Sabato Santaniello

List of Publications by Year
in descending order

56 papers	1,151 citations	687363 13 h-index	580821 25 g-index
61 all docs	61 docs citations	61 times ranked	1432 citing authors

#	Article	IF	Citations
1	COVID-19 detection from red blood cells using highly comparative time-series analysis (HCTSA) in digital holographic microscopy. Optics Express, 2022, 30, 1723.	3.4	19
2	Non-invasive suppression of essential tremor via phase-locked disruption of its temporal coherence. Nature Communications, 2021, 12, 363.	12.8	50
3	Loss of KCNQ2 or KCNQ3 Leads to Multifocal Time-Varying Activity in the Neonatal Forebrain<i>Ex Vivo</i>. ENeuro, 2021, 8, ENEURO.0024-21.2021.	1.9	6
4	Editorial: Towards the Next Generation of Deep Brain Stimulation Therapies: Technological Advancements, Computational Methods, and New Targets. Frontiers in Neuroscience, 2021, 15, 737737.	2.8	1
5	Transcranial direct current stimulation of cerebellum alters spiking precision in cerebellar cortex: A modeling study of cellular responses. PLoS Computational Biology, 2021, 17, e1009609.	3.2	12
6	The critical role of persistent sodium current in hippocampal gamma oscillations. Neuropharmacology, 2020, 162, 107787.	4.1	3
7	Role of cerebellar GABAergic dysfunctions in the origins of essential tremor. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 13592-13601.	7.1	49
8	Modulations in Oscillatory Activity of Globus Pallidus Internus Neurons During a Directed Hand Movement Taskâ€"A Primary Mechanism for Motor Planning. Frontiers in Systems Neuroscience, 2019, 13, 15.	2.5	1
9	Modularity-Based Detection of Ripples in Scalp EEG. , 2019, , .		0
10	Functional maturation of human neural stem cells in a 3D bioengineered brain model enriched with fetal brain-derived matrix. Scientific Reports, 2019, 9, 17874.	3.3	46
11	Decision Support System for Seizure Onset Zone Localization Based on Channel Ranking and High-Frequency EEG Activity. IEEE Journal of Biomedical and Health Informatics, 2019, 23, 1535-1545.	6.3	12
12	Systems approaches to optimizing deep brain stimulation therapies in Parkinsonâ€™s disease. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2018, 10, e1421.	6.6	17
13	Temporal Pattern of Ripple Events in Temporal Lobe Epilepsy: Towards a Pattern-based Localization of the Seizure Onset Zone. , 2018, 2018, 2288-2291.		6
14	Cortical Network Synchrony Under Applied Electrical Field in vitro. Frontiers in Neuroscience, 2018, 12, 630.	2.8	7
15	Decoding Kinematics Using Task-Independent Movement-Phase-Specific Encoding Models. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 2122-2132.	4.9	8
16	A novel HFO-based method for unsupervised localization of the seizure onset zone in drug-resistant epilepsy. , 2017, 2017, 1054-1057.		11
17	Effects of the temporal pattern of subthalamic deep brain stimulation on the neuronal complexity in the globus pallidus. , 2017, 2017, 3352-3355.		2
18	Closed-loop low-frequency DBS restores thalamocortical relay fidelity in a computational model of the motor loop. , 2017, 2017, 1954-1957.		3

