Patrick M. Dougherty

List of Publications by Year
in descending order

137	8,374	31976	49909
papers	citations	53 h-index	87 g-index

139	139	139	7333
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Are the symptoms of cancer and cancer treatment due to a shared biologic mechanism?. Cancer, 2003, 97, 2919-2925.	4.1	460
2	An Overview of Animal Models of Pain: Disease Models and Outcome Measures. Journal of Pain, 2013, 14, 1255-1269.	1.4	318
3	Taxol-induced sensory disturbance is characterized by preferential impairment of myelinated fiber function in cancer patients. Pain, 2004, 109, 132-142.	4.2	317
4	A Cytokine-Based Neuroimmunologic Mechanism of Cancer-Related Symptoms. NeuroImmunoModulation, 2004, 11, 279-292.	1.8	266
5	Loss of p53 drives neuron reprogramming in head and neck cancer. Nature, 2020, 578, 449-454.	27.8	241
6	Dorsal Root Ganglion Infiltration by Macrophages Contributes toÂPaclitaxel Chemotherapy-Induced Peripheral Neuropathy. Journal of Pain, 2016, 17, 775-786.	1.4	237
7	Electrophysiological and transcriptomic correlates of neuropathic pain in human dorsal root ganglion neurons. Brain, 2019, 142, 1215-1226.	7.6	198
8	The Cancer Chemotherapeutic Paclitaxel Increases Human and Rodent Sensory Neuron Responses to TRPV1 by Activation of TLR4. Journal of Neuroscience, 2015, 35, 13487-13500.	3.6	190
9	Toll-Like Receptor 4 Signaling Contributes to Paclitaxel-Induced Peripheral Neuropathy. Journal of Pain, 2014, 15, 712-725.	1.4	182
10	Evidence That Spinal Astrocytes but Not Microglia Contribute to the Pathogenesis of Paclitaxel-Induced Painful Neuropathy. Journal of Pain, 2012, 13, 293-303.	1.4	173
11	DRG Voltage-Gated Sodium Channel 1.7 Is Upregulated in Paclitaxel-Induced Neuropathy in Rats and in Humans with Neuropathic Pain. Journal of Neuroscience, 2018, 38, 1124-1136.	3.6	173
12	CD8⁺T Cells and Endogenous IL-10 Are Required for Resolution of Chemotherapy-Induced Neuropathic Pain. Journal of Neuroscience, 2016, 36, 11074-11083.	3.6	164
13	Spatial transcriptomics of dorsal root ganglia identifies molecular signatures of human nociceptors. Science Translational Medicine, 2022, 14, eabj8186.	12.4	164
14	Quantitative Sensory Findings in Patients With Bortezomib-Induced Pain. Journal of Pain, 2007, 8, 296-306.	1.4	141
15	Differential influence of local anesthetic upon two models of experimentally induced peripheral mononeuropathy in the rat. Brain Research, 1992, 570, 109-115.	2.2	138
16	Dorsal root ganglion neurons become hyperexcitable and increase expression of voltage-gated T-type calcium channels (Cav3.2) in paclitaxel-induced peripheral neuropathy. Pain, 2017, 158, 417-429.	4.2	137
17	Neuroma formation and numbers of axons in a rat model of experimental peripheral neuropathy. Neuroscience Letters, 1991, 131, 88-92.	2.1	135
18	Role of nuclear factor-Î²B-mediated inflammatory pathways in cancer-related symptoms and their regulation by nutritional agents. Experimental Biology and Medicine, 2011, 236, 658-671.	2.4	131

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19	Mechanisms involved in the development of chemotherapy-induced neuropathy. Pain Management, 2015, 5, 285-296.	1.5	131
20	Changes in lectin, GAP-43 and neuropeptide staining in the rat superficial dorsal horn following experimental peripheral neuropathy. Neuroscience Letters, 1991, 131, 249-252.	2.1	130
21	Persistent chemoneuropathy in patients receiving the plant alkaloids paclitaxel and vincristine. Cancer Chemotherapy and Pharmacology, 2013, 71, 619-626.	2.3	126
22	Astrocytes, but not microglia, are activated in oxaliplatin and bortezomib-induced peripheral neuropathy in the rat. Neuroscience, 2014, 274, 308-317.	2.3	126
