Patrick M. Dougherty

List of Publications by Year
in descending order

137 papers	8,374 citations	31976 53 h-index	49909 87 g-index
139 all docs	139 docs citations	139 times ranked	7333 citing authors

#	Article	IF	Citations
1	Nociception and Pain: New Roles for Exosomes. Neuroscientist, 2022, 28, 349-363.	3.5	10
2	Dorsal root ganglion toll-like receptor 4 signaling contributes to oxaliplatin-induced peripheral neuropathy. Pain, 2022, 163, 923-935.	4.2	8
3	Methods and protocols for chemotherapy-induced peripheral neuropathy (CIPN) mouse models using paclitaxel. Methods in Cell Biology, 2022, 168, 277-298.	1.1	2
4	Spatial transcriptomics of dorsal root ganglia identifies molecular signatures of human nociceptors. Science Translational Medicine, 2022, 14, eabj8186.	12.4	164
5	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
6	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
7	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
8	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
9	Cancer-Associated Neurogenesis and Nerve-Cancer Cross-talk. Cancer Research, 2021, 81, 1431-1440.	0.9	84
10	Blockers of Wnt3a, Wnt10a, or Î²-Catenin Prevent Chemotherapy-Induced Neuropathic Pain In Vivo. Neurotherapeutics, 2021, 18, 601-614.	4.4	14
11	Human cells and networks of pain: Transforming pain target identification and therapeutic development. Neuron, 2021, 109, 1426-1429.	8.1	47
12	Studying human nociceptors: from fundamentals to clinic. Brain, 2021, 144, 1312-1335.	7.6	77
13	Role of innate immunity in chemotherapy-induced peripheral neuropathy. Neuroscience Letters, 2021, 755, 135941.	2.1	7
14	A rat model to investigate quality of recovery after abdominal surgery. Pain Reports, 2021, 6, e943.	2.7	5
15	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
16	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
17	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
18	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

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19	Loss of p53 drives neuron reprogramming in head and neck cancer. Nature, 2020, 578, 449-454.	27.8	241
20	Percutaneous Cordotomy for Pain Palliation in Advanced Cancer: A Randomized Clinical Trial Study Protocol. Neurosurgery, 2020, 87, 394-402.	1.1	5
21	Sex-based differences and aging in tactile function loss in persons with type 2 diabetes. PLoS ONE, 2020, 15, e0242199.	2.5	4
22	Somatotopy and Organization of Spinothalamic Tracts in the Human Cervical Spinal Cord. Neurosurgery, 2019, 84, E311-E317.	1.1	10
23	Should we be itching for a CCL2 itch and pain medicine?. Brain, Behavior, and Immunity, 2019, 81, 12-13.	4.1	2
24	Electrophysiological and transcriptomic correlates of neuropathic pain in human dorsal root ganglion neurons. Brain, 2019, 142, 1215-1226.	7.6	198
25	Minimally Invasive Cordotomy for Refractory Cancer Pain: A Randomized Controlled Trial. Oncologist, 2019, 24, e590-e596.	3.7	14
26	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
27	Beyond symptomatic relief for chemotherapyâ€induced peripheral neuropathy: Targeting the source. Cancer, 2018, 124, 2289-2298.	4.1	115
28	Radiation induces age-dependent deficits in cortical synaptic plasticity. Neuro-Oncology, 2018, 20, 1207-1214.	1.2	20
29	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
30	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
31	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
32	Limited Midline Myelotomy for Intractable Visceral Pain: Surgical Techniques and Outcomes. Neurosurgery, 2018, 83, 783-789.	1.1	18
33	Ectopic Spontaneous Afferent Activity and Neuropathic Pain. Neurosurgery, 2018, 65, 49-54.	1.1	18
34	An updated understanding of the mechanisms involved in chemotherapy-induced neuropathy. Pain Management, 2018, 8, 363-375.	1.5	58
35	Trial designs for chemotherapy-induced peripheral neuropathy prevention. Neurology, 2018, 91, 403-413.	1.1	63
36	Neurochemistry of Somatosensory and Pain Processing. , 2018, , 11-20.e2.		1

