Bruce D Trapp

List of Publications by Year
in descending order

127 papers	25,320 citations	13865 67 h-index	20358 116 g-index
135 all docs	135 docs citations	135 times ranked	18036 citing authors

#	Article	IF	Citations
1	Axonal Transection in the Lesions of Multiple Sclerosis. New England Journal of Medicine, 1998, 338, 278-285.	27.0	3,776
2	Multiple Sclerosis: An Immune or Neurodegenerative Disorder?. Annual Review of Neuroscience, 2008, 31, 247-269.	10.7	1,448
3	Transected neurites, apoptotic neurons, and reduced inflammation in cortical multiple sclerosis lesions. Annals of Neurology, 2001, 50, 389-400.	5.3	1,239
4	Pathological mechanisms in progressive multiple sclerosis. Lancet Neurology, The, 2015, 14, 183-193.	10.2	925
5	Premyelinating Oligodendrocytes in Chronic Lesions of Multiple Sclerosis. New England Journal of Medicine, 2002, 346, 165-173.	27.0	888
6	Mitochondrial dysfunction as a cause of axonal degeneration in multiple sclerosis patients. Annals of Neurology, 2006, 59, 478-489.	5.3	748
7	NG2-Positive Oligodendrocyte Progenitor Cells in Adult Human Brain and Multiple Sclerosis Lesions. Journal of Neuroscience, 2000, 20, 6404-6412.	3.6	655
8	Subpial Demyelination in the Cerebral Cortex of Multiple Sclerosis Patients. Journal of Neuropathology and Experimental Neurology, 2003, 62, 723-732.	1.7	625
9	Axon-Glial Signaling and the Glial Support of Axon Function. Annual Review of Neuroscience, 2008, 31, 535-561.	10.7	580
10	LINGO-1 negatively regulates myelination by oligodendrocytes. Nature Neuroscience, 2005, 8, 745-751.	14.8	553
11	Hyaluronan accumulates in demyelinated lesions and inhibits oligodendrocyte progenitor maturation. Nature Medicine, 2005, 11, 966-972.	30.7	529
12	Induction of nitric oxide synthase in demyelinating regions of multiple sclerosis brains. Annals of Neurology, 1994, 36, 778-786.	5.3	527
13	Neurological disability correlates with spinal cord axonal loss and reducedN-acetyl aspartate in chronic multiple sclerosis patients. Annals of Neurology, 2000, 48, 893-901.	5.3	524
14	Virtual hypoxia and chronic necrosis of demyelinated axons in multiple sclerosis. Lancet Neurology, The, 2009, 8, 280-291.	10.2	524
15	Myelin-Associated Glycoprotein Is a Myelin Signal that Modulates the Caliber of Myelinated Axons. Journal of Neuroscience, 1998, 18, 1953-1962.	3.6	458
16	Axonal pathology in multiple sclerosis: relationship to neurologic disability. Current Opinion in Neurology, 1999, 12, 295-302.	3.6	425
17	Activation of Necroptosis in Multiple Sclerosis. Cell Reports, 2015, 10, 1836-1849.	6.4	413
18	Axonal and neuronal degeneration in multiple sclerosis: mechanisms and functional consequences. Current Opinion in Neurology, 2001, 14, 271-278.	3.6	408

