Rohini Kuner

List of Publications by Year
in descending order

100 papers	7,848 citations	53794 45 h-index	54911 84 g-index
113 all docs	113 docs citations	113 times ranked	9132 citing authors

#	Article	IF	Citations
1	Central mechanisms of pathological pain. Nature Medicine, 2010, 16, 1258-1266.	30.7	629
2	Neuropathic Pain: From Mechanisms to Treatment. Physiological Reviews, 2021, 101, 259-301.	28.8	546
3	Cannabinoids mediate analgesia largely via peripheral type 1 cannabinoid receptors in nociceptors. Nature Neuroscience, 2007, 10, 870-879.	14.8	504
4	Structural plasticity and reorganisation in chronic pain. Nature Reviews Neuroscience, 2017, 18, 20-30.	10.2	419
5	Plexin-B1 Directly Interacts with PDZ-RhoGEF/LARG to Regulate RhoA and Growth Cone Morphology. Neuron, 2002, 35, 51-63.	8.1	338
6	A New Population of Parvocellular Oxytocin Neurons Controlling Magnocellular Neuron Activity and Inflammatory Pain Processing. Neuron, 2016, 89, 1291-1304.	8.1	314
7	Synaptic plasticity in pathological pain. Trends in Neurosciences, 2014, 37, 343-355.	8.6	191
8	The AMPA Receptor Subunits GluR-A and GluR-B Reciprocally Modulate Spinal Synaptic Plasticity and Inflammatory Pain. Neuron, 2004, 44, 637-650.	8.1	188
9	The serine protease inhibitor SerpinA3N attenuates neuropathic pain by inhibiting T cellâ€"derived leukocyte elastase. Nature Medicine, 2015, 21, 518-523.	30.7	182
10	Conditional gene deletion in primary nociceptive neurons of trigeminal ganglia and dorsal root ganglia. Genesis, 2004, 38, 122-129.	1.6	179
11	Hematopoietic colonyâ€"stimulating factors mediate tumor-nerve interactions and bone cancer pain. Nature Medicine, 2009, 15, 802-807.	30.7	175
12	Cellular Circuits in the Brain and Their Modulation in Acute and Chronic Pain. Physiological Reviews, 2021, 101, 213-258.	28.8	155
13	Plexin-B1/RhoGEFâ€"mediated RhoA activation involves the receptor tyrosine kinase ErbB-2. Journal of Cell Biology, 2004, 165, 869-880.	5.2	146
14	Pain hypersensitivity mechanisms at a glance. DMM Disease Models and Mechanisms, 2013, 6, 889-895.	2.4	126
15	A Key Role for gp130 Expressed on Peripheral Sensory Nerves in Pathological Pain. Journal of Neuroscience, 2009, 29, 13473-13483.	3.6	125
16	A pathway from midcingulate cortex to posterior insula gates nociceptive hypersensitivity. Nature Neuroscience, 2017, 20, 1591-1601.	14.8	125
17	Synaptic scaffolding protein Homer1a protects against chronic inflammatory pain. Nature Medicine, 2006, 12, 677-681.	30.7	123
18	Studying ongoing and spontaneous pain in rodents â€" challenges and opportunities. European Journal of Neuroscience, 2014, 39, 1881-1890.	2.6	121

