

Lucas C Parra

List of Publications by Year in descending order

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Version: 2024-02-01

106
papers

9,952
citations

44069

48
h-index

43889

91
g-index

133
all docs

133
docs citations

133
times ranked

7687
citing authors

#	ARTICLE	IF	CITATIONS
1	Weak DCS causes a relatively strong cumulative boost of synaptic plasticity with spaced learning. <i>Brain Stimulation</i> , 2022, 15, 57-62.	1.6	14
2	Radiologist-Level Performance by Using Deep Learning for Segmentation of Breast Cancers on MRI Scans. <i>Radiology: Artificial Intelligence</i> , 2022, 4, e200231.	5.8	16
3	Cognitive processing of a common stimulus synchronizes brains, hearts, and eyes. , 2022, 1, .		23
4	Deep Learning Achieves Neuroradiologist-Level Performance in Detecting Hydrocephalus Requiring Treatment. <i>Journal of Digital Imaging</i> , 2022, 35, 1662-1672.	2.9	1
5	Temporal interference stimulation targets deep brain regions by modulating neural oscillations. <i>Brain Stimulation</i> , 2021, 14, 55-65.	1.6	59
6	Synchronized eye movements predict test scores in online video education. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	38
7	Animal Models of tES: Methods, Techniques, and Safety. , 2021, , 49-66.		1
8	Animal Studies on the Mechanisms of Low-Intensity Transcranial Electric Stimulation. , 2021, , 67-92.		3
9	A double-blind sham-controlled phase 1 clinical trial of tDCS of the dorsolateral prefrontal cortex in cocaine inpatients: Craving, sleepiness, and contemplation to change. <i>European Journal of Neuroscience</i> , 2021, 53, 3212-3230.	2.6	11
10	Cutaneous sensation of electrical stimulation waveforms. <i>Brain Stimulation</i> , 2021, 14, 693-702.	1.6	10
11	Effects of direct current stimulation on synaptic plasticity in a single neuron. <i>Brain Stimulation</i> , 2021, 14, 588-597.	1.6	30
12	Segmentation of MRI head anatomy using deep volumetric networks and multiple spatial priors. <i>Journal of Medical Imaging</i> , 2021, 8, 034001.	1.5	3
13	During natural viewing, neural processing of visual targets continues throughout saccades. <i>Journal of Vision</i> , 2021, 21, 7.	0.3	4
14	Conscious processing of narrative stimuli synchronizes heart rate between individuals. <i>Cell Reports</i> , 2021, 36, 109692.	6.4	52
15	Neural responses to natural visual motion are spatially selective across the visual field, with selectivity differing across brain areas and task. <i>European Journal of Neuroscience</i> , 2021, 54, 7609-7625.	2.6	2
16	Direct current stimulation boosts hebbian plasticity in vitro. <i>Brain Stimulation</i> , 2020, 13, 287-301.	1.6	103
17	Visually evoked responses are enhanced when engaging in a video game. <i>European Journal of Neuroscience</i> , 2020, 52, 4695-4708.	2.6	9
18	Olfaction Modulates Inter-Subject Correlation of Neural Responses. <i>Frontiers in Neuroscience</i> , 2020, 14, 702.	2.8	6

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19	Optimization of interferential stimulation of the human brain with electrode arrays. Journal of Neural Engineering, 2020, 17, 036023.	3.5	34
20	Functional connectivity of EEG is subject-specific, associated with phenotype, and different from fMRI. Neurolmage, 2020, 218, 117001.	4.2	58
21	Combined behavioral and electrophysiological evidence for a direct cortical effect of prefrontal tDCS on disorders of consciousness. Scientific Reports, 2020, 10, 4323.	3.3	55
22	Adaptive Auto-Regressive Proportional Myoelectric Control. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 314-322.	4.9	25
23	Realistic volumetric-approach to simulate transcranial electric stimulationâ€”ROASTâ€”a fully automated open-source pipeline. Journal of Neural Engineering, 2019, 16, 056006.	3.5	229
24	Music synchronizes brainwaves across listeners with strong effects of repetition, familiarity and training. Scientific Reports, 2019, 9, 3576.	3.3	28
25	EEG can predict speech intelligibility. Journal of Neural Engineering, 2019, 16, 036008.	3.5	41
26	Multiway canonical correlation analysis of brain data. Neurolmage, 2019, 186, 728-740.	4.2	65
27	Inherent physiological artifacts in EEG during tDCS. Neurolmage, 2019, 185, 408-424.	4.2	30
28	Can transcranial electric stimulation with multiple electrodes reach deep targets?. Brain Stimulation, 2019, 12, 30-40.	1.6	93
29	Closed-Loop Acoustic Stimulation Enhances Sleep Oscillations But Not Memory Performance. ENeuro, 2019, 6, ENEURO.0306-19.2019.	1.9	55
30	Rigor and reproducibility in research with transcranial electrical stimulation: An NIMH-sponsored workshop. Brain Stimulation, 2018, 11, 465-480.	1.6	144
31	Extracting multidimensional stimulus-response correlations using hybrid encoding-decoding of neural activity. Neurolmage, 2018, 180, 134-146.	4.2	51
32	Optimized tDCS for Targeting Multiple Brain Regions: An Integrated Implementation. , 2018, 2018, 3545-3548.		18
33	ROAST: An Open-Source, Fully-Automated, Realistic Volumetric-Approach-Based Simulator For TES. , 2018, 2018, 3072-3075.		55
34	Immediate neurophysiological effects of transcranial electrical stimulation. Nature Communications, 2018, 9, 5092.	12.8	338
35	Neural engagement with online educational videos predicts learning performance for individual students. Neurobiology of Learning and Memory, 2018, 155, 60-64.	1.9	77
36	Elucidating relations between fMRI, ECoG, and EEG through a common natural stimulus. Neurolmage, 2018, 179, 79-91.	4.2	64

