

# Aubin Moutal

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9224924/publications.pdf>

Version: 2024-02-01

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	SARS-CoV-2 spike protein co-opts VEGF-A/neuropilin-1 receptor signaling to induce analgesia. <i>Pain</i> , 2021, 162, 243-252.	4.2	119
2	Hierarchical CRMP2 posttranslational modifications control Nav1.7 function. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, E8443-E8452.	7.1	103
3	Long-lasting antinociceptive effects of green light in acute and chronic pain in rats. <i>Pain</i> , 2017, 158, 347-360.	4.2	81
4	A membrane-delimited N-myristoylated CRMP2 peptide aptamer inhibits CaV2.2 trafficking and reverses inflammatory and postoperative pain behaviors. <i>Pain</i> , 2015, 156, 1247-1264.	4.2	71
5	CRISPR/Cas9 editing of Nf1 gene identifies CRMP2 as a therapeutic target in neurofibromatosis type 1-related pain that is reversed by (S)-Lacosamide. <i>Pain</i> , 2017, 158, 2301-2319.	4.2	67
6	Dysregulation of CRMP2 Post-Translational Modifications Drive Its Pathological Functions. <i>Molecular Neurobiology</i> , 2019, 56, 6736-6755.	4.0	55
7	(S)-Lacosamide inhibition of CRMP2 phosphorylation reduces postoperative and neuropathic pain behaviors through distinct classes of sensory neurons identified by constellation pharmacology. <i>Pain</i> , 2016, 157, 1448-1463.	4.2	54
8	(S)-Lacosamide Binding to Collapsin Response Mediator Protein 2 (CRMP2) Regulates CaV2.2 Activity by Subverting Its Phosphorylation by Cdk5. <i>Molecular Neurobiology</i> , 2016, 53, 1959-1976.	4.0	50
9	Dissecting the role of the CRMP2-neurofibromin complex on pain behaviors. <i>Pain</i> , 2017, 158, 2203-2221.	4.2	50
10	Inhibition of the Ubc9 E2 SUMO-conjugating enzyme-CRMP2 interaction decreases Nav1.7 currents and reverses experimental neuropathic pain. <i>Pain</i> , 2018, 159, 2115-2127.	4.2	49
11	A light-gated potassium channel for sustained neuronal inhibition. <i>Nature Methods</i> , 2018, 15, 969-976.	19.0	47
12	Cdk5-mediated CRMP2 phosphorylation is necessary and sufficient for peripheral neuropathic pain. <i>Neurobiology of Pain (Cambridge, Mass )</i> , 2019, 5, 100022.	2.5	46
13	The prolactin receptor long isoform regulates nociceptor sensitization and opioid-induced hyperalgesia selectively in females. <i>Science Translational Medicine</i> , 2020, 12, .	12.4	46
14	Betulinic acid, derived from the desert lavender <i>Hyptis emoryi</i> , attenuates paclitaxel-, HIV-, and nerve injury-associated peripheral sensory neuropathy via block of N- and T-type calcium channels. <i>Pain</i> , 2019, 160, 117-135.	4.2	44
15	A porcine model of neurofibromatosis type 1 that mimics the human disease. <i>JCI Insight</i> , 2018, 3, .	5.0	44
16	Synaptic zinc inhibition of NMDA receptors depends on the association of GluN2A with the zinc transporter ZnT1. <i>Science Advances</i> , 2020, 6, .	10.3	43
17	Targeting T-type/CaV3.2 channels for chronic pain. <i>Translational Research</i> , 2021, 234, 20-30.	5.0	42
18	Homology-guided mutational analysis reveals the functional requirements for antinociceptive specificity of collapsin response mediator protein 2-derived peptides. <i>British Journal of Pharmacology</i> , 2018, 175, 2244-2260.	5.4	40

