Aubin Moutal

List of Publications by Year
in descending order

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78 papers	2,081 citations	201674 27 h-index	302126 39 g-index
91 all docs	91 docs citations	91 times ranked	1919 citing authors

#	Article	IF	Citations
1	Chronic pain recruits hypothalamic dynorphin/kappa opioid receptor signalling to promote wakefulness and vigilance. Brain, 2023, 146, 1186-1199.	7.6	8
2	Conditional knockout of CRMP2 in neurons, but not astrocytes, disrupts spinal nociceptive neurotransmission to control the initiation and maintenance of chronic neuropathic pain. Pain, 2022, 163, e368-e381.	4.2	7
3	A prolactin-dependent sexually dimorphic mechanism of migraine chronification. Cephalalgia, 2022, 42, 197-208.	3.9	14
4	Alternaria alternata-induced airway epithelial signaling and inflammatory responses via protease-activated receptor-2 expression. Biochemical and Biophysical Research Communications, 2022, 591, 13-19.	2.1	7
5	Dysregulation of serum prolactin links the hypothalamus with female nociceptors to promote migraine. Brain, 2022, 145, 2894-2909.	7.6	20
6	Conotoxin contulakin-G engages a neurotensin receptor 2/R-type calcium channel (Cav2.3) pathway to mediate spinal antinociception. Pain, 2022, 163, 1751-1762.	4.2	5
7	Heat shock protein Grp78/BiP/HspA5 binds directly to TDP-43 and mitigates toxicity associated with disease pathology. Scientific Reports, 2022, 12, 8140.	3.3	12
8	Stereospecific Effects of Benzimidazolonepiperidine Compounds on T-Type Ca²⁺ Channels and Pain. ACS Chemical Neuroscience, 2022, 13, 2035-2047.	3.5	4
9	Non-SUMOylated CRMP2 decreases NaV1.7 currents via the endocytic proteins Numb, Nedd4-2 and Eps15. Molecular Brain, 2021, 14, 20.	2.6	17
10	Comparison of quinazoline and benzoylpyrazoline chemotypes targeting the CaVÎ±-Î² interaction as antagonists of the N-type CaV2.2 channel. Channels, 2021, 15, 128-135.	2.8	4
11	Evaluation of the effects of the T-type calcium channel enhancer SAK3 in a rat model of TAF1 deficiency. Neurobiology of Disease, 2021, 149, 105224.	4.4	1
12	Novel Compounds Targeting Neuropilin Receptor 1 with Potential To Interfere with SARS-CoV-2 Virus Entry. ACS Chemical Neuroscience, 2021, 12, 1299-1312.	3.5	30
13	The Effects of Repeated Morphine Treatment on the Endogenous Cannabinoid System in the Ventral Tegmental Area. Frontiers in Pharmacology, 2021, 12, 632757.	3.5	8
14	Missense variants in DPYSL5 cause a neurodevelopmental disorder with corpus callosum agenesis and cerebellar abnormalities. American Journal of Human Genetics, 2021, 108, 951-961.	6.2	26
15	Green Light Antinociceptive and Reversal of Thermal and Mechanical Hypersensitivity Effects Rely on Endogenous Opioid System Stimulation. Journal of Pain, 2021, 22, 1646-1656.	1.4	11
16	Targeting T-type/CaV3.2 channels for chronic pain. Translational Research, 2021, 234, 20-30.	5.0	42
17	SARS-CoV-2 spike protein co-opts VEGF-A/neuropilin-1 receptor signaling to induce analgesia. Pain, 2021, 162, 243-252.	4.2	119
18	Selective targeting of NaV1.7 via inhibition of the CRMP2-Ubc9 interaction reduces pain in rodents. Science Translational Medicine, 2021, 13, eabh1314.	12.4	23

