Emad N Eskandar

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/2721468/publications.pdf

Version: 2024-02-01

88 papers

5,587 citations

35 h-index 95266 68 g-index

96 all docs 96
docs citations

96 times ranked 6712 citing authors

#	Article	IF	CITATIONS
1	A Randomized Sham-Controlled Trial of Deep Brain Stimulation of the Ventral Capsule/Ventral Striatum for Chronic Treatment-Resistant Depression. Biological Psychiatry, 2015, 78, 240-248.	1.3	415
2	Rapid fragmentation of neuronal networks at the onset of propofol-induced unconsciousness. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E3377-86.	7.1	366
3	Mechanisms of deep brain stimulation. Journal of Neurophysiology, 2016, 115, 19-38.	1.8	354
4	Virtual typing by people with tetraplegia using a self-calibrating intracortical brain-computer interface. Science Translational Medicine, 2015, 7, 313ra179.	12.4	249
5	Dissociation of visual, motor and predictive signals in parietal cortex during visual guidance. Nature Neuroscience, 1999, 2, 88-93.	14.8	234
6	The generation and propagation of the human alpha rhythm. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 23772-23782.	7.1	229
7	Individualized localization and cortical surface-based registration of intracranial electrodes. NeuroImage, 2012, 59, 3563-3570.	4.2	213
8	Enhanced Dendritic Compartmentalization in Human Cortical Neurons. Cell, 2018, 175, 643-651.e14.	28.9	204
9	Intra-day signal instabilities affect decoding performance in an intracortical neural interface system. Journal of Neural Engineering, 2013, 10, 036004.	3.5	180
10	Heterogeneous neuronal firing patterns during interictal epileptiform discharges in the human cortex. Brain, 2010, 133, 1668-1681.	7.6	168
11	Spatiotemporal dynamics of neocortical excitation and inhibition during human sleep. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 1731-1736.	7.1	166
12	Consensus on guidelines for stereotactic neurosurgery for psychiatric disorders. Journal of Neurology, Neurosurgery and Psychiatry, 2014, 85, 1003-1008.	1.9	150
13	Speech-Specific Tuning of Neurons in Human Superior Temporal Gyrus. Cerebral Cortex, 2014, 24, 2679-2693.	2.9	121
14	Variability and anatomical specificity of the orbitofrontothalamic fibers of passage in the ventral capsule/ventral striatum (VC/VS): precision care for patient-specific tractography-guided targeting of deep brain stimulation (DBS) in obsessive compulsive disorder (OCD). Brain Imaging and Behavior, 2016, 10, 1054-1067.	2.1	115
15	Mechanisms of deep brain stimulation for obsessive compulsive disorder: effects upon cells and circuits. Frontiers in Integrative Neuroscience, 2012, 6, 29.	2.1	110
16	Cortical control of a tablet computer by people with paralysis. PLoS ONE, 2018, 13, e0204566.	2.5	108
17	A novel severity score to predict inpatient mortality in COVID-19 patients. Scientific Reports, 2020, 10, 16726.	3.3	97
18	Rapid calibration of an intracortical brain–computer interface for people with tetraplegia. Journal of Neural Engineering, 2018, 15, 026007.	3 . 5	95

#	Article	IF	CITATIONS
19	Treating refractory mental illness with closed-loop brain stimulation: Progress towards a patient-specific transdiagnostic approach. Experimental Neurology, 2017, 287, 461-472.	4.1	94
20	Reliability of directional information in unsorted spikes and local field potentials recorded in human motor cortex. Journal of Neural Engineering, 2014, 11, 046007.	3.5	92
21	Stable long-term BCI-enabled communication in ALS and locked-in syndrome using LFP signals. Journal of Neurophysiology, 2018, 120, 343-360.	1.8	91
22	Surgical Treatment of Trigeminal Neuralgia. Neurosurgery Clinics of North America, 2017, 28, 429-438.	1.7	87
23	Home Use of a Percutaneous Wireless Intracortical Brain-Computer Interface by Individuals With Tetraplegia. IEEE Transactions on Biomedical Engineering, 2021, 68, 2313-2325.	4.2	83
24	Surgery for Parkinson disease in the United States, 1996 to 2000: practice patterns, short-term outcomes, and hospital charges in a nationwide sample. Journal of Neurosurgery, 2003, 99, 863-871.	1.6	75
25	Sharp Wave Ripples during Visual Exploration in the Primate Hippocampus. Journal of Neuroscience, 2015, 35, 14771-14782.	3.6	67
26	Dynamics of Propofol-Induced Loss of Consciousness Across Primate Neocortex. Journal of Neuroscience, 2016, 36, 7718-7726.	3.6	64
27	A Novel Brain Stimulation Technology Provides Compatibility with MRI. Scientific Reports, 2015, 5, 9805.	3.3	61
28	Erratum. Journal of Neurosurgery, 2002, 96, 162.	1.6	60
29	Neural population dynamics in human motor cortex during movements in people with ALS. ELife, 2015, 4, e07436.	6.0	60
30	Frequency-Dependent Representation of Reinforcement-Related Information in the Human Medial and Lateral Prefrontal Cortex. Journal of Neuroscience, 2015, 35, 15827-15836.	3.6	47
31	Neuroanatomical Characteristics Associated With Response to Dorsal Anterior Cingulotomy for Obsessive-Compulsive Disorder. JAMA Psychiatry, 2015, 72, 127.	11.0	45
32	Travelling spindles create necessary conditions for spike-timing-dependent plasticity in humans. Nature Communications, 2021, 12, 1027.	12.8	45
33	Treatment of <i>ADCY5</i> -Associated Dystonia, Chorea, and Hyperkinetic Disorders With Deep Brain Stimulation. Journal of Child Neurology, 2016, 31, 1027-1035.	1.4	44
34	Distinct Nature of Directional Signals Among Parietal Cortical Areas During Visual Guidance. Journal of Neurophysiology, 2002, 88, 1777-1790.	1.8	43
35	Replay of large-scale spatio-temporal patterns from waking during subsequent NREM sleep in human cortex. Scientific Reports, 2017, 7, 17380.	3.3	43
36	Lesion analysis for cingulotomy and limbic leucotomy: comparison and correlation with clinical outcomes. Journal of Neurosurgery, 2014, 120, 152-163.	1.6	42

