Brian Litt

List of Publications by Year
in descending order

76 papers	5,166 citations	147801 31 h-index	98798 67 g-index
84 all docs	84 docs citations	84 times ranked	6105 citing authors

#	Article	IF	Citations
1	Epileptic Seizures May Begin Hours in Advance of Clinical Onset. Neuron, 2001, 30, 51-64.	8.1	577
2	Transparent and flexible low noise graphene electrodes for simultaneous electrophysiology and neuroimaging. Nature Communications, 2014, 5, 5259.	12.8	448
3	Prediction of epileptic seizures. Lancet Neurology, The, 2002, 1, 22-30.	10.2	425
4	Bioresorbable silicon electronics for transient spatiotemporal mapping of electrical activity fromÂthe cerebral cortex. Nature Materials, 2016, 15, 782-791.	27.5	400
5	Crowdsourcing reproducible seizure forecasting in human and canine epilepsy. Brain, 2016, 139, 1713-1722.	7.6	200
6	Technology Insight: neuroengineering and epilepsyâ€"designing devices for seizure control. Nature Clinical Practice Neurology, 2008, 4, 190-201.	2.5	194
7	Virtual Cortical Resection Reveals Push-Pull Network Control Preceding Seizure Evolution. Neuron, 2016, 91, 1170-1182.	8.1	185
8	Glutamate imaging (GluCEST) lateralizes epileptic foci in nonlesional temporal lobe epilepsy. Science Translational Medicine, 2015, 7, 309ra161.	12.4	156
9	Dynamic Network Drivers of Seizure Generation, Propagation and Termination in Human Neocortical Epilepsy. PLoS Computational Biology, 2015, 11, e1004608.	3.2	148
10	The statistics of a practical seizure warning system. Journal of Neural Engineering, 2008, 5, 392-401.	3.5	122
11	Interictal epileptiform activity outside the seizure onset zone impacts cognition. Brain, 2017, 140, 2157-2168.	7.6	106
12	White Matter Network Architecture Guides Direct Electrical Stimulation through Optimal State Transitions. Cell Reports, 2019, 28, 2554-2566.e7.	6.4	104
13	Forecasting Seizures in Dogs with Naturally Occurring Epilepsy. PLoS ONE, 2014, 9, e81920.	2.5	103
14	Crowdsourcing seizure detection: algorithm development and validation on human implanted device recordings. Brain, 2017, 140, 1680-1691.	7.6	101
15	A novel implanted device to wirelessly record and analyze continuous intracranial canine EEG. Epilepsy Research, 2011, 96, 116-122.	1.6	95
16	Virtual resection predicts surgical outcome for drug-resistant epilepsy. Brain, 2019, 142, 3892-3905.	7.6	93
17	Integrating Brain Implants With Local and Distributed Computing Devices: A Next Generation Epilepsy Management System. IEEE Journal of Translational Engineering in Health and Medicine, 2018, 6, 1-12.	3.7	92
18	Continuous EEG is associated with favorable hospitalization outcomes for critically ill patients. Neurology, 2019, 92, e9-e18.	1.1	91

