

Characterizing White Matter Damage in Rat Spinal Cord Histology

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Glial Response and Myelin Clearance in Areas of Wallerian Degeneration after Spinal Cord Hemisection in the Monkey <i>Macaca Fascicularis</i> . <i>Journal of Neurotrauma</i> , 2009, 26, 2083-2096.	1.7	19
2	Diffusion Tensor Magnetic Resonance Imaging of Wallerian Degeneration in Rat Spinal Cord after Dorsal Root Axotomy. <i>Journal of Neuroscience</i> , 2009, 29, 3160-3171.	1.7	167
3	Neurodegeneration in thiamine deficient rats—A longitudinal MRI study. <i>Brain Research</i> , 2010, 1308, 176-184.	1.1	22
4	Quantitative and conventional diffusion imaging of axon and myelin damage in the rat spinal cord after axotomy. <i>Magnetic Resonance in Medicine</i> , 2010, 63, 1323-1335.	1.9	43
5	In Vivo Longitudinal MRI and Behavioral Studies in Experimental Spinal Cord Injury. <i>Journal of Neurotrauma</i> , 2010, 27, 1753-1767.	1.7	49
6	Recovery after spinal cord relapse in multiple sclerosis is predicted by radial diffusivity. <i>Multiple Sclerosis Journal</i> , 2010, 16, 1193-1202.	1.4	63
7	Diffusion tensor imaging of white matter pathology in the mouse brain. <i>Imaging in Medicine</i> , 2010, 2, 623-632.	0.0	14
8	Cerebrospinal Fluid Myelin Basic Protein as a Prognostic Biomarker in Dogs with Thoracolumbar Intervertebral Disk Herniation. <i>Journal of Veterinary Internal Medicine</i> , 2010, 24, 890-896.	0.6	36
9	Neurite density from magnetic resonance diffusion measurements at ultrahigh field: Comparison with light microscopy and electron microscopy. <i>NeuroImage</i> , 2010, 49, 205-216.	2.1	245
10	Early Events of Secondary Degeneration after Partial Optic Nerve Transection: An Immunohistochemical Study. <i>Journal of Neurotrauma</i> , 2010, 27, 439-452.	1.7	98
11	Effect of Vascular Endothelial Growth Factor Treatment in Experimental Traumatic Spinal Cord Injury: In Vivo Longitudinal Assessment. <i>Journal of Neurotrauma</i> , 2011, 28, 565-578.	1.7	27
12	Comparative study of the sensitivity of ADC value and T2 relaxation time for early detection of Wallerian degeneration. <i>European Journal of Radiology</i> , 2011, 79, 118-123.	1.2	6
13	Correlation of MR Diffusion Tensor Imaging Parameters with ASIA Motor Scores in Hemorrhagic and Nonhemorrhagic Acute Spinal Cord Injury. <i>Journal of Neurotrauma</i> , 2011, 28, 1881-1892.	1.7	105
14	Axonal integrity predicts cortical reorganisation following cervical injury. <i>Journal of Neurology, Neurosurgery and Psychiatry</i> , 2012, 83, 629-637.	0.9	65
15	Magnetic Resonance Diffusion Tensor Imaging in Patients With Cervical Spondylotic Spinal Cord Compression. <i>Spine</i> , 2012, 37, 48-56.	1.0	94
16	Scaffolds to promote spinal cord regeneration. <i>Handbook of Clinical Neurology</i> / Edited By P J Vinken and G W Bruyn, 2012, 109, 575-594.	1.0	56
17	Myelin water imaging reflects clinical variability in multiple sclerosis. <i>NeuroImage</i> , 2012, 60, 263-270.	2.1	110
18	Rapid whole cerebrum myelin water imaging using a 3D GRASE sequence. <i>NeuroImage</i> , 2012, 63, 533-539.	2.1	222

#	ARTICLE	IF	CITATIONS
19	Conditions for quantitative evaluation of injured spinal cord by in vivo diffusion tensor imaging and tractography: Preclinical longitudinal study in common marmosets. <i>NeuroImage</i> , 2012, 63, 1841-1853.	2.1	62
20	Cervical spinal cord injection of epidural corticosteroids: Comprehensive longitudinal study including multiparametric magnetic resonance imaging. <i>Pain</i> , 2012, 153, 2292-2299.	2.0	20