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19	Mechanisms of neuronal dysfunction and degeneration in multiple sclerosis. Progress in Neurobiology, 2011, 93, 1-12.	5.7	369
20	Role of myelin Po protein as a homophilic adhesion molecule. Nature, 1990, 344, 871-872.	27.8	356
21	Lipopolysaccharide-Induced Microglial Activation and Neuroprotection against Experimental Brain Injury Is Independent of Hematogenous TLR4. Journal of Neuroscience, 2012, 32, 11706-11715.	3.6	354
22	Myelination in the absence of myelin-associated glycoprotein. Nature, 1994, 369, 747-750.	27.8	349
23	Differentiation and Death of Premyelinating Oligodendrocytes in Developing Rodent Brain. Journal of Cell Biology, 1997, 137, 459-468.	5.2	349
24	Cerebral white matter changes in acquired immunodeficiency syndrome dementia: Alterations of the blood-brain barrier. Annals of Neurology, 1993, 34, 339-350.	5.3	345
25	Pathogenesis of axonal and neuronal damage in multiple sclerosis. Neurology, 2007, 68, S22-S31.	1.1	343
26	Evidence for synaptic stripping by cortical microglia. Glia, 2007, 55, 360-368.	4.9	293
27	Demyelination causes synaptic alterations in hippocampi from multiple sclerosis patients. Annals of Neurology, 2011, 69, 445-454.	5.3	269
28	NG2+ Glial Cells: A Novel Glial Cell Population in the Adult Brain. Journal of Neuropathology and Experimental Neurology, 1999, 58, 1113-1124.	1.7	260
29	Axon Loss in the Spinal Cord Determines Permanent Neurological Disability in an Animal Model of Multiple Sclerosis. Journal of Neuropathology and Experimental Neurology, 2002, 61, 23-32.	1.7	258
30	Detection of MHC class II-antigens on macrophages and microglia, but not on astrocytes and endothelia in active multiple sclerosis lesions. Journal of Neuroimmunology, 1994, 51, 135-146.	2.3	237
31	Microglial displacement of inhibitory synapses provides neuroprotection in the adult brain. Nature Communications, 2014, 5, 4486.	12.8	233
32	Pathogenesis of tissue injury in MS lesions. Journal of Neuroimmunology, 1999, 98, 49-56.	2.3	232
33	Cellular and Subcellular Distribution of 2',3'-Cyclic Nucleotide 3'-Phosphodiesterase and Its mRNA in the Rat Central Nervous System. Journal of Neurochemistry, 1988, 51, 859-868.	3.9	197
34	Cortical remyelination: A new target for repair therapies in multiple sclerosis. Annals of Neurology, 2012, 72, 918-926.	5.3	191
35	Depolarization-Induced Ca2+ Release in Ischemic Spinal Cord White Matter Involves L-type Ca2+ Channel Activation of Ryanodine Receptors. Neuron, 2003, 40, 53-63.	8.1	188
36	Relapsing and progressive forms of multiple sclerosis. Current Opinion in Neurology, 2014, 27, 271-278.	3.6	180

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37	Axonal pathology in myelin disorders. Journal of Neurocytology, 1999, 28, 383-395.	1.5	171
38	Hippocampal demyelination and memory dysfunction are associated with increased levels of the neuronal microRNA miRâ€•124 and reduced AMPA receptors. Annals of Neurology, 2013, 73, 637-645.	5.3	164
39	N-acetylaspartate is an axon-specific marker of mature white matter in vivo: A biochemical and immunohistochemical study on the rat optic nerve. Annals of Neurology, 2002, 51, 51-58.	5.3	161
40	Myelination and Axonal Electrical Activity Modulate the Distribution and Motility of Mitochondria at CNS Nodes of Ranvier. Journal of Neuroscience, 2011, 31, 7249-7258.	3.6	158
41	Myelin-Associated Glycoprotein Location and Potential Functions. Annals of the New York Academy of Sciences, 1990, 605, 29-43.	3.8	153
42	Demyelination Increases Axonal Stationary Mitochondrial Size and the Speed of Axonal Mitochondrial Transport. Journal of Neuroscience, 2010, 30, 6658-6666.	3.6	151
43	P0 Glycoprotein Overexpression Causes Congenital Hypomyelination of Peripheral Nerves. Journal of Cell Biology, 2000, 148, 1021-1034.	5.2	145
44	Increased mitochondrial content in remyelinated axons: implications for multiple sclerosis. Brain, 2011, 134, 1901-1913.	7.6	131
45	Evolution of a neuroprotective function of central nervous system myelin. Journal of Cell Biology, 2006, 172, 469-478.	5.2	127
46	Axonal degeneration and progressive neurologic disability in multiple sclerosis. Neurotoxicity Research, 2003, 5, 157-164.	2.7	126
47	Imaging correlates of axonal swelling in chronic multiple sclerosis brains. Annals of Neurology, 2007, 62, 219-228.	5.3	107
48	Imaging correlates of decreased axonal Na⁺/K⁺ ATPase in chronic multiple sclerosis lesions. Annals of Neurology, 2008, 63, 428-435.	5.3	106
49	Human myelin proteome and comparative analysis with mouse myelin. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 14605-14610.	7.1	105
50	Cortical neuronal densities and cerebral white matter demyelination in multiple sclerosis: a retrospective study. Lancet Neurology, The, 2018, 17, 870-884.	10.2	103
51	Immunocytochemical localization of the myelin-associated glycoprotein Fact or Artifact?. Journal of Neuroimmunology, 1984, 6, 231-249.	2.3	102
52	Glutamate receptors on myelinated spinal cord axons: I. GluR6 kainate receptors. Annals of Neurology, 2009, 65, 151-159.	5.3	100
53	Mitochondrial immobilization mediated by syntaphilin facilitates survival of demyelinated axons. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 9953-9958.	7.1	98
54	Glutamate receptors on myelinated spinal cord axons: II. AMPA and GluR5 receptors. Annals of Neurology, 2009, 65, 160-166.	5.3	97

