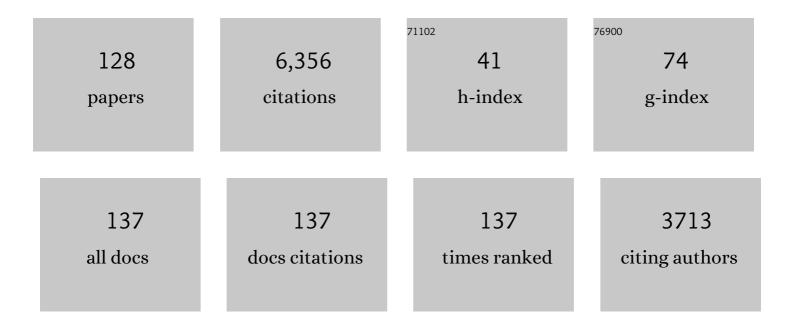
Glen A Lichtwark

List of Publications by Year in descending order

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#	Article	lF	CITATIONS
1	Biceps femoris long head sarcomere and fascicle length adaptations after 3 weeks of eccentric exercise training. Journal of Sport and Health Science, 2022, 11, 43-49.	6.5	34
2	Modelling the complexity of the foot and ankle during human locomotion: the development and validation of a multi-segment foot model using biplanar videoradiography. Computer Methods in Biomechanics and Biomedical Engineering, 2022, 25, 554-565.	1.6	7
3	A Human-Centered Machine-Learning Approach for Muscle-Tendon Junction Tracking in Ultrasound Images. IEEE Transactions on Biomedical Engineering, 2022, 69, 1920-1930.	4.2	3
4	The Iliotibial Band: A Complex Structure with Versatile Functions. Sports Medicine, 2022, 52, 995-1008.	6.5	17
5	The effect of small changes in rate of force development on muscle fascicle velocity and motor unit discharge behaviour. European Journal of Applied Physiology, 2022, 122, 1035.	2.5	4
6	Flexor digitorum brevis utilizes elastic strain energy to contribute to both work generation and energy absorption at the foot. Journal of Experimental Biology, 2022, 225, .	1.7	6
7	Muscle architecture, growth, and biological Remodelling in cerebral palsy: a narrative review. BMC Musculoskeletal Disorders, 2022, 23, 233.	1.9	21
8	The acute effects of higher versus lower load duration and intensity on morphological and mechanical properties of the healthy Achilles tendon: a randomized crossover trial. Journal of Experimental Biology, 2022, , .	1.7	0
9	Isometric fascicle behaviour of the biceps femoris long head muscle during Nordic hamstring exercise variations. Journal of Science and Medicine in Sport, 2022, 25, 684-689.	1.3	7
10	2021 ISB World Athletics Award for Biomechanics: The Subtalar Joint Maintains "Spring-Like―Function While Running in Footwear That Perturbs Foot Pronation. Journal of Applied Biomechanics, 2022, , 1-11.	0.8	0
11	Regional changes in muscle activity do not underlie the repeated bout effect in the human gastrocnemius muscle. Scandinavian Journal of Medicine and Science in Sports, 2021, 31, 799-812.	2.9	5
12	Immediate and long-term effects of mechanical loading on Achilles tendon volume: A systematic review and meta-analysis. Journal of Biomechanics, 2021, 118, 110289.	2.1	8
13	Plantar flexor voluntary activation capacity, strength and function in cerebral palsy. European Journal of Applied Physiology, 2021, 121, 1733-1741.	2.5	8
14	Reliability of Human Achilles Tendon Stiffness Measures Using Freehand 3-D Ultrasound. Ultrasound in Medicine and Biology, 2021, 47, 973-981.	1.5	4
15	The energetic function of the human foot and its muscles during accelerations and decelerations. Journal of Experimental Biology, 2021, 224, .	1.7	18
16	Cyclic eccentric stretching induces more damage and improved subsequent protection than stretched isometric contractions in the lower limb. European Journal of Applied Physiology, 2021, 121, 3349-3360.	2.5	3
17	Evaluation of an inertial measurement unit-based approach for determining centre-of-mass movement during non-seated cycling. Journal of Biomechanics, 2021, 126, 110441.	2.1	5
18	The extensibility of the plantar fascia influences the windlass mechanism during human running. Proceedings of the Royal Society B: Biological Sciences, 2021, 288, 20202095.	2.6	37

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19	Comparisons of laboratoryâ€based methods to calculate jump height and improvements to the fieldâ€based flightâ€time method. Scandinavian Journal of Medicine and Science in Sports, 2020, 30, 31-37.	2.9	26