#	Article	IF	CITATIONS
37	Consistent linear and non-linear responses to invasive electrical brain stimulation across individuals and primate species with implanted electrodes. Brain Stimulation, 2019, 12, 877-892.	1.6	41
38	Older Patients Have Better Pain Outcomes Following Microvascular Decompression for Trigeminal Neuralgia. Neurosurgery, 2019, 84, 116-122.	1.1	37
39	Utility of foramen ovale electrodes in mesial temporal lobe epilepsy. Epilepsia, 2014, 55, 713-724.	5.1	35
40	Prefrontal Neurons Encode a Solution to the Credit-Assignment Problem. Journal of Neuroscience, 2017, 37, 6995-7007.	3.6	33
41	Electrical Stimulation-Evoked Dopamine Release in the Primate Striatum. Stereotactic and Functional Neurosurgery, 2013, 91, 355-363.	1.5	32
42	Exome Sequencing Implicates Impaired GABA Signaling and Neuronal Ion Transport in Trigeminal Neuralgia. IScience, 2020, 23, 101552.	4.1	32
43	Local and distant responses to single pulse electrical stimulation reflect different forms of connectivity. Neurolmage, 2021, 237, 118094.	4.2	31
44	Neuromodulation for restoring memory. Neurosurgical Focus, 2016, 40, E5.	2.3	30
45	Microscale Physiological Events on the Human Cortical Surface. Cerebral Cortex, 2021, 31, 3678-3700.	2.9	29
46	Closed-loop enhancement and neural decoding of cognitive control in humans. Nature Biomedical Engineering, 2023, 7, 576-588.	22.5	29
47	Widespread ripples synchronize human cortical activity during sleep, waking, and memory recall. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	29
48	Non-causal spike filtering improves decoding of movement intention for intracortical BCIs. Journal of Neuroscience Methods, 2014, 236, 58-67.	2.5	28
49	Caudate stimulation enhances learning. Brain, 2019, 142, 2930-2937.	7.6	25
50	Local and distant cortical responses to single pulse intracranial stimulation in the human brain are differentially modulated by specific stimulation parameters. Brain Stimulation, 2022, 15, 491-508.	1.6	24
51	Decoding Hidden Cognitive States From Behavior and Physiology Using a Bayesian Approach. Neural Computation, 2019, 31, 1751-1788.	2.2	23
52	Reward and reinforcement activity in the nucleus accumbens during learning. Frontiers in Behavioral Neuroscience, 2014, 8, 114.	2.0	22
53	The interactive electrode localization utility: software for automatic sorting and labeling of intracranial subdural electrodes. International Journal of Computer Assisted Radiology and Surgery, 2017, 12, 1829-1837.	2.8	21
54	CLoSES: A platform for closed-loop intracranial stimulation in humans. NeuroImage, 2020, 223, 117314.	4.2	21

