David S K Magnuson

List of Publications by Year
in descending order

99 papers	4,523 citations	87888 38 h-index	110387 64 g-index
103 all docs	103 docs citations	103 times ranked	3415 citing authors

#	Article	IF	Citations
1	Identification of a human immunodeficiency virus type 1 Tat epitope that is neuroexcitatory and neurotoxic. Journal of Virology, 1996, 70, 1475-1480.	3.4	308
2	Human immunodeficiency virus type 1 tat activates non?N-methyl-D-aspartate excitatory amino acid receptors and causes neurotoxicity. Annals of Neurology, 1995, 37, 373-380.	5.3	286
3	Comparing Deficits Following Excitotoxic and Contusion Injuries in the Thoracic and Lumbar Spinal Cord of the Adult Rat. Experimental Neurology, 1999, 156, 191-204.	4.1	194
4	Transplantation of Ciliary Neurotrophic Factor-Expressing Adult Oligodendrocyte Precursor Cells Promotes Remyelination and Functional Recovery after SpinalCord Injury. Journal of Neuroscience, 2010, 30, 2989-3001.	3.6	193
5	Functional Redundancy of Ventral Spinal Locomotor Pathways. Journal of Neuroscience, 2002, 22, 315-323.	3.6	152
6	Neuronal excitatory properties of human immunodeficiency virus type 1 tat protein. Neuroscience, 1997, 82, 97-106.	2.3	134
7	Mitogen and Substrate Differentially Affect the Lineage Restriction of Adult Rat Subventricular Zone Neural Precursor Cell Populations. Experimental Cell Research, 1999, 252, 75-95.	2.6	134
8	Differential interactions of cholecystokinin and FLFQPQRF-NH2 with Î¼ and Î´ opioid antinociception in the rat spinal cord. Neuropeptides, 1990, 16, 213-218.	2.2	118
9	Both Dorsal and Ventral Spinal Cord Pathways Contribute to Overground Locomotion in the Adult Rat. Experimental Neurology, 2002, 177, 575-580.	4.1	111
10	Functional Consequences of Lumbar Spinal Cord Contusion Injuries in the Adult Rat. Journal of Neurotrauma, 2005, 22, 529-543.	3.4	101
11	Anatomical and Functional Outcomes following a Precise, Graded, Dorsal Laceration Spinal Cord Injury in C57BL/6 Mice. Journal of Neurotrauma, 2009, 26, 1-15.	3.4	101
12	Development of a Database for Translational Spinal Cord Injury Research. Journal of Neurotrauma, 2014, 31, 1789-1799.	3.4	100
13	Gait Analysis in Normal and Spinal Contused Mice Using the TreadScan System. Journal of Neurotrauma, 2009, 26, 2045-2056.	3.4	93
14	Effects of Swimming on Functional Recovery after Incomplete Spinal Cord Injury in Rats. Journal of Neurotrauma, 2006, 23, 908-919.	3.4	89
15	Lamina-specific effects of morphine and naloxone in dorsal horn of rat spinal cord in vitro. Journal of Neurophysiology, 1991, 66, 1941-1950.	1.8	86
16	N-acetylcysteine amide preserves mitochondrial bioenergetics and improves functional recovery following spinal trauma. Experimental Neurology, 2014, 257, 95-105.	4.1	84
17	A Grading System To Evaluate Objectively the Strength of Pre-Clinical Data of Acute Neuroprotective Therapies for Clinical Translation in Spinal Cord Injury. Journal of Neurotrauma, 2011, 28, 1525-1543.	3.4	83
18	Synthesis, resolution, and absolute configuration of the isomers of the neuronal excitant 1-amino-1,3-cyclopentanedicarboxylic acid. Journal of Medicinal Chemistry, 1988, 31, 864-867.	6.4	80