23	Is large myelinated fiber loss associated with hyperalgesia in a model of experimental peripheral neuropathy in the rat?. Pain, 1993, 52, 233-242.	4.2	124
24	Enhanced Excitability of Primary Sensory Neurons and Altered Gene Expression of Neuronal Ion Channels in Dorsal Root Ganglion in Paclitaxel-induced Peripheral Neuropathy. Anesthesiology, 2014, 120, 1463-1475.	2.5	123
25	GFAP Expression in Lumbar Spinal Cord of Naive and Neuropathic Rats Treated with MK-801. Experimental Neurology, 1994, 129, 237-243.	4.1	122
26	Induction of Monocyte Chemoattractant Protein-1 (MCP-1) and Its Receptor CCR2 in Primary Sensory Neurons Contributes to Paclitaxel-Induced Peripheral Neuropathy. Journal of Pain, 2013, 14, 1031-1044.	1.4	122
27	Beyond symptomatic relief for chemotherapyâ€induced peripheral neuropathy: Targeting the source. Cancer, 2018, 124, 2289-2298.	4.1	115
28	Ghrelin Prevents Cisplatin-Induced Mechanical Hyperalgesia and Cachexia. Endocrinology, 2008, 149, 455-460.	2.8	112
29	Spinal Astrocyte Gap Junctions Contribute to Oxaliplatin-Induced Mechanical Hypersensitivity. Journal of Pain, 2013, 14, 205-214.	1.4	111
30	Quantitative analysis of substance P and calcitonin gene-related peptide immunohistochemical staining in the dorsal horn of neuropathic MK-801-treated rats. Brain Research, 1993, 607, 205-214.	2.2	107
31	MAPK signaling downstream to TLR4 contributes to paclitaxel-induced peripheral neuropathy. Brain, Behavior, and Immunity, 2015, 49, 255-266.	4.1	105
32	Plasticity in Expression of the Glutamate Transporters GLT-1 and GLAST in Spinal Dorsal Horn Glial Cells following Partial Sciatic Nerve Ligation. Molecular Pain, 2009, 5, 1744-8069-5-15.	2.1	102
33	A p38 Mitogen-Activated Protein Kinase-Dependent Mechanism of Disinhibition in Spinal Synaptic Transmission Induced by Tumor Necrosis Factor-Î±. Journal of Neuroscience, 2010, 30, 12844-12855.	3.6	101
34	The effects of thalidomide and minocycline on taxol-induced hyperalgesia in rats. Brain Research, 2008, 1229, 100-110.	2.2	98
35	Dysfunction in Multiple Primary Afferent Fiber Subtypes Revealed By Quantitative Sensory Testing in Patients with Chronic Vincristine-Induced Pain. Journal of Pain and Symptom Management, 2007, 33, 166-179.	1.2	95
36	Nociceptor Translational Profiling Reveals the Ragulator-Rag GTPase Complex as a Critical Generator of Neuropathic Pain. Journal of Neuroscience, 2019, 39, 393-411.	3.6	95

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37	Functional plasticity in primate somatosensory thalamus following chronic lesion of the ventral lateral spinal cord. Neuroscience, 2000, 101, 393-401.	2.3	92
38	Spinal glial glutamate transporters downregulate in rats with taxol-induced hyperalgesia. Neuroscience Letters, 2005, 386, 18-22.	2.1	92
39	The sensation of angina can be evoked by stimulation of the human thalamus. Pain, 1994, 59, 119-125.	4.2	91
40	Minocycline blocks lipopolysaccharide induced hyperalgesia by suppression of microglia but not astrocytes. Neuroscience, 2012, 221, 214-224.	2.3	90
41	Spinal cord stimulation relieves chemotherapy-induced pain: a clinical case report. Journal of Pain and Symptom Management, 2004, 27, 72-78.	1.2	88
42	Cancer-Associated Neurogenesis and Nerve-Cancer Cross-talk. Cancer Research, 2021, 81, 1431-1440.	0.9	84
43	ACE2 and SCARF expression in human dorsal root ganglion nociceptors: implications for SARS-CoV-2 virus neurological effects. Pain, 2020, 161, 2494-2501.	4.2	83
44	Studying human nociceptors: from fundamentals to clinic. Brain, 2021, 144, 1312-1335.	7.6	77
