Sheng Li

List of Publications by Year in descending order

105 papers	2,489 citations	218677 26 h-index	254184 43 g-index
108 all docs	108 docs citations	108 times ranked	2047 citing authors

#	Article	IF	Citations
1	Comprehensive Assessment of the Time Course of Biomechanical, Electrophysiological and Neuro-Motor Effects after Botulinum Toxin Injections in Elbow Flexors of Chronic Stroke Survivors with Spastic Hemiplegia: A Cross Sectional Observation Study. Toxins, 2022, 14, 104.	3.4	1
2	Evidence of treating spasticity before it develops: a systematic review of spasticity outcomes in acute spinal cord injury interventional trials. Therapeutic Advances in Neurological Disorders, 2022, 15, 175628642110706.	3.5	3
3	Exploring 5-minute heart rate variability in spinal cord injury during acute inpatient rehabilitation. Journal of Spinal Cord Medicine, 2022, , 1-8.	1.4	0
4	Spasticity Management in Persons with Disorders of Consciousness. PM and R, 2021, 13, 657-665.	1.6	16
5	Observations of Autonomic Variability Following Central Neuromodulation for Chronic Neuropathic Pain in Spinal Cord Injury. Neuromodulation, 2021, 24, 427-433.	0.8	6
6	Spasticity. , 2021, , 447-468.e6.		0
7	A Retrospective Analysis on Clinical Practice-Based Approaches Using Zolpidem and Lorazepam in Disorders of Consciousness. Brain Sciences, 2021, 11, 726.	2.3	13
8	Many Faces of the Hidden Souls: Medical and Neurological Complications and Comorbidities in Disorders of Consciousness. Brain Sciences, 2021, 11, 608.	2.3	14
9	A New Definition of Poststroke Spasticity and the Interference of Spasticity With Motor Recovery From Acute to Chronic Stages. Neurorehabilitation and Neural Repair, 2021, 35, 601-610.	2.9	53
10	Model-Based Analysis of Muscle Strength and EMG-Force Relation with respect to Different Patterns of Motor Unit Loss. Neural Plasticity, 2021, 2021, 1-9.	2.2	4
11	Real-world analysis of botulinum toxin (BoNT) injections in post-stroke spasticity: Higher doses of BoNT and longer intervals in the early-start group. Journal of the Neurological Sciences, 2021, 425, 117449.	0.6	5
12	Muscle Fiber Diameter and Density Alterations after Stroke Examined by Single-Fiber EMG. Neural Plasticity, 2021, 2021, 1-7.	2.2	3
13	Early Use of Phenol Neurolysis Likely Reduces the Total Amount of Botulinum Toxin in Management of Post-Stroke Spasticity. Frontiers in Rehabilitation Sciences, 2021, 2, .	1.2	3
14	Neurophysiological Factors Affecting Muscle Innervation Zone Estimation Using Surface EMG: A Simulation Study. Biosensors, 2021, 11, 356.	4.7	4
15	Improving Botulinum Toxin Efficiency in Treating Post-Stroke Spasticity Using 3D Innervation Zone Imaging. International Journal of Neural Systems, 2021, 31, 2150007.	5.2	11
16	Global Innervation Zone Identification With High-Density Surface Electromyography. IEEE Transactions on Biomedical Engineering, 2020, 67, 718-725.	4.2	9
17	Phenol Neurolysis for Management of Focal Spasticity in the Distal Upper Extremity. PM and R, 2020, 12, 246-250.	1.6	16
18	Electromyography (EMG) examination on motor unit alterations after stroke. , 2020, , 51-64.		0