21	The Translational Role of Diffusion Tensor Image Analysis in Animal Models of Developmental Pathologies. <i>Developmental Neuroscience</i> , 2012, 34, 5-19.	1.0	21
22	Detection of endogenous iron deposits in the injured mouse spinal cord through high-resolution <i>ex vivo</i> and <i>in vivo</i> MRI. <i>NMR in Biomedicine</i> , 2013, 26, 141-150.	1.6	22
23	<i>Ex Vivo</i> Diffusion Tensor Imaging of Spinal Cord Injury in Rats of Varying Degrees of Severity. <i>Journal of Neurotrauma</i> , 2013, 30, 1577-1586.	1.7	42
24	Acute Delivery of EphA4-Fc Improves Functional Recovery after Contusive Spinal Cord Injury in Rats. <i>Journal of Neurotrauma</i> , 2013, 30, 1023-1034.	1.7	35
25	A Novel Porcine Model of Traumatic Thoracic Spinal Cord Injury. <i>Journal of Neurotrauma</i> , 2013, 30, 142-159.	1.7	123
26	Longitudinal assessment of white matter pathology in the injured mouse spinal cord through ultra-high field (16.4T) <i>in vivo</i> diffusion tensor imaging. <i>NeuroImage</i> , 2013, 82, 574-585.	2.1	51
27	Myelin loss and oligodendrocyte pathology in white matter tracts following traumatic brain injury in the rat. <i>European Journal of Neuroscience</i> , 2013, 38, 2153-2165.	1.2	119
28	The acute phase of Wallerian degeneration: Longitudinal diffusion tensor imaging of the fornix following temporal lobe surgery. <i>NeuroImage</i> , 2013, 74, 128-139.	2.1	52
29	Optimal time window of myelotomy in rats with acute traumatic spinal cord injury: a preliminary study. <i>Spinal Cord</i> , 2013, 51, 673-678.	0.9	17
30	Effects of Vertebral Column Distraction on Transcranial Electrical Stimulation-Motor Evoked Potential and Histology of the Spinal Cord in a Porcine Model. <i>Journal of Bone and Joint Surgery - Series A</i> , 2013, 95, 835-842.	1.4	17
31	Diffusion tensor imaging of the spinal cord: a review. <i>Coluna/ Columna</i> , 2013, 12, 64-69.	0.0	9
32	T2 Relaxation. , 2014, , 181-206.		0
33	Characterization of a Novel, Magnetic Resonance Imaging-Compatible Rodent Model Spinal Cord Injury Device. <i>Journal of Biomechanical Engineering</i> , 2014, 136, 095001.	0.6	7
34	<i>In vivo</i> longitudinal Myelin Water Imaging in rat spinal cord following dorsal column transection injury. <i>Magnetic Resonance Imaging</i> , 2014, 32, 250-258.	1.0	25
35	The current state-of-the-art of spinal cord imaging: Applications. <i>NeuroImage</i> , 2014, 84, 1082-1093.	2.1	169
36	A non-surgical model of cervical spinal cord injury induced with focused ultrasound and microbubbles. <i>Journal of Neuroscience Methods</i> , 2014, 235, 92-100.	1.3	18

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37	Diffusion Tensor Imaging as a Predictor of Locomotor Function after Experimental Spinal Cord Injury and Recovery. <i>Journal of Neurotrauma</i> , 2014, 31, 1362-1373.	1.7	62
38	Diffusion Tensor Imaging of the Spinal Cord. <i>Neurosurgery</i> , 2014, 74, 1-8.	0.6	77
39	Brain and cord myelin water imaging: a progressive multiple sclerosis biomarker. <i>NeuroImage: Clinical</i> , 2015, 9, 574-580.	1.4	44
40	Quantitative MRI in a non-surgical model of cervical spinal cord injury. <i>NMR in Biomedicine</i> , 2015, 28, 925-936.	1.6	14
41	Serum Levels of Neurofilament-H are Elevated in Patients Suffering From Severe Burns. <i>Journal of Burn Care and Research</i> , 2015, 36, 545-550.	0.2	5
42	Corticospinal Tract Anatomy and Functional Connectivity of Primary Motor Cortex in Autism. <i>Journal of the American Academy of Child and Adolescent Psychiatry</i> , 2015, 54, 859-867.	0.3	47