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19	Using demographic and time series physiological features to classify sepsis in the intensive care unit. , 2016, 2016, 778-782.		5
20	Therapeutic mechanisms of high-frequency stimulation in Parkinsonâ€™s disease and neural restoration via loop-based reinforcement. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E586-95.	7.1	70
21	Task-Independent Cognitive State Transition Detection From Cortical Neurons During 3-D Reach-to-Grasp Movements. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2015, 23, 676-682.	4.9	15
22	Physiology of functional and effective networks in epilepsy. Clinical Neurophysiology, 2015, 126, 227-236.	1.5	107
23	Computing network-based features from physiological time series: Application to sepsis detection. , 2014, 2014, 3825-6.		0
24	Generalizing performance limitations of relay neurons: Application to Parkinson's disease. , 2014, 2014, 6573-6.		1
25	Modeling, estimation and control of neurons and neuronal networks. , 2014, , .		0
26	Computing network-based features from intracranial EEG time series data: Application to seizure focus localization. , 2014, 2014, 5812-5.		5
27	Network dynamics of the brain and influence of the epileptic seizure onset zone. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E5321-30.	7.1	306
28	An Optimal Control Approach to Seizure Detection in Drug-Resistant Epilepsy. , 2014, , 153-178.		4
29	State Dynamics of the Epileptic Brain. , 2013, , .		1
30	Reinforcement mechanisms in putamen during high frequency STN DBS: A point process study. , 2012, 2012, 1214-7.		9
31	Automatic seizure onset detection in drug-resistant epilepsy: A Bayesian optimal solution. , 2012, , .		1
32	A point process model-based framework reveals reinforcement mechanisms in striatum during high frequency STN DBS. , 2012, 2012, 1645-1650.		0
33	Point process modeling reveals anatomical non-uniform distribution across the Subthalamic Nucleus in Parkinson's disease. , 2012, 2012, 2539-42.		2
34	Quickest seizure onset detection in drug-resistant epilepsy. , 2012, , .		2
35	Towards automated navigation of deep brain stimulating electrodes: Analyzing neuronal activity near the target. , 2012, , .		1
36	Optimal Control-Based Bayesian Detection of Clinical and Behavioral State Transitions. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2012, 20, 708-719.	4.9	23

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37	Non-stationary discharge patterns in motor cortex under subthalamic nucleus deep brain stimulation. Frontiers in Integrative Neuroscience, 2012, 6, 35.	2.1	26
38	Quickest detection of drug-resistant seizures: An optimal control approach. Epilepsy and Behavior, 2011, 22, S49-S60.	1.7	51
39	Quickest Detection of State-Transition in Point Processes: Application to Neuronal Activity. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 10021-10026.	0.4	1
40	Closed-Loop Control of Deep Brain Stimulation: A Simulation Study. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2011, 19, 15-24.	4.9	175
41	Quickest detection of state-transition in point processes: Application to neuronal activity. , 2011, , .		0
42	A Bayesian framework for analyzing iEEG data from a rat model of epilepsy. , 2011, 2011, 1435-8.		11
43	Analyzing Local Field Potentials in the healthy basal ganglia under Deep Brain Stimulation. , 2010, , .		1
44	Point process models show temporal dependencies of basal ganglia nuclei under Deep Brain Stimulation. , 2010, 2010, 4152-5.		11
45	Modeling the motor striatum under Deep Brain Stimulation in normal and MPTP conditions. , 2010, 2010, 2065-8.		12
46	System identification of Local Field Potentials under Deep Brain Stimulation in a healthy primate. , 2010, 2010, 4144-7.		5
47	Modeling the effects of Deep Brain Stimulation on sensorimotor cortex in normal and MPTP conditions. , 2010, 2010, 2081-4.		13
48	Identification and analysis of local field potentials in Parkinson's disease under Nonlinear Delayed Feedback Stimulation.. , 2010, , .		2
49	Nicely Nonlinear LQ-based Control. , 2009, , .		0
50	Linear Quadratic control for restoring paralyzed muscles to standing through Functional Electrical Stimulation in paraplegic patients. , 2009, , .		0
51	A biophysically inspired microelectrode recording-based model for the subthalamic nucleus activity in Parkinson's disease. Biomedical Signal Processing and Control, 2008, 3, 203-211.	5.7	9
52	DBS feedback controlled tremor suppression in Parkinson’s disease. , 2008, , .		1
53	Adaptive feedback control in deep brain stimulation: a simulation study. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 11624-11629.	0.4	4
54	Basal Ganglia Modeling in Healthy and Parkinson's Disease State. I. Isolated Neurons Activity. Proceedings of the American Control Conference, 2007, , .	0.0	13

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55	Basal Ganglia Modeling in Healthy and Parkinson's Disease State. II. Network-based Multi-Units Simulation. Proceedings of the American Control Conference, 2007, , .	0.0	5
56	Dynamic modeling and statistical characterization of subthalamic nucleus neural activity in Parkinson's disease patients. , 2006, , .		3