45	Follow-Up Psychophysical Studies in Bortezomib-Related Chemoneuropathy Patients. Journal of Pain, 2011, 12, 1017-1024.	1.4	76
46	Characterization of baroreceptor-related neurons in the monkey insular cortex. Brain Research, 1998, 796, 303-306.	2.2	75
47	A population of cells in the human thalamic principal sensory nucleus respond to painful mechanical stimuli. Neuroscience Letters, 1994, 180, 46-50.	2.1	71
48	Basic science and clinical management of painful and non-painful chemotherapy-related neuropathy. Gynecologic Oncology, 2015, 136, 453-459.	1.4	71
49	Comparison of oxaliplatin and paclitaxel-induced neuropathy (Alliance A151505). Supportive Care in Cancer, 2016, 24, 5059-5068.	2.2	67
50	Trial designs for chemotherapy-induced peripheral neuropathy prevention. Neurology, 2018, 91, 403-413.	1.1	63
51	Behavioral and electrophysiological studies in rats with cisplatin-induced chemoneuropathy. Brain Research, 2008, 1230, 91-98.	2.2	60
52	Chemokine CCL2 and its receptor CCR2 in the dorsal root ganglion contribute to oxaliplatin-induced mechanical hypersensitivity. Pain, 2018, 159, 1308-1316.	4.2	58
53	An updated understanding of the mechanisms involved in chemotherapy-induced neuropathy. Pain Management, 2018, 8, 363-375.	1.5	58
54	A Quantitative Sensory Analysis of Peripheral Neuropathy in Colorectal Cancer and Its Exacerbation by Oxaliplatin Chemotherapy. Cancer Research, 2014, 74, 5955-5962.	0.9	57

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55	Subclinical Peripheral Neuropathy Is a Common Finding in Colorectal Cancer Patients Prior to Chemotherapy. Clinical Cancer Research, 2012, 18, 3180-3187.	7.0	55
56	Human cells and networks of pain: Transforming pain target identification and therapeutic development. Neuron, 2021, 109, 1426-1429.	8.1	47
57	AAPT Diagnostic Criteria for Chronic Cancer Pain Conditions. Journal of Pain, 2017, 18, 233-246.	1.4	42
58	Oral Poly(ADP-Ribose) Polymerase-1 Inhibitor BSI-401 Has Antitumor Activity and Synergizes with Oxaliplatin against Pancreatic Cancer, Preventing Acute Neurotoxicity. Clinical Cancer Research, 2009, 15, 6367-6377.	7.0	39
59	Orally active Epac inhibitor reverses mechanical allodynia and loss of intraepidermal nerve fibers in a mouse model of chemotherapy-induced peripheral neuropathy. Pain, 2018, 159, 884-893.	4.2	38
60	Infusion of substance P or neurokinin A by microdialysis alters responses of primate spinothalamic tract neurons to cutaneous stimuli and to iontophoretically released excitatory amino acids. Pain, 1995, 61, 411-425.	4.2	37
61	Subclinical Peripheral Neuropathy in Patients With Multiple Myeloma Before Chemotherapy Is Correlated With Decreased Fingertip Innervation Density. Journal of Clinical Oncology, 2014, 32, 3156-3162.	1.6	37
62	Spinal astrocyte gap junction and glutamate transporter expression contributes to a rat model of bortezomib-induced peripheral neuropathy. Neuroscience, 2015, 285, 1-10.	2.3	36
63	Dynamic effects of TNF-Î± on synaptic transmission in mice over time following sciatic nerve chronic constriction injury. Journal of Neurophysiology, 2013, 110, 1663-1671.	1.8	35
64	Physiological changes in primate somatosensory thalamus induced by deafferentation are dependent on the spinal funiculi that are sectioned and time following injury. Neuroscience, 2003, 116, 1149-1160.	2.3	33
65	Pain Encoding in the Human Forebrain: Binary and Analog Exteroceptive Channels. Journal of Neuroscience, 2004, 24, 6540-6544.	3.6	32
66	Disease burden and pain in obese cancer patients with chemotherapy-induced peripheral neuropathy. Supportive Care in Cancer, 2017, 25, 1873-1879.	2.2	29