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19	Ankle and Foot Spasticity Patterns in Chronic Stroke Survivors with Abnormal Gait. Toxins, 2020, 12, 646.	3.4	32
20	The Effects of Botulinum Toxin Injections on Spasticity and Motor Performance in Chronic Stroke with Spastic Hemiplegia. Toxins, 2020, 12, 492.	3.4	19
21	Are There Trigger Points in the Spastic Muscles? Electromyographical Evidence of Dry Needling Effects on Spastic Finger Flexors in Chronic Stroke. Frontiers in Neurology, 2020, 11, 78.	2.4	14
22	Time-course of pain threshold after continuous theta burst stimulation of primary somatosensory cortex in pain-free subjects. Neuroscience Letters, 2020, 722, 134760.	2.1	7
23	Response to Letter to the Editor Regarding â€œPhenol Neurolysis for Management of Focal Spasticity in the Distal Upper Extremityâ€• PM and R, 2020, 12, 943-944.	1.6	0
24	New perspective on neuromodulation techniques: Breathing-controlled electrical stimulation as an innovative neuromodulation technique for management of neuropathic pain after spinal cord injury. The Journal of the International Society of Physical and Rehabilitation Medicine, 2020, 3, 106.	0.3	0
25	Phenol Neurolysis for the Management of Shoulder Spasticity in Early Recovery From Traumatic Brain Injury: A Case Report. PM and R, 2019, 11, 90-93.	1.6	4
26	The effects of conditioning startling acoustic stimulation (SAS) on the corticospinal motor system: a SASâ€“TMS study. Experimental Brain Research, 2019, 237, 1973-1980.	1.5	5
27	Motor unit innervation zone localization based on robust linear regression analysis. Computers in Biology and Medicine, 2019, 106, 65-70.	7.0	6
28	Innervation zone distribution of the biceps brachii muscle examined using voluntary and electrically-evoked high-density surface EMG. Journal of NeuroEngineering and Rehabilitation, 2019, 16, 73.	4.6	14
29	A Unifying Pathophysiological Account for Post-stroke Spasticity and Disordered Motor Control. Frontiers in Neurology, 2019, 10, 468.	2.4	80
30	Heart rate variability in spinal cord injury: Asymptomatic orthostatic hypotension is a confounding variable. Neuroscience Letters, 2019, 703, 213-218.	2.1	6
31	Bladder Neuromodulation in Acute Spinal Cord Injury via Transcutaneous Tibial Nerve Stimulation: Cystometrogram and Autonomic Nervous System Evidence From a Randomized Control Pilot Trial. Frontiers in Neuroscience, 2019, 13, 119.	2.8	21
32	Three dimensional innervation zone imaging in spastic muscles of stroke survivors. Journal of Neural Engineering, 2019, 16, 034001.	3.5	14
33	Current Concepts in Assessment and Management of Spasticity. , 2019, , 133-153.		2
34	A startling acoustic stimulation (SAS)-TMS approach to assess the reticulospinal system in healthy and stroke subjects. Journal of the Neurological Sciences, 2019, 399, 82-88.	0.6	11
35	Possible Contributions of Ipsilateral Pathways From the Contralesional Motor Cortex to the Voluntary Contraction of the Spastic Elbow Flexors in Stroke Survivors. American Journal of Physical Medicine and Rehabilitation, 2019, 98, 558-565.	1.4	7
36	The Use of Botulinum Toxin for Treatment of Spasticity. Handbook of Experimental Pharmacology, 2019, 263, 127-146.	1.8	16

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37	Neuropathic pain modulation after spinal cord injury by breathing-controlled electrical stimulation (BreEStim) is associated with restoration of autonomic dysfunction. Journal of Pain Research, 2018, Volume 11, 2331-2341.	2.0	11
38	Motor Unit Properties of the First Dorsal Interosseous in Chronic Stroke Subjects: Concentric Needle and Single Fiber EMG Analysis. Frontiers in Physiology, 2018, 9, 1587.	2.8	8
39	Early Detection of Alzheimerâ€™s Disease Using Non-invasive Near-Infrared Spectroscopy. Frontiers in Aging Neuroscience, 2018, 10, 366.	3.4	68
40	Motor Overflow and Spasticity in Chronic Stroke Share a Common Pathophysiological Process: Analysis of Within-Limb and Between-Limb EMG-EMG Coherence. Frontiers in Neurology, 2018, 9, 795.	2.4	40
41	Assessing Hand Muscle Structural Modifications in Chronic Stroke. Frontiers in Neurology, 2018, 9, 296.	2.4	10
42	Post-stroke Hemiplegic Gait: New Perspective and Insights. Frontiers in Physiology, 2018, 9, 1021.	2.8	141
43	Combined transcranial direct current stimulation and breathing-controlled electrical stimulation for management of neuropathic pain after spinal cord injury. Journal of Rehabilitation Medicine, 2018, 50, 814-820.	1.1	12
44	Assessing muscle spasticity with Myotonometric and passive stretch measurements: validity of the Myotonometer. Scientific Reports, 2017, 7, 44022.	3.3	25
45	Assessing the immediate impact of botulinum toxin injection on impedance of spastic muscle. Medical Engineering and Physics, 2017, 43, 97-102.	1.7	8
46	Imaging three-dimensional innervation zone distribution in muscles from M-wave recordings. Journal of Neural Engineering, 2017, 14, 036011.	3.5	15
47	Assessing muscle compliance in stroke with the Myotonometer. Clinical Biomechanics, 2017, 50, 110-113.	1.2	8
48	Characterization of Volume-Based Changes in Cortical Auditory Evoked Potentials and Prepulse Inhibition. Scientific Reports, 2017, 7, 11098.	3.3	4
49	Heart Rate Variability: A Novel Modality for Diagnosing Neuropathic Pain after Spinal Cord Injury. Frontiers in Physiology, 2017, 8, 495.	2.8	28
50	Practice patterns for spasticity management with phenol neurolysis. Journal of Rehabilitation Medicine, 2017, 49, 482-488.	1.1	35
51	Advanced Myoelectric Control for Robotic Hand-Assisted Training: Outcome from a Stroke Patient. Frontiers in Neurology, 2017, 8, 107.	2.4	34
52	Spasticity, Motor Recovery, and Neural Plasticity after Stroke. Frontiers in Neurology, 2017, 8, 120.	2.4	185
53	Different Effects of Cold Stimulation on Reflex and Non-Reflex Components of Poststroke Spastic Hypertonia. Frontiers in Neurology, 2017, 8, 169.	2.4	8
54	The Reticulospinal Pathway Does Not Increase Its Contribution to the Strength of Contralesional Muscles in Stroke Survivors as Compared to Ipsilesional Side or Healthy Controls. Frontiers in Neurology, 2017, 8, 627.	2.4	11

