

# S Jayne Garland

## List of Publications by Year in descending order

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115  
papers

3,903  
citations

94433

37  
h-index

144013

57  
g-index

115  
all docs

115  
docs citations

115  
times ranked

3275  
citing authors

#	ARTICLE	IF	CITATIONS
1	Behavior of motor units in human biceps brachii during a submaximal fatiguing contraction. Journal of Applied Physiology, 1994, 76, 2411-2419.	2.5	217
2	Role of small diameter afferents in reflex inhibition during human muscle fatigue.. Journal of Physiology, 1991, 435, 547-558.	2.9	192
3	Reflex inhibition of human soleus muscle during fatigue.. Journal of Physiology, 1990, 429, 17-27.	2.9	175
4	Recovery of standing balance and functional mobility after stroke11No commercial party having a direct financial interest in the results of the research supporting this article has or will confer a benefit upon the author(s) or upon any organization with which the author(s) is/are associated.. Archives of Physical Medicine and Rehabilitation, 2003, 84, 1753-1759.	0.9	124
5	Validity of the Community Balance and Mobility Scale in Community-Dwelling Persons After Stroke. Archives of Physical Medicine and Rehabilitation, 2010, 91, 890-896.	0.9	121
6	Task-Dependent Factors in Fatigue of Human Voluntary Contractions. Advances in Experimental Medicine and Biology, 1995, 384, 361-380.	1.6	115
7	Postural responses to unilateral arm perturbation in young, elderly, and hemiplegic subjects. Archives of Physical Medicine and Rehabilitation, 1997, 78, 1072-1077.	0.9	91
8	Cortical and Spinal Modulation of Antagonist Coactivation During a Submaximal Fatiguing Contraction in Humans. Journal of Neurophysiology, 2008, 99, 554-563.	1.8	86
9	Standing balance during internally produced perturbations in subjects with hemiplegia: Validation of the balance scale. Archives of Physical Medicine and Rehabilitation, 1996, 77, 656-662.	0.9	85
10	Minimal Detectable Change in Quadriceps Strength and Voluntary Muscle Activation in Patients With Knee Osteoarthritis. Archives of Physical Medicine and Rehabilitation, 2010, 91, 1447-1451.	0.9	84
11	Reduced voluntary electromyographic activity after fatiguing stimulation of human muscle.. Journal of Physiology, 1988, 401, 547-556.	2.9	82
12	Motor Unit Double Discharges: Statistical Anomaly or Functional Entity?. Applied Physiology, Nutrition, and Metabolism, 1999, 24, 113-130.	1.7	78
13	Factors That Influence Muscle Weakness Following Stroke and Their Clinical Implications: A Critical Review. Physiotherapy Canada Physiotherapie Canada, 2012, 64, 415-426.	0.6	76
14	Role of Muscle Afferents in the Inhibition of Motoneurons During Fatigue. Advances in Experimental Medicine and Biology, 1995, 384, 271-278.	1.6	72
15	Muscle Activation Patterns and Postural Control Following Stroke. Motor Control, 2009, 13, 387-411.	0.6	70
16	Low-frequency common modulation of soleus motor unit discharge is enhanced during postural control in humans. Experimental Brain Research, 2006, 175, 584-595.	1.5	65
17	Muscle vibration sustains motor unit firing rate during submaximal isometric fatigue in humans. Journal of Physiology, 2001, 535, 929-936.	2.9	64
18	Postural muscle activity during bilateral and unilateral arm movements at different speeds. Experimental Brain Research, 2004, 155, 352-361.	1.5	58

