Volker Dietz

List of Publications by Year
in descending order

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120 papers	9,978 citations	36303 51 h-index	34986 98 g-index
130 all docs	130 docs citations	130 times ranked	6997 citing authors

#	Article	IF	Citations
1	Neural coordination of bilateral power and precision finger movements. European Journal of Neuroscience, 2021, 54, 8249-8255.	2.6	6
2	Restoration of motor function after CNS damage: is there a potential beyond spontaneous recovery?. Brain Communications, 2021, 3, fcab171.	3.3	1
3	Differential neural coordination of bilateral hand and finger movements. Physiological Reports, 2020, 8, e14393.	1.7	4
4	Coordination of bilateral synchronous and asynchronous hand movements. Neuroscience Letters, 2020, 720, 134757.	2.1	4
5	In vivo evidence of remote neural degeneration in the lumbar enlargement after cervical injury. Neurology, 2019, 92, e1367-e1377.	1.1	29
6	Performance of Functional Arm and Leg Movements Depends on Neural Coupling. Biosystems and Biorobotics, 2019, , 271-272.	0.3	1
7	Cooperative hand movements. NeuroReport, 2018, 29, 650-654.	1.2	3
8	Neuroplastic Changes in Older Adults Performing Cooperative Hand Movements. Frontiers in Human Neuroscience, 2018, 12, 488.	2.0	5
9	Rehabilitation robots for the treatment of sensorimotor deficits: a neurophysiological perspective. Journal of NeuroEngineering and Rehabilitation, 2018, 15, 46.	4.6	240
10	Cooperative hand movements in tetraplegic spinal cord injury patients: Preserved neural coupling. Clinical Neurophysiology, 2018, 129, 2059-2064.	1.5	1
11	From the Rodent Spinal Cord Injury Model to Human Application: Promises and Challenges. Journal of Neurotrauma, 2017, 34, 1826-1830.	3.4	30
12	Effectiveness of Automated Locomotor Training in Patients with Acute Incomplete Spinal Cord Injury: A Randomized, Controlled, Multicenter Trial. Journal of Neurotrauma, 2017, 34, 1891-1896.	3.4	23
13	Effect of Locomotor Training on Exhaustion of Leg Muscle Activity in Chronic Complete Spinal Cord Injury. Journal of Neurotrauma, 2017, 34, 2375-2378.	3.4	0
14	Improving outcome of sensorimotor functions after traumatic spinal cord injury. F1000Research, 2016, 5, 1018.	1.6	5
15	Control of functional movements in healthy and post-stroke subjects: Role of neural interlimb coupling. Clinical Neurophysiology, 2016, 127, 2286-2293.	1.5	19
16	Neural coupling of cooperative hand movements after stroke: role of ipsilateral afference. Annals of Clinical and Translational Neurology, 2016, 3, 884-888.	3.7	10
17	Clinical Aspects for the Application of Robotics in Locomotor Neurorehabilitation. , 2016, , 209-222.		4
18	Cooperative hand movements in post-stroke subjects: Neural reorganization. Clinical Neurophysiology, 2016, 127, 748-754.	1.5	27

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19	Rehabilitation-Dependent Neural Plasticity After Spinal Cord Injury. , 2016, , 439-456.		1
20	Learning in the Damaged Brain/Spinal Cord: Neuroplasticity. , 2016, , 3-17.		1
21	Recovery of Sensorimotor Function and Activities of Daily Living after Cervical Spinal Cord Injury: The Influence of Age. Journal of Neurotrauma, 2015, 32, 194-199.	3.4	26
22	Neural Coupling of Cooperative Hand Movements: A Reflex and fMRI Study. Cerebral Cortex, 2015, 25, 948-958.	2.9	48
23	Anwendung von Robotern in der Neurorehabilitation. , 2015, , 59-66.		0
24	Task-specific role of ipsilateral pathways. NeuroReport, 2014, 25, 1429-1432.	1.2	16
25	Restoration of sensorimotor functions after spinal cord injury. Brain, 2014, 137, 654-667.	7.6	218
26	Three-dimensional, task-specific robot therapy of the arm after stroke: a multicentre, parallel-group randomised trial. Lancet Neurology, The, 2014, 13, 159-166.	10.2	473
27	The physiological basis of neurorehabilitation - locomotor training after spinal cord injury. Journal of NeuroEngineering and Rehabilitation, 2013, 10, 5.	4.6	110
28	Undirected compensatory plasticity contributes to neuronal dysfunction after severe spinal cord injury. Brain, 2013, 136, 3347-3361.	7.6	102
29	Arm movements can increase leg muscle activity during submaximal recumbent stepping in neurologically intact individuals. Journal of Applied Physiology, 2013, 115, 34-42.	2.5	32
30	Spasticity. Handbook of Clinical Neurology / Edited By P J Vinken and G W Bruyn, 2012, 109, 197-211.	1.8	58
31	Translating preclinical approaches into human application. Handbook of Clinical Neurology / Edited By P J Vinken and G W Bruyn, 2012, 109, 399-409.	1.8	9
32	Chronic Cervical Spinal Cord Injury: DTI Correlates with Clinical and Electrophysiological Measures. Journal of Neurotrauma, 2012, 29, 1556-1566.	3.4	116
33	Spinal Reflex Activity. Neurorehabilitation and Neural Repair, 2012, 26, 188-196.	2.9	28
34	Missed pediatric spinal injuriesâ€"neurological consequences?. Nature Reviews Neurology, 2012, 8, 181-182.	10.1	2
35	Spinal Cord Injury. Neurorehabilitation and Neural Repair, 2012, 26, 939-948.	2.9	57
36	Neuronal plasticity after a human spinal cord injury: Positive and negative effects. Experimental Neurology, 2012, 235, 110-115.	4.1	49