#	ARTICLE	IF	CITATIONS
19	The functionalized amino acid (S)-Lacosamide subverts CRMP2-mediated tubulin polymerization to prevent constitutive and activity-dependent increase in neurite outgrowth. <i>Frontiers in Cellular Neuroscience</i> , 2014, 8, 196.	3.7	38
20	Differential neuroprotective potential of CRMP2 peptide aptamers conjugated to cationic, hydrophobic, and amphipathic cell penetrating peptides. <i>Frontiers in Cellular Neuroscience</i> , 2015, 8, 471.	3.7	37
21	Phosphorylated CRMP2 Regulates Spinal Nociceptive Neurotransmission. <i>Molecular Neurobiology</i> , 2019, 56, 5241-5255.	4.0	36
22	CRMP5 Controls Glioblastoma Cell Proliferation and Survival through Notch-Dependent Signaling. <i>Cancer Research</i> , 2015, 75, 3519-3528.	0.9	35
23	CRMP2-Neurofibromin Interface Drives NF1-related Pain. <i>Neuroscience</i> , 2018, 381, 79-90.	2.3	35
24	A single structurally conserved SUMOylation site in CRMP2 controls Nav1.7 function. <i>Channels</i> , 2017, 11, 316-328.	2.8	34
25	Targeting a Potassium Channel/Syntaxin Interaction Ameliorates Cell Death in Ischemic Stroke. <i>Journal of Neuroscience</i> , 2017, 37, 5648-5658.	3.6	33
26	Sustained relief of ongoing experimental neuropathic pain by a CRMP2 peptide aptamer with low abuse potential. <i>Pain</i> , 2016, 157, 2124-2140.	4.2	30
27	Targeting the CaV1.2-CaV1.2 interaction yields an antagonist of the N-type CaV2.2 channel with broad antinociceptive efficacy. <i>Pain</i> , 2019, 160, 1644-1661.	4.2	30
28	Novel Compounds Targeting Neuropilin Receptor 1 with Potential To Interfere with SARS-CoV-2 Virus Entry. <i>ACS Chemical Neuroscience</i> , 2021, 12, 1299-1312.	3.5	30
29	CRMP2 is necessary for Neurofibromatosis type 1 related pain. <i>Channels</i> , 2018, 12, 47-50.	2.8	26
30	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. <i>ACS Chemical Neuroscience</i> , 2019, 10, 2939-2955.	3.5	26
31	Missense variants in DPYSL5 cause a neurodevelopmental disorder with corpus callosum agenesis and cerebellar abnormalities. <i>American Journal of Human Genetics</i> , 2021, 108, 951-961.	6.2	26
32	CRMP2 Phosphorylation Drives Glioblastoma Cell Proliferation. <i>Molecular Neurobiology</i> , 2018, 55, 4403-4416.	4.0	25
33	Studies on CRMP2 SUMOylation-deficient transgenic mice identify sex-specific Nav1.7 regulation in the pathogenesis of chronic neuropathic pain. <i>Pain</i> , 2020, 161, 2629-2651.	4.2	25
34	Efficacy of (S)-lacosamide in preclinical models of cephalic pain. <i>Pain Reports</i> , 2016, 1, e565.	2.7	24
35	TNF- $\alpha$ mediated upregulation of Nav1.7 currents in rat dorsal root ganglion neurons is independent of CRMP2 SUMOylation. <i>Molecular Brain</i> , 2019, 12, 117.	2.6	23
36	Selective targeting of Nav1.7 via inhibition of the CRMP2-Ubc9 interaction reduces pain in rodents. <i>Science Translational Medicine</i> , 2021, 13, eabh1314.	12.4	23

