Nicholas Lachlan Opie

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2558755/publications.pdf

Version: 2024-02-01

39	1,219	567144	434063
papers	citations	15 h-index	31 g-index

41	41	41	1357
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The potential of closedâ€loop endovascular neurostimulation as a viable therapeutic approach for drugâ€resistant epilepsy: A critical review. Artificial Organs, 2022, 46, 337-348.	1.0	3
2	Motor neuroprosthesis implanted with neurointerventional surgery improves capacity for activities of daily living tasks in severe paralysis: first in-human experience. Journal of NeuroInterventional Surgery, 2021, 13, 102-108.	2.0	106
3	Sensor Modalities for Brain-Computer Interface Technology: A Comprehensive Literature Review. Neurosurgery, 2020, 86, E108-E117.	0.6	47
4	Mechanical suitability of an endovascular braincomputer interface. , 2020, , .		2
5	Endovascular Neuromodulation: Safety Profile and Future Directions. Frontiers in Neurology, 2020, 11, 351.	1.1	16
6	Distinct Neural Correlates Underlie Inhibitory Mechanisms of Motor Inhibition and Motor Imagery Restraint. Frontiers in Behavioral Neuroscience, 2020, 14, 77.	1.0	4
7	<italic>In Vivo</italic> Impedance Characterization of Cortical Recording Electrodes Shows Dependence on Electrode Location and Size. IEEE Transactions on Biomedical Engineering, 2019, 66, 675-681.	2.5	11
8	Removing the need for invasive brain surgery: the potential of stent electrodes. Bioelectronics in Medicine, 2019, 2, 9-11.	2.0	3
9	Neural Stimulation with an Endovascular Brain-Machine Interface. , 2019, , .		6
10	Near-Field Wireless Power Transfer to Stent-Based Biomedical Implants. IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology, 2018, 2, 193-200.	2.3	27
11	Spatially dynamic recurrent information flow across longâ€range dorsal motor network encodes selective motor goals. Human Brain Mapping, 2018, 39, 2635-2650.	1.9	9
12	An ovine model of cerebral catheter venography for implantation of an endovascular neural interface. Journal of Neurosurgery, 2018, 128, 1020-1027.	0.9	23
13	7T-fMRI: Faster temporal resolution yields optimal BOLD sensitivity for functional network imaging specifically at high spatial resolution. NeuroImage, 2018, 164, 214-229.	2.1	27
14	Visual evoked potentials determine chronic signal quality in a stent-electrode endovascular neural interface. Biomedical Physics and Engineering Express, 2018, 4, 055018.	0.6	8
15	A Stent-Based Power and Data Link for Sensing Intravascular Biological Indicators. , 2018, 2, 1-4.		5
16	Effect of Implant Duration, Anatomical Location and Electrode Orientation on Bandwidth Recorded with a Chronically Implanted Endovascular Stent-Electrode Array. , 2018, 2018, 1074-1077.		1
17	Cortical Brain Stimulation with Endovascular Electrodes. , 2018, 2018, 3088-3091.		7
18	Focal stimulation of the sheep motor cortex with a chronically implanted minimally invasive electrode array mounted on an endovascular stent. Nature Biomedical Engineering, 2018, 2, 907-914.	11.6	77

#	Article	IF	Citations
19	Feasibility of identifying the ideal locations for motor intention decoding using unimodal and multimodal classification at 7T-fMRI. Scientific Reports, 2018, 8, 15556.	1.6	4
20	Signal quality of simultaneously recorded endovascular, subdural and epidural signals are comparable. Scientific Reports, 2018, 8, 8427.	1.6	31
21	Optimized partial-coverage functional analysis pipeline (OPFAP): a semi-automated pipeline for skull stripping and co-registration of partial-coverage, ultra-high-field functional images. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2018, 31, 621-632.	1.1	4
22	The ovine motor cortex: A review of functional mapping and cytoarchitecture. Neuroscience and Biobehavioral Reviews, 2017, 80, 306-315.	2.9	23
23	Micro-CT and Histological Evaluation of an Neural Interface Implanted Within a Blood Vessel. IEEE Transactions on Biomedical Engineering, 2017, 64, 928-934.	2.5	35
24	Advanced Imaging of Intracranial Atherosclerosis: Lessons from Interventional Cardiology. Frontiers in Neurology, 2017, 8, 387.	1.1	16
25	Development and Implementation of a Corriedale Ovine Brain Atlas for Use in Atlas-Based Segmentation. PLoS ONE, 2016, 11, e0155974.	1.1	14
26	The evolution of endovascular electroencephalography: historical perspective and future applications. Neurosurgical Focus, 2016, 40, E7.	1.0	22
27	Suitability of nitinol electrodes in neural prostheses such as endovascular neural interfaces. , 2016, 2016, 4463-4466.		2
28	Chronic impedance spectroscopy of an endovascular stent-electrode array. Journal of Neural Engineering, 2016, 13, 046020.	1.8	35
29	Feasibility of a chronic, minimally invasive endovascular neural interface. , 2016, 2016, 4455-4458.		10
30	Development of a Magnetic Attachment Method for Bionic Eye Applications. Artificial Organs, 2016, 40, E12-24.	1.0	9
31	Minimally invasive endovascular stent-electrode array for high-fidelity, chronic recordings of cortical neural activity. Nature Biotechnology, 2016, 34, 320-327.	9.4	210
32	Reproducibility of an instrumented measure for passive ankle dorsiflexion in conscious and anaesthetized children with cerebral palsy. Developmental Medicine and Child Neurology, 2014, 56, 378-385.	1.1	7
33	Optical Coherence Tomographyâ€Guided Retinal Prosthesis Design: Model of Degenerated Retinal Curvature and Thickness for Patientâ€Specific Devices. Artificial Organs, 2014, 38, E82-94.	1.0	9
34	First-in-Human Trial of a Novel Suprachoroidal Retinal Prosthesis. PLoS ONE, 2014, 9, e115239.	1.1	274
35	Development of a surgical procedure for implantation of a prototype suprachoroidal retinal prosthesis. Clinical and Experimental Ophthalmology, 2014, 42, 665-674.	1.3	44
36	Current steering for high resolution retinal implants. , 2013, 2013, 2760-3.		1

#	Article	IF	Citations
37	Retinal Prosthesis Safety: Alterations in Microglia Morphology due to Thermal Damage and Retinal Implant Contact. , 2012, 53, 7802.		26
38	Heating of the Eye by a Retinal Prosthesis: Modeling, Cadaver and In Vivo Study. IEEE Transactions on Biomedical Engineering, 2012, 59, 339-345.	2.5	46
39	Thermal heating of a retinal prosthesis: Thermal model and in-vitro study. , 2010, 2010, 1597-600.		10