RichÃ¡rd FiÃ¡th

List of Publications by Year
in descending order

33 papers	1,074 citations	516710 16 h-index	501196 28 g-index
37 all docs	37 docs citations	37 times ranked	1785 citing authors

#	Article	IF	Citations
1	A community-based transcriptomics classification and nomenclature of neocortical cell types. Nature Neuroscience, 2020, 23, 1456-1468.	14.8	183
2	Astrocytes convert network excitation to tonic inhibition of neurons. BMC Biology, 2012, 10, 26.	3.8	142
3	Time Multiplexed Active Neural Probe with 1356 Parallel Recording Sites. Sensors, 2017, 17, 2388.	3.8	141
4	Slow insertion of silicon probes improves the quality of acute neuronal recordings. Scientific Reports, 2019, 9, 111.	3.3	67
5	A silicon-based neural probe with densely-packed low-impedance titanium nitride microelectrodes for ultrahigh-resolution in vivo recordings. Biosensors and Bioelectronics, 2018, 106, 86-92.	10.1	61
6	Two-Dimensional Multi-Channel Neural Probes With Electronic Depth Control. IEEE Transactions on Biomedical Circuits and Systems, 2011, 5, 403-412.	4.0	51
7	Spike detection and sorting with deep learning. Journal of Neural Engineering, 2020, 17, 016038.	3.5	39
8	Laminar analysis of the slow wave activity in the somatosensory cortex of anesthetized rats. European Journal of Neuroscience, 2016, 44, 1935-1951.	2.6	37
9	Hybrid intracerebral probe with integrated bare LED chips for optogenetic studies. Biomedical Microdevices, 2017, 19, 49.	2.8	36
10	Large-scale recording of thalamocortical circuits: in vivo electrophysiology with the two-dimensional electronic depth control silicon probe. Journal of Neurophysiology, 2016, 116, 2312-2330.	1.8	33
11	A Multimodal, SU-8 - Platinum - Polyimide Microelectrode Array for Chronic In Vivo Neurophysiology. PLoS ONE, 2015, 10, e0145307.	2.5	30
12	A novel multisite silicon probe for high quality laminar neural recordings. Sensors and Actuators A: Physical, 2011, 166, 14-21.	4.1	28
13	The neural tissue around SU-8 implants: A quantitative in vivo biocompatibility study. Materials Science and Engineering C, 2020, 112, 110870.	7.3	28
14	Fine-scale mapping of cortical laminar activity during sleep slow oscillations using high-density linear silicon probes. Journal of Neuroscience Methods, 2019, 316, 58-70.	2.5	25
15	Long-term recording performance and biocompatibility of chronically implanted cylindrically-shaped, polymer-based neural interfaces. Biomedizinische Technik, 2018, 63, 301-315.	0.8	20
16	Spatial Information Based OSort for Real-Time Spike Sorting Using FPGA. IEEE Transactions on Biomedical Engineering, 2021, 68, 99-108.	4.2	19
17	Recording site placement on planar silicon-based probes affects signal quality in acute neuronal recordings. Scientific Reports, 2021, 11, 2028.	3.3	16
18	Tunable Low Noise Amplifier Implementation With Low Distortion Pseudo-Resistance for in Vivo Brain Activity Measurement. IEEE Sensors Journal, 2014, 14, 1357-1363.	4.7	15

#	Article	IF	Citations
19	In Vivo Measurements With Robust Silicon-Based Multielectrode Arrays With Extreme Shaft Lengths. IEEE Sensors Journal, 2013, 13, 3263-3269.	4.7	13
20	FPGA-based neural probe positioning to improve spike sorting with OSort algorithm. , 2017, , .		12
21	In vivo validation of the electronic depth control probes. Biomedizinische Technik, 2014, 59, 283-9.	0.8	8
22	ELVISort: encoding latent variables for instant sorting, an artificial intelligence-based end-to-end solution. Journal of Neural Engineering, 2021, 18, 046033.	3.5	7
23	Two-dimensional multi-channel neural probes with electronic depth control. , 2010, , .		6
24	A novel multisite silicon probe for laminar neural recordings. Procedia Computer Science, 2011, 7, 310-311.	2.0	6
25	Neural and selfâ€reported reward responsiveness are associated with dispositional affectivity and emotion dysregulation in adolescents with evidence for convergent and incremental validity. Psychophysiology, 2021, 58, e13723.	2.4	5
26	Dataset of cortical activity recorded with high spatial resolution from anesthetized rats. Scientific Data, 2021, 8, 180.	5.3	5
27	Reliability of reward ERPs in middleâ€late adolescents using a custom and a standardized preprocessing pipeline. Psychophysiology, 2022, 59, e14043.	2.4	5
28	From End to End: Gaining, Sorting, and Employing High-Density Neural Single Unit Recordings. Frontiers in Neuroinformatics, 0, 16, .	2.5	5
29	High channel count electrode system to investigate thalamocortical interactions. Procedia Computer Science, 2011, 7, 178-179.	2.0	2
30	A silicon-based spiky probe providing improved cell accessibility during in vitro slice recordings. Sensors and Actuators B: Chemical, 2019, 297, 126649.	7.8	2
31	FPGA-based real-time multichannel neural dataset generation. , 2017, , .		1
32	Capturing The Electrical Activity Of Brain Cells With High Resolution: Novel High-Density Sensors Developed For Neuroscience. , 2018, , .		0
33	ELVISort: Encoding Latent Variables for Instant Sorting, an Artificial Intelligence-Based End-to-End Solution. SSRN Electronic Journal, 0, , .	0.4	0