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37	Spinal neuronal dysfunction after stroke. Experimental Neurology, 2012, 234, 153-160.	4.1	11
38	Tail spasms in rat spinal cord injury: Changes in interneuronal connectivity. Experimental Neurology, 2012, 236, 179-189.	4.1	37
39	Obstacle avoidance locomotor tasks: adaptation, memory and skill transfer. European Journal of Neuroscience, 2012, 35, 1613-1621.	2.6	13
40	Clinical Aspects for the Application of Robotics in Neurorehabilitation. , 2012, , 291-301.		2
41	Learning in the Damaged Brain/Spinal Cord: Neuroplasticity. , 2012, , 57-69.		0
42	Spasticity. , 2012, , 339-356.		0
43	Gaze strategies for avoiding obstacles: Differences between young and elderly subjects. Gait and Posture, 2011, 34, 340-346.	1.4	13
44	Preparation and performance of obstacle steps: interaction between brain and spinal neuronal activity. European Journal of Neuroscience, 2011, 33, 338-348.	2.6	52
45	Brain activity during stepping: A novel MRI-compatible device. Journal of Neuroscience Methods, 2011, 201, 124-130.	2.5	58
46	Quadrupedal coordination of bipedal gait: implications for movement disorders. Journal of Neurology, 2011, 258, 1406-1412.	3.6	66
47	Locomotion in stroke subjects: interactions between unaffected and affected sides. Brain, 2011, 134, 721-731.	7.6	39
48	The occurrence of the Babinski sign in complete spinal cord injury. Journal of Neurology, 2010, 257, 38-43.	3.6	13
49	Recent advances in spinal cord neurology. Journal of Neurology, 2010, 257, 1770-1773.	3.6	1
50	Nogoâ€A antibodies and training reduce muscle spasms in spinal cordâ€injured rats. Annals of Neurology, 2010, 68, 48-57.	5.3	45
51	Behavior of spinal neurons deprived of supraspinal input. Nature Reviews Neurology, 2010, 6, 167-174.	10.1	94
52	Rehabilitation of locomotion after spinal cord injury. Restorative Neurology and Neuroscience, 2010, 28, 123-134.	0.7	93
53	Clinical Algorithm for Improved Prediction of Ambulation and Patient Stratification after Incomplete Spinal Cord Injury. Journal of Neurotrauma, 2010, 27, 241-252.	3.4	85
54	Difficulty of Elderly SCI Subjects to Translate Motor Recoveryâ€”â€œBody Functionâ€â€”into Daily Living Activities. Journal of Neurotrauma, 2009, 26, 2037-2044.	3.4	55

