Kenneth J Smith

List of Publications by Year
in descending order

103	8,521	57758 44	45317 90
papers	citations	h-index	g-index

108	108	108	7830
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	High Dietary Fat Consumption Impairs Axonal Mitochondrial Function<i>In Vivo</i>. Journal of Neuroscience, 2021, 41, 4321-4334.	3.6	14
2	A Hyperspectral Imaging System for Mapping Haemoglobin and Cytochrome-c-Oxidase Concentration Changes in the Exposed Cerebral Cortex. IEEE Journal of Selected Topics in Quantum Electronics, 2021, 27, 1-11.	2.9	9
3	Reply to: Rethink the classical view of cerebrospinal fluid production. Nature Reviews Neurology, 2021, 17, 590-591.	10.1	1
4	Systematic approach to selecting licensed drugs for repurposing in the treatment of progressive multiple sclerosis. Journal of Neurology, Neurosurgery and Psychiatry, 2021, 92, 295-302.	1.9	15
5	Enhanced axonal response of mitochondria to demyelination offers neuroprotection: implications for multiple sclerosis. Acta Neuropathologica, 2020, 140, 143-167.	7.7	48
6	Perivascular spaces in the brain: anatomy, physiology and pathology. Nature Reviews Neurology, 2020, 16, 137-153.	10.1	405
7	Nimodipine Reduces Dysfunction and Demyelination in Models of Multiple Sclerosis. Annals of Neurology, 2020, 88, 123-136.	5.3	19
8	Understanding the role of the perivascular space in cerebral small vessel disease. Cardiovascular Research, 2018, 114, 1462-1473.	3.8	211
9	Mitochondrial damage and â€œpluggingâ€• of transport selectively in myelinated, small-diameter axons are major early events in peripheral neuroinflammation. Journal of Neuroinflammation, 2018, 15, 61.	7.2	13
10	Hyperspectral Imaging of the Hemodynamic and Metabolic States of the Exposed Cortex: Investigating a Commercial Snapshot Solution. Advances in Experimental Medicine and Biology, 2018, 1072, 13-20.	1.6	4
11	A multispectral microscope forin vivooximetry of rat dorsal spinal cord vasculature. Physiological Measurement, 2017, 38, 205-218.	2.1	9
12	Understanding a role for hypoxia in lesion formation and location in the deep and periventricular white matter in small vessel disease and multiple sclerosis. Clinical Science, 2017, 131, 2503-2524.	4.3	74
13	Experimental autoimmune encephalomyelitis from a tissue energy perspective. F1000Research, 2017, 6, 1973.	1.6	8
14	Neuroprotection by safinamide in the 6â€hydroxydopamine model of <scp>P</scp>arkinson's disease. Neuropathology and Applied Neurobiology, 2016, 42, 423-435.	3.2	36
15	Cause and prevention of demyelination in a model multiple sclerosis lesion. Annals of Neurology, 2016, 79, 591-604.	5.3	66
16	Immunohistochemical evidence of tissue hypoxia and astrogliosis in the rostral ventrolateral medulla of spontaneously hypertensive rats. Brain Research, 2016, 1650, 178-183.	2.2	14
17	Mitochondrial dysfunction is an important cause of neurological deficits in an inflammatory model of multiple sclerosis. Scientific Reports, 2016, 6, 33249.	3.3	89
18	Mitochondrial Function and Dynamics Imaged In Vivo. , 2016, , 329-345.		0