67	Mechanical and thermal hypersensitivity develops following kainate lesion of the ventral posterior lateral thalamus in rats. Neuroscience Letters, 2000, 290, 79-83.	2.1	27
68	Acute inhibition of signalling phenotype of spinal GABAergic neurons by tumour necrosis factorâ€Î±. Journal of Physiology, 2011, 589, 4511-4526.	2.9	27
69	Synaptically Evoked Glutamate Transporter Currents in Spinal Dorsal Horn Astrocytes. Molecular Pain, 2009, 5, 1744-8069-5-36.	2.1	25
70	Prechemotherapy Touch Sensation Deficits Predict Oxaliplatin-Induced Neuropathy in Patients with Colorectal Cancer. Oncology, 2016, 90, 127-135.	1.9	25
71	Measuring Therapy-Induced Peripheral Neuropathy: Preliminary Development and Validation of the Treatment-Induced Neuropathy Assessment Scale. Journal of Pain, 2015, 16, 1032-1043.	1.4	23
72	Morphological and Physiological Plasticity of Spinal Lamina II GABA Neurons Is Induced by Sciatic Nerve Chronic Constriction Injury in Mice. Frontiers in Cellular Neuroscience, 2018, 12, 143.	3.7	21

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73	Evidence of an immune system to brain communication axis that affects central opioid functions: Muramyl peptides attenuate opiate withdrawal. European Journal of Pharmacology, 1987, 141, 253-260.	3.5	20
74	Trans-cranial electrical stimulation attenuates abrupt morphine withdrawal in rats assayed by remote computerized quantification of multiple motor behavior indices. European Journal of Pharmacology, 1990, 175, 187-195.	3.5	20
75	Response properties of dorsal root reflexes in cutaneous C fibers before and after intradermal capsaicin injection in rats. Neuroscience, 2005, 132, 823-831.	2.3	20
76	Radiation induces age-dependent deficits in cortical synaptic plasticity. Neuro-Oncology, 2018, 20, 1207-1214.	1.2	20
77	Cyclosporine affects central nervous system opioid activity via direct and indirect means. Brain, Behavior, and Immunity, 1988, 2, 242-253.	4.1	19
78	Distribution of cardiovascular related cells within the human thalamus. Clinical Autonomic Research, 1998, 8, 173-179.	2.5	19
79	Altered discharges of spinal neurons parallel the behavioral phenotype shown by rats with bortezomib related chemotherapy induced peripheral neuropathy. Brain Research, 2014, 1574, 6-13.	2.2	18
80	Peripheral neuropathic pain: signs, symptoms, mechanisms, and causes: are they linked?. British Journal of Anaesthesia, 2015, 114, 361-363.	3.4	18
81	Limited Midline Myelotomy for Intractable Visceral Pain: Surgical Techniques and Outcomes. Neurosurgery, 2018, 83, 783-789.	1.1	18
82	Ectopic Spontaneous Afferent Activity and Neuropathic Pain. Neurosurgery, 2018, 65, 49-54.	1.1	18
83	Persistent and Chronic Postoperative Opioid Use in a Cohort of Patients with Oral Tongue Squamous Cell Carcinoma. Pain Medicine, 2020, 21, 1061-1067.	1.9	17
84	Cyclooxygenase inhibitors and thalidomide ameliorate vincristine-induced hyperalgesia in rats. Cancer Chemotherapy and Pharmacology, 2004, 54, 391-397.	2.3	16
85	Electrophysiological Alterations Driving Pain-Associated Spontaneous Activity in Human Sensory Neuron Somata Parallel Alterations Described in Spontaneously Active Rodent Nociceptors. Journal of Pain, 2022, 23, 1343-1357.	1.4	16
86	Muramyl-dipeptide, a macrophage-derived cytokine, alters neuronal activity in hypothalamus and hippocampus but not in the dorsal raphe/periaqueductal gray of rats. Journal of Neuroimmunology, 1990, 28, 201-208.	2.3	15
87	Spinal injection of IL-2 or IL-15 alters mechanical and thermal withdrawal thresholds in rats. Neuroscience Letters, 2008, 437, 45-49.	2.1	15