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19	Dynamic CRMP2 Regulation of CaV2.2 in the Prefrontal Cortex Contributes to the Reinstatement of Cocaine Seeking. Molecular Neurobiology, 2020, 57, 346-357.	4.0	11
20	Studies on CRMP2 SUMOylationâ€“deficient transgenic mice identify sex-specific Nav1.7 regulation in the pathogenesis of chronic neuropathic pain. Pain, 2020, 161, 2629-2651.	4.2	25
21	Druggability of CRMP2 for Neurodegenerative Diseases. ACS Chemical Neuroscience, 2020, 11, 2492-2505.	3.5	13
22	Synaptic zinc inhibition of NMDA receptors depends on the association of GluN2A with the zinc transporter ZnT1. Science Advances, 2020, 6, .	10.3	43
23	The role of cyclin-dependent kinase 5 in neuropathic pain. Pain, 2020, 161, 2674-2689.	4.2	20
24	Putative roles of SLC7A5 (LAT1) transporter in pain. Neurobiology of Pain (Cambridge, Mass), 2020, 8, 100050.	2.5	9
25	A modulator of the low-voltage-activated T-type calcium channel that reverses HIV glycoprotein 120-, paclitaxel-, and spinal nerve ligation-induced peripheral neuropathies. Pain, 2020, 161, 2551-2570.	4.2	12
26	1-O-Acetylgeopyxin A, a derivative of a fungal metabolite, blocks tetrodotoxin-sensitive voltage-gated sodium, calcium channels and neuronal excitability which correlates with inhibition of neuropathic pain. Molecular Brain, 2020, 13, 73.	2.6	3
27	Targeted disruption of Kv2.1-VAPA association provides neuroprotection against ischemic stroke in mice by declustering Kv2.1 channels. Science Advances, 2020, 6, .	10.3	21
28	Differential expression of Cdk5-phosphorylated CRMP2 following a spared nerve injury. Molecular Brain, 2020, 13, 97.	2.6	7
29	The investigation of the T-type calcium channel enhancer SAK3 in an animal model of TAF1 intellectual disability syndrome. Neurobiology of Disease, 2020, 143, 105006.	4.4	5
30	The prolactin receptor long isoform regulates nociceptor sensitization and opioid-induced hyperalgesia selectively in females. Science Translational Medicine, 2020, 12, .	12.4	46
31	Coordinating Synaptic Signaling with CRMP2. International Journal of Biochemistry and Cell Biology, 2020, 124, 105759.	2.8	12
32	Collapsin Response Mediator Proteins: Novel Targets for Alzheimerâ€™s Disease. Journal of Alzheimer's Disease, 2020, 77, 949-960.	2.6	9
33	Defining the Kv2.1â€“syntaxin molecular interaction identifies a first-in-class small molecule neuroprotectant. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 15696-15705.	7.1	8
34	TAF1-gene editing alters the morphology and function of the cerebellum and cerebral cortex. Neurobiology of Disease, 2019, 132, 104539.	4.4	8
35	The Natural Flavonoid Naringenin Elicits Analgesia through Inhibition of NaV1.8 Voltage-Gated Sodium Channels. ACS Chemical Neuroscience, 2019, 10, 4834-4846.	3.5	20
36	Development and Characterization of An Injury-free Model of Functional Pain in Rats by Exposure to Red Light. Journal of Pain, 2019, 20, 1293-1306.	1.4	15

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37	Activity of T-type calcium channels is independent of CRMP2 in sensory neurons. Channels, 2019, 13, 147-152.	2.8	6
38	Dysregulation of CRMP2 Post-Translational Modifications Drive Its Pathological Functions. Molecular Neurobiology, 2019, 56, 6736-6755.	4.0	55
39	Reversal of Peripheral Neuropathic Pain by the Small-Molecule Natural Product Physalin F via Block of CaV2.3 (R-Type) and CaV2.2 (N-Type) Voltage-Gated Calcium Channels. ACS Chemical Neuroscience, 2019, 10, 2939-2955.	3.5	26
40	TNF-Î± mediated upregulation of NaV1.7 currents in rat dorsal root ganglion neurons is independent of CRMP2 SUMOylation. Molecular Brain, 2019, 12, 117.	2.6	23
41	Assessment of nociception and related quality-of-life measures in a porcine model of neurofibromatosis type 1. Pain, 2019, 160, 2473-2486.	4.2	11
42	Targeting the CaVÎ±â€“CaVÎ² interaction yields an antagonist of the N-type CaV2.2 channel with broad antinociceptive efficacy. Pain, 2019, 160, 1644-1661.	4.2	30
43	Neuronal Conditional Knockout of Collapsin Response Mediator Protein 2 Ameliorates Disease Severity in a Mouse Model of Multiple Sclerosis. ASN Neuro, 2019, 11, 175909141989209.	2.7	8
44	Evaluation of edonerpic maleate as a CRMP2 inhibitor for pain relief. Channels, 2019, 13, 498-504.	2.8	2
45	Phosphorylated CRMP2 Regulates Spinal Nociceptive Neurotransmission. Molecular Neurobiology, 2019, 56, 5241-5255.	4.0	36
46	(â^')-Hardwickiic Acid and Hautriwaic Acid Induce Antinociception via Blockade of Tetrodotoxin-Sensitive Voltage-Dependent Sodium Channels. ACS Chemical Neuroscience, 2019, 10, 1716-1728.	3.5	22
47	Betulinic acid, derived from the desert lavender Hyptis emoryi, attenuates paclitaxel-, HIV-, and nerve injuryâ€“associated peripheral sensory neuropathy via block of N- and T-type calcium channels. Pain, 2019, 160, 117-135.	4.2	44
48	Cdk5-mediated CRMP2 phosphorylation is necessary and sufficient for peripheral neuropathic pain. Neurobiology of Pain (Cambridge, Mass), 2019, 5, 100022.	2.5	46
49	Restoration of Kv7 Channel-Mediated Inhibition Reduces Cued-Reinstatement of Cocaine Seeking. Journal of Neuroscience, 2018, 38, 4212-4229.	3.6	20
50	Unconventional Signaling by Extracellular CRMP2: Possible Role as an Atypical Neurotransmitter?. Neuroscience, 2018, 376, 224-226.	2.3	8
51	Genetic and pharmacological antagonism of NK1 receptor prevents opiate abuse potential. Molecular Psychiatry, 2018, 23, 1745-1755.	7.9	20
52	Homologyâ€guided mutational analysis reveals the functional requirements for antinociceptive specificity of collapsin response mediator protein 2â€derived peptides. British Journal of Pharmacology, 2018, 175, 2244-2260.	5.4	40
53	CRMP2 Phosphorylation Drives Glioblastoma Cell Proliferation. Molecular Neurobiology, 2018, 55, 4403-4416.	4.0	25
54	Transcriptional regulation of CRMP5 controls neurite outgrowth through Sox5. Cellular and Molecular Life Sciences, 2018, 75, 67-79.	5.4	16

