Mesut Åahin

List of Publications by Year
in descending order

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73	711	623188	610482
papers	citations	14 h-index	24 g-index

84	84	84	772
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The size of via holes influence the amplitude and selectivity of neural signals in Micro-ECoG arrays. BMC Biomedical Engineering, 2022, 4, 3.	1.7	0
2	Selective neural stimulation by leveraging electrophysiological differentiation and using pre-pulsing and non-rectangular waveforms. Journal of Computational Neuroscience, 2022, 50, 313-330.	0.6	2
3	Wireless Microstimulators. , 2022, , 3647-3656.		0
4	Entrainment of cerebellar Purkinje cell spiking activity using pulsed ultrasound stimulation. Brain Stimulation, 2021, 14, 598-606.	0.7	17
5	A Wearable Ultrasonic Neurostimulator - Part I: A 1D CMUT Phased Array System for Chronic Implantation in Small Animals. IEEE Transactions on Biomedical Circuits and Systems, 2021, 15, 692-704.	2.7	12
6	Entrainment of cerebellar purkinje cells with directional AC electric fields in anesthetized rats. Brain Stimulation, 2020, 13, 1548-1558.	0.7	24
7	Optical Isolation of Physiological Amplifiers. , 2020, , 123-132.		0
8	Electrophysiological Amplifier. , 2020, , 11-38.		0
9	Extraction of Respiratory Rate from ECG (ECG-Derived Respiration-EDR). , 2020, , 133-140.		0
10	Oscillometric Method for Measurement of Blood Pressure. , 2020, , 73-86.		0
11	Prediction of Forelimb EMGs and Movement Phases from Corticospinal Signals in the Rat During the Reach-to-Pull Task. International Journal of Neural Systems, 2019, 29, 1950009.	3.2	5
12	Genioglossal response to mechanical vibrations of the mandible and the submandibular muscles. Journal of Applied Physiology, 2019, 127, 11-21.	1.2	0
13	Electrical fields induced inside the rat brain with skin, skull, and dural placements of the current injection electrode. PLoS ONE, 2019, 14, e0203727.	1.1	21
14	A Sub-Millimeter Lateral Resolution Ultrasonic Beamforming System for Brain Stimulation in Behaving Animals. , 2019, 2019, 6462-6465.		8
15	Modulation of Multiunit Spike Activity by Transcranial AC Stimulation (tACS) in the Rat Cerebellar Cortex. , 2019, 2019, 5192-5195.		7
16	Electric Fields Induced By Transcutaneous And Intracranial Current Injections In The Rat Brain. , 2018, 2018, 2252-2255.		3
17	Carbon Fiber Electrodes for in Vivo Spinal Cord Recordings. , 2018, 2018, 5069-5072.		6
18	Towards an Untethered Ultrasound Beamforming System for Brain Stimulation in Behaving Animals. , 2018, 2018, 1596-1599.		6

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19	Electrophysiological Correlates of Blast-Wave Induced Cerebellar Injury. Scientific Reports, 2018, 8, 13633.	1.6	6
20	Convolutional Networks Outperform Linear Decoders in Predicting EMG From Spinal Cord Signals. Frontiers in Neuroscience, 2018, 12, 689.	1.4	8
21	Polydimethylsiloxane-based optical waveguides for tetherless powering of floating microstimulators. Journal of Biomedical Optics, 2017, 22, 055005.	1.4	14
22	Rat forelimb movement components segregated by corticospinal tract activity. , 2017, , .		0
23	Active C4 Electrodes for Local Field Potential Recording Applications. Sensors, 2016, 16, 198.	2.1	4
24	Prediction of forelimb muscle EMGs from the corticospinal signals in rats. , 2016, 2016, 2780-2783.		3
25	A PDMS-based optical waveguide for transcutaneous powering of microelectrode arrays. , 2016, 2016, 4475-4478.		2
26	High frequency synchrony in the cerebellar cortex during goal directed movements. Frontiers in Systems Neuroscience, 2015, 9, 98.	1.2	9
27	Chronic tissue response to untethered microelectrode implants in the rat brain and spinal cord. Journal of Neural Engineering, 2015, 12, 016019.	1.8	57
28	Improved selectivity from a wavelength addressable device for wireless stimulation of neural tissue. Frontiers in Neuroengineering, 2014, 7, 5.	4.8	17
29	Encoding of forelimb forces by corticospinal tract activity in the rat. Frontiers in Neuroscience, 2014, 8, 62.	1.4	13
30	Electrophysiological monitoring of injury progression in the rat cerebellar cortex. Frontiers in Systems Neuroscience, 2014, 8, 197.	1.2	15
31	Temperature elevation profile inside the rat brain induced by a laser beam. Journal of Biomedical Optics, 2014, 19, 015009.	1.4	10
32	Spatial patterns of high-frequency oscillations in the rat cerebellar cortex. , 2014, 2014, 4107-10.		0
33	Feature selection on single-lead ECG for obstructive sleep apnea diagnosis. Turkish Journal of Electrical Engineering and Computer Sciences, 2014, 22, 465-478.	0.9	6
34	Wireless Microstimulators. , 2014, , 1-11.		0
35	An electroacoustic recording device for wireless sensing of neural signals. , 2013, 2013, 3086-8.		1
36	Near-infrared light penetration profile in the rodent brain. Journal of Biomedical Optics, 2013, 18, 075001.	1.4	27