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19	The Louisville Swim Scale: A Novel Assessment of Hindlimb Function following Spinal Cord Injury in Adult Rats. Journal of Neurotrauma, 2006, 23, 1654-1670.	3.4	77
20	Task-specificity vs. ceiling effect: Step-training in shallow water after spinal cord injury. Experimental Neurology, 2010, 224, 178-187.	4.1	76
21	Inter-enlargement pathways in the ventrolateral funiculus of the adult rat spinal cord. Neuroscience, 2006, 142, 1195-1207.	2.3	75
22	Large animal and primate models of spinal cord injury for the testing of novel therapies. Experimental Neurology, 2015, 269, 154-168.	4.1	75
23	Swimming as a Model of Task-Specific Locomotor Retraining After Spinal Cord Injury in the Rat. Neurorehabilitation and Neural Repair, 2009, 23, 535-545.	2.9	70
24	Locomotor Rhythm Evoked by Ventrolateral Funiculus Stimulation in the Neonatal Rat Spinal Cord In Vitro. Journal of Neurophysiology, 1997, 77, 200-206.	1.8	67
25	Adult rat forelimb dysfunction after dorsal cervical spinal cord injury. Experimental Neurology, 2005, 192, 25-38.	4.1	65
26	Murine embryonal carcinoma-derived neurons survive and mature following transplantation into adult rat striatum. Neuroscience, 1994, 58, 753-763.	2.3	64
27	Rolipram attenuates acute oligodendrocyte death in the adult rat ventrolateral funiculus following contusive cervical spinal cord injury. Neuroscience Letters, 2008, 438, 200-204.	2.1	64
28	Acetyl-l-carnitine treatment following spinal cord injury improves mitochondrial function correlated with remarkable tissue sparing and functional recovery. Neuroscience, 2012, 210, 296-307.	2.3	62
29	Hindlimb Immobilization in a Wheelchair Alters Functional Recovery Following Contusive Spinal Cord Injury in the Adult Rat. Neurorehabilitation and Neural Repair, 2011, 25, 729-739.	2.9	58
30	Swim Training Initiated Acutely after Spinal Cord Injury Is Ineffective and Induces Extravasation In and Around the Epicenter. Journal of Neurotrauma, 2009, 26, 1017-1027.	3.4	56
31	Spinal Cord Contusion Based on Precise Vertebral Stabilization and Tissue Displacement Measured by Combined Assessment to Discriminate Small Functional Differences. Journal of Neurotrauma, 2008, 25, 1227-1240.	3.4	55
32	Inhibition of EphA7 up-regulation after spinal cord injury reduces apoptosis and promotes locomotor recovery. Journal of Neuroscience Research, 2006, 84, 1438-1451.	2.9	51
33	Comprehensive locomotor outcomes correlate to hyperacute diffusion tensor measures after spinal cord injury in the adult rat. Experimental Neurology, 2012, 235, 188-196.	4.1	48
34	Functional testing in animal models of spinal cord injury: not as straight forward as one would think. Frontiers in Integrative Neuroscience, 2013, 7, 85.	2.1	45
35	Electrophysiological Properties of Mitogen-Expanded Adult Rat Spinal Cord and Subventricular Zone Neural Precursor Cells. Experimental Neurology, 1999, 158, 143-154.	4.1	44
36	Swim training initiated acutely after spinal cord injury is ineffective and induces extravasation in and around the epicenter. Journal of Neurotrauma, 2009, 26, 110306202455053.	3.4	43

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37	Anterograde labeling of ventrolateral funiculus pathways with spinal enlargement connections in the adult rat spinal cord. Brain Research, 2009, 1302, 76-84.	2.2	41
38	Lamina VII neurons are rhythmically active during locomotor-like activity in the neonatal rat spinal cord. Neuroscience Letters, 1995, 197, 9-12.	2.1	40
39	Spinal Interneurons as Gatekeepers to Neuroplasticity after Injury or Disease. Journal of Neuroscience, 2021, 41, 845-854.	3.6	39
40	In vivo electrophysiological maturation of neurons derived from a multipotent precursor (embryonal) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	1.7	38
41	Use of magnetic stimulation to elicit motor evoked potentials, somatosensory evoked potentials, and H-reflexes in non-sedated rodents. Journal of Neuroscience Methods, 2007, 165, 9-17.	2.5	36
42	The N-methyl-d-aspartate receptor and burst firing of ca1 hippocampal pyramidal neurons. Neuroscience, 1987, 22, 563-571.	2.3	34
43	Magnetically evoked inter-enlargement response: An assessment of ascending propriospinal fibers following spinal cord injury. Experimental Neurology, 2006, 201, 428-440.	4.1	32
44	Reticulospinal pathways in the ventrolateral funiculus with terminations in the cervical and lumbar enlargements of the adult rat spinal cord. Neuroscience, 2008, 151, 505-517.	2.3	32
45	Reversible silencing of lumbar spinal interneurons unmasks a task-specific network for securing hindlimb alternation. Nature Communications, 2017, 8, 1963.	12.8	32
46	Ca2+-dependent depolarization and burst firing of rat CA1 pyramidal neurones induced by N-methyl-D-aspartic acid and quinolinic acid: antagonism by 2-amino-5-phosphonovaleric and kynurenic acids. Canadian Journal of Physiology and Pharmacology, 1986, 64, 163-168.	1.4	29
47	Long ascending propriospinal neurons provide flexible, context-specific control of interlimb coordination. ELife, 2020, 9, .	6.0	29
48	Spinal Cord Injury Causes Systolic Dysfunction and Cardiomyocyte Atrophy. Journal of Neurotrauma, 2018, 35, 424-434.	3.4	28
49	Functional consequences of ethidium bromide demyelination of the mouse ventral spinal cord. Experimental Neurology, 2013, 247, 615-622.	4.1	27
50	FAIR SCI Ahead: The Evolution of the Open Data Commons for Pre-Clinical Spinal Cord Injury Research. Journal of Neurotrauma, 2020, 37, 831-838.	3.4	27
51	Hindlimb Stretching Alters Locomotor Function After Spinal Cord Injury in the Adult Rat. Neurorehabilitation and Neural Repair, 2015, 29, 268-277.	2.9	24
52	Lasting paraplegia caused by loss of lumbar spinal cord interneurons in rats: no direct correlation with motor neuron loss. Journal of Neurosurgery: Spine, 2000, 93, 266-275.	1.7	23
53	Neurons labeled from locomotor-related ventrolateral funiculus stimulus sites in the neonatal rat spinal cord. Journal of Comparative Neurology, 2002, 442, 226-238.	1.6	23
54	Bone Loss following Spinal Cord Injury in a Rat Model. Journal of Neurotrauma, 2012, 29, 1676-1682.	3.4	23