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55	CRMP2 is necessary for Neurofibromatosis type 1 related pain. Channels, 2018, 12, 47-50.	2.8	26
56	A light-gated potassium channel for sustained neuronal inhibition. Nature Methods, 2018, 15, 969-976.	19.0	47
57	A novel variant in TAF1 affects gene expression and is associated with X-linked TAF1 intellectual disability syndrome. Neuronal Signaling, 2018, 2, NS20180141.	3.2	16
58	CRMP2â€“Neurofibromin Interface Drives NF1-related Pain. Neuroscience, 2018, 381, 79-90.	2.3	35
59	A Chemical Biology Approach to Model Pontocerebellar Hypoplasia Type 1B (PCH1B). ACS Chemical Biology, 2018, 13, 3000-3010.	3.4	9
60	Inhibition of the Ubc9 E2 SUMO-conjugating enzymeâ€“CRMP2 interaction decreases NaV1.7 currents and reverses experimental neuropathic pain. Pain, 2018, 159, 2115-2127.	4.2	49
61	A porcine model of neurofibromatosis type 1 that mimics the human disease. JCI Insight, 2018, 3, .	5.0	44
62	High Fidelity Cryopreservation and Recovery of Primary Rodent Cortical Neurons. ENeuro, 2018, 5, ENEURO.0135-18.2018.	1.9	18
63	Sensitization of Ion Channels Contributes to Central and Peripheral Dysfunction in Neurofibromatosis Type 1. Molecular Neurobiology, 2017, 54, 3342-3349.	4.0	19
64	Targeting a Potassium Channel/Syntaxin Interaction Ameliorates Cell Death in Ischemic Stroke. Journal of Neuroscience, 2017, 37, 5648-5658.	3.6	33
65	Long-lasting antinociceptive effects of green light in acute and chronic pain in rats. Pain, 2017, 158, 347-360.	4.2	81
66	A single structurally conserved SUMOylation site in CRMP2 controls NaV1.7 function. Channels, 2017, 11, 316-328.	2.8	34
67	Dissecting the role of the CRMP2â€“neurofibromin complex on pain behaviors. Pain, 2017, 158, 2203-2221.	4.2	50
68	CRISPR/Cas9 editing of Nf1 gene identifies CRMP2 as a therapeutic target in neurofibromatosis type 1-related pain that is reversed by (S)-Lacosamide. Pain, 2017, 158, 2301-2319.	4.2	67
69	Hierarchical CRMP2 posttranslational modifications control NaV1.7 function. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E8443-E8452.	7.1	103
70	Sustained relief of ongoing experimental neuropathic pain by a CRMP2 peptide aptamer with low abuse potential. Pain, 2016, 157, 2124-2140.	4.2	30
71	Efficacy of (S)-lacosamide in preclinical models of cephalic pain. Pain Reports, 2016, 1, e565.	2.7	24
72	(S)-lacosamide inhibition of CRMP2 phosphorylation reduces postoperative and neuropathic pain behaviors through distinct classes of sensory neurons identified by constellation pharmacology. Pain, 2016, 157, 1448-1463.	4.2	54

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73	(S)-Lacosamide Binding to Collapsin Response Mediator Protein 2 (CRMP2) Regulates CaV2.2 Activity by Subverting Its Phosphorylation by Cdk5. Molecular Neurobiology, 2016, 53, 1959-1976.	4.0	50
74	A membrane-delimited N-myristoylated CRMP2 peptide aptamer inhibits CaV2.2 trafficking and reverses inflammatory and postoperative pain behaviors. Pain, 2015, 156, 1247-1264.	4.2	71
75	Differential neuroprotective potential of CRMP2 peptide aptamers conjugated to cationic, hydrophobic, and amphipathic cell penetrating peptides. Frontiers in Cellular Neuroscience, 2015, 8, 471.	3.7	37
76	CRMP5 Controls Glioblastoma Cell Proliferation and Survival through Notch-Dependent Signaling. Cancer Research, 2015, 75, 3519-3528.	0.9	35
77	(399) A membrane-delimited N-myristoylated CRMP2 peptide aptamer inhibits CaV2.2 trafficking and reverses post-operative pain behaviors. Journal of Pain, 2015, 16, S75.	1.4	0
78	The functionalized amino acid (S)-Lacosamide subverts CRMP2-mediated tubulin polymerization to prevent constitutive and activity-dependent increase in neurite outgrowth. Frontiers in Cellular Neuroscience, 2014, 8, 196.	3.7	38