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19	Nuclear Calcium Signaling in Spinal Neurons Drives a Genomic Program Required for Persistent Inflammatory Pain. Neuron, 2013, 77, 43-57.	8.1	114
20	Plexin-B2, But Not Plexin-B1, Critically Modulates Neuronal Migration and Patterning of the Developing Nervous System In Vivo. Journal of Neuroscience, 2007, 27, 6333-6347.	3.6	105
21	A Functional Role for VEGFR1 Expressed in Peripheral Sensory Neurons in Cancer Pain. Cancer Cell, 2015, 27, 780-796.	16.8	97
22	Noncoding RNAs: key molecules in understanding and treating pain. Trends in Molecular Medicine, 2014, 20, 437-448.	6.7	94
23	Gamma oscillations in somatosensory cortex recruit prefrontal and descending serotonergic pathways in aversion and nociception. Nature Communications, 2019, 10, 983.	12.8	94
24	Late-onset motoneuron disease caused by a functionally modified AMPA receptor subunit. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 5826-5831.	7.1	89
25	Molecular, Cellular and Circuit Basis of Cholinergic Modulation of Pain. Neuroscience, 2018, 387, 135-148.	2.3	85
26	Oligodendrocyte ablation triggers central pain independently of innate or adaptive immune responses in mice. Nature Communications, 2014, 5, 5472.	12.8	83
27	A critical role for Piezo2 channels in the mechanotransduction of mouse proprioceptive neurons. Scientific Reports, 2016, 6, 25923.	3.3	82
28	Presynaptically Localized Cyclic GMP-Dependent Protein Kinase 1 Is a Key Determinant of Spinal Synaptic Potentiation and Pain Hypersensitivity. PLoS Biology, 2012, 10, e1001283.	5.6	82
29	Presynaptic GABAergic inhibition regulated by BDNF contributes to neuropathic pain induction. Nature Communications, 2014, 5, 5331.	12.8	76
30	The Cannabinoid Receptor CB1 Interacts with the WAVE1 Complex and Plays a Role in Actin Dynamics and Structural Plasticity in Neurons. PLoS Biology, 2015, 13, e1002286.	5.6	75
31	Nitric Oxide Synthase (NOS)-Interacting Protein Interacts with Neuronal NOS and Regulates Its Distribution and Activity. Journal of Neuroscience, 2004, 24, 10454-10465.	3.6	72
32	CXCL10 and CCL21 Promote Migration of Pancreatic Cancer Cells Toward Sensory Neurons and Neural Remodeling in Tumors in Mice, Associated With Pain in Patients. Gastroenterology, 2020, 159, 665-681.e13.	1.3	72
33	microRNAs in nociceptive circuits as predictors of future clinical applications. Frontiers in Molecular Neuroscience, 2013, 6, 33.	2.9	70
34	Plexinâ€B family members demonstrate nonâ€redundant expression patterns in the developing mouse nervous system: an anatomical basis for morphogenetic effects of Sema4D during development. European Journal of Neuroscience, 2004, 19, 2622-2632.	2.6	68
35	Voluntary and evoked behavioral correlates in neuropathic pain states under different social housing conditions. Molecular Pain, 2016, 12, 174480691665663.	2.1	68
36	Wnt-Fzd Signaling Sensitizes Peripheral Sensory Neurons via Distinct Noncanonical Pathways. Neuron, 2014, 83, 104-121.	8.1	67

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37	Neocortical circuits in pain and pain relief. Nature Reviews Neuroscience, 2021, 22, 458-471.	10.2	63
38	Roles of the AMPA Receptor Subunit GluA1 but Not GluA2 in Synaptic Potentiation and Activation of ERK in the Anterior Cingulate Cortex. Molecular Pain, 2009, 5, 1744-8069-5-46.	2.1	61
39	Genetic dissection of plexin signaling in vivo. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 2194-2199.	7.1	61
40	Early-onset treadmill training reduces mechanical allodynia and modulates calcitonin gene-related peptide fiber density in lamina III/IV in a mouse model of spinal cord contusion injury. Pain, 2016, 157, 687-697.	4.2	60
41	An Improved Behavioural Assay Demonstrates That Ultrasound Vocalizations Constitute a Reliable Indicator of Chronic Cancer Pain and Neuropathic Pain. Molecular Pain, 2010, 6, 1744-8069-6-18.	2.1	59
42	Small-molecule inhibition of STOML3 oligomerization reverses pathological mechanical hypersensitivity. Nature Neuroscience, 2017, 20, 209-218.	14.8	59
43	Genomeâ€wide identification and functional analyses of micro<scp>RNA</scp> signatures associated with cancer pain. EMBO Molecular Medicine, 2013, 5, 1740-1758.	6.9	53
44	Peripheral calcium-permeable AMPA receptors regulate chronic inflammatory pain in mice. Journal of Clinical Investigation, 2011, 121, 1608-1623.	8.2	53
45	TorsinA protects against oxidative stress in COS-1 and PC12 cells. Neuroscience Letters, 2003, 350, 153-156.	2.1	48
46	Activity-dependent potentiation of calcium signals in spinal sensory networks in inflammatory pain states. Pain, 2008, 140, 358-367.	4.2	48
47	Neuropathic pain caused by miswiring and abnormal end organ targeting. Nature, 2022, 606, 137-145.	27.8	46
48	Spinal excitatory mechanisms of pathological pain. Pain, 2015, 156, S11-S17.	4.2	45
49	Metabolomic signature of type 1 diabetes-induced sensory loss and nerve damage in diabetic neuropathy. Journal of Molecular Medicine, 2019, 97, 845-854.	3.9	44
50	In Vivo SiRNA Transfection and Gene Knockdown in Spinal Cord via Rapid Noninvasive Lumbar Intrathecal Injections in Mice. Journal of Visualized Experiments, 2014, , .	0.3	43
51	Voluntary and evoked behavioral correlates in inflammatory pain conditions under different social housing conditions. Pain Reports, 2016, 1, e564.	2.7	43
52	Sources of Individual Variability: Mirnas That Predispose to Neuropathic Pain Identified Using Genome-Wide Sequencing. Molecular Pain, 2014, 10, 1744-8069-10-22.	2.1	41
53	A role for Kalirin-7 in nociceptive sensitization via activity-dependent modulation of spinal synapses. Nature Communications, 2015, 6, 6820.	12.8	39
54	The semaphorin 4Dâ€plexinâ€B signalLing complex regulates dendritic and axonal complexity in developing neurons via diverse pathways. European Journal of Neuroscience, 2009, 30, 1193-1208.	2.6	38