#	Article	IF	CITATIONS
55	Early Detection of Human Epileptic Seizures Based on Intracortical Microelectrode Array Signals. IEEE Transactions on Biomedical Engineering, 2020, 67, 817-831.	4.2	20
56	Retrospectively supervised click decoder calibration for self-calibrating point-and-click brain–computer interfaces. Journal of Physiology (Paris), 2016, 110, 382-391.	2.1	17
57	Leveraging Nonhuman Primate Multisensory Neurons and Circuits in Assessing Consciousness Theory. Journal of Neuroscience, 2019, 39, 7485-7500.	3.6	17
58	Intra-stimulation discharges: An overlooked cortical electrographic entity triggered by direct electrical stimulation. Clinical Neurophysiology, 2015, 126, 882-888.	1.5	16
59	Temporally Coordinated Deep Brain Stimulation in the Dorsal and Ventral Striatum Synergistically Enhances Associative Learning. Scientific Reports, 2016, 6, 18806.	3.3	16
60	Anterior Temporal Lobectomy for Refractory Status Epilepticus in Herpes Simplex Encephalitis. Neurocritical Care, 2016, 25, 458-463.	2.4	14
61	Volitional control of single-electrode high gamma local field potentials by people with paralysis. Journal of Neurophysiology, 2019, 121, 1428-1450.	1.8	12
62	Prolonged therapy with the anticonvulsant carbamazepine leads to increased plasma clearance of fentanyl. Journal of Pharmacy and Pharmacology, 2019, 71, 982-987.	2.4	12
63	Auditory cues reveal intended movement information in middle frontal gyrus neuronal ensemble activity of a person with tetraplegia. Scientific Reports, 2021, 11, 98.	3.3	12
64	Central nervous system lymphoma presenting as trigeminal neuralgia: A diagnostic challenge. Journal of Clinical Neuroscience, 2015, 22, 1188-1190.	1.5	11
65	An Electrocorticography Grid with Conductive Nanoparticles in a Polymer Thick Film on an Organic Substrate Improves CT and MR Imaging. Radiology, 2016, 280, 595-601.	7.3	11
66	Case 21-2006. New England Journal of Medicine, 2006, 355, 183-188.	27.0	10
67	A point process approach to identifying and tracking transitions in neural spiking dynamics in the subthalamic nucleus of Parkinson's patients. Chaos, 2013, 23, 046102.	2.5	10
68	Reprint of "Non-causal spike filtering improves decoding of movement intention for intracortical BCls― Journal of Neuroscience Methods, 2015, 244, 94-103.	2.5	10
69	Anterior temporal lobectomy for older adults with mesial temporal sclerosis. Epilepsy Research, 2016, 127, 358-365.	1.6	10
70	Double blind randomized controlled trial of deep brain stimulation for obsessive-compulsive disorder: Clinical trial design. Contemporary Clinical Trials Communications, 2021, 22, 100785.	1.1	10
71	Intermittent subthalamic nucleus deep brain stimulation induces risk-aversive behavior in human subjects. ELife, 2018, 7, .	6.0	10
72	Dynamics of recovery from anaesthesia-induced unconsciousness across primate neocortex. Brain, 2020, 143, 833-843.	7.6	9

#	Article	IF	CITATIONS
73	Structural and Functional Network Dysfunction in Parkinson Disease. Radiology, 2017, 285, 725-727.	7.3	8
74	Intracortical neural activity distal to seizure-onset-areas predicts human focal seizures. PLoS ONE, 2019, 14, e0211847.	2.5	8
75	An Open Source 3-D Printed Modular Micro-Drive System for Acute Neurophysiology. PLoS ONE, 2014, 9, e94262.	2.5	6
76	A systematic approach to selecting task relevant neurons. Journal of Neuroscience Methods, 2015, 245, 156-168.	2.5	4
77	Neural Interactions Underlying Visuomotor Associations in the Human Brain. Cerebral Cortex, 2019, 29, 4551-4567.	2.9	3
78	Phasic stimulation in the nucleus accumbens enhances learning after traumatic brain injury. Cerebral Cortex Communications, 2022, 3, tgac016.	1.6	3
79	Using point process models to determine the impact of visual cues on basal ganglia activity and behavior of Parkinson's patients. , 2009, , .		2
80	Three-dimensional brain surface visualization for epilepsy surgery of focal cortical dysplasia. Journal of Clinical Neuroscience, 2014, 21, 1230-1232.	1.5	2
81	A case of non-affective psychosis followed by extended response to non-stimulation in deep brain stimulation for obsessive-compulsive disorder. Brain Stimulation, 2020, 13, 1317-1319.	1.6	2
82	Dynamic mapping of the corticospinal tract in open cordotomy and myelomeningocele surgery. Journal of Clinical Neuroscience, 2020, 74, 225-231.	1.5	2
83	Hippocampography Guides Consistent Mesial Resections in Neocortical Temporal Lobe Epilepsy. Epilepsy Research & Treatment, 2016, 2016, 1-8.	1.4	1
84	Modulations in Oscillatory Activity of Globus Pallidus Internus Neurons During a Directed Hand Movement Taskâ€"A Primary Mechanism for Motor Planning. Frontiers in Systems Neuroscience, 2019, 13, 15.	2.5	1
85	Editorial: Anterior capsulotomy and deep brain stimulation. Journal of Neurosurgery, 2015, 122, 1026-1027.	1.6	0
86	In Reply: Older Patients Have Better Pain Outcomes Following Microvascular Decompression for Trigeminal Neuralgia. Neurosurgery, 2019, 85, E610-E611.	1.1	0
87	Correlation and Causation: Systems Level Understanding of Decisionâ€Making Signals at the Singleâ€Neuronal Level in the Human Brain. FASEB Journal, 2013, 27, 1124.1.	0.5	0
88	Aura Type and Outcome Following Anterior Temporal Lobectomy. World Neurosurgery, 2022, , .	1.3	0