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55	A comparison of passive hindlimb cycling and active upper-limb exercise provides new insights into systolic dysfunction after spinal cord injury. American Journal of Physiology - Heart and Circulatory Physiology, 2017, 313, H861-H870.	3.2	22
56	Neurons derived from P19 embryonal carcinoma cells develop responses to excitatory and inhibitory neurotransmitters. Developmental Brain Research, 1995, 90, 141-150.	1.7	21
57	Neuroregeneration in Composite Tissue Allografts: Effect of Low-Dose FK506 and Mycophenolate Mofetil Immunotherapy. Plastic and Reconstructive Surgery, 2006, 118, 615-623.	1.4	21
58	Long-duration, frequency-dependent motor responses evoked by ventrolateral funiculus stimulation in the neonatal rat spinal cord. Neuroscience Letters, 1995, 192, 97-100.	2.1	20
59	Silencing long ascending propriospinal neurons after spinal cord injury improves hindlimb stepping in the adult rat. ELife, 2021, 10, .	6.0	17
60	A novel spinal cord slice preparation from the rat. Journal of Neuroscience Methods, 1987, 19, 141-145.	2.5	16
61	Embryonic brain precursors transplanted into kainate lesioned rat spinal cord. NeuroReport, 2001, 12, 1015-1019.	1.2	16
62	Electromyographic patterns of the rat hindlimb in response to muscle stretch after spinal cord injury. Spinal Cord, 2018, 56, 560-568.	1.9	16
63	Excitation of rat hippocampal neurones by the stereoisomers of cis- and trans-1-amino-1,3-cyclopentane dicarboxylate. Canadian Journal of Physiology and Pharmacology, 1987, 65, 2196-2201.	1.4	15
64	Structural requirements for activation of excitatory amino acid receptors in the rat spinal cord in vitro. Experimental Brain Research, 1988, 73, 541-545.	1.5	15
65	Consequences of Common Data Analysis Inaccuracies in CNS Trauma Injury Basic Research. Journal of Neurotrauma, 2013, 30, 797-805.	3.4	15
66	Human chorionic gonadotropin/luteinizing hormone receptor expression in the adult rat spinal cord. Neuroscience Letters, 2003, 336, 135-138.	2.1	14
67	Challenges of animal models in SCI research: Effects of pre-injury task-specific training in adult rats before lesion. Behavioural Brain Research, 2015, 291, 26-35.	2.2	14
68	Challenging cardiac function post-spinal cord injury with dobutamine. Autonomic Neuroscience: Basic and Clinical, 2018, 209, 19-24.	2.8	14
69	The Transcriptional Response of Neurotrophins and Their Tyrosine Kinase Receptors in Lumbar Sensorimotor Circuits to Spinal Cord Contusion is Affected by Injury Severity and Survival Time. Frontiers in Physiology, 2012, 3, 478.	2.8	13
70	Acridinic acid: A new antagonist of amino acid-induced excitations of central neurones. Neuroscience Letters, 1986, 66, 101-105.	2.1	12
71	Lumbar Spinoreticular Neurons in the Rat: Part of the Central Pattern Generator for Locomotion?a. Annals of the New York Academy of Sciences, 1998, 860, 436-440.	3.8	12
72	Disruption of Locomotion in Response to Hindlimb Muscle Stretch at Acute and Chronic Time Points after a Spinal Cord Injury in Rats. Journal of Neurotrauma, 2017, 34, 661-670.	3.4	12