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37	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
38	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
39	Postoperative MRI Evaluation of a Radiofrequency Cordotomy Lesion for Intractable Cancer Pain. American Journal of Neuroradiology, 2017, 38, 835-839.	2.4	7
40	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
41	Disease burden and pain in obese cancer patients with chemotherapy-induced peripheral neuropathy. Supportive Care in Cancer, 2017, 25, 1873-1879.	2.2	29
42	Psychometric study of the pain drawing. Journal of Applied Biobehavioral Research, 2017, 22, e12095.	2.0	3
43	AAPT Diagnostic Criteria for Chronic Cancer Pain Conditions. Journal of Pain, 2017, 18, 233-246.	1.4	42
44	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
45	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
46	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
47	Is Chemotherapy-induced Peripheral Neuropathy More Than Just a Peripheral Nervous System Disorder?. Anesthesiology, 2016, 124, 992-993.	2.5	5
48	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
49	Prechemotherapy Touch Sensation Deficits Predict Oxaliplatin-Induced Neuropathy in Patients with Colorectal Cancer. Oncology, 2016, 90, 127-135.	1.9	25
50	Comparison of oxaliplatin and paclitaxel-induced neuropathy (Alliance A151505). Supportive Care in Cancer, 2016, 24, 5059-5068.	2.2	67
51	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
52	Dorsal Root Ganglion Infiltration by Macrophages Contributes toÂPaclitaxel Chemotherapy-Induced Peripheral Neuropathy. Journal of Pain, 2016, 17, 775-786.	1.4	237
53	Painful Hands and Feet After Cancer Treatment: Inflammation Affecting the Mind-Body Connection. Journal of Clinical Oncology, 2016, 34, 649-652.	1.6	7
54	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

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55	Chemotherapy-Induced Peripheral Neuropathy: A Challenge for Clinicians. Oncology, 2016, 30, 1030, C3.	0.5	1
56	Basic science and clinical management of painful and non-painful chemotherapy-related neuropathy. Gynecologic Oncology, 2015, 136, 453-459.	1.4	71
57	MAPK signaling downstream to TLR4 contributes to paclitaxel-induced peripheral neuropathy. Brain, Behavior, and Immunity, 2015, 49, 255-266.	4.1	105
58	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
59	Mechanisms involved in the development of chemotherapy-induced neuropathy. Pain Management, 2015, 5, 285-296.	1.5	131
60	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
61	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
62	Peripheral neuropathic pain: signs, symptoms, mechanisms, and causes: are they linked?. British Journal of Anaesthesia, 2015, 114, 361-363.	3.4	18
63	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
64	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
65	Toll-Like Receptor 4 Signaling Contributes to Paclitaxel-Induced Peripheral Neuropathy. Journal of Pain, 2014, 15, 712-725.	1.4	182
66	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
67	Astrocytes, but not microglia, are activated in oxaliplatin and bortezomib-induced peripheral neuropathy in the rat. Neuroscience, 2014, 274, 308-317.	2.3	126
68	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
69	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
70	Persistent chemoneuropathy in patients receiving the plant alkaloids paclitaxel and vincristine. Cancer Chemotherapy and Pharmacology, 2013, 71, 619-626.	2.3	126
71	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
72	An Overview of Animal Models of Pain: Disease Models and Outcome Measures. Journal of Pain, 2013, 14, 1255-1269.	1.4	318

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73	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
74	Spinal Astrocyte Gap Junctions Contribute to Oxaliplatin-Induced Mechanical Hypersensitivity. Journal of Pain, 2013, 14, 205-214.	1.4	111
75	Subclinical Peripheral Neuropathy Is a Common Finding in Colorectal Cancer Patients Prior to Chemotherapy. Clinical Cancer Research, 2012, 18, 3180-3187.	7.0	55
76	Minocycline blocks lipopolysaccharide induced hyperalgesia by suppression of microglia but not astrocytes. Neuroscience, 2012, 221, 214-224.	2.3	90
77	Two pains at once: How can you tell which is worse?. Neuroscience Letters, 2012, 513, 112-113.	2.1	0
78	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
79	Wireless peripheral nerve stimulation increases pain threshold in two neuropathic rat models. Experimental Neurology, 2012, 235, 621-626.	4.1	6
80	Follow-Up Psychophysical Studies in Bortezomib-Related Chemoneuropathy Patients. Journal of Pain, 2011, 12, 1017-1024.	1.4	76
81	Acute inhibition of signalling phenotype of spinal GABAergic neurons by tumour necrosis factorâ€Î±. Journal of Physiology, 2011, 589, 4511-4526.	2.9	27
82	Role of nuclear factor-<i>Îº</i>B-mediated inflammatory pathways in cancer-related symptoms and their regulation by nutritional agents. Experimental Biology and Medicine, 2011, 236, 658-671.	2.4	131
83	Anatomy and physiology of somatosensory and pain processing. , 2011, , 1-7.		4
84	Neurochemistry of somatosensory and pain processing. , 2011, , 8-15.		3
85	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
86	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
87	Synaptically Evoked Glutamate Transporter Currents in Spinal Dorsal Horn Astrocytes. Molecular Pain, 2009, 5, 1744-8069-5-36.	2.1	25
88	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
89	The effects of thalidomide and minocycline on taxol-induced hyperalgesia in rats. Brain Research, 2008, 1229, 100-110.	2.2	98
90	Behavioral and electrophysiological studies in rats with cisplatin-induced chemoneuropathy. Brain Research, 2008, 1230, 91-98.	2.2	60

