

# Carlo J De Luca

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/11289291/publications.pdf>

Version: 2024-02-01

74  
papers

10,915  
citations

61857

43  
h-index

95083

68  
g-index

74  
all docs

74  
docs citations

74  
times ranked

6593  
citing authors

#	ARTICLE	IF	CITATIONS
1	The common input notion, conceived and sustained by conjecture. Journal of Neurophysiology, 2016, 115, 1079-1080.	0.9	1
2	The compensatory interaction between motor unit firing behavior and muscle force during fatigue. Journal of Neurophysiology, 2016, 116, 1579-1585.	0.9	75
3	Synchronization of motor unit firings: an epiphenomenon of firing rate characteristics not common inputs. Journal of Neurophysiology, 2016, 115, 178-192.	0.9	29
4	Is the notion of central fatigue based on a solid foundation?. Journal of Neurophysiology, 2016, 115, 967-977.	0.9	16
5	Clarification of methods used to validate surface EMG decomposition algorithms as described by Farina et al. (2014). Journal of Applied Physiology, 2015, 118, 1084-1084.	1.2	21
6	Biomechanical benefits of the onion-skin motor unit control scheme. Journal of Biomechanics, 2015, 48, 195-203.	0.9	70
7	Decomposition of surface EMG signals from cyclic dynamic contractions. Journal of Neurophysiology, 2015, 113, 1941-1951.	0.9	88
8	Error reduction in EMG signal decomposition. Journal of Neurophysiology, 2014, 112, 2718-2728.	0.9	24
9	Statistically rigorous calculations do not support common input and long-term synchronization of motor-unit firings. Journal of Neurophysiology, 2014, 112, 2729-2744.	0.9	13
10	Transposed firing activation of motor units. Journal of Neurophysiology, 2014, 112, 962-970.	0.9	21
11	Dynamical Learning and Tracking of Tremor and Dyskinesia From Wearable Sensors. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2014, 22, 982-991.	2.7	82
12	High-resolution tracking of motor disorders in Parkinson's disease during unconstrained activity. Movement Disorders, 2013, 28, 1080-1087.	2.2	55
13	Neural control of muscle force: indications from a simulation model. Journal of Neurophysiology, 2013, 109, 1548-1570.	0.9	74
14	Preferred sensor sites for surface EMG signal decomposition. Physiological Measurement, 2012, 33, 195-206.	1.2	53
15	Hierarchical control of motor units in voluntary contractions. Journal of Neurophysiology, 2012, 107, 178-195.	0.9	167
16	Inter-electrode spacing of surface EMG sensors: Reduction of crosstalk contamination during voluntary contractions. Journal of Biomechanics, 2012, 45, 555-561.	0.9	153
17	Reply to Farina and Enoka: The Reconstruct-and-Test Approach Is the Most Appropriate Validation for Surface EMG Signal Decomposition to Date. Journal of Neurophysiology, 2011, 105, 983-984.	0.9	36
18	Filtering the surface EMG signal: Movement artifact and baseline noise contamination. Journal of Biomechanics, 2010, 43, 1573-1579.	0.9	892