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55	Mechanisms underlying progression in multiple sclerosis. Current Opinion in Neurology, 2020, 33, 277-285.	3.6	88
56	NG2-positive cells generate A2B5-positive oligodendrocyte precursor cells. Glia, 2007, 55, 1001-1010.	4.9	86
57	Activation of the ciliary neurotrophic factor (CNTF) signalling pathway in cortical neurons of multiple sclerosis patients. Brain, 2007, 130, 2566-2576.	7.6	83
58	T1â€/T2â€weighted ratio differs in demyelinated cortex in multiple sclerosis. Annals of Neurology, 2017, 82, 635-639.	5.3	82
59	Neuropathobiology of multiple sclerosis. Neurologic Clinics, 2005, 23, 107-129.	1.8	81
60	VCAM-1-Positive Microglia Target Oligodendrocytes at the Border of Multiple Sclerosis Lesions. Journal of Neuropathology and Experimental Neurology, 2002, 61, 539-546.	1.7	80
61	Neurodegeneration and neuroprotection in multiple sclerosis and other neurodegenerative diseases. Journal of Neuroimmunology, 2006, 176, 198-215.	2.3	80
62	Clinically feasible MTR is sensitive to cortical demyelination in MS. Neurology, 2013, 80, 246-252.	1.1	79
63	pHERV-W envelope protein fuels microglial cell-dependent damage of myelinated axons in multiple sclerosis. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 15216-15225.	7.1	78
64	Neurogenesis in the chronic lesions of multiple sclerosis. Brain, 2008, 131, 2366-2375.	7.6	74
65	Sodium Channel Expression Within Chronic Multiple Sclerosis Plaques. Journal of Neuropathology and Experimental Neurology, 2007, 66, 828-837.	1.7	73
66	Axonal loss in multiple sclerosis. Handbook of Clinical Neurology / Edited By P J Vinken and G W Bruyn, 2014, 122, 101-113.	1.8	71
67	Oligodendrocytes but not astrocytes express apolipoprotein E after injury of rat optic nerve. Glia, 1989, 2, 170-176.	4.9	70
68	Alterations in CA1 hippocampal synapses in a mouse model of fragile X syndrome. Glia, 2018, 66, 789-800.	4.9	70
69	The tetraspanin protein, CD9, is expressed by progenitor cells committed to oligodendrogenesis and is linked to Î²1 integrin, CD81, and Tspan-2. Glia, 2002, 40, 350-359.	4.9	69
70	Astrocyte response to IFN-Î³ limits IL-6-mediated microglia activation and progressive autoimmune encephalomyelitis. Journal of Neuroinflammation, 2015, 12, 79.	7.2	66
71	Imaging Correlates of Leukocyte Accumulation and CXCR4/CXCL12 in Multiple Sclerosis. Archives of Neurology, 2009, 66, 44-53.	4.5	63
72	A mouse model for testing remyelinating therapies. Experimental Neurology, 2016, 283, 330-340.	4.1	62

