

# Silvia Muceli

## List of Publications by Year in descending order

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Version: 2024-02-01

54  
papers

2,732  
citations

257450

24  
h-index

243625

44  
g-index

59  
all docs

59  
docs citations

59  
times ranked

2181  
citing authors

#	ARTICLE	IF	CITATIONS
1	Multi-channel intramuscular and surface EMG decomposition by convolutive blind source separation. <i>Journal of Neural Engineering</i> , 2016, 13, 026027.	3.5	391
2	Simultaneous and Proportional Estimation of Hand Kinematics From EMG During Mirrored Movements at Multiple Degrees-of-Freedom. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2012, 20, 371-378.	4.9	238
3	Tutorial. Surface EMG detection in space and time: Best practices. <i>Journal of Electromyography and Kinesiology</i> , 2019, 49, 102363.	1.7	158
4	EMG-based simultaneous and proportional estimation of wrist/hand kinematics in uni-lateral trans-radial amputees. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2012, 9, 42.	4.6	152
5	Identifying Representative Synergy Matrices for Describing Muscular Activation Patterns During Multidirectional Reaching in the Horizontal Plane. <i>Journal of Neurophysiology</i> , 2010, 103, 1532-1542.	1.8	150
6	Principles of Motor Unit Physiology Evolve With Advances in Technology. <i>Physiology</i> , 2016, 31, 83-94.	3.1	147
7	Extracting Signals Robust to Electrode Number and Shift for Online Simultaneous and Proportional Myoelectric Control by Factorization Algorithms. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2014, 22, 623-633.	4.9	145
8	Closed-Loop Control of Grasping With a Myoelectric Hand Prosthesis: Which Are the Relevant Feedback Variables for Force Control?. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2014, 22, 1041-1052.	4.9	132
9	Postural activation of the human medial gastrocnemius muscle: are the muscle units spatially localised?. <i>Journal of Physiology</i> , 2011, 589, 431-443.	2.9	97
10	Effect of arm position on the prediction of kinematics from EMG in amputees. <i>Medical and Biological Engineering and Computing</i> , 2013, 51, 143-151.	2.8	97
11	Accurate and representative decoding of the neural drive to muscles in humans with multi-channel intramuscular thin-film electrodes. <i>Journal of Physiology</i> , 2015, 593, 3789-3804.	2.9	87
12	Online Tremor Suppression Using Electromyography and Low-Level Electrical Stimulation. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2015, 23, 385-395.	4.9	87
13	Reorganization of muscle synergies during multidirectional reaching in the horizontal plane with experimental muscle pain. <i>Journal of Neurophysiology</i> , 2014, 111, 1615-1630.	1.8	64
14	Experimental Muscle Pain Impairs the Synergistic Modular Control of Neck Muscles. <i>PLoS ONE</i> , 2015, 10, e0137844.	2.5	63
15	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.	1.8	55
16	Deep Learning for Robust Decomposition of High-Density Surface EMG Signals. <i>IEEE Transactions on Biomedical Engineering</i> , 2021, 68, 526-534.	4.2	52
17	Peripheral nerve transfers change target muscle structure and function. <i>Science Advances</i> , 2019, 5, eaau2956.	10.3	46
18	Electrical Stimulation of Afferent Pathways for the Suppression of Pathological Tremor. <i>Frontiers in Neuroscience</i> , 2017, 11, 178.	2.8	44