20	Impact of Lower Limb Active Movement Training in Individuals With Spastic Type Cerebral Palsy on Neuromuscular Control Outcomes: A Systematic Review. Frontiers in Neurology, 2020, 11, 581892.	2.4	8
21	Riders Use Their Body Mass to Amplify Crank Power during Nonseated Ergometer Cycling. Medicine and Science in Sports and Exercise, 2020, 52, 2599-2607.	0.4	5
22	The Mechanics of Seated and Nonseated Cycling at Very-High-Power Output: A Joint-Level Analysis. Medicine and Science in Sports and Exercise, 2020, 52, 1585-1594.	0.4	8
23	The Reliability of Foot and Ankle Bone and Joint Kinematics Measured With Biplanar Videoradiography and Manual Scientific Rotoscoping. Frontiers in Bioengineering and Biotechnology, 2020, 8, 106.	4.1	13
24	Joint and muscle-tendon coordination strategies during submaximal jumping. Journal of Applied Physiology, 2020, 128, 596-603.	2.5	7
25	Regulation of foot and ankle quasi-stiffness during human hopping across a range of frequencies. Journal of Biomechanics, 2020, 108, 109853.	2.1	19
26	Ahead of the curve in the evolution of human feet. Nature, 2020, 579, 31-32.	27.8	1
27	Measuring A Rider's Centre Of Mass Displacement During Non-seated Cycling Using A Single Inertial Measurement Unit. Medicine and Science in Sports and Exercise, 2020, 52, 939-939.	0.4	0
28	A Direct Comparison of Biplanar Videoradiography and Optical Motion Capture for Foot and Ankle Kinematics. Frontiers in Bioengineering and Biotechnology, 2019, 7, 199.	4.1	62
29	Swimming performance is reduced by reflective markers intended for the analysis of swimming kinematics. Journal of Biomechanics, 2019, 91, 109-113.	2.1	16
30	Increasing step width reduces the requirements for subtalar joint moments and powers. Journal of Biomechanics, 2019, 92, 29-34.	2.1	2
31	Tibialis anterior tendinous tissue plays a key role in energy absorption during human walking. Journal of Experimental Biology, 2019, 222, .	1.7	14
32	The Effect of Cadence on the Mechanics and Energetics of Constant Power Cycling. Medicine and Science in Sports and Exercise, 2019, 51, 941-950.	0.4	17
33	The effect of combined functional anaerobic and strength training on treadmill gait kinematics and kinetics in ambulatory young adults with cerebral palsy. Gait and Posture, 2019, 70, 323-329.	1.4	8
34	Intrinsic foot muscles contribute to elastic energy storage and return in the human foot. Journal of Applied Physiology, 2019, 126, 231-238.	2.5	46
35	The functional importance of human foot muscles for bipedal locomotion. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 1645-1650.	7.1	139
36	The influence of added mass on muscle activation and contractile mechanics during submaximal and maximal countermovement jumping in humans. Journal of Experimental Biology, 2019, 222, .	1.7	9

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37	The Immediate Effect of Foot Orthoses on Subtalar Joint Mechanics and Energetics. Medicine and Science in Sports and Exercise, 2018, 50, 1449-1456.	0.4	13
38	Modeling the two-dimensional accuracy of soccer kicks. Journal of Biomechanics, 2018, 72, 159-166.	2.1	15
39	Differences in in vivo muscle fascicle and tendinous tissue behavior between the ankle plantarflexors during running. Scandinavian Journal of Medicine and Science in Sports, 2018, 28, 1828-1836.	2.9	44
40	Simulating the effect of muscle weakness and contracture on neuromuscular control of normal gait in children. Gait and Posture, 2018, 61, 169-175.	1.4	28
41	Movement Strategies for Countermovement Jumping are Potentially Influenced by Elastic Energy Stored and Released from Tendons. Scientific Reports, 2018, 8, 2300.	3.3	23
42	Functional Capacity in Adults With Cerebral Palsy: Lower Limb Muscle Strength Matters. Archives of Physical Medicine and Rehabilitation, 2018, 99, 900-906.e1.	0.9	26
