

Ian D Loram

List of Publications by Year in descending order

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Version: 2024-02-01

66
papers

3,649
citations

159525

30
h-index

133188

59
g-index

74
all docs

74
docs citations

74
times ranked

2453
citing authors

#	ARTICLE	IF	CITATIONS
1	Direct measurement of human ankle stiffness during quiet standing: the intrinsic mechanical stiffness is insufficient for stability. <i>Journal of Physiology</i> , 2002, 545, 1041-1053.	1.3	431
2	Human postural sway results from frequent, ballistic bias impulses by soleus and gastrocnemius. <i>Journal of Physiology</i> , 2005, 564, 295-311.	1.3	257
3	Human balancing of an inverted pendulum: position control by small, ballistic "like, throw and catch movements. <i>Journal of Physiology</i> , 2002, 540, 1111-1124.	1.3	256
4	Human control of an inverted pendulum: Is continuous control necessary? Is intermittent control effective? Is intermittent control physiological?. <i>Journal of Physiology</i> , 2011, 589, 307-324.	1.3	213
5	Intermittent control: a computational theory of human control. <i>Biological Cybernetics</i> , 2011, 104, 31-51.	0.6	203
6	The proprioceptive and agonist roles of gastrocnemius, soleus and tibialis anterior muscles in maintaining human upright posture. <i>Journal of Physiology</i> , 2009, 587, 2399-2416.	1.3	154
7	Active, non-spring-like muscle movements in human postural sway: how might paradoxical changes in muscle length be produced?. <i>Journal of Physiology</i> , 2005, 564, 281-293.	1.3	140
8	Human balancing of an inverted pendulum: is sway size controlled by ankle impedance?. <i>Journal of Physiology</i> , 2001, 532, 879-891.	1.3	125
9	Use of ultrasound to make noninvasive in vivo measurement of continuous changes in human muscle contractile length. <i>Journal of Applied Physiology</i> , 2006, 100, 1311-1323.	1.2	124
10	Paradoxical muscle movement in human standing. <i>Journal of Physiology</i> , 2004, 556, 683-689.	1.3	122
11	Human balancing of an inverted pendulum with a compliant linkage: neural control by anticipatory intermittent bias. <i>Journal of Physiology</i> , 2003, 551, 357-370.	1.3	105
12	Changes in joint angle, muscle-tendon complex length, muscle contractile tissue displacement, and modulation of EMG activity during acute whole-body vibration. <i>Muscle and Nerve</i> , 2009, 40, 420-429.	1.0	101
13	Postural activation of the human medial gastrocnemius muscle: are the muscle units spatially localised?. <i>Journal of Physiology</i> , 2011, 589, 431-443.	1.3	97
14	The frequency of human, manual adjustments in balancing an inverted pendulum is constrained by intrinsic physiological factors. <i>Journal of Physiology</i> , 2006, 577, 417-432.	1.3	90
15	The passive, human calf muscles in relation to standing: the non-linear decrease from short range to long range stiffness. <i>Journal of Physiology</i> , 2007, 584, 661-675.	1.3	87
16	The passive, human calf muscles in relation to standing: the short range stiffness lies in the contractile component. <i>Journal of Physiology</i> , 2007, 584, 677-692.	1.3	69
17	Myoelectric activity along human gastrocnemius medialis: Different spatial distributions of postural and electrically elicited surface potentials. <i>Journal of Electromyography and Kinesiology</i> , 2013, 23, 43-50.	0.7	61
18	Intermittent control models of human standing: similarities and differences. <i>Biological Cybernetics</i> , 2014, 108, 159-168.	0.6	60