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19	Modulation of motor unit discharge rate and H-reflex amplitude during submaximal fatigue of the human soleus muscle. <i>Experimental Brain Research</i> , 2004, 158, 345-55.	1.5	58
20	Motor unit discharge rate is not associated with muscle relaxation time in sustained submaximal contractions in humans. <i>Neuroscience Letters</i> , 1997, 239, 25-28.	2.1	57
21	Pain and physical performance in people with COPD. <i>Respiratory Medicine</i> , 2013, 107, 1692-1699.	2.9	57
22	Recovery of Standing Balance and Health-Related Quality of Life After Mild or Moderately Severe Stroke. <i>Archives of Physical Medicine and Rehabilitation</i> , 2007, 88, 218-227.	0.9	56
23	Validity and Reliability of the Community Balance and Mobility Scale in Individuals With Knee Osteoarthritis. <i>Physical Therapy</i> , 2014, 94, 866-874.	2.4	53
24	Motor-unit behavior in humans during fatiguing arm movements. <i>Journal of Neurophysiology</i> , 1996, 75, 1629-1636.	1.8	51
25	Motor unit discharge rate following twitch potentiation in human triceps brachii muscle. <i>Neuroscience Letters</i> , 2001, 316, 153-156.	2.1	51
26	Control of the triceps surae during the postural sway of quiet standing. <i>Acta Physiologica</i> , 2007, 191, 229-236.	3.8	49
27	Reliability of center of pressure measures within and between sessions in individuals post-stroke and healthy controls. <i>Gait and Posture</i> , 2014, 40, 198-203.	1.4	47
28	Electromyography and Kinematics of the Trunk during Rowing in Elite Female Rowers. <i>Medicine and Science in Sports and Exercise</i> , 2009, 41, 628-636.	0.4	46
29	Association between muscle architecture and quadriceps femoris H-reflex. <i>Muscle and Nerve</i> , 1994, 17, 581-592.	2.2	45
30	Discharge patterns in human motor units during fatiguing arm movements. <i>Journal of Applied Physiology</i> , 1998, 85, 1684-1692.	2.5	45
31	Cardiorespiratory and neuromuscular deconditioning in fatigued and non-fatigued breast cancer survivors. <i>Supportive Care in Cancer</i> , 2013, 21, 873-881.	2.2	45
32	Raising the Priority of Lifestyle-Related Noncommunicable Diseases in Physical Therapy Curricula. <i>Physical Therapy</i> , 2016, 96, 940-948.	2.4	45
33	Synchronization of Motor Units in Human Soleus Muscle During Standing Postural Tasks. <i>Journal of Neurophysiology</i> , 2005, 94, 62-69.	1.8	43
34	Mobility Assistive Device Utilization in a Prospective Study of Patients With First-Ever Stroke. <i>Archives of Physical Medicine and Rehabilitation</i> , 2007, 88, 1268-1275.	0.9	42
35	Sway-dependent modulation of the triceps surae H-reflex during standing. <i>Journal of Applied Physiology</i> , 2008, 104, 1359-1365.	2.5	42
36	Relationship between numbers and frequencies of stimuli in human muscle fatigue. <i>Journal of Applied Physiology</i> , 1988, 65, 89-93.	2.5	41

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37	Control of motor units in human flexor digitorum profundus under different proprioceptive conditions. <i>Journal of Physiology</i> , 1997, 502, 693-701.	2.9	41
38	The Muscular Wisdom Hypothesis in Human Muscle Fatigue. <i>Exercise and Sport Sciences Reviews</i> , 2002, 30, 45-49.	3.0	40
39	Do Performance Measures of Strength, Balance, and Mobility Predict Quality of Life and Community Reintegration After Stroke?. <i>Archives of Physical Medicine and Rehabilitation</i> , 2018, 99, 713-719.	0.9	40
40	Dynamic Balance Training Improves Physical Function in Individuals With Knee Osteoarthritis: A Pilot Randomized Controlled Trial. <i>Archives of Physical Medicine and Rehabilitation</i> , 2017, 98, 1586-1593.	0.9	35
41	The time course of the motoneurone after hyperpolarization is related to motor unit twitch speed in human skeletal muscle. <i>Journal of Physiology</i> , 2003, 552, 657-664.	2.9	34
42	Motor unit activity during human single joint movements. <i>Journal of Neurophysiology</i> , 1996, 76, 1982-1990.	1.8	33
43	Reflex inhibition during muscle fatigue in endurance-trained and sedentary individuals. <i>European Journal of Applied Physiology</i> , 2002, 87, 462-468.	2.5	32
44	The origins of neuromuscular fatigue post-stroke. <i>Experimental Brain Research</i> , 2011, 214, 303-315.	1.5	31
45	Motor and Visuospatial Attention and Motor Planning After Stroke: Considerations for the Rehabilitation of Standing Balance and Gait. <i>Physical Therapy</i> , 2015, 95, 1423-1432.	2.4	30
46	Motor unit recruitment and discharge behavior in movements and isometric contractions. , 1997, 20, 867-874.		27
47	Morphological, Electrophysiological, and Metabolic Characteristics of Skeletal Muscle in People with End-Stage Renal Disease: A Critical Review. <i>Physiotherapy Canada Physiotherapie Canada</i> , 2011, 63, 355-376.	0.6	27
48	Changes in kinematics and trunk electromyography during a 2000m race simulation in elite female rowers. <i>Scandinavian Journal of Medicine and Science in Sports</i> , 2012, 22, 478-487.	2.9	25
49	Modeling health-related quality of life in people recovering from stroke. <i>Quality of Life Research</i> , 2015, 24, 41-53.	3.1	25
50	Trunk and lower limb biomechanics during stair climbing in people with and without symptomatic femoroacetabular impingement. <i>Clinical Biomechanics</i> , 2017, 42, 108-114.	1.2	25
51	Retraining Postural Responses With Exercises Emphasizing Speed Poststroke. <i>Physical Therapy</i> , 2012, 92, 924-934.	2.4	24
52	Test re-test reliability of centre of pressure measures during standing balance in individuals with knee osteoarthritis. <i>Gait and Posture</i> , 2014, 40, 270-273.	1.4	23
53	Moments and Muscle Activity after High Tibial Osteotomy and Anterior Cruciate Ligament Reconstruction. <i>Medicine and Science in Sports and Exercise</i> , 2009, 41, 612-619.	0.4	22
54	Accelerating Gene Discovery by Phenotyping Whole-Genome Sequenced Multi-mutation Strains and Using the Sequence Kernel Association Test (SKAT). <i>PLoS Genetics</i> , 2016, 12, e1006235.	3.5	22