#	ARTICLE	IF	CITATIONS
19	Relationship Between Firing Rate and Recruitment Threshold of Motoneurons in Voluntary Isometric Contractions. <i>Journal of Neurophysiology</i> , 2010, 104, 1034-1046.	0.9	234
20	High-yield decomposition of surface EMG signals. <i>Clinical Neurophysiology</i> , 2010, 121, 1602-1615.	0.7	299
21	Surface EMG signal decomposition using empirically sustainable biosignal separation principles. , 2009, 2009, 4986-9.		5
22	Motor unit control and force fluctuation during fatigue. <i>Journal of Applied Physiology</i> , 2009, 107, 235-243.	1.2	112
23	A Combined sEMG and Accelerometer System for Monitoring Functional Activity in Stroke. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2009, 17, 585-594.	2.7	111
24	Motor Unit Recruitment and Proprioceptive Feedback Decrease the Common Drive. <i>Journal of Neurophysiology</i> , 2009, 101, 1620-1628.	0.9	44
25	A simulation study for a surface EMG sensor that detects distinguishable motor unit action potentials. <i>Journal of Neuroscience Methods</i> , 2008, 168, 54-63.	1.3	9
26	Aliasing rejection in Precision Decomposition of EMG signals. , 2008, 2008, 4972-5.		11
27	Decomposition of indwelling EMG signals. <i>Journal of Applied Physiology</i> , 2008, 105, 700-710.	1.2	74
28	Ordered Motor-Unit Firing Behavior in Acute Cerebellar Stroke. <i>Journal of Neurophysiology</i> , 2006, 96, 2769-2774.	0.9	17
29	Multi-Receiver Precision Decomposition of Intramuscular EMG Signals. , 2006, 2006, 1252-5.		7
30	Decomposition of Surface EMG Signals. <i>Journal of Neurophysiology</i> , 2006, 96, 1646-1657.	0.9	383
31	Multi-Receiver Precision Decomposition of Intramuscular EMG Signals. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2006, , .	0.5	2
32	Firing rates of motor units in human vastus lateralis muscle during fatiguing isometric contractions. <i>Journal of Applied Physiology</i> , 2005, 99, 268-280.	1.2	167
33	Improved resolution of pulse superpositions in a knowledge-based system EMG decomposition. , 2004, 2006, 69-71.		12
34	The role of plantar cutaneous sensation in unperturbed stance. <i>Experimental Brain Research</i> , 2004, 156, 505-512.	0.7	336
35	Reduced plantar sensitivity alters postural responses to lateral perturbations of balance. <i>Experimental Brain Research</i> , 2004, 157, 526-536.	0.7	127
36	Recruitment Order of Motor Units in Human Vastus Lateralis Muscle Is Maintained During Fatiguing Contractions. <i>Journal of Neurophysiology</i> , 2003, 90, 2919-2927.	0.9	139

#	ARTICLE	IF	CITATIONS
37	Activation imbalances in lumbar spine muscles in the presence of chronic low back pain. <i>Journal of Applied Physiology</i> , 2003, 94, 1410-1420.	1.2	117
38	Common Drive in Motor Units of a Synergistic Muscle Pair. <i>Journal of Neurophysiology</i> , 2002, 87, 2200-2204.	0.9	143
39	Multiple Motor Unit Recordings of Laryngeal Muscles: The Technique of Vector Laryngeal Electromyography. <i>Laryngoscope</i> , 2002, 112, 2196-2203.	1.1	17
40	Effects of Aging on Motor-Unit Control Properties. <i>Journal of Neurophysiology</i> , 1999, 82, 2081-2091.	0.9	210
41	Decomposition and Analysis of Intramuscular Electromyographic Signals. , 1999, , 757-776.		13
42	Hand Dominance and Motor Unit Firing Behavior. <i>Journal of Neurophysiology</i> , 1998, 80, 1373-1382.	0.9	140
43	Electromyographic analysis of grand-pli?? in ballet and modern dancers. <i>Medicine and Science in Sports and Exercise</i> , 1998, 30, 1708-1720.	0.2	31
44	The Use of Surface Electromyography in Biomechanics. <i>Journal of Applied Biomechanics</i> , 1997, 13, 135-163.	0.3	2,182
45	Rank-ordered regulation of motor units. , 1996, 19, 563-573.		148
46	Spectral Electromyographic Assessment of Back Muscles in Patients With Low Back Muscles in Patients With Low Back Pain Undergoing Rehabilitation. <i>Spine</i> , 1995, 20, 38-48.	1.0	132
47	Letters to the editor. <i>Muscle and Nerve</i> , 1995, 18, 1490-1497.	1.0	1
48	Common drive of motor units in regulation of muscle force. <i>Trends in Neurosciences</i> , 1994, 17, 299-305.	4.2	397
49	Electromyographic analysis of standing posture and demi-plie in ballet and modern dancers. <i>Medicine and Science in Sports and Exercise</i> , 1994, 26, 771-782.	0.2	51
50	Use of the surface EMG signal for performance evaluation of back muscles. <i>Muscle and Nerve</i> , 1993, 16, 210-216.	1.0	220
51	Firing Rate Interactions Among Human Orbicularis Oris Motor Units. <i>International Journal of Neuroscience</i> , 1992, 64, 167-175.	0.8	36
52	Lateral dominance and motor unit firing behavior. <i>Brain Research</i> , 1992, 576, 165-167.	1.1	27
53	Recruitment threshold and muscle fiber conduction velocity of single motor units. <i>Journal of Electromyography and Kinesiology</i> , 1991, 1, 116-123.	0.7	67
54	Technique for detecting MUAP propagation from high-threshold motor units. <i>Journal of Electromyography and Kinesiology</i> , 1991, 1, 75-80.	0.7	14

