Marco Capogrosso

List of Publications by Year
in descending order

36	5,011	304368 22	414034 32
papers	citations	h-index	g-index

44	44	44	5031
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Activity-dependent spinal cord neuromodulation rapidly restores trunk and leg motor functions after complete paralysis. Nature Medicine, 2022, 28, 260-271.	15.2	174
2	Preferential activation of proprioceptive and cutaneous sensory fibers compared to motor fibers during cervical transcutaneous spinal cord stimulation: A computational study. Journal of Neural Engineering, 2022, , .	1.8	11
3	Poststroke arm and hand paresis: should we target the cervical spinal cord?. Trends in Neurosciences, 2022, 45, 568-578.	4.2	12
4	Epidural electrical stimulation of the cervical dorsal roots restores voluntary upper limb control in paralyzed monkeys. Nature Neuroscience, 2022, 25, 924-934.	7.1	30
5	Neuroprosthetic baroreflex controls haemodynamics after spinal cord injury. Nature, 2021, 590, 308-314.	13.7	96
6	Recruitment of upper-limb motoneurons with epidural electrical stimulation of the cervical spinal cord. Nature Communications, 2021, 12, 435.	5.8	92
7	A Computational Model of the Interaction Between Residual Cortico-Spinal Inputs and Spinal Cord Stimulation After Paralysis. , 2021, , .		2
8	Motor improvements enabled by spinal cord stimulation combined with physical training after spinal cord injury: review of experimental evidence in animals and humans. Bioelectronic Medicine, 2021, 7, 16.	1.0	25
9	Intrafascicular peripheral nerve stimulation produces fine functional hand movements in primates. Science Translational Medicine, 2021, 13, eabg6463.	5.8	30
10	Bayesian optimization of peripheral intraneural stimulation protocols to evoke distal limb movements. Journal of Neural Engineering, 2021, 18, 066046.	1.8	9
11	Spatiotemporal Maps of Proprioceptive Inputs to the Cervical Spinal Cord During Three-Dimensional Reaching and Grasping. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 1668-1677.	2.7	8
12	Biophysics of Temporal Interference Stimulation. Cell Systems, 2020, 11, 557-572.e5.	2.9	78
13	Bioelectronic Interfaces: Soft, Implantable Bioelectronic Interfaces for Translational Research (Adv.) Tj ETQq1 1 0.784314 rgBT /Overlo	11.1	4
14	A computational outlook on neurostimulation. Bioelectronic Medicine, 2020, 6, 10.	1.0	20
15	Soft, Implantable Bioelectronic Interfaces for Translational Research. Advanced Materials, 2020, 32, e1906512.	11.1	67
16	Microneurography as a tool to develop decoding algorithms for peripheral neuro-controlled hand prostheses. BioMedical Engineering OnLine, 2019, 18, 44.	1.3	10
17	Anatomically Realistic Computational Model to Assess the Specificity of Epidural Electrical Stimulation of the Cervical Spinal Cord. Biosystems and Biorobotics, 2019, , 44-48.	0.2	3
18	Advantages of soft subdural implants for the delivery of electrochemical neuromodulation therapies to the spinal cord. Journal of Neural Engineering, 2018, 15, 026024.	1.8	41

#	Article	IF	Citations
19	Closed-loop control of trunk posture improves locomotion through the regulation of leg proprioceptive feedback after spinal cord injury. Scientific Reports, 2018, 8, 76.	1.6	30
20	Selective Recruitment of Arm Motoneurons in Nonhuman Primates Using Epidural Electrical Stimulation of the Cervical Spinal Cord. , 2018, 2018, 1424-1427.		10
21	Long-term functionality of a soft electrode array for epidural spinal cord stimulation in a minipig model. , 2018, 2018, 1432-1435.		8
22	Targeted neurotechnology restores walking in humans with spinal cord injury. Nature, 2018, 563, 65-71.	13.7	708
23	Electrical spinal cord stimulation must preserve proprioception to enable locomotion in humans with spinal cord injury. Nature Neuroscience, 2018, 21, 1728-1741.	7.1	247
24	Configuration of electrical spinal cord stimulation through real-time processing of gait kinematics. Nature Protocols, 2018, 13, 2031-2061.	5.5	96
25	A multidirectional gravity-assist algorithm that enhances locomotor control in patients with stroke or spinal cord injury. Science Translational Medicine, 2017, 9, .	5.8	42
26	A Computational Framework for the Design of Spinal Neuroprostheses. Biosystems and Biorobotics, 2017, , 23-27.	0.2	0
27	A brainâ€“spine interface alleviating gait deficits after spinal cord injury in primates. Nature, 2016, 539, 284-288.	13.7	492
28	Spatiotemporal neuromodulation therapies engaging muscle synergies improve motor control after spinal cord injury. Nature Medicine, 2016, 22, 138-145.	15.2	274
29	Mechanisms Underlying the Neuromodulation of Spinal Circuits for Correcting Gait and Balance Deficits after Spinal Cord Injury. Neuron, 2016, 89, 814-828.	3.8	144
30	Chronic multichannel neural recordings from soft regenerative microchannel electrodes during gait. Scientific Reports, 2015, 5, 14363.	1.6	59
31	Electronic dura mater for long-term multimodal neural interfaces. Science, 2015, 347, 159-163.	6.0	845
32	Neuroprosthetic technologies to augment the impact of neurorehabilitation after spinal cord injury. Annals of Physical and Rehabilitation Medicine, 2015, 58, 232-237.	1.1	26
33	Restoring Natural Sensory Feedback in Real-Time Bidirectional Hand Prostheses. Science Translational Medicine, 2014, 6, 222ra19.	5.8	805
34	A Computational Model for Epidural Electrical Stimulation of Spinal Sensorimotor Circuits. Journal of Neuroscience, 2013, 33, 19326-19340.	1.7	320
35	Experimental Validation of a Hybrid Computational Model for Selective Stimulation Using Transverse Intrafascicular Multichannel Electrodes. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2012, 20, 395-404.	2.7	53
36	A Computational Model for the Stimulation of Rat Sciatic Nerve Using a Transverse Intrafascicular Multichannel Electrode. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2011, 19, 333-344.	2.7	97