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73	Gray-Matter Injury in Multiple Sclerosis. New England Journal of Medicine, 2009, 361, 1505-1506.	27.0	59
74	A quantitation of myelin-associated glycoprotein and myelin basic protein loss in different demyelinating disease. Annals of Neurology, 1985, 18, 324-328.	5.3	56
75	Hippocampal volume is related to cognitive decline and fornicial diffusion measures in multiple sclerosis. Magnetic Resonance Imaging, 2014, 32, 354-358.	1.8	54
76	DNA methylation in demyelinated multiple sclerosis hippocampus. Scientific Reports, 2017, 7, 8696.	3.3	54
77	Pathogenesis of multiple sclerosis: The eyes only see what the mind is prepared to comprehend. Annals of Neurology, 2004, 55, 455-457.	5.3	53
78	Enhanced axonal response of mitochondria to demyelination offers neuroprotection: implications for multiple sclerosis. Acta Neuropathologica, 2020, 140, 143-167.	7.7	48
79	Proteolipid proteinâ€"deficient myelin promotes axonal mitochondrial dysfunction via altered metabolic coupling. Journal of Cell Biology, 2016, 215, 531-542.	5.2	47
80	NG2-positive glia in the human central nervous system. Neuron Glia Biology, 2009, 5, 35-44.	1.6	39
81	Aggressive multiple sclerosis (1): Towards a definition of the phenotype. Multiple Sclerosis Journal, 2020, 26, 1031-1044.	3.0	39
82	Clonally expanded mitochondrial DNA deletions within the choroid plexus in multiple sclerosis. Acta Neuropathologica, 2012, 124, 209-220.	7.7	38
83	Amyloid Load and Neural Elements in Alzheimer's Disease and Nondemented Individuals with High Amyloid Plaque Density. Experimental Neurology, 1996, 142, 89-102.	4.1	37
84	Is Axonal Degeneration a Key Early Event in Parkinsonâ€™s Disease?. Journal of Parkinson's Disease, 2016, 6, 703-707.	2.8	36
85	Relapses in multiple sclerosis: Relationship to disability. Multiple Sclerosis and Related Disorders, 2016, 6, 10-20.	2.0	36
86	Dysmyelinated Lower Motor Neurons Retract and Regenerate Dysfunctional Synaptic Terminals. Journal of Neuroscience, 2004, 24, 3890-3898.	3.6	35
87	Intrinsic and Extrinsic Mechanisms of Thalamic Pathology in Multiple Sclerosis. Annals of Neurology, 2020, 88, 81-92.	5.3	33
88	Discrepancy in CCL2 and CCR2 expression in white versus grey matter hippocampal lesions of Multiple Sclerosis patients. Acta Neuropathologica Communications, 2014, 2, 98.	5.2	32
89	Microglial Displacement of GABAergic Synapses Is a Protective Event during Complex Febrile Seizures. Cell Reports, 2020, 33, 108346.	6.4	32
90	?IV tubulin is selectively expressed by oligodendrocytes in the central nervous system. Glia, 2005, 50, 212-222.	4.9	30

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91	Organization of microtubules in myelinating Schwann cells. Journal of Neurocytology, 1994, 23, 801-810.	1.5	29
92	Axo-Glial Septate Junctions. Journal of Cell Biology, 2000, 150, F97-F100.	5.2	28
93	Gene expression profiling in multiple sclerosis brain. Neurobiology of Disease, 2012, 45, 108-114.	4.4	25
94	Mitochondrial fission augments capsaicin-induced axonal degeneration. Acta Neuropathologica, 2015, 129, 81-96.	7.7	25
95	Oligodendrogenesis is differentially regulated in gray and white matter of jimpy mice. Journal of Neuroscience Research, 2002, 70, 645-654.	2.9	24
96	P₀Protein Is Required for and Can Induce Formation of Schmidt-Lantermann Incisures in Myelin Internodes. Journal of Neuroscience, 2008, 28, 7068-7073.	3.6	24
97	Â4 Tubulin Identifies a Primitive Cell Source for Oligodendrocytes in the Mammalian Brain. Journal of Neuroscience, 2009, 29, 7649-7657.	3.6	24
98	Integrin-Kindlin3 requirements for microglial motility in vivo are distinct from those for macrophages. JCI Insight, 2017, 2, .	5.0	24
99	Hippocampal Neurogenesis and Neural Circuit Formation in a Cuprizone-Induced Multiple Sclerosis Mouse Model. Journal of Neuroscience, 2020, 40, 447-458.	3.6	24
100	Postmortem degradation of N-acetyl aspartate and N-acetyl aspartylglutamate: an HPLC analysis of different rat CNS regions. Neurochemical Research, 2001, 26, 695-702.	3.3	23
101	Structure of the Myelinated Axon. , 2004, , 3-27.		23
102	Lateral cerebellar nucleus stimulation promotes motor recovery and suppresses neuroinflammation in a fluid percussion injury rodent model. Brain Stimulation, 2018, 11, 1356-1367.	1.6	23
103	Sensitivity of T1/T2-weighted ratio in detection of cortical demyelination is similar to magnetization transfer ratio using post-mortem MRI. Multiple Sclerosis Journal, 2022, 28, 198-205.	3.0	18
104	Ultrastructural and immunohistochemical analysis of axonal regrowth and myelination in membranes which form over lesion sites in the rat visual system. Journal of Neurocytology, 1988, 17, 797-808.	1.5	16
105	Discovery of 1,2,3-Triazole Derivatives for Multimodality PET/CT/Cryoimaging of Myelination in the Central Nervous System. Journal of Medicinal Chemistry, 2017, 60, 987-999.	6.4	16
106	High spatial and angular resolution diffusion-weighted imaging reveals forniceal damage related to memory impairment. Magnetic Resonance Imaging, 2013, 31, 695-699.	1.8	15
107	Cell Biology of Myelin Assembly. , 2004, , 29-55.		14
108	Single-Nucleus RNA-seq of Normal-Appearing Brain Regions in Relapsing-Remitting vs. Secondary Progressive Multiple Sclerosis: Implications for the Efficacy of Fingolimod. Frontiers in Cellular Neuroscience, 0, 16, .	3.7	14