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55	Afterhyperpolarization time-course and minimal discharge rate in low threshold motor units in humans. <i>Experimental Brain Research</i> , 2008, 189, 23-33.	1.5	21
56	Factors Associated With Dynamic Balance in People With Knee Osteoarthritis. <i>Archives of Physical Medicine and Rehabilitation</i> , 2015, 96, 1873-1879.	0.9	21
57	Role of limb movement in the modulation of motor unit discharge rate during fatiguing contractions. <i>Experimental Brain Research</i> , 2000, 130, 392-400.	1.5	20
58	Use of the Challenge Point Framework to Guide Motor Learning of Stepping Reactions for Improved Balance Control in People With Stroke: A Case Series. <i>Physical Therapy</i> , 2014, 94, 562-570.	2.4	20
59	Validity of the Handheld Dynamometer Compared with an Isokinetic Dynamometer in Measuring Peak Hip Extension Strength. <i>Physiotherapy Canada Physiotherapie Canada</i> , 2016, 68, 15-22.	0.6	20
60	Identification of regional activation by factorization of high-density surface EMG signals: A comparison of Principal Component Analysis and Non-negative Matrix factorization. <i>Journal of Electromyography and Kinesiology</i> , 2018, 41, 116-123.	1.7	20
61	Effects of Fast Functional Exercise on Muscle Activity After Stroke. <i>Neurorehabilitation and Neural Repair</i> , 2012, 26, 968-975.	2.9	19
62	Motor control of the diaphragm in multiple sclerosis. , 1996, 19, 654-656.		18
63	Factors Affecting the Common Modulation of Bilateral Motor Unit Discharge in Human Soleus Muscles. <i>Journal of Neurophysiology</i> , 2007, 97, 3917-3925.	1.8	18
64	Control of fast squatting movements after stroke. <i>Clinical Neurophysiology</i> , 2012, 123, 344-350.	1.5	18
65	Perspective on neuromuscular factors in poststroke fatigue. <i>Disability and Rehabilitation</i> , 2012, 34, 2291-2299.	1.8	16
66	Regional activation within the vastus medialis in stimulated and voluntary contractions. <i>Journal of Applied Physiology</i> , 2016, 121, 466-474.	2.5	16
67	Between-day reliability of triceps surae responses to standing perturbations in people post-stroke and healthy controls: A high-density surface EMG investigation. <i>Gait and Posture</i> , 2016, 44, 103-109.	1.4	16
68	Influence of Age and Gender of Healthy Adults on Scoring Patterns on the Community Balance and Mobility Scale. <i>Physiotherapy Canada Physiotherapie Canada</i> , 2005, 57, 285-292.	0.6	15
69	Preoperative Strength Training for Patients Undergoing High Tibial Osteotomy: A Prospective Cohort Study With Historical Controls. <i>Journal of Orthopaedic and Sports Physical Therapy</i> , 2011, 41, 52-59.	3.5	15
70	Selectivity of conventional electrodes for recording motor evoked potentials: An investigation with high-density surface electromyography. <i>Muscle and Nerve</i> , 2017, 55, 828-834.	2.2	15
71	Responses of human single motor units to transcranial magnetic stimulation. <i>Electroencephalography and Clinical Neurophysiology - Electromyography and Motor Control</i> , 1997, 105, 94-101.	1.4	14
72	Vastus Lateralis Motor Unit Firing Rate Is Higher in Women With Patellofemoral Pain. <i>Archives of Physical Medicine and Rehabilitation</i> , 2018, 99, 907-913.	0.9	14

