Cristin G Welle

List of Publications by Year
in descending order

31 papers	1,061 citations	623188 14 h-index	552369 26 g-index
37 all docs	37 docs citations	37 times ranked	1621 citing authors

#	Article	IF	Citations
1	Miniature structured illumination microscope for in vivo 3D imaging of brain structures with optical sectioning. Biomedical Optics Express, 2022, 13, 2530.	1.5	15
2	Development and characterization of a chronic implant mouse model for vagus nerve stimulation. ELife, 2021, 10, .	2.8	28
3	Closed-loop automated reaching apparatus (CLARA) for interrogating complex motor behaviors. Journal of Neural Engineering, 2021, 18, 045015.	1.8	5
4	Longitudinal neural and vascular structural dynamics produced by chronic microelectrode implantation. Biomaterials, 2020, 238, 119831.	5.7	19
5	Motor learning promotes remyelination via new and surviving oligodendrocytes. Nature Neuroscience, 2020, 23, 819-831.	7.1	208
6	Neural engineering: the process, applications, and its role in the future of medicine. Journal of Neural Engineering, 2019, 16, 063002.	1.8	14
7	Longitudinal Functional Assessment of Brain Injury Induced by High-Intensity Ultrasound Pulse Sequences. Scientific Reports, 2019, 9, 15518.	1.6	4
8	A rat model for assessing the long-term safety and performance of peripheral nerve electrode arrays. Journal of Neuroscience Methods, 2019, 328, 108437.	1.3	7
9	Cleveland neural engineering workshop 2017: strategic evaluation of neural engineering. Bioelectronic Medicine, 2019, 5, 2.	1.0	2
10	Epidermal Electrode Technology for Detecting Ultrasonic Perturbation of Sensory Brain Activity. IEEE Transactions on Biomedical Engineering, 2018, 65, 1272-1280.	2.5	9
11	Innovations in electrical stimulation harness neural plasticity to restore motor function. Bioelectronics in Medicine, 2018, 1, 251-263.	2.0	5
12	Characterizing Longitudinal Changes in the Impedance Spectra of In-Vivo Peripheral Nerve Electrodes. Micromachines, 2018, 9, 587.	1.4	26
13	Automated reactive accelerated aging for rapid in vitro evaluation of neural implant performance. Review of Scientific Instruments, 2018, 89, 094301.	0.6	20
14	Rapid Detection and Monitoring of Brain Injury Using Sensory-Evoked Responses. Neuromethods, 2018, , 243-256.	0.2	0
15	New Light on Gamma Oscillations. Neuron, 2017, 93, 247-249.	3.8	8
16	Rodent model for assessing the long term safety and performance of peripheral nerve recording electrodes. Journal of Neural Engineering, 2017, 14, 016008.	1.8	40
17	Alterations in neurovascular coupling following acute traumatic brain injury. Neurophotonics, 2017, 4, 1.	1.7	22
18	(Invited) Invasive Cortical Microelectrode Array Longitudinal Performance: Temporal Dynamics of Electrical Impedance Spectroscopy and Multiunit Activity. ECS Meeting Abstracts, 2017, , .	0.0	0

#	Article	IF	Citations
19	Sensory-driven and spontaneous gamma oscillations engage distinct cortical circuitry. Journal of Neurophysiology, 2016, 115, 1821-1835.	0.9	39
20	Acute insertion effects of penetrating cortical microelectrodes imaged with quantitative optical coherence angiography. Neurophotonics, 2016, 3, 1.	1.7	7
21	Tissue damage thresholds during therapeutic electrical stimulation. Journal of Neural Engineering, 2016, 13, 021001.	1.8	258
22	Real-Time Detection and Monitoring of Acute Brain Injury Utilizing Evoked Electroencephalographic Potentials. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2016, 24, 1003-1012.	2.7	28
23	Real time imaging of peripheral nerve vasculature using optical coherence angiography. , 2016, , .		1
24	Acute changes associated with electrode insertion measured with optical coherence microscopy. , 2016, , .		0
25	Image quality metrics for optical coherence angiography. Biomedical Optics Express, 2015, 6, 2435.	1.5	27
26	Rapid evaluation of the durability of cortical neural implants using accelerated aging with reactive oxygen species. Journal of Neural Engineering, 2015, 12, 026003.	1.8	150
27	Optical coherence microscopy of mouse cortical vasculature surrounding implanted electrodes. Proceedings of SPIE, 2014, , .	0.8	2
28	Longitudinal vascular dynamics following cranial window and electrode implantation measured with speckle variance optical coherence angiography. Biomedical Optics Express, 2014, 5, 2823.	1.5	29
29	Ray-tracing study on the post-scanner variable beam expansion optics in a two-photon microscopy system. , 2012, , .		0
30	FDA Regulation of Invasive Neural Recording Electrodes: A Daunting Task for Medical Innovators. IEEE Pulse, 2012, 3, 37-41.	0.1	7
31	Two-Photon Excitation of Potentiometric Probes Enables Optical Recording of Action Potentials From Mammalian Nerve Terminals In Situ. Journal of Neurophysiology, 2008, 99, 1545-1553.	0.9	65