43	Functional Anaerobic and Strength Training in Young Adults with Cerebral Palsy. Medicine and Science in Sports and Exercise, 2018, 50, 1549-1557.	0.4	43
44	Muscle-tendon length and force affect human tibialis anterior central aponeurosis stiffness in vivo. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E3097-E3105.	7.1	39
45	The Influence of Foot-Strike Technique on the Neuromechanical Function of the Foot. Medicine and Science in Sports and Exercise, 2018, 50, 98-108.	0.4	43
46	Effect of a prehop on the muscle-tendon interaction during vertical jumps. Journal of Applied Physiology, 2018, 124, 1203-1211.	2.5	10
47	Stand And Deliver. Medicine and Science in Sports and Exercise, 2018, 50, 441-442.	0.4	Ο
48	Microendoscopy reveals positive correlation in multiscale length changes and variable sarcomere lengths across different regions of human muscle. Journal of Applied Physiology, 2018, 125, 1812-1820.	2.5	48
49	The repeated bout effect can occur without mechanical and neuromuscular changes after a bout of eccentric exercise. Scandinavian Journal of Medicine and Science in Sports, 2018, 28, 2123-2134.	2.9	18
50	Ultrasound Technology for Examining the Mechanics of the Muscle, Tendon, and Ligament. , 2018, , 157-176.		0
51	The effect of muscle-tendon unit vs. fascicle analyses on vastus lateralis force-generating capacity during constant power output cycling with variable cadence. Journal of Applied Physiology, 2018, 124, 993-1002.	2.5	13
52	Influence of the windlass mechanism on arch-spring mechanics during dynamic foot arch deformation. Journal of the Royal Society Interface, 2018, 15, 20180270.	3.4	59
53	Effects of muscle activation on shear between human soleus and gastrocnemius muscles. Scandinavian Journal of Medicine and Science in Sports, 2017, 27, 26-34.	2.9	29
54	The effect of cadence on the muscleâ€ŧendon mechanics of the gastrocnemius muscle during walking. Scandinavian Journal of Medicine and Science in Sports, 2017, 27, 289-298.	2.9	14

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55	Medial gastrocnemius and soleus muscleâ€ŧendon unit, fascicle, and tendon interaction during walking in children with cerebral palsy. Developmental Medicine and Child Neurology, 2017, 59, 843-851.	2.1	66
56	In vivo fascicle length measurements via B-mode ultrasound imaging with single vs dual transducer arrangements. Journal of Biomechanics, 2017, 64, 240-244.	2.1	39
57	Foot structure is significantly associated to subtalar joint kinetics and mechanical energetics. Gait and Posture, 2017, 58, 159-165.	1.4	11
58	Subtalar Joint Pronation and Energy Absorption Requirements During Walking are Related to Tibialis Posterior Tendinous Tissue Strain. Scientific Reports, 2017, 7, 17958.	3.3	18
59	Information from dynamic length changes improves reliability of static ultrasound fascicle length measurements. PeerJ, 2017, 5, e4164.	2.0	12
60	Ultrasound Technology for Examining the Mechanics of the Muscle, Tendon, and Ligament. , 2017, , 1-20.		5
61	Additional in-series compliance reduces muscle force summation and alters the time course of force relaxation during fixed-end contractions. Journal of Experimental Biology, 2016, 219, 3587-3596.	1.7	15
62	Rise of the tendon research. Scandinavian Journal of Medicine and Science in Sports, 2016, 26, 992-994.	2.9	3
63	Effects of series elastic compliance on muscle force summation and the rate of force rise. Journal of Experimental Biology, 2016, 219, 3261-3270.	1.7	30
64	The mechanical function of the tibialis posterior muscle and its tendon during locomotion. Journal of Biomechanics, 2016, 49, 3238-3243.	2.1	48
65	Deconstructing the power resistance relationship for squats: A jointâ€level analysis. Scandinavian Journal of Medicine and Science in Sports, 2016, 26, 774-781.	2.9	24