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19	Visual control of stable and unstable loads: what is the feedback delay and extent of linear time-invariant control?. <i>Journal of Physiology</i> , 2009, 587, 1343-1365.	1.3	55
20	Recruitment of motor units in the medial gastrocnemius muscle during human quiet standing: is recruitment intermittent? What triggers recruitment?. <i>Journal of Neurophysiology</i> , 2012, 107, 666-676.	0.9	55
21	The Consequences of Short-Range Stiffness and Fluctuating Muscle Activity for Proprioception of Postural Joint Rotations: The Relevance to Human Standing. <i>Journal of Neurophysiology</i> , 2009, 102, 460-474.	0.9	46
22	Automated regional analysis of B-mode ultrasound images of skeletal muscle movement. <i>Journal of Applied Physiology</i> , 2012, 112, 313-327.	1.2	45
23	Identification of intermittent control in man and machine. <i>Journal of the Royal Society Interface</i> , 2012, 9, 2070-2084.	1.5	43
24	Estimating Skeletal Muscle Fascicle Curvature From B-Mode Ultrasound Image Sequences. <i>IEEE Transactions on Biomedical Engineering</i> , 2013, 60, 1935-1945.	2.5	43
25	A novel system of electrodes transparent to ultrasound for simultaneous detection of myoelectric activity and B-mode ultrasound images of skeletal muscles. <i>Journal of Applied Physiology</i> , 2013, 115, 1203-1214.	1.2	42
26	Cautious gait in relation to knowledge and vision of height: is altered visual information the dominant influence?. <i>Journal of Neurophysiology</i> , 2012, 107, 2686-2691.	0.9	38
27	Manually controlled human balancing using visual, vestibular and proprioceptive senses involves a common, low frequency neural process. <i>Journal of Physiology</i> , 2006, 577, 403-416.	1.3	37
28	Predictive feedback in human simulated pendulum balancing. <i>Biological Cybernetics</i> , 2009, 101, 131-146.	0.6	36
29	Paradoxical Muscle Movement during Postural Control. <i>Medicine and Science in Sports and Exercise</i> , 2009, 41, 198-204.	0.2	35
30	Refractoriness in Sustained Visuo-Manual Control: Is the Refractory Duration Intrinsic or Does It Depend on External System Properties?. <i>PLoS Computational Biology</i> , 2013, 9, e1002843.	1.5	34
31	Does the Motor System Need Intermittent Control?. <i>Exercise and Sport Sciences Reviews</i> , 2014, 42, 117-125.	1.6	33
32	Estimating Full Regional Skeletal Muscle Fibre Orientation from B-Mode Ultrasound Images Using Convolutional, Residual, and Deconvolutional Neural Networks. <i>Journal of Imaging</i> , 2018, 4, 29.	1.7	33
33	Real-Time Ultrasound Segmentation, Analysis and Visualisation of Deep Cervical Muscle Structure. <i>IEEE Transactions on Medical Imaging</i> , 2017, 36, 653-665.	5.4	28
34	Human standing: does the control strategy preprogram a rigid knee?. <i>Journal of Applied Physiology</i> , 2013, 114, 1717-1729.	1.2	27
35	Ultrasound-Based Detection of Fasciculations in Healthy and Diseased Muscles. <i>IEEE Transactions on Biomedical Engineering</i> , 2016, 63, 512-518.	2.5	24
36	An evaluation of 3D head pose estimation using the Microsoft Kinect v2. <i>Gait and Posture</i> , 2016, 48, 83-88.	0.6	22