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73	Treadmill-Based Gait Kinematics in the Yucatan Mini Pig. Journal of Neurotrauma, 2020, 37, 2277-2291.	3.4	12
74	Nociceptor-dependent locomotor dysfunction after clinically-modeled hindlimb muscle stretching in adult rats with spinal cord injury. Experimental Neurology, 2019, 318, 267-276.	4.1	11
75	Electrophysiological changes accompanying DSP-4 lesions of rat locus coeruleus neurons. Brain Research, 1993, 628, 317-320.	2.2	10
76	Promoting FAIR Data Through Community-driven Agile Design: the Open Data Commons for Spinal Cord Injury (odc-sci.org). Neuroinformatics, 2022, 20, 203-219.	2.8	10
77	Dynamic â€œRange of Motionâ€•Hindlimb Stretching Disrupts Locomotor Function in Rats with Moderate Subacute Spinal Cord Injuries. Journal of Neurotrauma, 2017, 34, 2086-2091.	3.4	9
78	Activity/exercise-induced changes in the liver transcriptome after chronic spinal cord injury. Scientific Data, 2019, 6, 88.	5.3	9
79	The action of quinolinate in the rat spinal cord in vitro. Canadian Journal of Physiology and Pharmacology, 1987, 65, 2483-2487.	1.4	8
80	Temporal analysis of cardiovascular control and function following incomplete T3 and T10 spinal cord injury in rodents. Physiological Reports, 2018, 6, e13634.	1.7	8
81	Non-stationary analysis of extracellular neural activity. Neurocomputing, 2000, 32-33, 1083-1093.	5.9	7
82	Transcriptome of dorsal root ganglia caudal to a spinal cord injury with modulated behavioral activity. Scientific Data, 2019, 6, 83.	5.3	7
83	Effects of early exercise training on the severity of autonomic dysreflexia following incomplete spinal cord injury in rodents. Physiological Reports, 2021, 9, e14969.	1.7	7
84	Optimizing Stem Cell Grafting into the CNS. Methods in Molecular Biology, 2008, 438, 375-382.	0.9	7
85	Basso, Beattie, and Bresnahan Scale Locomotor Assessment Following Spinal Cord Injury and Its Utility as a Criterion for Other Assessments. Springer Protocols, 2012, , 591-604.	0.3	6
86	Initiation of segmental locomotor-like activities by stimulation of ventrolateral funiculus in the neonatal rat. Experimental Brain Research, 2011, 214, 151-161.	1.5	5
87	Dual-Viral Transduction Utilizing Highly Efficient Retrograde Lentivirus Improves Labeling of Long Propriospinal Neurons. Frontiers in Neuroanatomy, 2021, 15, 635921.	1.7	5
88	Cervical response among ascending ventrolateral funiculus pathways of the neonatal rat. Brain Research, 2013, 1491, 136-146.	2.2	4
89	Introduction to the Special Issue on Locomotor Rehabilitation after Spinal Cord Injury. Journal of Neurotrauma, 2017, 34, 1711-1712.	3.4	4
90	Evidence That the Central Nervous System Can Induce a Modification at the Neuromuscular Junction That Contributes to the Maintenance of a Behavioral Response. Journal of Neuroscience, 2020, 40, 9186-9209.	3.6	2

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91	Broad opioid antagonism amplifies disruption of locomotor function following therapy-like hindlimb stretching in spinal cord injured rats. Spinal Cord, 2022, 60, 312-319.	1.9	2
92	Markers of susceptibility to cardiac arrhythmia in experimental spinal cord injury and the impact of sympathetic stimulation and exercise training. Autonomic Neuroscience: Basic and Clinical, 2021, 235, 102867.	2.8	2
93	Protocol for rapid onset of mobilisation in patients with traumatic spinal cord injury (PROMPT-SCI) study: a single-arm proof-of-concept trial of early in-bed leg cycling following acute traumatic spinal cord injury. BMJ Open, 2021, 11, e049884.	1.9	2
94	RNA-seq data of soleus muscle tissue after spinal cord injury under conditions of inactivity and applied exercise. Data in Brief, 2020, 28, 105056.	1.0	1
95	Techniques for Studying the Electrophysiology of Neurons Derived from Neural Stem/Progenitor Cells. , 2002, 198, 179-186.		0
96	Swimming as an Assessment of Hindlimb Function in Animals with Traumatic Spinal Cord Injury. Springer Protocols, 2012, , 663-677.	0.3	0
97	Automated Gait Analysis Following Spinal Cord Injury. Springer Protocols, 2012, , 625-638.	0.3	0
98	Immunohistochemical detection of double-infected cell bodies. Protocol Exchange, 0, , .	0.3	0
99	Immunohistochemical detection of viral-infected terminals. Protocol Exchange, 0, , .	0.3	0