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55	Ultrasonographic Validation of Anatomical Landmarks for Localization of the Tendon of the Long Head of Biceps Brachii. BioMed Research International, 2017, 2017, 1-5.	1.9	1
56	Centrally mediated late motor recovery after botulinum toxin injection: Case reports and a review of current evidence. Journal of Rehabilitation Medicine, 2017, 49, 609-619.	1.1	6
57	A novel nonpharmacological intervention – breathing-controlled electrical stimulation for neuropathic pain management after spinal cord injury – a preliminary study. Journal of Pain Research, 2016, Volume 9, 933-940.	2.0	8
58	Different Effects of Startling Acoustic Stimuli (SAS) on TMS-Induced Responses at Rest and during Sustained Voluntary Contraction. Frontiers in Human Neuroscience, 2016, 10, 396.	2.0	18
59	Localized Electrical Impedance Myography of the Biceps Brachii Muscle during Different Levels of Isometric Contraction and Fatigue. Sensors, 2016, 16, 581.	3.8	39
60	A dilemma in stroke application: Standard or modified motor unit number index?. Clinical Neurophysiology, 2016, 127, 2756-2759.	1.5	4
61	Re-evaluation of EMG-torque relation in chronic stroke using linear electrode array EMG recordings. Scientific Reports, 2016, 6, 28957.	3.3	24
62	Motor unit number estimation based on high-density surface electromyography decomposition. Clinical Neurophysiology, 2016, 127, 3059-3065.	1.5	26
63	Pain modulation effect of breathing-controlled electrical stimulation (BreEStim) is not likely to be mediated by deep and fast voluntary breathing. Scientific Reports, 2015, 5, 14228.	3.3	5
64	Botulinum Toxin Injection for Spastic Scapular Dyskinesia After Stroke. Medicine (United States), 2015, 94, e1300.	1.0	8
65	Tactile, thermal, and electrical thresholds in patients with and without phantom limb pain after traumatic lower limb amputation. Journal of Pain Research, 2015, 8, 169.	2.0	12
66	Altered force perception in stroke survivors with spastic hemiplegia. Journal of Rehabilitation Medicine, 2015, 47, 917-923.	1.1	21
67	Correlation of Resting Elbow Angle with Spasticity in Chronic Stroke Survivors. Frontiers in Neurology, 2015, 6, 183.	2.4	29
68	Analysis of linear electrode array EMG for assessment of hemiparetic biceps brachii muscles. Frontiers in Human Neuroscience, 2015, 9, 569.	2.0	31
69	New insights into the pathophysiology of post-stroke spasticity. Frontiers in Human Neuroscience, 2015, 9, 192.	2.0	149
70	Three-Dimensional Innervation Zone Imaging from Multi-Channel Surface EMG Recordings. International Journal of Neural Systems, 2015, 25, 1550024.	5.2	31
71	Habituation to Experimentally Induced Electrical Pain during Voluntary-Breathing Controlled Electrical Stimulation (BreEStim). PLoS ONE, 2014, 9, e104729.	2.5	7
72	Inter-limb force coupling is resistant to distorted visual feedback in chronic hemiparetic stroke. Journal of Rehabilitation Medicine, 2014, 46, 206-211.	1.1	7