#	ARTICLE	IF	CITATIONS
37	( $\alpha^*$ )-Hardwickic Acid and Hautriwaic Acid Induce Antinociception via Blockade of Tetrodotoxin-Sensitive Voltage-Dependent Sodium Channels. <i>ACS Chemical Neuroscience</i> , 2019, 10, 1716-1728.	3.5	22
38	Targeted disruption of Kv2.1-VAPA association provides neuroprotection against ischemic stroke in mice by declustering Kv2.1 channels. <i>Science Advances</i> , 2020, 6, .	10.3	21
39	Restoration of Kv7 Channel-Mediated Inhibition Reduces Cued-Reinstatement of Cocaine Seeking. <i>Journal of Neuroscience</i> , 2018, 38, 4212-4229.	3.6	20
40	Genetic and pharmacological antagonism of NK1 receptor prevents opiate abuse potential. <i>Molecular Psychiatry</i> , 2018, 23, 1745-1755.	7.9	20
41	The Natural Flavonoid Naringenin Elicits Analgesia through Inhibition of Nav1.8 Voltage-Gated Sodium Channels. <i>ACS Chemical Neuroscience</i> , 2019, 10, 4834-4846.	3.5	20
42	The role of cyclin-dependent kinase 5 in neuropathic pain. <i>Pain</i> , 2020, 161, 2674-2689.	4.2	20
43	Dysregulation of serum prolactin links the hypothalamus with female nociceptors to promote migraine. <i>Brain</i> , 2022, 145, 2894-2909.	7.6	20
44	Sensitization of Ion Channels Contributes to Central and Peripheral Dysfunction in Neurofibromatosis Type 1. <i>Molecular Neurobiology</i> , 2017, 54, 3342-3349.	4.0	19
45	High Fidelity Cryopreservation and Recovery of Primary Rodent Cortical Neurons. <i>ENeuro</i> , 2018, 5, ENEURO.0135-18.2018.	1.9	18
46	Non-SUMOylated CRMP2 decreases Nav1.7 currents via the endocytic proteins Numb, Nedd4-2 and Eps15. <i>Molecular Brain</i> , 2021, 14, 20.	2.6	17
47	Transcriptional regulation of CRMP5 controls neurite outgrowth through Sox5. <i>Cellular and Molecular Life Sciences</i> , 2018, 75, 67-79.	5.4	16
48	A novel variant in <i>TAF1</i> affects gene expression and is associated with X-linked intellectual disability syndrome. <i>Neuronal Signaling</i> , 2018, 2, NS20180141.	3.2	16
49	Development and Characterization of An Injury-free Model of Functional Pain in Rats by Exposure to Red Light. <i>Journal of Pain</i> , 2019, 20, 1293-1306.	1.4	15
50	A prolactin-dependent sexually dimorphic mechanism of migraine chronification. <i>Cephalalgia</i> , 2022, 42, 197-208.	3.9	14
51	Druggability of CRMP2 for Neurodegenerative Diseases. <i>ACS Chemical Neuroscience</i> , 2020, 11, 2492-2505.	3.5	13
52	A modulator of the low-voltage-activated T-type calcium channel that reverses HIV glycoprotein 120-, paclitaxel-, and spinal nerve ligation-induced peripheral neuropathies. <i>Pain</i> , 2020, 161, 2551-2570.	4.2	12
53	Coordinating Synaptic Signaling with CRMP2. <i>International Journal of Biochemistry and Cell Biology</i> , 2020, 124, 105759.	2.8	12
54	Heat shock protein Grp78/BiP/HspA5 binds directly to TDP-43 and mitigates toxicity associated with disease pathology. <i>Scientific Reports</i> , 2022, 12, 8140.	3.3	12