43	Cornel Iridoid Glycoside Improves Locomotor Impairment and Decreases Spinal Cord Damage in Rats. <i>BioMed Research International</i> , 2016, 2016, 1-12.	0.9	2
44	Ameliorating Spinal Cord Injury in an Animal Model With Mechanical Tissue Resuscitation. <i>Neurosurgery</i> , 2016, 78, 868-876.	0.6	6
45	Magnetic Resonance of Myelin Water: An <i>In vivo</i> Marker for Myelin. <i>Brain Plasticity</i> , 2016, 2, 71-91.	1.9	205
46	Transcriptional Regulation of Brain-Derived Neurotrophic Factor (BDNF) by Methyl CpG Binding Protein 2 (MeCP2): a Novel Mechanism for Re-Myelination and/or Myelin Repair Involved in the Treatment of Multiple Sclerosis (MS). <i>Molecular Neurobiology</i> , 2016, 53, 1092-1107.	1.9	61
47	Continuous distraction-induced delayed spinal cord injury on motor-evoked potentials and histological changes of spinal cord in a porcine model. <i>Spinal Cord</i> , 2016, 54, 649-655.	0.9	16
48	High-resolution myelin water imaging in post-mortem multiple sclerosis spinal cord: A case report. <i>Multiple Sclerosis Journal</i> , 2016, 22, 1485-1489.	1.4	32
49	Differential Histopathological and Behavioral Outcomes Eight Weeks after Rat Spinal Cord Injury by Contusion, Dislocation, and Distraction Mechanisms. <i>Journal of Neurotrauma</i> , 2016, 33, 1667-1684.	1.7	48
50	Serial Diffusion Tensor Imaging <i>In Vivo</i> Predicts Long-Term Functional Recovery and Histopathology in Rats following Different Severities of Spinal Cord Injury. <i>Journal of Neurotrauma</i> , 2016, 33, 917-928.	1.7	29
51	Quantifying the internal deformation of the rodent spinal cord during acute spinal cord injury – the validation of a method. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2016, 19, 386-395.	0.9	9
52	Consumption of seaweeds and the human brain. <i>Journal of Applied Phycology</i> , 2017, 29, 2377-2398.	1.5	54
53	Repeated mild traumatic brain injury in female rats increases lipid peroxidation in neurons. <i>Experimental Brain Research</i> , 2017, 235, 2133-2149.	0.7	23
54	Validating myelin water imaging with transmission electron microscopy in a rat spinal cord injury model. <i>NeuroImage</i> , 2017, 153, 122-130.	2.1	32

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55	Neuroprotection and secondary damage following spinal cord injury: concepts and methods. <i>Neuroscience Letters</i> , 2017, 652, 3-10.	1.0	78
56	Diffusion MRI of the spinal cord: from structural studies to pathology. <i>NMR in Biomedicine</i> , 2017, 30, e3592.	1.6	32
57	Implantation of 3D Constructs Embedded with Oral Mucosa-Derived Cells Induces Functional Recovery in Rats with Complete Spinal Cord Transection. <i>Frontiers in Neuroscience</i> , 2017, 11, 589.	1.4	29
58	Specific ion channels contribute to key elements of pathology during secondary degeneration following neurotrauma. <i>BMC Neuroscience</i> , 2017, 18, 62.	0.8	26
59	The Relationship between Lesion Severity Characterized by Diffusion Tensor Imaging and Motor Function in Chronic Canine Spinal Cord Injury. <i>Journal of Neurotrauma</i> , 2018, 35, 500-507.	1.7	24
60	Testing Pathological Variation of White Matter Tract in Adult Rats after Severe Spinal Cord Injury with MRI. <i>BioMed Research International</i> , 2018, 2018, 1-13.	0.9	10
61	High-Speed Fluoroscopy to Measure Dynamic Spinal Cord Deformation in an <i>In Vivo</i> Rat Model. <i>Journal of Neurotrauma</i> , 2018, 35, 2572-2580.	1.7	6
62	Postmortem diffusion MRI of the entire human spinal cord at microscopic resolution. <i>NeuroImage: Clinical</i> , 2018, 18, 963-971.	1.4	27