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55	Changes in spinal reflex and locomotor activity after a complete spinal cord injury: a common mechanism?. Brain, 2009, 132, 2196-2205.	7.6	108
56	Walking During Daily Life Can Be Validly and Responsively Assessed in Subjects With a Spinal Cord Injury. Neurorehabilitation and Neural Repair, 2009, 23, 117-124.	2.9	44
57	Obstacle stepping in patients with Parkinsonâ€™s disease. Journal of Neurology, 2009, 256, 457-463.	3.6	29
58	Neuropathic pain in spinal cord injury: significance of clinical and electrophysiological measures. European Journal of Neuroscience, 2009, 30, 91-99.	2.6	72
59	Human Bipeds Use Quadrupedal Coordination during Locomotion. Annals of the New York Academy of Sciences, 2009, 1164, 97-103.	3.8	64
60	Vertical perturbations of human gait: organisation and adaptation of leg muscle responses. Experimental Brain Research, 2008, 186, 123-130.	1.5	27
61	Spasticity-spastic movement disorder. Spinal Cord, 2008, 46, 588-588.	1.9	9
62	Body weight supported gait training: From laboratory to clinical setting. Brain Research Bulletin, 2008, 76, 459-463.	3.0	56
63	SHORT COMMUNICATION: Levodopa Therapy in Incomplete Spinal Cord Injury. Journal of Neurotrauma, 2008, 25, 1303-1307.	3.4	18
64	Recovery from a Spinal Cord Injury: Significance of Compensation, Neural Plasticity, and Repair. Journal of Neurotrauma, 2008, 25, 677-685.	3.4	307
65	Swing Phase Resistance Enhances Flexor Muscle Activity During Treadmill Locomotion in Incomplete Spinal Cord Injury. Neurorehabilitation and Neural Repair, 2008, 22, 438-446.	2.9	79
66	Locomotion in Parkinson's disease: neuronal coupling of upper and lower limbs. Brain, 2008, 131, 3421-3431.	7.6	37
67	Ready for human spinal cord repair?. Brain, 2008, 131, 2240-2242.	7.6	17
68	Computerized Visual Feedback: An Adjunct to Robotic-Assisted Gait Training. Physical Therapy, 2008, 88, 1135-1145.	2.4	92
69	Changes in Activity After a Complete Spinal Cord Injury as Measured by the Spinal Cord Independence Measure II (SCIM II). Neurorehabilitation and Neural Repair, 2008, 22, 145-153.	2.9	71
70	Repair of the Injured Spinal Cord. Neurodegenerative Diseases, 2007, 4, 51-56.	1.4	37
71	Assessment of Walking Speed and Distance in Subjects With an Incomplete Spinal Cord Injury. Neurorehabilitation and Neural Repair, 2007, 21, 295-301.	2.9	86
72	Single joint perturbation during gait: Preserved compensatory response pattern in spinal cord injured subjects. Clinical Neurophysiology, 2007, 118, 1607-1616.	1.5	21

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73	Spastic movement disorder: impaired reflex function and altered muscle mechanics. Lancet Neurology, The, 2007, 6, 725-733.	10.2	505
74	The amplitude of lower leg motor evoked potentials is a reliable measure when controlled for torque and motor task. Journal of Neurology, 2007, 254, 1089-1098.	3.6	68
75	Muscle Force and Gait Performance: Relationships After Spinal Cord Injury. Archives of Physical Medicine and Rehabilitation, 2006, 87, 1218-1222.	0.9	69
76	Neuronal Plasticity After Spinal Cord Injury: Significance for Present and Future Treatments. Journal of Spinal Cord Medicine, 2006, 29, 481-488.	1.4	13
77	Contribution of Feedback and Feedforward Strategies to Locomotor Adaptations. Journal of Neurophysiology, 2006, 95, 766-773.	1.8	168
78	Impaired facilitation of motor evoked potentials in incomplete spinal cord injury. Journal of Neurology, 2006, 253, 51-57.	3.6	29
79	Good clinical practice in neurorehabilitation. Lancet Neurology, The, 2006, 5, 377-378.	10.2	17
80	Neurological aspects of spinal-cord repair: promises and challenges. Lancet Neurology, The, 2006, 5, 688-694.	10.2	169
81	Learning a high-precision locomotor task in patients with Parkinson's disease. Movement Disorders, 2006, 21, 406-411.	3.9	21
82	Phase-dependent modulation of short latency cutaneous reflexes during walking in man. Brain Research, 2005, 1031, 268-275.	2.2	37
83	Controversial treatments for spinal-cord injuries. Lancet, The, 2005, 365, 841.	13.7	23
84	Assessing walking ability in subjects with spinal cord injury: Validity and reliability of 3 walking tests. Archives of Physical Medicine and Rehabilitation, 2005, 86, 190-196.	0.9	390
85	Effectiveness of automated locomotor training in patients with chronic incomplete spinal cord injury: A multicenter trial. Archives of Physical Medicine and Rehabilitation, 2005, 86, 672-680.	0.9	428
86	Transfer of Motor Performance in an Obstacle Avoidance Task to Different Walking Conditions. Journal of Neurophysiology, 2004, 92, 2010-2016.	1.8	28
87	Degradation of neuronal function following a spinal cord injury: mechanisms and countermeasures. Brain, 2004, 127, 2221-2231.	7.6	97
88	Obstacle avoidance during human walking: effects of biomechanical constraints on performance11No commercial party having a direct financial interest in the results of the research supporting this article has or will confer a benefit on the author(s) or on any organization with which the author(s) is/are associated.. Archives of Physical Medicine and Rehabilitation, 2004, 85, 972-979.	0.9	20
89	SSEP analysis in surgery of idiopathic scoliosis: the influence of spine deformity and surgical approach. European Spine Journal, 2003, 12, 117-123.	2.2	8
90	Sepiapterin reduces postischemic injury in the rat heart. Pflugers Archiv European Journal of Physiology, 2003, 447, 1-7.	2.8	28