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91	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
92	Ghrelin Prevents Cisplatin-Induced Mechanical Hyperalgesia and Cachexia. Endocrinology, 2008, 149, 455-460.	2.8	112
93	Quantitative Sensory Findings in Patients With Bortezomib-Induced Pain. Journal of Pain, 2007, 8, 296-306.	1.4	141
94	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
95	Effect of Fenoldopam on Ischemia/Reperfusion-Induced Apoptosis. Renal Failure, 2006, 28, 337-344.	2.1	14
96	Neurochemistry of Somatosensory and Pain Processing. , 2005, , 7-14.		0
97	Spinal glial glutamate transporters downregulate in rats with taxol-induced hyperalgesia. Neuroscience Letters, 2005, 386, 18-22.	2.1	92
98	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
99	A Cytokine-Based Neuroimmunologic Mechanism of Cancer-Related Symptoms. NeuroImmunoModulation, 2004, 11, 279-292.	1.8	266
100	Pain Encoding in the Human Forebrain: Binary and Analog Exteroceptive Channels. Journal of Neuroscience, 2004, 24, 6540-6544.	3.6	32
101	Spinal cord stimulation relieves chemotherapy-induced pain: a clinical case report. Journal of Pain and Symptom Management, 2004, 27, 72-78.	1.2	88
102	Cyclooxygenase inhibitors and thalidomide ameliorate vincristine-induced hyperalgesia in rats. Cancer Chemotherapy and Pharmacology, 2004, 54, 391-397.	2.3	16
103	Taxol-induced sensory disturbance is characterized by preferential impairment of myelinated fiber function in cancer patients. Pain, 2004, 109, 132-142.	4.2	317
104	Sensitization of dorsal root reflexes in vitro and hyperalgesia in neonatal rats produced by capsaicin. Neuroscience, 2004, 126, 743-751.	2.3	11
105	Are the symptoms of cancer and cancer treatment due to a shared biologic mechanism?. Cancer, 2003, 97, 2919-2925.	4.1	460
106	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
107	Central sensitization and cutaneous hyperalgesia. Seminars in Pain Medicine, 2003, 1, 121-131.	0.4	4
108	Central nervous system mechanisms of pain. , 2002, , 888-905.		10

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109	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
110	Functional plasticity in primate somatosensory thalamus following chronic lesion of the ventral lateral spinal cord. Neuroscience, 2000, 101, 393-401.	2.3	92
111	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
112	Characterization of baroreceptor-related neurons in the monkey insular cortex. Brain Research, 1998, 796, 303-306.	2.2	75
113	Distribution of cardiovascular related cells within the human thalamus. Clinical Autonomic Research, 1998, 8, 173-179.	2.5	19
114	Facilitation of responses to AMPA but not kainate by cyclothiazide in primate somatosensory thalamus. Neuroscience Letters, 1998, 246, 17-20.	2.1	6
115	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
116	Hemispatial Somatosensory and Motor Extinction after Stereotactic Thalamic Lesions. Neurocase, 1998, 4, 21-34.	0.6	7
117	Physiology of Pain. , 1997, , 3-21.		1
118	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
119	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
120	GFAP Expression in Lumbar Spinal Cord of Naive and Neuropathic Rats Treated with MK-801. Experimental Neurology, 1994, 129, 237-243.	4.1	122
121	The sensation of angina can be evoked by stimulation of the human thalamus. Pain, 1994, 59, 119-125.	4.2	91
122	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
123	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
124	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
125	Noninvasive subthreshold auricular electrical stimulation reduces the severity of precipitated and abrupt opiate withdrawal. Brain Research Bulletin, 1993, 31, 491-492.	3.0	0
126	Reply to D. Nuytten and colleagues. Pain, 1993, 54, 362-363.	4.2	3

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127	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
128	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
129	Neuroma formation and numbers of axons in a rat model of experimental peripheral neuropathy. Neuroscience Letters, 1991, 131, 88-92.	2.1	135
130	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
131	Microiontophoretic application of muramyl-dipeptide upon single cortical, hippocampal and hypothalamic neurons in rats. Neuropharmacology, 1990, 29, 973-981.	4.1	7
132	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
133	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
134	The immune system and opiate withdrawal. International Journal of Immunopharmacology, 1989, 11, 371-375.	1.1	10
135	Cyclosporine affects central nervous system opioid activity via direct and indirect means. Brain, Behavior, and Immunity, 1988, 2, 242-253.	4.1	19
136	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
137	Participation of lymphoid cells in the withdrawal syndrome of opiate dependent rats. Life Sciences, 1987, 40, 1589-1593.	4.3	8