63	Axon Diameters and Myelin Content Modulate Microscopic Fractional Anisotropy at Short Diffusion Times in Fixed Rat Spinal Cord. <i>Frontiers in Physics</i> , 2018, 6, .	1.0	23
64	Quantitative Ex Vivo MRI Changes due to Progressive Formalin Fixation in Whole Human Brain Specimens: Longitudinal Characterization of Diffusion, Relaxometry, and Myelin Water Fraction Measurements at 3T. <i>Frontiers in Medicine</i> , 2018, 5, 31.	1.2	56
65	Guidelines for the conduct of clinical trials in spinal cord injury: Neuroimaging biomarkers. <i>Spinal Cord</i> , 2019, 57, 717-728.	0.9	40
66	Rapid myelin water imaging for the assessment of cervical spinal cord myelin damage. <i>NeuroImage: Clinical</i> , 2019, 23, 101896.	1.4	16
67	Stable gastric pentadecapeptide BPC 157 can improve the healing course of spinal cord injury and lead to functional recovery in rats. <i>Journal of Orthopaedic Surgery and Research</i> , 2019, 14, 199.	0.9	18
68	Dynamic response of microglia/macrophage polarization following demyelination in mice. <i>Journal of Neuroinflammation</i> , 2019, 16, 188.	3.1	33
69	Traumatic and nontraumatic spinal cord injury: pathological insights from neuroimaging. <i>Nature Reviews Neurology</i> , 2019, 15, 718-731.	4.9	125
70	The influence of brain iron on myelin water imaging. <i>NeuroImage</i> , 2019, 199, 545-552.	2.1	68
71	Diffusion tensor imaging shows mechanism-specific differences in injury pattern and progression in rat models of acute spinal cord injury. <i>NeuroImage</i> , 2019, 186, 43-55.	2.1	9
72	Longitudinal <i>In Vivo</i> Diffusion Magnetic Resonance Imaging Remote from the Lesion Site in Rat Spinal Cord Injury. <i>Journal of Neurotrauma</i> , 2019, 36, 1389-1398.	1.7	7

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73	Myelin Water Fraction and Intra/Extracellular Water Geometric Mean T ₂ Normative Atlases for the Cervical Spinal Cord from 3T MRI. <i>Journal of Neuroimaging</i> , 2020, 30, 50-57.	1.0	13
74	DECAES – DEcomposition and Component Analysis of Exponential Signals. <i>Zeitschrift Fur Medizinische Physik</i> , 2020, 30, 271-278.	0.6	17
75	Red-Light (670nm) Therapy Reduces Mechanical Sensitivity and Neuronal Cell Death, and Alters Glial Responses after Spinal Cord Injury in Rats. <i>Journal of Neurotrauma</i> , 2020, 37, 2244-2260.	1.7	5
76	Influence of Duration of Injury on Diffusion Tensor Imaging in Acute Canine Spinal Cord Injury. <i>Journal of Neurotrauma</i> , 2020, 37, 2261-2267.	1.7	5
77	Numbers of Axons in Spared Neural Tissue Bridges But Not Their Widths or Areas Correlate With Functional Recovery in Spinal Cord-Injured Rats. <i>Journal of Neuropathology and Experimental Neurology</i> , 2020, 79, 1203-1217.	0.9	1
78	So You Want to Image Myelin Using MRI: An Overview and Practical Guide for Myelin Water Imaging. <i>Journal of Magnetic Resonance Imaging</i> , 2021, 53, 360-373.	1.9	60
79	Myelin quantification with MRI: A systematic review of accuracy and reproducibility. <i>NeuroImage</i> , 2021, 226, 117561.	2.1	67
80	Myelin water imaging depends on white matter fiber orientation in the human brain. <i>Magnetic Resonance in Medicine</i> , 2021, 85, 2221-2231.	1.9	35
81	Secondary Degeneration of White Matter After Focal Sensorimotor Cortical Ischemic Stroke in Rats. <i>Frontiers in Neuroscience</i> , 2020, 14, 611696.	1.4	6
82	Time-Course Changes of Extracellular Matrix Encoding Genes Expression Level in the Spinal Cord Following Contusion Injury – A Data-Driven Approach. <i>International Journal of Molecular Sciences</i> , 2021, 22, 1744.	1.8	5