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19	Hypothermia protects brain mitochondrial function from hypoxemia in a murine model of sepsis. Journal of Cerebral Blood Flow and Metabolism, 2016, 36, 1955-1964.	4.3	23
20	Axonal morphological changes following impulse activity in mouse peripheral nerve <i>in vivo</i>: the return pathway for sodium ions. Journal of Physiology, 2015, 593, 987-1002.	2.9	14
21	A Genome-wide Gene-Expression Analysis and Database in Transgenic Mice during Development of Amyloid or Tau Pathology. Cell Reports, 2015, 10, 633-644.	6.4	247
22	Neurological deficits caused by tissue hypoxia in neuroinflammatory disease. Annals of Neurology, 2013, 74, 815-825.	5.3	114
23	Axonal Protection with Sodium Channel Blocking Agents in Models of Multiple Sclerosis. , 2013, , 179-201.		0
24	Safinamide and flecainide protect axons and reduce microglial activation in models of multiple sclerosis. Brain, 2013, 136, 1067-1082.	7.6	67
25	Impulse Conduction Increases Mitochondrial Transport in Adult Mammalian Peripheral Nerves In Vivo. PLoS Biology, 2013, 11, e1001754.	5.6	72
26	Lamotrigine monotherapy does not provide protection against the loss of optic nerve axons in a rat model of ocular hypertension. Experimental Eye Research, 2012, 104, 1-6.	2.6	1
27	The role of CD8⁺T cells in a model of multiple sclerosis induced with recombinant myelin oligodendrocyte glycoprotein. Multiple Sclerosis Journal, 2012, 18, 286-298.	3.0	7
28	Axonal protection achieved by blockade of sodium/calcium exchange in a new model of ischemia inÂvivo. Neuropharmacology, 2012, 63, 405-414.	4.1	6
29	Neuroprotection and repair in multiple sclerosis. Nature Reviews Neurology, 2012, 8, 624-634.	10.1	235
30	Mesenchymal Stem Cells Lack Efficacy in the Treatment of Experimental Autoimmune Neuritis despite In Vitro Inhibition of T-Cell Proliferation. PLoS ONE, 2012, 7, e30708.	2.5	19
31	Clinical and imaging correlates of the multiple sclerosis impact scale in secondary progressive multiple sclerosis. Journal of Neurology, 2012, 259, 237-245.	3.6	17
32	Longitudinal changes in magnetisation transfer ratio in secondary progressive multiple sclerosis: data from a randomised placebo controlled trial of lamotrigine. Journal of Neurology, 2012, 259, 505-514.	3.6	25
33	Mitochondrial Changes Associated with Demyelination: Consequences for Axonal Integrity. , 2012, , 175-190.		1
34	Newly lesioned tissue in multiple sclerosis--a role for oxidative damage?. Brain, 2011, 134, 1877-1881.	7.6	23
35	Inflammation induced by innate immunity in the central nervous system leads to primary astrocyte dysfunction followed by demyelination. Acta Neuropathologica, 2010, 120, 223-236.	7.7	150
36	A longitudinal study of MRI-detected atrophy in secondary progressive multiple sclerosis. Journal of Neurology, 2010, 257, 1508-1516.	3.6	42

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37	Lamotrigine for neuroprotection in secondary progressive multiple sclerosis: a randomised, double-blind, placebo-controlled, parallel-group trial. Lancet Neurology, The, 2010, 9, 681-688.	10.2	239
38	Origins of Gliogenic Stem Cell Populations Within Adult Skin and Bone Marrow. Stem Cells and Development, 2010, 19, 1055-1065.	2.1	9
39	Different white matter lesion characteristics correlate with distinct grey matter abnormalities on magnetic resonance imaging in secondary progressive multiple sclerosis. Multiple Sclerosis Journal, 2009, 15, 687-694.	3.0	13
40	Grey matter magnetization transfer ratio independently correlates with neurological deficit in secondary progressive multiple sclerosis. Journal of Neurology, 2009, 256, 427-435.	3.6	27
41	Detection of cytochrome c oxidase activity and mitochondrial proteins in single cells. Journal of Neuroscience Methods, 2009, 184, 310-319.	2.5	30
42	Magnetic resonance imaging measures of brain and spinal cord atrophy correlate with clinical impairment in secondary progressive multiple sclerosis. Multiple Sclerosis Journal, 2008, 14, 1068-1075.	3.0	69
43	Botulinum toxin for detrusor overactivity and symptoms of overactive bladder: where we are now and where we are going. Nature Reviews Urology, 2007, 4, 379-386.	1.4	13
44	Lesion genesis in a subset of patients with multiple sclerosis: a role for innate immunity?. Brain, 2007, 130, 2800-2815.	7.6	272
45	Sodium Channels and Multiple Sclerosis: Roles in Symptom Production, Damage and Therapy. Brain Pathology, 2007, 17, 230-242.	4.1	106
46	The pathogenesis of multiple sclerosis: a pandect. , 2006, , 661-668.		1
47	The pathophysiology of multiple sclerosis. , 2006, , 601-659.		9
48	The neurobiology of multiple sclerosis. , 2006, , 449-490.		2
49	The diagnosis of multiple sclerosis. , 2006, , 347-388.		8
50	Axonal protection achieved in a model of multiple sclerosis using lamotrigine. Journal of Neurology, 2006, 253, 1542-1551.	3.6	119
51	Axonal protection in multiple sclerosis--a particular need during remyelination?. Brain, 2006, 129, 3147-3149.	7.6	42
52	Remyelination of dorsal column axons by endogenous Schwann cells restores the normal pattern of Nav1.6 and Kv1.2 at nodes of Ranvier. Brain, 2006, 129, 1319-1329.	7.6	79
53	Inflammation and primary demyelination induced by the intraspinal injection of lipopolysaccharide. Brain, 2005, 128, 1649-1666.	7.6	150
54	Sodium-mediated axonal degeneration in inflammatory demyelinating disease. Journal of the Neurological Sciences, 2005, 233, 27-35.	0.6	71