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37	Predictive feedback control and Fitts's law. <i>Biological Cybernetics</i> , 2008, 98, 229-238.	0.6	21
38	Estimation of absolute states of human skeletal muscle via standard B-mode ultrasound imaging and deep convolutional neural networks. <i>Journal of the Royal Society Interface</i> , 2020, 17, 20190715.	1.5	20
39	Postural threat differentially affects the feedforward and feedback components of the vestibular-evoked balance response. <i>European Journal of Neuroscience</i> , 2013, 38, 3239-3247.	1.2	19
40	A video based method to quantify posture of the head and trunk in sitting. <i>Gait and Posture</i> , 2017, 51, 181-187.	0.6	19
41	Frequency-domain identification of the human controller. <i>Biological Cybernetics</i> , 2012, 106, 359-372.	0.6	18
42	Effects of attentional focus on walking stability in elderly. <i>Gait and Posture</i> , 2017, 55, 94-99.	0.6	17
43	Foreground Detection Analysis of Ultrasound Image Sequences Identifies Markers of Motor Neurone Disease across Diagnostically Relevant Skeletal Muscles. <i>Ultrasound in Medicine and Biology</i> , 2019, 45, 1164-1175.	0.7	15
44	Objective Analysis of Neck Muscle Boundaries for Cervical Dystonia Using Ultrasound Imaging and Deep Learning. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2020, 24, 1016-1027.	3.9	15
45	Proactive Selective Inhibition Targeted at the Neck Muscles: This Proximal Constraint Facilitates Learning and Regulates Global Control. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2017, 25, 357-369.	2.7	13
46	Visual-manual tracking: does intermittent control with aperiodic sampling explain linear power and non-linear remnant without sensorimotor noise?. <i>Journal of Physiology</i> , 2017, 595, 6751-6770.	1.3	12
47	Wavelet-frequency analysis for the detection of discontinuities in switched system models of human balance. <i>Human Movement Science</i> , 2017, 51, 27-40.	0.6	11
48	A Semi-automated Programme for Tracking Myoblast Migration Following Mechanical Damage: Manipulation by Chemical Inhibitors. <i>Cellular Physiology and Biochemistry</i> , 2011, 27, 625-636.	1.1	10
49	Fully automated image-based estimation of postural point-features in children with cerebral palsy using deep learning. <i>Royal Society Open Science</i> , 2019, 6, 191011.	1.1	10
50	Deep Residual Networks for Quantification of Muscle Fiber Orientation and Curvature from Ultrasound Images. <i>Communications in Computer and Information Science</i> , 2017, , 63-73.	0.4	10
51	Interfacing sensory input with motor output: does the control architecture converge to a serial process along a single channel?. <i>Frontiers in Computational Neuroscience</i> , 2013, 7, 55.	1.2	8
52	Working towards an objective segmental assessment of trunk control in children with cerebral palsy. <i>Gait and Posture</i> , 2018, 65, 45-50.	0.6	7
53	Force accuracy rather than high stiffness is associated with faster learning and reduced falls in human balance. <i>Scientific Reports</i> , 2020, 10, 4953.	1.6	7
54	Intermittent control of unstable multivariate systems. , 2015, 2015, 1436-9.		6

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55	Crosstalk opposing view: Fear of falling does not influence vestibular-evoked balance responses. <i>Journal of Physiology</i> , 2015, 593, 2983-2984.	1.3	5
56	The effect of fear of falling on vestibular feedback control of balance. <i>Physiological Reports</i> , 2017, 5, e13391.	0.7	4
57	Auto-regressive moving average analysis of linear and discontinuous models of human balance during quiet standing. <i>Chaos</i> , 2014, 24, 022101.	1.0	3
58	Reply from Ian D. Loram, Constantinos N. Maganaris and Martin Lakie. <i>Journal of Physiology</i> , 2005, 569, 706-706.	1.3	2
59	Complexity and dynamics of switched human balance control during quiet standing. <i>Biological Cybernetics</i> , 2015, 109, 469-478.	0.6	2
60	The potential of an automated system to identify the upper limb component of a controlled sitting posture. <i>Gait and Posture</i> , 2017, 58, 223-228.	0.6	2
61	Intermittent control explains human motor remnant without additive noise. , 2011, , .		1
62	Rebuttal from Raymond Reynolds, Callum Osler, Linda Tersteeg and Ian Loram. <i>Journal of Physiology</i> , 2015, 593, 2987-2987.	1.3	1
63	Effect of motor and sensory noise in the control of upright standing. <i>Progress in Brain Research</i> , 2019, 248, 319-327.	0.9	1
64	Intermittent Control of Movement and Balance. , 2020, , 1-6.		1
65	Intermittent Control of Movement and Balance. , 2022, , 1689-1694.		1
66	The development of a video retrieval system using a clinician-led approach. <i>Expert Systems With Applications</i> , 2020, 142, 112992.	4.4	0