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55	Hematopoietic colony-stimulating factors: new players in tumorâ€“nerve interactions. Journal of Molecular Medicine, 2011, 89, 321-329.	3.9	37
56	A functional role for semaphorin 4D/plexin B1 interactions in epithelial branching morphogenesis during organogenesis. Development (Cambridge), 2008, 135, 3333-3343.	2.5	34
57	Spinal Wnt5a Plays a Key Role in Spinal Dendritic Spine Remodeling in Neuropathic and Inflammatory Pain Models and in the Proalgesic Effects of Peripheral Wnt3a. Journal of Neuroscience, 2020, 40, 6664-6677.	3.6	34
58	Evoked hypoalgesia is accompanied by tonic pain and immune cell infiltration in the dorsal root ganglia at late stages of diabetic neuropathy in mice. Molecular Pain, 2018, 14, 174480691881797.	2.1	32
59	Functional characterization of a mouse model for central post-stroke pain. Molecular Pain, 2016, 12, 174480691662904.	2.1	30
60	miR-34c-5p functions as pronociceptive microRNA in cancer pain by targeting Cav2.3 containing calcium channels. Pain, 2017, 158, 1765-1779.	4.2	30
61	Clinically Actionable Strategies for Studying Neural Influences in Cancer. Cancer Cell, 2020, 38, 11-14.	16.8	30
62	The impact of Semaphorin 4C/Plexin-B2 signaling on fear memory via remodeling of neuronal and synaptic morphology. Molecular Psychiatry, 2021, 26, 1376-1398.	7.9	30
63	Hypoxia-inducible factor 1Î± protects peripheral sensory neurons from diabetic peripheral neuropathy by suppressing accumulation of reactive oxygen species.. Journal of Molecular Medicine, 2018, 96, 1395-1405.	3.9	29
64	TorsinA, the gene linked to early-onset dystonia, is upregulated by the dopaminergic toxin MPTP in mice. Neuroscience Letters, 2004, 355, 126-130.	2.1	28
65	Transcriptional Mechanisms Underlying Sensitization of Peripheral Sensory Neurons by Granulocyte-/Granulocyte-Macrophage Colony Stimulating Factors. Molecular Pain, 2013, 9, 1744-8069-9-48.	2.1	28
66	A common ground for pain and depression. Nature Neuroscience, 2019, 22, 1612-1614.	14.8	28
67	Therapeutic potential for leukocyte elastase in chronic pain states harboring a neuropathic component. Pain, 2017, 158, 2243-2258.	4.2	27
68	SUMOylation of Enzymes and Ion Channels in Sensory Neurons Protects against Metabolic Dysfunction, Neuropathy, and Sensory Loss in Diabetes. Neuron, 2020, 107, 1141-1159.e7.	8.1	27
69	Dissecting the functional significance of endothelin A receptors in peripheral nociceptors in vivo via conditional gene deletion. Pain, 2010, 148, 206-214.	4.2	26
70	A novel biological role for the phospholipid lysophosphatidylinositol in nociceptive sensitization via activation of diverse G-protein signalling pathways in sensory nerves in vivo. Pain, 2013, 154, 2801-2812.	4.2	25
71	Neuron-specific biomarkers predict hypo- and hyperalgesia in individuals with diabetic peripheral neuropathy. Diabetologia, 2021, 64, 2843-2855.	6.3	25
72	Structureâ€“function relationships in peripheral nerve contributions to diabetic peripheral neuropathy. Pain, 2019, 160, S29-S36.	4.2	24