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73	Suppression of stimulus artifact contaminating electrically evoked electromyography. NeuroRehabilitation, 2014, 34, 381-389.	1.3	19
74	Acoustic Startle Reflex in Patients With Chronic Stroke at Different Stages of Motor Recovery: A Pilot Study. Topics in Stroke Rehabilitation, 2014, 21, 358-370.	1.9	25
75	Quantification of Perceived Exertion During Isometric Force Production With the Borg Scale in Healthy Individuals and Patients With Chronic Stroke. Topics in Stroke Rehabilitation, 2014, 21, 33-39.	1.9	19
76	Activation deficit correlates with weakness in chronic stroke: Evidence from evoked and voluntary EMG recordings. Clinical Neurophysiology, 2014, 125, 2413-2417.	1.5	35
77	Spasticity, weakness, force variability, and sustained spontaneous motor unit discharges of resting spasticâ€“paretic biceps brachii muscles in chronic stroke. Muscle and Nerve, 2013, 48, 85-92.	2.2	74
78	Interlimb interactions during bilateral voluntary elbow flexion tasks in chronic hemiparetic stroke. Physiological Reports, 2013, 1, e00010.	1.7	21
79	Analysis of Increasing and Decreasing Isometric Finger Force Generation and the Possible Role of the Corticospinal System in This Process. Motor Control, 2013, 17, 221-237.	0.6	10
80	Breathing-controlled Electrical Stimulation (BreEStim) for Management of Neuropathic Pain and Spasticity. Journal of Visualized Experiments, 2013, , e50077.	0.3	8
81	Modification of Electrical Pain Threshold by Voluntary Breathing-Controlled Electrical Stimulation (BreEStim) in Healthy Subjects. PLoS ONE, 2013, 8, e70282.	2.5	11
82	Phase-Dependent Respiratory-Motor Interactions in Reaction Time Tasks During Rhythmic Voluntary Breathing. Motor Control, 2012, 16, 493-505.	0.6	16
83	Breathing-controlled electrical stimulation could modify the affective component of neuropathic pain after amputation: a case report. Journal of Pain Research, 2012, 5, 71.	2.0	9
84	Botulinum Toxin (BT) injection improves voluntary motor control in selected patients with post-stroke spasticity. Neural Regeneration Research, 2012, 7, 1436-1439.	3.0	11
85	Voluntary Breathing Influences Corticospinal Excitability of Nonrespiratory Finger Muscles. Journal of Neurophysiology, 2011, 105, 512-521.	1.8	50
86	Interactions between imagined movement and the initiation of voluntary movement: A TMS study. Clinical Neurophysiology, 2009, 120, 1154-1160.	1.5	27
87	The Valsalva Maneuver Revisited: The Influence of Voluntary Breathing on Isometric Muscle Strength. Journal of Strength and Conditioning Research, 2009, 23, 127-132.	2.1	30
88	Finger force perception during ipsilateral and contralateral force matching tasks. Experimental Brain Research, 2008, 189, 301-310.	1.5	24
89	Forced ventilation increases variability of isometric finger forces. Neuroscience Letters, 2007, 412, 243-247.	2.1	21
90	Movement-specific enhancement of corticospinal excitability at subthreshold levels during motor imagery. Experimental Brain Research, 2007, 179, 517-524.	1.5	30

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91	Error compensation during finger force production after one- and four-finger voluntarily fatiguing exercise. Experimental Brain Research, 2007, 181, 461-468.	1.5	12
92	Perception of finger forces within the hand after index finger fatiguing exercise. Experimental Brain Research, 2007, 182, 169-177.	1.5	10
93	Perception of individual finger forces during multi-finger force production tasks. Neuroscience Letters, 2006, 409, 239-243.	2.1	15
94	The effect of enslaving on perception of finger forces. Experimental Brain Research, 2006, 172, 301-309.	1.5	13
95	Effects of changing wrist positions on finger flexor hypertonia in stroke survivors. Muscle and Nerve, 2006, 33, 183-190.	2.2	43
96	Influences of ventilation on maximal isometric force of the finger flexors. Muscle and Nerve, 2006, 34, 651-655.	2.2	46
97	The Effect of Motor Imagery on Spinal Segmental Excitability. Journal of Neuroscience, 2004, 24, 9674-9680.	3.6	73
98	Effects of motor imagery on finger force responses to transcranial magnetic stimulation. Cognitive Brain Research, 2004, 20, 273-280.	3.0	65
99	Finger interactions studied with transcranial magnetic stimulation during multi-finger force production tasks. Clinical Neurophysiology, 2003, 114, 1445-1455.	1.5	32
100	The effects of stroke and age on finger interaction in multi-finger force production tasks. Clinical Neurophysiology, 2003, 114, 1646-1655.	1.5	79
101	Coupling phenomena during asynchronous submaximal two-hand, multi-finger force production tasks in humans. Neuroscience Letters, 2002, 331, 75-78.	2.1	12
102	Central mechanisms of finger interaction during one- and two-hand force production at distal and proximal phalanges. Brain Research, 2002, 924, 198-208.	2.2	59
103	Bilateral multifinger deficits in symmetric key-pressing tasks. Experimental Brain Research, 2001, 140, 86-94.	1.5	18
104	Bilateral deficit and symmetry in finger force production during two-hand multifinger tasks. Experimental Brain Research, 2001, 141, 530-540.	1.5	47
105	Finger Coordination and Bilateral Deficit during Two-Hand Force Production Tasks Performed by Right-Handed Subjects. Journal of Applied Biomechanics, 2000, 16, 379-391.	0.8	26