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73	Location-specific responses to nociceptive input support the purposeful nature of motor adaptation to pain. <i>Pain</i> , 2018, 159, 2192-2200.	4.2	14
74	Blood flow in the triceps brachii muscle in humans during sustained submaximal isometric contractions. <i>European Journal of Applied Physiology</i> , 2001, 84, 432-437.	2.5	13
75	Reliability of the interval death rate analysis for estimating the time course of the motoneurone afterhyperpolarization in humans. <i>Journal of Neuroscience Methods</i> , 2007, 162, 314-319.	2.5	13
76	Changes in the Estimated Time Course of the Motoneuron Afterhyperpolarization Induced by Tendon Vibration. <i>Journal of Neurophysiology</i> , 2010, 104, 3240-3249.	1.8	13
77	Reliability and validity of the Performance Recorder 1 for measuring isometric knee flexor and extensor strength. <i>Physiotherapy Theory and Practice</i> , 2013, 29, 639-647.	1.3	13
78	Regionalization of the stretch reflex in the human vastus medialis. <i>Journal of Physiology</i> , 2017, 595, 4991-5001.	2.9	13
79	Lack of task-related motor unit activity in human triceps brachii muscle during elbow movements. <i>Neuroscience Letters</i> , 1994, 170, 1-4.	2.1	12
80	Changes in motor unit discharge rate are not associated with the amount of twitch potentiation in old men. <i>Journal of Applied Physiology</i> , 2002, 93, 1616-1621.	2.5	12
81	Challenging Standing Balance Reduces the Asymmetry of Motor Control of Postural Sway Poststroke. <i>Motor Control</i> , 2019, 23, 327-343.	0.6	12
82	Factors affecting the stability of the spike-triggered averaged force in the human first dorsal interosseus muscle. <i>Journal of Neuroscience Methods</i> , 2003, 126, 155-164.	2.5	11
83	Is the Recovery of Functional Balance and Mobility Accompanied by Physiological Recovery in People With Severe Impairments After Stroke?. <i>Neurorehabilitation and Neural Repair</i> , 2014, 28, 847-855.	2.9	11
84	Motor unit recruitment and firing rate in medial gastrocnemius muscles during external perturbations in standing in humans. <i>Journal of Neurophysiology</i> , 2014, 112, 1678-1684.	1.8	10
85	Behavior of medial gastrocnemius motor units during postural reactions to external perturbations after stroke. <i>Clinical Neurophysiology</i> , 2015, 126, 1951-1958.	1.5	10
86	Use of Rasch Analysis to Evaluate and Refine the Community Balance and Mobility Scale for Use in Ambulatory Community-Dwelling Adults Following Stroke. <i>Physical Therapy</i> , 2016, 96, 1648-1657.	2.4	10
87	Recruitment and Deoxygenation of Selected Respiratory and Skeletal Muscles During Incremental Loading in Stable COPD Patients. <i>Journal of Cardiopulmonary Rehabilitation and Prevention</i> , 2016, 36, 279-287.	2.1	10
88	Regional modulation of the ankle plantarflexor muscles associated with standing external perturbations across different directions. <i>Experimental Brain Research</i> , 2020, 238, 39-50.	1.5	10
89	Patterns of muscle coordination during stepping responses post-stroke. <i>Journal of Electromyography and Kinesiology</i> , 2015, 25, 959-965.	1.7	9
90	Motoneurone afterhyperpolarisation time-course following stroke. <i>Clinical Neurophysiology</i> , 2014, 125, 544-551.	1.5	8