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109	Reversible Loss of Hippocampal Function in a Mouse Model of Demyelination/Remyelination. Frontiers in Cellular Neuroscience, 2019, 13, 588.	3.7	13
110	Axonal Degeneration in Multiple Sclerosis: The Histopathological Evidence. , 2005, , 165-184.		12
111	Comprehensive Autopsy Program for Individuals with Multiple Sclerosis. Journal of Visualized Experiments, 2019, , .	0.3	12
112	Demyelination in the central nervous system mediated by an anti-oligodendrocyte antibody. , 1998, 54, 158-168.		10
113	Cuprizone does not induce <scp>CNS</scp> demyelination in nonhuman primates. Annals of Clinical and Translational Neurology, 2015, 2, 208-213.	3.7	10
114	Neuronal hibernation following hippocampal demyelination. Acta Neuropathologica Communications, 2021, 9, 34.	5.2	9
115	Taking Two TRAILS. Neuron, 2005, 46, 355-356.	8.1	8
116	Proteolipid protein cannot replace P₀protein as the major structural protein of peripheral nervous system myelin. Glia, 2015, 63, 66-77.	4.9	5
117	Juxtacortical susceptibility changes in progressive multifocal leukoencephalopathy at the grayâ€"white matter junction correlates with iron-enriched macrophages. Multiple Sclerosis Journal, 2021, 27, 135245852199965.	3.0	5
118	N-Acetyl-L-Aspartate in Multiple Sclerosis. , 2006, 576, 199-214.		5
119	Rescue of Congenital Hypomyelination by Progenitor Cell Transplantation. Cell Stem Cell, 2008, 2, 519-520.	11.1	4
120	Identifying a new subtype of multiple sclerosis. Neurodegenerative Disease Management, 2018, 8, 367-369.	2.2	3
121	The pathology of multiple sclerosis. , 2011, , 12-19.		2
122	Neurogenesis in the chronic lesions of multiple sclerosis. Journal of Neuropathology and Experimental Neurology, 2007, 66, 431.	1.7	1
123	Diseases Involving Myelin. , 2012, , 691-704.		1
124	FOREWORD. , 2000, 29, 103-103.		0
125	Lessons from Jack Griffin and the â€œpathogenesis of peripheral nerve diseaseâ€• Journal of the Peripheral Nervous System, 2012, 17, 20-23.	3.1	0
126	Much, if not all, of the cortical damage in MS can be attributed to the microglial cell â€" No. Multiple Sclerosis Journal, 2018, 24, 897-899.	3.0	0

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127	Is Multiple Sclerosis a Neurodegenerative Disorder?. Blue Books of Neurology, 2010, 35, 371-387.	0.1	0