66	Protection from Muscle Damage in the Absence of Changes in Muscle Mechanical Behavior. Medicine and Science in Sports and Exercise, 2016, 48, 1495-1505.	0.4	14
67	Shoes alter the spring-like function of the human foot during running. Journal of the Royal Society Interface, 2016, 13, 20160174.	3.4	55
68	Medial gastrocnemius muscle volume in ambulant children with unilateral and bilateral cerebral palsy aged 2 to 9 years. Developmental Medicine and Child Neurology, 2016, 58, 1146-1152.	2.1	57
69	Muscle growth is reduced in 15â€monthâ€old children with cerebral palsy. Developmental Medicine and Child Neurology, 2016, 58, 485-491.	2.1	108
70	UltraTrack: Software for semi-automated tracking of muscle fascicles in sequences of B-mode ultrasound images. Computer Methods and Programs in Biomedicine, 2016, 128, 111-118.	4.7	162
71	Quantification of muscle co-contraction using supersonic shear wave imaging. Journal of Biomechanics, 2016, 49, 493-495.	2.1	26
72	Three-dimensional geometrical changes of the human tibialis anterior muscle and its central aponeurosis measured with three-dimensional ultrasound during isometric contractions. PeerJ, 2016, 4, e2260.	2.0	71

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73	Reactive stepping behaviour in response to forward loss of balance predicts future falls in community-dwelling older adults. Age and Ageing, 2015, 44, 109-115.	1.6	89
74	FAST CP <i>:</i> protocol of a randomised controlled trial of the efficacy of a 12-week combined Functional Anaerobic and Strength Training programme on muscle properties and mechanical gait deficiencies in adolescents and young adults with spastic-type cerebral palsy. BMJ Open, 2015, 5, e008059.	1.9	12
75	The role of human ankle plantar flexor muscle-tendon interaction & architecture in maximal vertical jumping examined <i>in vivo</i> . Journal of Experimental Biology, 2015, 219, 528-34.	1.7	59
76	Ultrasound reveals negligible cocontraction during isometric plantar flexion and dorsiflexion despite the presence of antagonist electromyographic activity. Journal of Applied Physiology, 2015, 118, 1193-1199.	2.5	31
77	In vivo behavior of the human soleus muscle with increasing walking and running speeds. Journal of Applied Physiology, 2015, 118, 1266-1275.	2.5	147
78	Is the Soleus a Sentinel Muscle for Impaired Aerobic Capacity in Heart Failure?. Medicine and Science in Sports and Exercise, 2015, 47, 498-508.	0.4	16
79	Fluoroscopic Assessment of Lumbar Total Disc Replacement Kinematics During Walking. Spine, 2015, 40, 436-442.	2.0	5
80	Doublet potentiation in the triceps surae is limited by series compliance and dynamic fascicle behavior. Journal of Applied Physiology, 2015, 119, 807-816.	2.5	13
81	Effects of cold water immersion and active recovery on hemodynamics and recovery of muscle strength following resistance exercise. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2015, 309, R389-R398.	1.8	31
82	Changes in the length and threeâ€dimensional orientation of muscle fascicles and aponeuroses with passive length changes in human gastrocnemius muscles. Journal of Physiology, 2015, 593, 441-455.	2.9	50
83	Active regulation of longitudinal arch compression and recoil during walking and running. Journal of the Royal Society Interface, 2015, 12, 20141076.	3.4	156
84	Intrinsic foot muscles have the capacity to control deformation of the longitudinal arch. Journal of the Royal Society Interface, 2014, 11, 20131188.	3.4	226
85	Muscle contributions to recovery from forward loss of balance by stepping. Journal of Biomechanics, 2014, 47, 667-674.	2.1	31
86	Muscle fascicle strains in human gastrocnemius during backward downhill walking. Journal of Applied Physiology, 2014, 116, 1455-1462.	2.5	29