#	ARTICLE	IF	CITATIONS
55	Fatigue, recovery, and low back pain in varsity rowers. <i>Medicine and Science in Sports and Exercise</i> , 1990, 22, 463-469.	0.2	103
56	Unusual motor unit firing behavior in older adults. <i>Brain Research</i> , 1989, 482, 136-140.	1.1	44
57	Lumbar Muscle Fatigue and Chronic Lower Back Pain. <i>Spine</i> , 1989, 14, 992-1001.	1.0	407
58	Surface myoelectric signal cross-talk among muscles of the leg. <i>Electroencephalography and Clinical Neurophysiology</i> , 1988, 69, 568-575.	0.3	280
59	Compression Induced Damage on In-Situ Severed and Intact Nerves. <i>Orthopedics</i> , 1987, 10, 777-784.	0.5	14
60	Median frequency of the myoelectric signal. <i>European Journal of Applied Physiology and Occupational Physiology</i> , 1986, 55, 457-464.	1.2	63
61	A Note on the Noninvasive Estimation of Muscle Fiber Conduction Velocity. <i>IEEE Transactions on Biomedical Engineering</i> , 1985, BME-32, 341-344.	2.5	120
62	Muscle Fatigue Monitor (MFM): Second Generation. <i>IEEE Transactions on Biomedical Engineering</i> , 1985, BME-32, 75-78.	2.5	37
63	Motor unit recruitment and firing rates interaction in the control of human muscles. <i>Brain Research</i> , 1985, 337, 311-319.	1.1	52
64	Median frequency of the myoelectric signal. <i>European Journal of Applied Physiology and Occupational Physiology</i> , 1984, 52, 258-265.	1.2	130
65	A technique for the detection, decomposition and analysis of the EMG signal. <i>Electroencephalography and Clinical Neurophysiology</i> , 1984, 58, 175-188.	0.3	144
66	Muscle Fatigue Monitor: A Noninvasive Device for Observing Localized Muscular Fatigue. <i>IEEE Transactions on Biomedical Engineering</i> , 1982, BME-29, 760-768.	2.5	84
67	A Procedure for Decomposing the Myoelectric Signal Into Its Constituent Action Potentials - Part I: Technique, Theory, and Implementation. <i>IEEE Transactions on Biomedical Engineering</i> , 1982, BME-29, 149-157.	2.5	259
68	A Procedure for Decomposing the Myoelectric Signal Into Its Constituent Action Potentials-Part II: Execution and Test for Accuracy. <i>IEEE Transactions on Biomedical Engineering</i> , 1982, BME-29, 158-164.	2.5	123
69	Frequency Parameters of the Myoelectric Signal as a Measure of Muscle Conduction Velocity. <i>IEEE Transactions on Biomedical Engineering</i> , 1981, BME-28, 515-523.	2.5	466
70	Physiology and Mathematics of Myoelectric Signals. <i>IEEE Transactions on Biomedical Engineering</i> , 1979, BME-26, 313-325.	2.5	546
71	The relation between the myoelectric signal and physiological properties of constant-force isometric contractions. <i>Electroencephalography and Clinical Neurophysiology</i> , 1978, 45, 681-698.	0.3	41
72	Control of upper-limb prostheses. <i>Journal of Medical Engineering and Technology</i> , 1978, 2, 57-61.	0.8	28

#	ARTICLE	IF	CITATIONS
73	A model for a motor unit train recorded during constant force isometric contractions. Biological Cybernetics, 1975, 19, 159-167.	0.6	27
74	An Electrode for Recording Single Motor Unit Activity During Strong Muscle Contractions. IEEE Transactions on Biomedical Engineering, 1972, BME-19, 367-372.	2.5	42