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19	A high-density, high-channel count, multiplexed Î¼ECoG array for auditory-cortex recordings. Journal of Neurophysiology, 2014, 112, 1566-1583.	1.8	90
20	Association of Piriform Cortex Resection With Surgical Outcomes in Patients With Temporal Lobe Epilepsy. JAMA Neurology, 2019, 76, 690.	9.0	69
21	Computational analysis in epilepsy neuroimaging: A survey of features and methods. NeuroImage: Clinical, 2016, 11, 515-529.	2.7	68
22	Forecasting Seizures Using Intracranial EEG Measures and SVM in Naturally Occurring Canine Epilepsy. PLoS ONE, 2015, 10, e0133900.	2.5	67
23	Timing is everything: Where status epilepticus treatment fails. Annals of Neurology, 2017, 82, 155-165.	5.3	61
24	Semi-Supervised Anomaly Detection for EEG Waveforms Using Deep Belief Nets. , 2010, , .		60
25	Mapping the structural and functional network architecture of the medial temporal lobe using 7T MRI. Human Brain Mapping, 2018, 39, 851-865.	3.6	60
26	Spatial distribution of interictal spikes fluctuates over time and localizes seizure onset. Brain, 2020, 143, 554-569.	7.6	60
27	Characterizing the role of the structural connectome in seizure dynamics. Brain, 2019, 142, 1955-1972.	7.6	56
28	Towards network-guided neuromodulation for epilepsy. Brain, 2022, 145, 3347-3362.	7.6	51
29	A multimodal platform for cloud-based collaborative research. , 2013, , .		49
30	Mining continuous intracranial <scp>EEG</scp> in focal canine epilepsy: Relating interictal bursts to seizure onsets. Epilepsia, 2016, 57, 89-98.	5.1	46
31	Recurring Functional Interactions Predict Network Architecture of Interictal and Ictal States in Neocortical Epilepsy. ENeuro, 2017, 4, ENEURO.0091-16.2017.	1.9	44
32	High interictal connectivity within the resection zone is associated with favorable post-surgical outcomes in focal epilepsy patients. NeuroImage: Clinical, 2019, 23, 101908.	2.7	41
33	Time-evolving controllability of effective connectivity networks during seizure progression. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	41
34	Feasibility study of a caregiver seizure alert system in canine epilepsy. Epilepsy Research, 2013, 106, 456-460.	1.6	34
35	Radiofrequencyâ€Triggered Drug Release from Nanoliposomes with Millimeterâ€Scale Resolution Using a Superimposed Static Gating Field. Small, 2018, 14, e1802563.	10.0	30
36	Enabling an Open Data Ecosystem for the Neurosciences. Neuron, 2016, 92, 617-621.	8.1	29

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37	Normative intracranial EEG maps epileptogenic tissues in focal epilepsy. Brain, 2022, 145, 1949-1961.	7.6	29
38	Multimodal in vivo recording using transparent graphene microelectrodes illuminates spatiotemporal seizure dynamics at the microscale. Communications Biology, 2021, 4, 136.	4.4	28
39	Quantitative EEG predicts outcomes in children after cardiac arrest. Neurology, 2019, 92, e2329-e2338.	1.1	27
40	Intracranial electroencephalographic biomarker predicts effective responsive neurostimulation for epilepsy prior to treatment. Epilepsia, 2022, 63, 652-662.	5.1	25
41	Readmission after seizure discharge in a nationally representative sample. Neurology, 2019, 92, .	1.1	23
42	Evaluating Devices for Treating Epilepsy. Epilepsia, 2003, 44, 30-37.	5.1	22
43	A novel seizure detection algorithm informed by hidden Markov model event states. Journal of Neural Engineering, 2016, 13, 036011.	3.5	22
44	Temporal behavior of seizures and interictal bursts in prolonged intracranial recordings from epileptic canines. Epilepsia, 2016, 57, 1949-1957.	5.1	22
45	Science in the cloud (SIC): A use case in MRI connectomics. GigaScience, 2017, 6, 1-10.	6.4	22
46	Microfabricated intracortical extracellular matrix-microelectrodes for improving neural interfaces. Microsystems and Nanoengineering, 2018, 4, 30.	7.0	22
47	Electrocorticography and stereo EEG provide distinct measures of brain connectivity: implications for network models. Brain Communications, 2021, 3, fcab156.	3.3	22
48	Extracting seizure frequency from epilepsy clinic notes: a machine reading approach to natural language processing. Journal of the American Medical Informatics Association: JAMIA, 2022, 29, 873-881.	4.4	22
49	A framework For brain atlases: Lessons from seizure dynamics. NeuroImage, 2022, 254, 118986.	4.2	20
50	Improved availability and quality of care with epilepsy nurse practitioners. Neurology: Clinical Practice, 2017, 7, 109-117.	1.6	19
51	Standards for data acquisition and softwareâ€based analysis of inÂvivo electroencephalography recordings from animals. A TASK 1â€•WG 5 report of the AES/ ILAE Translational Task Force of the ILAE. Epilepsia, 2017, 58, 53-67.	5.1	18
52	The effect of increased intracranial EEG sampling rates in clinical practice. Clinical Neurophysiology, 2018, 129, 360-367.	1.5	17
53	The sensitivity of network statistics to incomplete electrode sampling on intracranial EEG. Network Neuroscience, 2020, 4, 484-506.	2.6	17
54	Modeling the complex dynamics and changing correlations of epileptic events. Artificial Intelligence, 2014, 216, 55-75.	5.8	16