87	Reciprocal activation of gastrocnemius and soleus motor units is associated with fascicle length change during knee flexion. Physiological Reports, 2014, 2, e12044.	1.7	40
88	Differential strain patterns of the human Achilles tendon determined <i>in vivo</i> with freehand three-dimensional ultrasound imaging. Journal of Experimental Biology, 2013, 216, 594-600.	1.7	52
89	The effects of botulinum toxin injection frequency on calf muscle growth in young children with spastic cerebral palsy: A 12-month prospective study. Journal of Children's Orthopaedics, 2013, 7, 425-433.	1.1	49
90	Decreased lower limb muscle recruitment contributes to the inability of older adults to recover with a single step following a forward loss of balance. Journal of Electromyography and Kinesiology, 2013, 23, 1139-1144.	1.7	23

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91	Does ankle joint power reflect type of muscle action of soleus and gastrocnemius during walking in cats and humans?. Journal of Biomechanics, 2013, 46, 1383-1386.	2.1	26
92	Neuromechanical properties of the triceps surae in young and older adults. Experimental Gerontology, 2013, 48, 1147-1155.	2.8	37
93	The use of ultrasound to study muscle–tendon function in human posture and locomotion. Gait and Posture, 2013, 37, 305-312.	1.4	93
94	Reliability and accuracy of an automated tracking algorithm to measure controlled passive and active muscle fascicle length changes from ultrasound. Computer Methods in Biomechanics and Biomedical Engineering, 2013, 16, 678-687.	1.6	106
95	Effects of running on human Achilles tendon length-tension properties in the free and gastrocnemius components. Journal of Experimental Biology, 2013, 216, 4388-94.	1.7	45
96	Tibialis anterior muscle fascicle dynamics adequately represent postural sway during standing balance. Journal of Applied Physiology, 2013, 115, 1742-1750.	2.5	33
97	Commentaries on Viewpoint: On the hysteresis in the human Achilles tendon. Journal of Applied Physiology, 2013, 114, 518-520.	2.5	15
98	A comparison of two Hill-type skeletal muscle models on the construction of medial gastrocnemius length-tension curves in humans in vivo. Journal of Applied Physiology, 2012, 113, 90-96.	2.5	24
99	Modulation of the soleus H-reflex during knee rotations is not consistent with muscle fascicle length changes. European Journal of Applied Physiology, 2012, 112, 3259-3266.	2.5	7
100	Lower limb muscle moments and power during recovery from forward loss of balance in male and female single and multiple steppers. Clinical Biomechanics, 2012, 27, 1031-1037.	1.2	32
101	Adaptive recovery responses to repeated forward loss of balance in older adults. Journal of Biomechanics, 2012, 45, 183-187.	2.1	43
102	Medial gastrocnemius muscle fascicle active torque-length and Achilles tendon properties in young adults with spastic cerebral palsy. Journal of Biomechanics, 2012, 45, 2526-2530.	2.1	108
103	Lower Limb Muscle Weakness Predicts Use of a Multiple- Versus Single-Step Strategy to Recover From Forward Loss of Balance in Older Adults. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2012, 67, 1246-1252.	3.6	65
104	Mechanisms of Adaptation from a Multiple to a Single Step Recovery Strategy following Repeated Exposure to Forward Loss of Balance in Older Adults. PLoS ONE, 2012, 7, e33591.	2.5	36
105	A compliant tendon increases fatigue resistance and net efficiency during fatiguing cyclic contractions of mouse soleus muscle. Acta Physiologica, 2012, 204, 533-543.	3.8	16
106	Passive muscle mechanical properties of the medial gastrocnemius in young adults with spastic cerebral palsy. Journal of Biomechanics, 2011, 44, 2496-2500.	2.1	128
107	Automatic tracking of medial gastrocnemius fascicle length during human locomotion. Journal of Applied Physiology, 2011, 111, 1491-1496.	2.5	186