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73	Semaphorin 4C Plexin-B2 signaling in peripheral sensory neurons is pronociceptive in a model of inflammatory pain. Nature Communications, 2017, 8, 176.	12.8	23
74	Mice lacking Plexin-B3 display normal CNS morphology and behaviour. Molecular and Cellular Neurosciences, 2009, 42, 372-381.	2.2	19
75	Future directions in preclinical and translational cancer neuroscience research. Nature Cancer, 2020, 1, 1027-1031.	13.2	19
76	Neurobiology of brain oscillations in acute and chronic pain. Trends in Neurosciences, 2021, 44, 629-642.	8.6	18
77	Epigenetic control of hypersensitivity in chronic inflammatory pain by the de novo DNA methyltransferase Dnmt3a2. Molecular Pain, 2019, 15, 174480691982746.	2.1	14
78	Repetitive non-invasive prefrontal stimulation reverses neuropathic pain via neural remodelling in mice. Progress in Neurobiology, 2021, 201, 102009.	5.7	13
79	Unravelling Spinal Circuits of Pain and Mechanical Allodynia. Neuron, 2015, 87, 673-675.	8.1	12
80	Loss of POMC-mediated antinociception contributes to painful diabetic neuropathy. Nature Communications, 2021, 12, 426.	12.8	12
81	A genome-wide screen reveals microRNAs in peripheral sensory neurons driving painful diabetic neuropathy. Pain, 2021, 162, 1334-1351.	4.2	12
82	Mechanisms of Disease: Motoneuron Disease Aggravated by Transgenic Expression of a Functionally Modified AMPA Receptor Subunit. Annals of the New York Academy of Sciences, 2005, 1053, 269-286.	3.8	12
83	Suppression of neuropathic pain and comorbidities by recurrent cycles of repetitive transcranial direct current motor cortex stimulation in mice. Scientific Reports, 2021, 11, 9735.	3.3	11
84	A mouse model for pain and neuroplastic changes associated with pancreatic ductal adenocarcinoma. Pain, 2017, 158, 1609-1621.	4.2	9
85	Neurogenesis of medium spiny neurons in the nucleus accumbens continues into adulthood and is enhanced by pathological pain. Molecular Psychiatry, 2021, 26, 4616-4632.	7.9	9
86	Presynaptic NMDARs on spinal nociceptor terminals state-dependently modulate synaptic transmission and pain. Nature Communications, 2022, 13, 728.	12.8	9
87	Characterization of experimental diabetic neuropathy using multicontrast magnetic resonance neurography at ultra high field strength. Scientific Reports, 2020, 10, 7593.	3.3	8
88	Plexin-B2 controls the timing of differentiation and the motility of cerebellar granule neurons. ELife, 2021, 10, .	6.0	8
89	A checkpoint to pain. Nature Neuroscience, 2017, 20, 897-899.	14.8	7
90	Mechanisms of Disease: Motoneuron Disease Aggravated by Transgenic Expression of a Functionally Modified AMPA Receptor Subunit. Annals of the New York Academy of Sciences, 2005, 1053, 269-286.	3.8	5

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91	Peripheral Kappa Opioid Receptor Signaling Takes on a Central Role. Neuron, 2018, 99, 1102-1104.	8.1	5
92	Organic anion transporter 1 is an HDAC4-regulated mediator of nociceptive hypersensitivity in mice. Nature Communications, 2022, 13, 875.	12.8	5
93	Neurogenesis in the adult brain functionally contributes to the maintenance of chronic neuropathic pain. Scientific Reports, 2021, 11, 18549.	3.3	4
94	Meet PAIN Pictured. Pain, 2015, 156, 3.	4.2	3
95	The plastic spinal cord: functional and structural plasticity in the transition from acute to chronic pain. E-Neuroforum, 2017, 23, 137-143.	0.1	3
96	Sounding out pain. Science, 2022, 377, 155-156.	12.6	2
97	Das plastische RÃ¼ckenmark: funktionelle und strukturelle PlastizitÃt bei der Chronifizierung von Schmerzen. E-Neuroforum, 2017, 23, 179-185.	0.1	1
98	Cortex: Unravelling the final frontier in pain. Canadian Journal of Pain, 2017, 1, 3-3.	1.7	0
99	Locus revealed: Painlessness via loss of NaV1.7 at central terminals of sensory neurons. Neuron, 2021, 109, 1413-1416.	8.1	0
100	Brain-based interventions for chronic pain. Neuroforum, 2022, .	0.3	0