Dion Khodagholy

List of Publications by Year
in descending order

38 papers	6,273 citations	218677 26 h-index	361022 35 g-index
42 all docs	42 docs citations	42 times ranked	6282 citing authors

#	Article	IF	Citations
1	In vivo recordings of brain activity using organic transistors. Nature Communications, 2013, 4, 1575.	12.8	776
2	NeuroGrid: recording action potentials from the surface of the brain. Nature Neuroscience, 2015, 18, 310-315.	14.8	745
3	High transconductance organic electrochemical transistors. Nature Communications, 2013, 4, 2133.	12.8	612
4	High-performance transistors for bioelectronics through tuning of channel thickness. Science Advances, 2015, 1, e1400251.	10.3	501
5	Highly Conformable Conducting Polymer Electrodes for In Vivo Recordings. Advanced Materials, 2011, 23, H268-72.	21.0	319
6	Learning-enhanced coupling between ripple oscillations in association cortices and hippocampus. Science, 2017, 358, 369-372.	12.6	293
7	Tools for Probing Local Circuits: High-Density Silicon Probes Combined with Optogenetics. Neuron, 2015, 86, 92-105.	8.1	284
8	Direct Measurement of Ion Mobility in a Conducting Polymer. Advanced Materials, 2013, 25, 4488-4493.	21.0	267
9	Organic electrochemical transistor incorporating an ionogel as a solid state electrolyte for lactate sensing. Journal of Materials Chemistry, 2012, 22, 4440.	6.7	248
10	Interictal epileptiform discharges induce hippocampalâ€“cortical coupling in temporal lobe epilepsy. Nature Medicine, 2016, 22, 641-648.	30.7	221
11	Organic Electrochemical Transistors with Maximum Transconductance at Zero Gate Bias. Advanced Materials, 2013, 25, 7010-7014.	21.0	215
12	Highâ€Density Stretchable Electrode Grids for Chronic Neural Recording. Advanced Materials, 2018, 30, e1706520.	21.0	211
13	Internal ion-gated organic electrochemical transistor: A building block for integrated bioelectronics. Science Advances, 2019, 5, eaau7378.	10.3	208
14	Easyâ€toâ€Fabricate Conducting Polymer Microelectrode Arrays. Advanced Materials, 2013, 25, 2135-2139.	21.0	199
15	Enhancement-mode ion-based transistor as a comprehensive interface and real-time processing unit for in vivo electrophysiology. Nature Materials, 2020, 19, 679-686.	27.5	182
16	Measurement of Barrier Tissue Integrity with an Organic Electrochemical Transistor. Advanced Materials, 2012, 24, 5919-5923.	21.0	152
17	Organic electronics for high-resolution electrocorticography of the human brain. Science Advances, 2016, 2, e1601027.	10.3	147
18	Bioelectronic neural pixel: Chemical stimulation and electrical sensing at the same site. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 9440-9445.	7.1	107

#	Article	IF	Citations
19	A Microfluidic Ion Pump for In Vivo Drug Delivery. Advanced Materials, 2017, 29, 1701217.	21.0	97
20	High speed and high density organic electrochemical transistor arrays. Applied Physics Letters, 2011, 99, .	3.3	95
21	Interictal epileptiform discharges shape large-scale intercortical communication. Brain, 2019, 142, 3502-3513.	7.6	59
22	Chronic electrical stimulation of peripheral nerves via deep-red light transduced by an implanted organic photocapacitor. Nature Biomedical Engineering, 2022, 6, 741-753.	22.5	59
23	Translational Neuroelectronics. Advanced Functional Materials, 2020, 30, 1909165.	14.9	44
24	PEDOT:TOS with PEG: a biofunctional surface with improved electronic characteristics. Journal of Materials Chemistry, 2012, 22, 19498.	6.7	42
25	Reduced GABAergic Neuron Excitability, Altered Synaptic Connectivity, and Seizures in a KCNT1 Gain-of-Function Mouse Model of Childhood Epilepsy. Cell Reports, 2020, 33, 108303.	6.4	41
26	Mixed-conducting particulate composites for soft electronics. Science Advances, 2020, 6, eaaz6767.	10.3	33
27	Ionic communication for implantable bioelectronics. Science Advances, 2022, 8, eabm7851.	10.3	25
28	Transcranial Electrical Stimulation and Recording of Brain Activity using Freestanding Plantâ€Based Conducting Polymer Hydrogel Composites. Advanced Materials Technologies, 2020, 5, 1900652.	5.8	22
29	Chitosanâ€Based, Biocompatible, Solution Processable Films for In Vivo Localization of Neural Interface Devices. Advanced Materials Technologies, 2020, 5, 1900663.	5.8	13
30	Responsive manipulation of neural circuit pathology by fully implantable, front-end multiplexed embedded neuroelectronics. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	12
31	A transient postnatal quiescent period precedes emergence of mature cortical dynamics. ELife, 2021, 10, .	6.0	11
32	Plastic neuronal probes for implantation in cortical and subcortical areas of the rat brain. International Journal of Nanotechnology, 2012, 9, 517.	0.2	8
33	Anisotropic Ion Conducting Particulate Composites for Bioelectronics. Advanced Science, 2022, 9, e2104404.	11.2	7
34	Electrically Conducting Elastomeric Fibers with High Stretchability and Stability. Small, 2022, 18, e2102813.	10.0	3
35	Bioelectronics Research Reaches New Heights. Advanced Materials Technologies, 2020, 5, 2000106.	5.8	1
36	Reply: Interactions of interictal epileptic discharges with sleep slow waves and spindles. Brain, 2020, 143, e28-e28.	7.6	0

#	Article	IF	Citations
37	Ions-based high bandwidth communication for implantable bioelectronics. , 0, , .		0
38	Translational Neuroelectronics. , 0, , .		0