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55	The Conduction Properties of Demyelinated and Remyelinated Axons. , 2005, , 85-100.		16
56	Nitric Oxide and Axonal Pathophysiology. , 2005, , 255-273.		2
57	Axonal protection in experimental autoimmune neuritis by the sodium channel blocking agent flecainide. Brain, 2004, 128, 18-28.	7.6	65
58	Axonal protection using flecainide in experimental autoimmune encephalomyelitis. Annals of Neurology, 2004, 55, 607-616.	5.3	188
59	Characterisation of matrix metalloproteinases and the effects of a broad-spectrum inhibitor (BB-1101) in peripheral nerve regeneration. Neuroscience, 2004, 124, 767-779.	2.3	44
60	Effects on axonal conduction of anti-ganglioside sera and sera from patients with Guillain-BarrÃ© syndrome. Journal of Neuroimmunology, 2003, 139, 133-140.	2.3	25
61	Blockers of sodium and calcium entry protect axons from nitric oxideâ€mediated degeneration. Annals of Neurology, 2003, 53, 174-180.	5.3	254
62	Chapter 5 Mechanisms of Symptom Production. Blue Books of Practical Neurology, 2003, , 59-74.	0.1	1
63	Brain-derived neurotrophic factor in experimental autoimmune neuritis. Journal of Neuroimmunology, 2002, 124, 62-69.	2.3	19
64	The role of nitric oxide in multiple sclerosis. Lancet Neurology, The, 2002, 1, 232-241.	10.2	491
65	Accumulation of immunoglobulin across the â€˜bloodâ€“nerve barrierâ€™ in spinal roots in adoptive transfer experimental autoimmune neuritis. Neuropathology and Applied Neurobiology, 2002, 28, 489-497.	3.2	35
66	Multiple sclerosis: more than inflammation and demyelination. Trends in Neurosciences, 2001, 24, 435-437.	8.6	33
67	Factors directly affecting impulse transmission in inflammatory demyelinating disease: recent advances in our understanding. Current Opinion in Neurology, 2001, 14, 289-298.	3.6	44
68	Electrically active axons degenerate when exposed to nitric oxide. Annals of Neurology, 2001, 49, 470-476.	5.3	309
69	Electrically active axons degenerate when exposed to nitric oxide. Annals of Neurology, 2001, 49, 470-476.	5.3	8
70	Tumour necrosis factor-Î± has few morphological effects within the dorsal columns of the spinal cord, in contrast to its effects in the peripheral nervous system. Journal of Neuroimmunology, 2000, 106, 130-136.	2.3	23
71	Effects of 4-aminopyridine on demyelinated axons, synapses and muscle tension. Brain, 2000, 123, 171-184.	7.6	136
72	Temporary Axonal Conduction Block and Axonal Loss in Inflammatory Neurological Disease: A Potential Role for Nitric Oxide?. Annals of the New York Academy of Sciences, 1999, 893, 304-308.	3.8	38