#	ARTICLE	IF	CITATIONS
19	Reduced force steadiness in women with neck pain and the effect of short term vibration. <i>Journal of Electromyography and Kinesiology</i> , 2011, 21, 283-290.	1.7	43
20	Broadband Prosthetic Interfaces: Combining Nerve Transfers and Implantable Multichannel EMG Technology to Decode Spinal Motor Neuron Activity. <i>Frontiers in Neuroscience</i> , 2017, 11, 421.	2.8	39
21	Specificity of surface EMG recordings for gastrocnemius during upright standing. <i>Scientific Reports</i> , 2017, 7, 13300.	3.3	36
22	Robust decomposition of single-channel intramuscular EMG signals at low force levels. <i>Journal of Neural Engineering</i> , 2011, 8, 066015.	3.5	30
23	A Real-Time Method for Decoding the Neural Drive to Muscles Using Single-Channel Intra-Muscular EMG Recordings. <i>International Journal of Neural Systems</i> , 2017, 27, 1750025.	5.2	29
24	Physiological recruitment of motor units by high-frequency electrical stimulation of afferent pathways. <i>Journal of Applied Physiology</i> , 2015, 118, 365-376.	2.5	28
25	Synergistic Organization of Neural Inputs from Spinal Motor Neurons to Extrinsic and Intrinsic Hand Muscles. <i>Journal of Neuroscience</i> , 2021, 41, 6878-6891.	3.6	28
26	Decoding motor neuron activity from epimysial thin-film electrode recordings following targeted muscle reinnervation. <i>Journal of Neural Engineering</i> , 2019, 16, 016010.	3.5	27
27	A thin-film multichannel electrode for muscle recording and stimulation in neuroprosthetics applications. <i>Journal of Neural Engineering</i> , 2019, 16, 026035.	3.5	26
28	Motor unit territories in human genioglossus estimated with multichannel intramuscular electrodes. <i>Journal of Applied Physiology</i> , 2018, 124, 664-671.	2.5	23
29	Intramuscular Stimulation of Muscle Afferents Attains Prolonged Tremor Reduction in Essential Tremor Patients. <i>IEEE Transactions on Biomedical Engineering</i> , 2021, 68, 1768-1776.	4.2	22
30	Fundamental Concepts of Bipolar and High-Density Surface EMG Understanding and Teaching for Clinical, Occupational, and Sport Applications: Origin, Detection, and Main Errors. <i>Sensors</i> , 2022, 22, 4150.	3.8	22
31	Voluntary and tremorogenic inputs to motor neuron pools of agonist/antagonist muscles in essential tremor patients. <i>Journal of Neurophysiology</i> , 2019, 122, 2043-2053.	1.8	19
32	Multichannel surface EMG based estimation of bilateral hand kinematics during movements at multiple degrees of freedom. , 2010, 2010, 6066-9.		17
33	Non-invasive analysis of motor neurons controlling the intrinsic and extrinsic muscles of the hand. <i>Journal of Neural Engineering</i> , 2020, 17, 046033.	3.5	17
34	Intramuscular EMG-Driven Musculoskeletal Modelling: Towards Implanted Muscle Interfacing in Spinal Cord Injury Patients. <i>IEEE Transactions on Biomedical Engineering</i> , 2022, 69, 63-74.	4.2	15
35	A new generation of double-sided intramuscular electrodes for multi-channel recording and stimulation. , 2015, 2015, 7135-8.		14
36	Wearable multichannel haptic device for encoding proprioception in the upper limb. <i>Journal of Neural Engineering</i> , 2020, 17, 056035.	3.5	12

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37	An fMRI Compatible Smart Device for Measuring Palmar Grasping Actions in Newborns. <i>Sensors</i> , 2020, 20, 6040.	3.8	11
38	Real-time foetal ECG extraction with JADE on floating point DSP. <i>Electronics Letters</i> , 2007, 43, 963.	1.0	10
39	Modulation of reciprocal inhibition at the wrist as a neurophysiological correlate of tremor suppression: a pilot healthy subject study. , 2019, 2019, 6267-6272.		9
40	Comparison of Intramuscular and Surface Electromyography Recordings Towards the Control of Wearable Robots for Incomplete Spinal Cord Injury Rehabilitation. , 2020, , .		8
41	Online Tracking of the Phase Difference Between Neural Drives to Antagonist Muscle Pairs in Essential Tremor Patients. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2022, 30, 709-718.	4.9	7
42	Development of functional organization within the sensorimotor network across the perinatal period. <i>Human Brain Mapping</i> , 2022, 43, 2249-2261.	3.6	6
43	Proof of concept for multiple nerve transfers to a single target muscle. <i>ELife</i> , 2021, 10, .	6.0	5
44	A high-density surface EMG framework for the study of motor neurons controlling the intrinsic and extrinsic muscles of the hand. , 2019, 2019, 2307-2310.		4
45	Signing up to motor signatures: a unique link to action. <i>Journal of Applied Physiology</i> , 2019, 127, 1163-1164.	2.5	4
46	Development of Multi-Channel Intramuscular EMG Recording Electrodes. <i>Biomedizinische Technik</i> , 2013, 58 Suppl 1, .	0.8	2
47	Multi-channel EMG recording and muscle stimulation electrodes for diagnosis and treatment of tremor. , 2014, , .		2
48	Adaptive learning in the detection of Movement Related Cortical Potentials improves usability of associative Brain-Computer Interfaces. , 2019, 2019, 3079-3082.		2
49	Prospects of Neurorehabilitation Technologies Based on Robust Decoding of the Neural Drive to Muscles Following Targeted Muscle Reinnervation. <i>Biosystems and Biorobotics</i> , 2017, , 1359-1363.	0.3	1
50	Editorial: Current Trends in Deep Learning for Movement Analysis and Prosthesis Control. <i>Frontiers in Neuroscience</i> , 2022, 16, 889202.	2.8	1
51	Simultaneous and Proportional Myocontrol of Multiple Degrees of Freedom. <i>Biosystems and Biorobotics</i> , 2013, , 1225-1228.	0.3	0
52	Motor Unit Characteristics After Selective Nerve Transfers. , 2021, , 83-91.		0
53	Spinal Interfacing via Muscle Recordings for Neuroprosthesis Control. , 2021, , 1-29.		0
54	The Pop and Color of Our Electrified Muscles. <i>Frontiers for Young Minds</i> , 0, 10, .	0.8	0