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91	Differences in the EMG pattern of leg muscle activation during locomotion in Parkinson's disease. Functional Neurology, 2003, 18, 165-70.	1.3	24
92	Locomotor activity in spinal man: significance of afferent input from joint and load receptors. Brain, 2002, 125, 2626-2634.	7.6	408
93	Do human bipeds use quadrupedal coordination?. Trends in Neurosciences, 2002, 25, 462-467.	8.6	375
94	Electromyographic activity associated with spontaneous functional recovery after spinal cord injury in rats. European Journal of Neuroscience, 2002, 16, 249-258.	2.6	44
95	Proprioception and locomotor disorders. Nature Reviews Neuroscience, 2002, 3, 781-790.	10.2	408
96	Improving axonal growth and functional recovery after experimental spinal cord injury by neutralizing myelin associated inhibitors. Brain Research Reviews, 2001, 36, 204-212.	9.0	96
97	Locomotor Recovery in Spinal Cord-Injured Rats Treated with an Antibody Neutralizing the Myelin-Associated Neurite Growth Inhibitor Nogo-A. Journal of Neuroscience, 2001, 21, 3665-3673.	3.6	302
98	Postural responses to combinations of head and body displacements: vestibular-somatosensory interactions. Experimental Brain Research, 2001, 141, 410-414.	1.5	39
99	Arm to leg coordination in humans during walking, creeping and swimming activities. Experimental Brain Research, 2001, 141, 375-379.	1.5	168
100	Stability criterion for controlling standing in able-bodied subjects. Journal of Biomechanics, 2000, 33, 1359-1368.	2.1	54
101	Efficient testing of motor function in spinal cord injured rats. Brain Research, 2000, 883, 165-177.	2.2	275
102	Longitudinal changes in bone in men with spinal cord injury. Clinical Rehabilitation, 2000, 14, 145-152.	2.2	60
103	Treadmill training in incomplete spinal cord injured rats. Behavioural Brain Research, 2000, 115, 107-113.	2.2	117
104	Significance of load receptor input during locomotion: a review. Gait and Posture, 2000, 11, 102-110.	1.4	290
105	Validation of the Weight-Drop Contusion Model in Rats: A Comparative Study of Human Spinal Cord Injury. Journal of Neurotrauma, 2000, 17, 1-17.	3.4	319
106	Impaired modulation of quadriceps tendon jerk reflex during spastic gait: differences between spinal and cerebral lesions. Brain, 1999, 122, 567-579.	7.6	83
107	Changes of tibia bone properties after spinal cord injury: Effects of early intervention. Archives of Physical Medicine and Rehabilitation, 1999, 80, 214-220.	0.9	103
108	Evidence for a Load Receptor Contribution to the Control of Posture and Locomotion. Neuroscience and Biobehavioral Reviews, 1998, 22, 495-499.	6.1	58

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109	Functional outcome following spinal cord injury: Significance of motor-evoked potentials and ASIA scores. Archives of Physical Medicine and Rehabilitation, 1998, 79, 81-86.	0.9	187
110	Locomotion in Patients With Spinal Cord Injuries. Physical Therapy, 1997, 77, 508-516.	2.4	59
111	Ambulatory capacity in spinal cord injury: Significance of somatosensory evoked potentials and ASIA protocol in predicting outcome. Archives of Physical Medicine and Rehabilitation, 1997, 78, 39-43.	0.9	191
112	Recovery of bladder function in patients with acute spinal cord injury: significance of ASIA scores and somatosensory evoked potentials. Spinal Cord, 1997, 35, 368-373.	1.9	56
113	Traumatic cervical spinal cord injury: Relation between somatosensory evoked potentials, neurological deficit, and hand function. Archives of Physical Medicine and Rehabilitation, 1996, 77, 48-53.	0.9	88
114	Significance of sympathetic skin response in the assessment of autonomic failure in patients with spinal cord injury. Journal of the Autonomic Nervous System, 1996, 61, 175-180.	1.9	71
115	Interaction between central programs and afferent input in the control of posture and locomotion. Journal of Biomechanics, 1996, 29, 841-844.	2.1	55
116	Neurographic assessment of intramedullary motoneurone lesions in cervical spinal cord injury: consequences for hand function. Spinal Cord, 1996, 34, 326-332.	1.9	50
117	Analysis of the electrical muscle activity during maximal contraction and the influence of ischaemia. Journal of the Neurological Sciences, 1978, 37, 187-197.	0.6	32
118	Pre-innervation and stretch responses of triceps bracchii in man falling with and without visual control. Brain Research, 1978, 142, 576-579.	2.2	203
119	Chances and limits of locomotor training after damage to the central nervous system. , 0, , 305-313.		0
120	Gait disorders and rehabilitation. , 0, , 343-354.		0