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73	Pathogenesis of Guillainâ€“BarrÃ© syndrome. Journal of Neuroimmunology, 1999, 100, 74-97.	2.3	390
74	The pathophysiology of multiple sclerosisâ‹® the mechanisms underlying the production of symptoms and the natural history of the disease. Philosophical Transactions of the Royal Society B: Biological Sciences, 1999, 354, 1649-1673.	4.0	281
75	Demyelination: The Role of Reactive Oxygen and Nitrogen Species. Brain Pathology, 1999, 9, 69-92.	4.1	502
76	REVIEW â–: Axonal Hyperexcitability: Mechanisms and Role in Symptom Production in Demyelinating Diseases. Neuroscientist, 1997, 3, 237-246.	3.5	16
77	Immunological investigation of chronic inflammatory demyelinating polyradiculoneuropathy. Journal of Neuroimmunology, 1997, 73, 124-134.	2.3	118
78	Conduction in Segmentally Demyelinated Mammalian Central Axons. Journal of Neuroscience, 1997, 17, 7267-7277.	3.6	185
79	Bloodâ€“brain barrier permeability in astrocyte-free regions of the central nervous system remyelinated by Schwann cells. Neuroscience, 1996, 75, 643-655.	2.3	21
80	A mechanism for ectopic firing in central demyelinated axons. Brain, 1995, 118, 1225-1231.	7.6	67
81	Conduction properties of central demyelinated and remyelinated axons, and their relation to symptom production in demyelinating disorders. Eye, 1994, 8, 224-237.	2.1	54
82	The use of potassium channel blocking agents in the therapy of demyelinating diseases. Annals of Neurology, 1994, 36, 454-454.	5.3	16
83	Internodal potassium currents can generate ectopic impulses in mammalian myelinated axons. Brain Research, 1993, 611, 165-169.	2.2	40
84	Is CNS trauma a prerequisite for the elongation of CNS axons into denervated peripheral nerve?. Brain Research, 1992, 575, 79-85.	2.2	8
85	Conduction properties of central nerve fibers remyelinated by Schwann cells. Brain Research, 1992, 574, 178-192.	2.2	135
86	Distribution of sodium channels in chronically demyelinated spinal cord axons: immuno-ultrastructural localization and electrophysiological observations. Brain Research, 1991, 544, 59-70.	2.2	76
87	Reinnervation of denervated skeletal muscle by central neurons regenerating via ventral roots implanted into the spinal cord. Brain Research, 1991, 551, 221-229.	2.2	20
88	Peripheral demyelination and remyelination initiated by the calcium-selective ionophore ionomycin: In vivo observations. Journal of the Neurological Sciences, 1988, 83, 37-53.	0.6	64
89	Repair of severed peripheral nerves: Comparison of the â€œde Medinaceliâ€• and standard microsuture methods. Experimental Neurology, 1987, 96, 672-680.	4.1	37
90	Vesicular demyelination induced by raised intracellular calcium. Journal of the Neurological Sciences, 1985, 71, 19-37.	0.6	48

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91	Node-like axonal specialisations along demyelinated central nerve fibres: Ultrastructural observations. Acta Neuropathologica, 1983, 60, 291-296.	7.7	43
92	Internodal myelin volume and axon surface area. Journal of the Neurological Sciences, 1982, 55, 231-246.	0.6	57
93	Spontaneous and evoked electrical discharges from a central demyelinating lesion. Journal of the Neurological Sciences, 1982, 55, 39-48.	0.6	97
94	Saltatory conduction precedes remyelination in axons demyelinated with lysophosphatidyl choline. Journal of the Neurological Sciences, 1982, 54, 13-31.	0.6	157
95	â€˜Nodeâ€™ formation precedes remyelination. Trends in Neurosciences, 1982, 5, 196-199.	8.6	4
96	THE RESTORATION OF CONDUCTION BY CENTRAL REMYELINATION. Brain, 1981, 104, 383-404.	7.6	183
97	Size-dependent variation of nodal properties in myelinated nerve. Nature, 1981, 293, 297-299.	27.8	35
98	Gallamine triethiodide (flaxedil): tetraethylammonium- and pancuronium-like effects in myelinated nerve fibers. Science, 1981, 212, 1170-1172.	12.6	22
99	Spontaneous and mechanically evoked activity due to central demyelinating lesion. Nature, 1980, 286, 154-155.	27.8	115
100	A sensitive method for the detection and quantification of conduction deficits in nerve. Journal of the Neurological Sciences, 1980, 48, 191-199.	0.6	35
101	Nerve conduction during peripheral demyelination and remyelination. Journal of the Neurological Sciences, 1980, 48, 201-219.	0.6	121
102	Central remyelination restores secure conduction. Nature, 1979, 280, 395-396.	27.8	292
103	Remyelination in the spinal cord of the cat following intraspinal injections of lysolecithin. Journal of the Neurological Sciences, 1977, 33, 31-43.	0.6	141