#	ARTICLE	IF	CITATIONS
55	Assessment of nociception and related quality-of-life measures in a porcine model of neurofibromatosis type 1. <i>Pain</i> , 2019, 160, 2473-2486.	4.2	11
56	Dynamic CRMP2 Regulation of CaV2.2 in the Prefrontal Cortex Contributes to the Reinstatement of Cocaine Seeking. <i>Molecular Neurobiology</i> , 2020, 57, 346-357.	4.0	11
57	Green Light Antinociceptive and Reversal of Thermal and Mechanical Hypersensitivity Effects Rely on Endogenous Opioid System Stimulation. <i>Journal of Pain</i> , 2021, 22, 1646-1656.	1.4	11
58	A Chemical Biology Approach to Model Pontocerebellar Hypoplasia Type 1B (PCH1B). <i>ACS Chemical Biology</i> , 2018, 13, 3000-3010.	3.4	9
59	Putative roles of SLC7A5 (LAT1) transporter in pain. <i>Neurobiology of Pain (Cambridge, Mass )</i> , 2020, 8, 100050.	2.5	9
60	Collapsin Response Mediator Proteins: Novel Targets for Alzheimer's Disease. <i>Journal of Alzheimer's Disease</i> , 2020, 77, 949-960.	2.6	9
61	Unconventional Signaling by Extracellular CRMP2: Possible Role as an Atypical Neurotransmitter?. <i>Neuroscience</i> , 2018, 376, 224-226.	2.3	8
62	Defining the Kv2.1-syntaxin molecular interaction identifies a first-in-class small molecule neuroprotectant. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 15696-15705.	7.1	8
63	TAF1-gene editing alters the morphology and function of the cerebellum and cerebral cortex. <i>Neurobiology of Disease</i> , 2019, 132, 104539.	4.4	8
64	Neuronal Conditional Knockout of Collapsin Response Mediator Protein 2 Ameliorates Disease Severity in a Mouse Model of Multiple Sclerosis. <i>ASN Neuro</i> , 2019, 11, 175909141989209.	2.7	8
65	The Effects of Repeated Morphine Treatment on the Endogenous Cannabinoid System in the Ventral Tegmental Area. <i>Frontiers in Pharmacology</i> , 2021, 12, 632757.	3.5	8
66	Chronic pain recruits hypothalamic dynorphin/kappa opioid receptor signalling to promote wakefulness and vigilance. <i>Brain</i> , 2023, 146, 1186-1199.	7.6	8
67	Differential expression of Cdk5-phosphorylated CRMP2 following a spared nerve injury. <i>Molecular Brain</i> , 2020, 13, 97.	2.6	7
68	Conditional knockout of CRMP2 in neurons, but not astrocytes, disrupts spinal nociceptive neurotransmission to control the initiation and maintenance of chronic neuropathic pain. <i>Pain</i> , 2022, 163, e368-e381.	4.2	7
69	<i>Alternaria alternata</i> -induced airway epithelial signaling and inflammatory responses via protease-activated receptor-2 expression. <i>Biochemical and Biophysical Research Communications</i> , 2022, 591, 13-19.	2.1	7
70	Activity of T-type calcium channels is independent of CRMP2 in sensory neurons. <i>Channels</i> , 2019, 13, 147-152.	2.8	6
71	The investigation of the T-type calcium channel enhancer SAK3 in an animal model of TAF1 intellectual disability syndrome. <i>Neurobiology of Disease</i> , 2020, 143, 105006.	4.4	5
72	Conotoxin contulakin-G engages a neurotensin receptor 2/R-type calcium channel (Cav2.3) pathway to mediate spinal antinociception. <i>Pain</i> , 2022, 163, 1751-1762.	4.2	5

#	ARTICLE	IF	CITATIONS
73	Comparison of quinazoline and benzoylpyrazoline chemotypes targeting the CaV1 $\pm$ - $\beta$ 2 interaction as antagonists of the N-type CaV2.2 channel. <i>Channels</i> , 2021, 15, 128-135.	2.8	4
74	Stereospecific Effects of Benzimidazolonepiperidine Compounds on T-Type Ca <sup>2+</sup> Channels and Pain. <i>ACS Chemical Neuroscience</i> , 2022, 13, 2035-2047.	3.5	4
75	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. <i>Molecular Brain</i> , 2020, 13, 73.	2.6	3
76	Evaluation of edonepic maleate as a CRMP2 inhibitor for pain relief. <i>Channels</i> , 2019, 13, 498-504.	2.8	2
77	Evaluation of the effects of the T-type calcium channel enhancer SAK3 in a rat model of TAF1 deficiency. <i>Neurobiology of Disease</i> , 2021, 149, 105224.	4.4	1
78	(399) A membrane-delimited N-myristoylated CRMP2 peptide aptamer inhibits CaV2.2 trafficking and reverses post-operative pain behaviors. <i>Journal of Pain</i> , 2015, 16, S75.	1.4	0