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55	Model-based design for seizure control by stimulation. Journal of Neural Engineering, 2020, 17, 026009.	3.5	16
56	Addressing barriers to surgical evaluation for patients with epilepsy. Epilepsy and Behavior, 2018, 86, 1-5.	1.7	12
57	Surgical Outcomes in Post-Traumatic Epilepsy: A Single Institutional Experience. Operative Neurosurgery, 2020, 18, 12-18.	0.8	11
58	Leaving tissue associated with infrequent intracranial EEG seizure onsets is compatible with post-operative seizure freedom. Journal of Pediatric Epilepsy, 2015, 01, 211-219.	0.2	10
59	Pairwise maximum entropy model explains the role of white matter structure in shaping emergent co-activation states. Communications Biology, 2021, 4, 210.	4.4	10
60	Spatiotemporal evolution of focal epileptiform activity from surface and laminar field recordings in cat neocortex. Journal of Neurophysiology, 2018, 119, 2068-2081.	1.8	9
61	Big data in status epilepticus. Epilepsy and Behavior, 2019, 101, 106457.	1.7	9
62	Time Evolution of the Skinâ€“Electrode Interface Impedance under Different Skin Treatments. Sensors, 2021, 21, 5210.	3.8	9
63	Simulated diagnostic performance of low-field MRI: Harnessing open-access datasets to evaluate novel devices. Magnetic Resonance Imaging, 2022, 87, 67-76.	1.8	9
64	Seizure Detection in Continuous Inpatient EEG. Neurology, 2022, 98, .	1.1	8
65	Engineering the Next Generation of Brain Scientists. Neuron, 2015, 86, 16-20.	8.1	7
66	IRIS: A Modular Platform for Continuous Monitoring and Caretaker Notification in the Intensive Care Unit. IEEE Journal of Biomedical and Health Informatics, 2020, 24, 2389-2397.	6.3	7
67	Theta Synchrony Is Increased near Neural Populations That Are Active When Initiating Instructed Movement. ENeuro, 2021, 8, ENEURO.0252-20.2020.	1.9	7
68	Spectral control of cortical activity. , 2017, , .		6
69	Neurophysiological Evidence for Cognitive Map Formation during Sequence Learning. ENeuro, 2022, 9, ENEURO.0361-21.2022.	1.9	6
70	Focal Seizures Induced by Intracranial Electroencephalogram Grids. Cureus, 2016, 8, e831.	0.5	4
71	Predicting Severity of Huntington's Disease With Wearable Sensors. Frontiers in Digital Health, 2022, 4, 874208.	2.8	4
72	Postdiagnosis neurological care for patients with psychogenic nonepileptic spells (PNES). Epilepsy and Behavior, 2017, 74, 64-68.	1.7	3

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73	A Full-Stack Application for Detecting Seizures and Reducing Data During Continuous Electroencephalogram Monitoring. , 2021, 3, e0476.		3
74	Feature analysis of functional MRI for discrimination between normal and epileptogenic brain. , 2007, , .		2
75	Implanting intracranial electrodes does not affect spikes or network connectivity in nearby or connected brain regions. Network Neuroscience, 0, , 1-33.	2.6	1
76	Flexible biomedical devices for mapping cardiac and neural electrophysiology. , 2011, , .		0