88	Subclinical pretreatment sensory deficits appear to predict the development of pain and numbness in patients with multiple myeloma undergoing chemotherapy. Cancer Chemotherapy and Pharmacology, 2013, 71, 1531-1540.	2.3	15
89	Higher Stem Cell Dose Infusion after Intensive Chemotherapy Does Not Improve Symptom Burden in Older Patients with Multiple Myeloma and Amyloidosis. Biology of Blood and Marrow Transplantation, 2016, 22, 226-231.	2.0	15
90	Effect of Fenoldopam on Ischemia/Reperfusion-Induced Apoptosis. Renal Failure, 2006, 28, 337-344.	2.1	14

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91	Minimally Invasive Cordotomy for Refractory Cancer Pain: A Randomized Controlled Trial. Oncologist, 2019, 24, e590-e596.	3.7	14
92	Blockers of Wnt3a, Wnt10a, or Î²-Catenin Prevent Chemotherapy-Induced Neuropathic Pain In Vivo. Neurotherapeutics, 2021, 18, 601-614.	4.4	14
93	The endogenous lectin RL-29 is transynaptically induced in dorsal horn neurons following peripheral neuropathy in the rat. Brain Research, 1993, 620, 64-71.	2.2	13
94	Gabapentin produces dose-dependent antinociception in the orofacial formalin test in the ratâ˜†. Regional Anesthesia and Pain Medicine, 2002, 27, 277-283.	2.3	13
95	Relationship of membrane properties, spike burst responses, laminar location, and functional class of dorsal horn neurons recorded in vitro. Journal of Neurophysiology, 2016, 116, 1137-1151.	1.8	12
96	Human Thalamic Somatosensory Nucleus (Ventral Caudal, Vc) as a Locus for Stimulation by INPUTS from Tactile, Noxious and Thermal Sensors on an Active Prosthesis. Sensors, 2017, 17, 1197.	3.8	12
97	Chemotherapy-induced peripheral neuropathy in a dish: dorsal root ganglion cells treated in vitro with paclitaxel show biochemical and physiological responses parallel to that seen in vivo. Pain, 2021, 162, 84-96.	4.2	12
98	Sensitization of dorsal root reflexes in vitro and hyperalgesia in neonatal rats produced by capsaicin. Neuroscience, 2004, 126, 743-751.	2.3	11
99	The immune system and opiate withdrawal. International Journal of Immunopharmacology, 1989, 11, 371-375.	1.1	10
100	Central nervous system mechanisms of pain. , 2002, , 888-905.		10
101	Somatotopy and Organization of Spinothalamic Tracts in the Human Cervical Spinal Cord. Neurosurgery, 2019, 84, E311-E317.	1.1	10
102	Nociception and Pain: New Roles for Exosomes. Neuroscientist, 2022, 28, 349-363.	3.5	10
103	Participation of lymphoid cells in the withdrawal syndrome of opiate dependent rats. Life Sciences, 1987, 40, 1589-1593.	4.3	8
104	Dorsal root ganglion toll-like receptor 4 signaling contributes to oxaliplatin-induced peripheral neuropathy. Pain, 2022, 163, 923-935.	4.2	8
105	Microiontophoretic application of muramyl-dipeptide upon single cortical, hippocampal and hypothalamic neurons in rats. Neuropharmacology, 1990, 29, 973-981.	4.1	7
106	Painful Hands and Feet After Cancer Treatment: Inflammation Affecting the Mind-Body Connection. Journal of Clinical Oncology, 2016, 34, 649-652.	1.6	7
107	Postoperative MRI Evaluation of a Radiofrequency Cordotomy Lesion for Intractable Cancer Pain. American Journal of Neuroradiology, 2017, 38, 835-839.	2.4	7
108	Use of Spinal Cord Diffusion Tensor Imaging to Quantify Neural Ablation and Evaluate Outcome after Percutaneous Cordotomy for Intractable Cancer Pain. Stereotactic and Functional Neurosurgery, 2017, 95, 34-39.	1.5	7

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109	Role of innate immunity in chemotherapy-induced peripheral neuropathy. Neuroscience Letters, 2021, 755, 135941.	2.1	7
110	Hemispatial Somatosensory and Motor Extinction after Stereotactic Thalamic Lesions. Neurocase, 1998, 4, 21-34.	0.6	7