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37	FEA modeling of temperature elevation in neural tissue illuminated by a laser: Transient effects. , 2013, , .		1
38	Electrophysiological monitoring of cerebellar evoked potentials following fluid percussion injury. , 2013, , .		0
39	Differential effects of ketamine/xylazine anesthesia on the cerebral and cerebellar cortical activities in the rat. Journal of Neurophysiology, 2013, 109, 1435-1443.	0.9	20
40	Wireless Microstimulators. , 2013, , 1-11.		0
41	Can motor volition be extracted from the spinal cord?. Journal of NeuroEngineering and Rehabilitation, 2012, 9, 41.	2.4	13
42	Effect of Anesthesia on spontaneous activity and evoked potentials of the cerebellar cortex. , 2012, 2012, 835-8.		3
43	Addressable floating light activated micro-electrical stimulators for wireless neurostimulation. , 2011, , .		5
44	A 16 × 16 multi-electrode array with integrated CMOS amplifiers for neural signal recording. , 2011, , .		1
45	Intraspinal stimulation with light activated micro-stimulators. , 2011, , .		3
46	Chronic recordings from the rat spinal cord descending tracts with microwires. , 2011, 2011, 2993-6.		3
47	Feasibility of Neural Stimulation With Floating-Light-Activated Microelectrical Stimulators. IEEE Transactions on Biomedical Circuits and Systems, 2011, 5, 179-188.	2.7	21
48	Temperature elevation inside neural tissue illuminated by NIR laser. , 2011, 2011, 3987-9.		1
49	Floating light-activated microelectrical stimulators tested in the rat spinal cord. Journal of Neural Engineering, 2011, 8, 056012.	1.8	45
50	Wireless Microstimulators for Neural Prosthetics. Critical Reviews in Biomedical Engineering, 2011, 39, 63-77.	0.5	22
51	Characterization of neural activity recorded from the descending tracts of the rat spinal cord. Frontiers in Neuroscience, 2010, 4, 21.	1.4	12
52	Signal characteristics of cerebellar activity recorded with 2D micro-electrode arrays. , 2009, 2009, 2937-9.		1
53	In Vitro Testing of Floating Light Activated Micro-Electrical Stimulators. , 2009, 2009, 626-9.		7
54	NIR light penetration in unfrozen samples of rat brain gray matter. , 2009, , .		0

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55	Spinal cord recordings in rats during skilled reaching task. , 2009, 2009, 582-5.		4
56	Non-rectangular waveforms for neural stimulation with practical electrodes. Journal of Neural Engineering, 2007, 4, 227-233.	1.8	129
57	Optimal Pulse Widths for Effective Use of the Electrode Surface Area. , 2007, , .		0
58	NIR Light Penetration Depth in the Rat Peripheral Nerve and Brain Cortex. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 1723-5.	0.5	15
59	Finite Element Analysis of a Floating Microstimulator. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2007, 15, 227-234.	2.7	9
60	Organization in the descending tracts of the dorsolateral funiculus in the cat. Brain Research, 2006, 1117, 61-68.	1.1	0
61	Multi-Channel Recordings of the Motor Activity From the Spinal Cord of Behaving Rats. , 2006, 2006, 2288-91.		2
62	Charge Injection Capacity of TiN Electrodes for an Extended Voltage Range. , 2006, 2006, 890-2.		9
63	Extraction of motor activity from the cervical spinal cord of behaving rats. Journal of Neural Engineering, 2006, 3, 287-292.	1.8	11
64	Charge Injection Capacity of TiN Electrodes for an Extended Voltage Range. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0
65	Multi-Channel Recordings of the Motor Activity From the Spinal Cord of Behaving Rats. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0
66	A low-noise preamplifier for nerve cuff electrodes. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2005, 13, 561-565.	2.7	4
67	Separation of spinal cord motor signals using the FastICA method. Journal of Neural Engineering, 2005, 2, 90-96.	1.8	7
68	Dilation of the oropharynx via selective stimulation of the hypoglossal nerve. Journal of Neural Engineering, 2005, 2, 73-80.	1.8	10
69	Organization of the fibers in the dorsolateral funiculus of the cervical spinal cord in the cat. , 2004, 2004, 4696-9.		1
70	Selective Stimulation of the Canine Hypoglossal Nerve Using a Multi-contact Cuff Electrode. Annals of Biomedical Engineering, 2004, 32, 511-519.	1.3	40
71	Information Capacity of the Corticospinal Tract Recordings as a Neural Interface. Annals of Biomedical Engineering, 2004, 32, 823-830.	1.3	3
72	Activation patterns of the tongue muscles with selective stimulation of the hypoglossal nerve. , 2004, 2004, 4275-8.		0

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73	Finite element analysis of a microelectrode on a substrate. , 2004, 2004, 4157-9.		5