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91	Effectiveness of Client-Centered "Tune-Ups" on Community Reintegration, Mobility, and Quality of Life After Stroke: A Randomized Controlled Trial. <i>Archives of Physical Medicine and Rehabilitation</i> , 2018, 99, 1325-1332.	0.9	8
92	Symmetry of cortical planning for initiating stepping in sub-acute stroke. <i>Clinical Neurophysiology</i> , 2018, 129, 787-796.	1.5	8
93	Maintenance of standing posture during multi-directional leaning demands the recruitment of task-specific motor units in the ankle plantarflexors. <i>Experimental Brain Research</i> , 2021, 239, 2569-2581.	1.5	8
94	Strengthening in a Therapeutic Golf Program for Individuals Following Stroke. <i>Topics in Geriatric Rehabilitation</i> , 2000, 15, 83-94.	0.4	8
95	Prolonged depression of force developed by single motor units after their intermittent activation in adult cats. <i>Brain Research Bulletin</i> , 1993, 30, 127-131.	3.0	7
96	Protocol for a randomized controlled clinical trial investigating the effectiveness of Fast muscle Activation and Stepping Training (FAST) for improving balance and mobility in sub-acute stroke. <i>BMC Neurology</i> , 2014, 14, 187.	1.8	7
97	A single session of open kinetic chain movements emphasizing speed improves speed of movement and modifies postural control in stroke. <i>Physiotherapy Theory and Practice</i> , 2016, 32, 113-123.	1.3	6
98	Differentiation of motor evoked potentials elicited from multiple forearm muscles: An investigation with high-density surface electromyography. <i>Brain Research</i> , 2017, 1676, 91-99.	2.2	6
99	Influence of knee joint position and sex on vastus medialis regional architecture. <i>Applied Physiology, Nutrition and Metabolism</i> , 2018, 43, 643-646.	1.9	6
100	Regional Vastus Medialis and Vastus Lateralis Activation in Females with Patellofemoral Pain. <i>Medicine and Science in Sports and Exercise</i> , 2019, 51, 411-420.	0.4	6
101	Effect of Force Level and Training Status on Contractile Properties Following Fatigue. <i>Applied Physiology, Nutrition, and Metabolism</i> , 2003, 28, 93-101.	1.7	5
102	Motor Planning for Loading During Gait in Subacute Stroke. <i>Archives of Physical Medicine and Rehabilitation</i> , 2016, 97, 528-535.	0.9	5
103	Non-uniform Effects of Nociceptive Stimulation to Motoneurons during Experimental Muscle Pain. <i>Neuroscience</i> , 2021, 463, 45-56.	2.3	5
104	Ischemia sensitivity and motoneuron afterhyperpolarization in human motor units. <i>Muscle and Nerve</i> , 2004, 30, 195-201.	2.2	4
105	Physiological arousal accompanying postural responses to external perturbations after stroke. <i>Clinical Neurophysiology</i> , 2017, 128, 935-944.	1.5	4
106	Effect of standing posture on inhibitory postsynaptic potentials in gastrocnemius motoneurons. <i>Journal of Neurophysiology</i> , 2018, 120, 263-271.	1.8	4
107	Suppression of somatosensory stimuli during motor planning may explain levels of balance and mobility after stroke. <i>European Journal of Neuroscience</i> , 2018, 48, 3534-3551.	2.6	4
108	Influence of Vestibular Afferent Input on Common Modulation of Human Soleus Motor Units during Standing. <i>Motor Control</i> , 2012, 16, 466-479.	0.6	3

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109	Could motor unit control strategies be partially preserved after stroke?. <i>Frontiers in Human Neuroscience</i> , 2014, 8, 864.	2.0	3
110	Cortical processing of irrelevant somatosensory information from the leg is altered by attention during early movement preparation. <i>Brain Research</i> , 2019, 1707, 45-53.	2.2	3
111	Neuroplasticity of Cortical Planning for Initiating Stepping Poststroke: A Case Series. <i>Journal of Neurologic Physical Therapy</i> , 2020, 44, 164-172.	1.4	3
112	Cardiovascular response to postural perturbations of different intensities in healthy young adults. <i>Physiological Reports</i> , 2022, 10, e15299.	1.7	3
113	Relationships Between Stepping-Reaction Movement Patterns and Clinical Measures of Balance, Motor Impairment, and Step Characteristics After Stroke. <i>Physical Therapy</i> , 2021, 101, .	2.4	2
114	Postural control in response to unilateral and bilateral external perturbations in older adults. <i>Gait and Posture</i> , 2022, 94, 26-31.	1.4	1
115	Does the stimulus provoking a stepping reaction correlate with step characteristics and clinical measures of balance and mobility post-stroke?. <i>Clinical Biomechanics</i> , 2022, 93, 105595.	1.2	0