111	Angiotensin-Converting Enzyme Inhibitors and Angiotensin Receptor Blockers Modulate the Function of Myelinated Fibers after Chemotherapy: A Quantitative Sensory Testing Study. Pain Physician, 2017, 20, 281-292.	0.4	7
112	The Âµâ€Opioid Receptor in Cancer and Its Role in Perineural Invasion: A Short Review and New Evidence. Advanced Biology, 2022, 6, e2200020.	2.5	7
113	Facilitation of responses to AMPA but not kainate by cyclothiazide in primate somatosensory thalamus. Neuroscience Letters, 1998, 246, 17-20.	2.1	6
114	Wireless peripheral nerve stimulation increases pain threshold in two neuropathic rat models. Experimental Neurology, 2012, 235, 621-626.	4.1	6
115	Subclinical Peripheral Neuropathy in Patients with Head and Neck Cancer: A Quantitative Sensory Testing (QST) Study. Pain Physician, 2018, 21, E419-E427.	0.4	6
116	Does sensitization of responses to excitatory amino acids underlie the psychophysical reports of two modalities of increased sensitivity in zones of secondary hyperalgesia?. APS Journal, 1993, 2, 276-279.	0.2	5
117	Is Chemotherapy-induced Peripheral Neuropathy More Than Just a Peripheral Nervous System Disorder?. Anesthesiology, 2016, 124, 992-993.	2.5	5
118	Percutaneous Cordotomy for Pain Palliation in Advanced Cancer: A Randomized Clinical Trial Study Protocol. Neurosurgery, 2020, 87, 394-402.	1.1	5
119	A rat model to investigate quality of recovery after abdominal surgery. Pain Reports, 2021, 6, e943.	2.7	5
120	Central sensitization and cutaneous hyperalgesia. Seminars in Pain Medicine, 2003, 1, 121-131.	0.4	4
121	Anatomy and physiology of somatosensory and pain processing. , 2011, , 1-7.		4
122	Sex-based differences and aging in tactile function loss in persons with type 2 diabetes. PLoS ONE, 2020, 15, e0242199.	2.5	4
123	Reply to D. Nuytten and colleagues. Pain, 1993, 54, 362-363.	4.2	3
124	Neurochemistry of somatosensory and pain processing. , 2011, , 8-15.		3
125	Psychometric study of the pain drawing. Journal of Applied Biobehavioral Research, 2017, 22, e12095.	2.0	3
126	Cranial irradiation induces axon initial segment dysfunction and neuronal injury in the prefrontal cortex and impairs hippocampal coupling. Neuro-Oncology Advances, 2020, 2, vdaa058.	0.7	3

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127	Should we be itching for a CCL2 itch and pain medicine?. Brain, Behavior, and Immunity, 2019, 81, 12-13.	4.1	2
128	Methods and protocols for chemotherapy-induced peripheral neuropathy (CIPN) mouse models using paclitaxel. Methods in Cell Biology, 2022, 168, 277-298.	1.1	2
129	The Value of In Vivo Reflectance Confocal Microscopy as an Assessment Tool in Chemotherapy-Induced Peripheral Neuropathy: A Pilot Study. Oncologist, 2022, 27, e671-e680.	3.7	2
130	Fadu head and neck squamous cell carcinoma induces hyperexcitability of primary sensory neurons in an in vitro coculture model. Pain Reports, 2022, 7, e1012.	2.7	2
131	Physiology of Pain. , 1997, , 3-21.		1
132	New version of the thalamic disinhibition hypothesis may explain some clinical features of central pain syndromes. Pain Forum, 1998, 7, 20-23.	1.1	1
133	Neurochemistry of Somatosensory and Pain Processing. , 2018, , 11-20.e2.		1
134	Chemotherapy-Induced Peripheral Neuropathy: A Challenge for Clinicians. Oncology, 2016, 30, 1030, C3.	0.5	1
135	Noninvasive subthreshold auricular electrical stimulation reduces the severity of precipitated and abrupt opiate withdrawal. Brain Research Bulletin, 1993, 31, 491-492.	3.0	0
136	Neurochemistry of Somatosensory and Pain Processing. , 2005, , 7-14.		0
137	Two pains at once: How can you tell which is worse?. Neuroscience Letters, 2012, 513, 112-113.	2.1	0