83	Exploring the Contribution of Myelin Content in Normal Appearing White Matter to Cognitive Outcomes in Cerebral Small Vessel Disease. <i>Journal of Alzheimer's Disease</i> , 2021, 80, 91-101.	1.2	9
84	Can MRI measure myelin? Systematic review, qualitative assessment, and meta-analysis of studies validating microstructural imaging with myelin histology. <i>NeuroImage</i> , 2021, 230, 117744.	2.1	104
85	Baricitinib Ameliorates Experimental Autoimmune Encephalomyelitis by Modulating the Janus Kinase/Signal Transducer and Activator of Transcription Signaling Pathway. <i>Frontiers in Immunology</i> , 2021, 12, 650708.	2.2	13
86	Alcohol-fixed specimens for high-contrast post-mortem MRI. <i>Forensic Imaging</i> , 2021, 25, 200449.	0.4	2
87	Empty Sella Syndrome as a Window Into the Neuroprotective Effects of Prolactin. <i>Frontiers in Medicine</i> , 2021, 8, 680602.	1.2	3
88	Label-free assessment of myelin status using birefringence microscopy. <i>Journal of Neuroscience Methods</i> , 2021, 360, 109226.	1.3	7
89	Morphological changes in the sciatic nerve in experimental modeling of contusion injury of the spinal cord in rats. <i>Hirurgia Pozvonochnika</i> , 2021, 18, 36-42.	0.1	0
94	The relevance of Neuroimaging Findings to Physical Disability in Multiple Sclerosis. <i>Noropsikiyatri Arsivi</i> , 2018, 55, S31-S36.	0.2	3

#	ARTICLE	IF	CITATIONS
95	Delayed treatment of secondary degeneration following acute optic nerve transection using a combination of ion channel inhibitors. <i>Neural Regeneration Research</i> , 2017, 12, 307.	1.6	3
96	DTI and pathological changes in a rabbit model of radiation injury to the spinal cord after ¹²⁵ I radioactive seed implantation. <i>Neural Regeneration Research</i> , 2018, 13, 528.	1.6	3
97	An interactive meta-analysis of MRI biomarkers of myelin. <i>ELife</i> , 2020, 9, .	2.8	99
98	Morphological Assessments Following Spinal Cord Injury. <i>Springer Protocols</i> , 2012, , 405-416.	0.1	0
99	Muscular Adaptations and Novel Magnetic Resonance Characterizations of Spinal Cord Injury. <i>Physical Therapy Korea</i> , 2015, 22, 70-80.	0.1	0
101	Relaxometry: Applications in the Brain. <i>Advances in Magnetic Resonance Technology and Applications</i> , 2020, 1, 149-184.	0.0	0
102	Serum neurofilament light chain correlates with myelin and axonal magnetic resonance imaging markers in multiple sclerosis. <i>Multiple Sclerosis and Related Disorders</i> , 2022, 57, 103366.	0.9	8
104	Advanced imaging for spinal cord injury. , 2022, , 105-124.		0
105	Evolution of Spinal Cord Transection of Rhesus Monkey Implanted with Polymer Synthesized by Plasma Evaluated by Diffusion Tensor Imaging. <i>Polymers</i> , 2022, 14, 962.	2.0	5
107	Quantifying Intraparenchymal Hemorrhage after Traumatic Spinal Cord Injury: A Review of Methodology. <i>Journal of Neurotrauma</i> , 2022, 39, 1603-1635.	1.7	3
109	A pilot study comparing myelin measurements from myelin water imaging and 11C-PIB PET in multiple sclerosis. <i>Multiple Sclerosis and Related Disorders</i> , 2022, 68, 104238.	0.9	0
110	Quantitative myelin imaging with MRI and PET: an overview of techniques and their validation status. <i>Brain</i> , 2023, 146, 1243-1266.	3.7	12
111	High-resolution magnetization-transfer imaging of post-mortem marmoset brain: Comparisons with relaxometry and histology. <i>NeuroImage</i> , 2023, 268, 119860.	2.1	3
115	Conventional and advanced magnetic resonance imaging for degenerative cervical myelopathy. , 2023, , 101-111.		0