108	Medial gastrocnemius muscle volume and fascicle length in children aged 2 to 5 years with cerebral palsy. Developmental Medicine and Child Neurology, 2011, 53, 543-548.	2.1	165

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109	Validity and reliability of a simple ultrasound approach to measure medial gastrocnemius muscle length. Journal of Anatomy, 2011, 218, 637-642.	1.5	49
110	The anatomical arrangement of muscle and tendon enhances limb versatility and locomotor performance. Philosophical Transactions of the Royal Society B: Biological Sciences, 2011, 366, 1540-1553.	4.0	59
111	Gross muscle morphology and structure in spastic cerebral palsy: a systematic review. Developmental Medicine and Child Neurology, 2010, 52, 794-804.	2.1	205
112	The influence of tendon compliance on muscle power output and efficiency during cyclic contractions. Journal of Experimental Biology, 2010, 213, 707-714.	1.7	66
113	Intensity of activation and timing of deactivation modulate elastic energy storage and release in a pennate muscle and account for gait-specific initiation of limb protraction in the horse. Journal of Experimental Biology, 2009, 212, 2454-2463.	1.7	11
114	Is muscle–tendon unit length a valid indicator for muscle spindle output?. Journal of Physiology, 2009, 587, 13-14.	2.9	15
115	Validation of a freehand 3D ultrasound system for morphological measures of the medial gastrocnemius muscle. Journal of Biomechanics, 2009, 42, 1313-1319.	2.1	131
116	Optimal muscle fascicle length and tendon stiffness for maximising gastrocnemius efficiency during human walking and running. Journal of Theoretical Biology, 2008, 252, 662-673.	1.7	180
117	Effect of altering neural, muscular and tendinous factors associated with aging on balance recovery using the ankle strategy: A simulation study. Journal of Theoretical Biology, 2008, 254, 546-554.	1.7	25
118	The energetic cost of activation in mouse fastâ€twitch muscle is the same whether measured using reduced filament overlap or <i>N</i> â€benzylâ€ <i>p</i> â€toluenesulphonamide. Acta Physiologica, 2008, 193, 381-391.	3.8	32
119	Comment on: The mechanism for efficacy of eccentric loading in Achilles tendon injury; an in vivo study in humans: reply. Rheumatology, 2008, 48, 203-203.	1.9	0
120	The mechanism for efficacy of eccentric loading in Achilles tendon injury; an in vivo study in humans. Rheumatology, 2008, 47, 1493-1497.	1.9	115
121	Muscle fascicle and series elastic element length changes along the length of the human gastrocnemius during walking and running. Journal of Biomechanics, 2007, 40, 157-164.	2.1	353
122	The mechanics of mouse skeletal muscle when shortening during relaxation. Journal of Biomechanics, 2007, 40, 3121-3129.	2.1	15
123	Is Achilles tendon compliance optimised for maximum muscle efficiency during locomotion?. Journal of Biomechanics, 2007, 40, 1768-1775.	2.1	205
124	Interactions between the human gastrocnemius muscle and the Achilles tendon during incline, level and decline locomotion. Journal of Experimental Biology, 2006, 209, 4379-4388.	1.7	278
125	A modified Hill muscle model that predicts muscle power output and efficiency during sinusoidal length changes. Journal of Experimental Biology, 2005, 208, 2831-2843.	1.7	91
126	Effects of series elasticity and activation conditions on muscle power output and efficiency. Journal of Experimental Biology, 2005, 208, 2845-2853.	1.7	59

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127	In vivo mechanical properties of the human Achilles tendon during one-legged hopping. Journal of Experimental Biology, 2005, 208, 4715-4725.	1.7	315
128	A catapult action for rapid limb protraction. Nature, 2003, 421, 35-36.	27.8	104