hypothalamic arcuate nucleus-median eminence complex: Immunohistochemistry of transmitters, peptides and DARPP-32 with special reference to coexistence in dopamine neurons. Brain Research Reviews, 1986, 11, 97-155.	9.1	218
112	Chapter 13 DARPP-32, a dopamine-regulated phosphoprotein. Progress in Brain Research, 1986, 69, 149-159.	0.9	20
113	Protein Kinases in the Brain. Annual Review of Biochemistry, 1985, 54, 931-976.	5.0	473
114	DARPP-32, a dopamine-regulated neuronal phosphoprotein, is a potent inhibitor of protein phosphatase-1. Nature, 1984, 310, 503-505.	13.7	576
115	A Common Human Brain-Derived Neurotrophic Factor Polymorphism Leads to Prolonged Depression of Excitatory Synaptic Transmission by Isoflurane in Hippocampal Cultures. Frontiers in Molecular Neuroscience, 0, 15, .	1.4	0