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37	Finding influential nodes for integration in brain networks using optimal percolation theory. Nature Communications, 2018, 9, 2274.	12.8	77
38	The Variability of Neural Responses to Naturalistic Videos Change with Age and Sex. ENeuro, 2018, 5, ENEURO.0244-17.2017.	1.9	33
39	EEG in the classroom: Synchronised neural recordings during video presentation. Scientific Reports, 2017, 7, 43916.	3.3	131
40	Direct current stimulation boosts synaptic gain and cooperativity <i>in vitro</i> . Journal of Physiology, 2017, 595, 3535-3547.	2.9	62
41	A resource for assessing information processing in the developing brain using EEG and eye tracking. Scientific Data, 2017, 4, 170040.	5.3	48
42	Optimal use of EEG recordings to target active brain areas with transcranial electrical stimulation. NeuroImage, 2017, 157, 69-80.	4.2	64
43	Low frequency transcranial electrical stimulation does not entrain sleep rhythms measured by human intracranial recordings. Nature Communications, 2017, 8, 1199.	12.8	153
44	Engaging narratives evoke similar neural activity and lead to similar time perception. Scientific Reports, 2017, 7, 4578.	3.3	46
45	Direct Current Stimulation Alters Neuronal Input/Output Function. Brain Stimulation, 2017, 10, 36-45.	1.6	107
46	Direct Current Stimulation Modulates LTP and LTD: Activity Dependence and Dendritic Effects. Brain Stimulation, 2017, 10, 51-58.	1.6	255
47	Divergent neural responses to narrative speech in disorders of consciousness. Annals of Clinical and Translational Neurology, 2017, 4, 784-792.	3.7	24
48	An open resource for transdiagnostic research in pediatric mental health and learning disorders. Scientific Data, 2017, 4, 170181.	5.3	375
49	Measurements and models of electric fields in the <i>in vivo</i> human brain during transcranial electric stimulation. ELife, 2017, 6, .	6.0	412
50	Collective Behaviour in Video Viewing: A Thermodynamic Analysis of Gaze Position. PLoS ONE, 2017, 12, e0168995.	2.5	8
51	The Healthy Brain Network Serial Scanning Initiative: a resource for evaluating inter-individual differences and their reliabilities across scan conditions and sessions. GigaScience, 2017, 6, 1-14.	6.4	66
52	The Effects of Compensatory Auditory Stimulation and High-Definition Transcranial Direct Current Stimulation (HD-tDCS) on Tinnitus Perception – A Randomized Pilot Study. PLoS ONE, 2016, 11, e0166208.	2.5	19
53	Temporal regularity increases with repertoire complexity in the Australian pied butcherbird's song. Royal Society Open Science, 2016, 3, 160357.	2.4	15
54	Animal models of transcranial direct current stimulation: Methods and mechanisms. Clinical Neurophysiology, 2016, 127, 3425-3454.	1.5	224

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55	The New York Headâ€”A precise standardized volume conductor model for EEG source localization and tES targeting. <i>NeuroImage</i> , 2016, 140, 150-162.	4.2	215
56	Attention Strongly Modulates Reliability of Neural Responses to Naturalistic Narrative Stimuli. <i>Journal of Neuroscience</i> , 2016, 36, 3092-3101.	3.6	144
57	Clinically Effective Treatment of Fibromyalgia Pain With High-Definition Transcranial Direct Current Stimulation: Phase II Open-Label Dose Optimization. <i>Journal of Pain</i> , 2016, 17, 14-26.	1.4	111
58	Memorable Audiovisual Narratives Synchronize Sensory and Supramodal Neural Responses. <i>ENeuro</i> , 2016, 3, ENEURO.0203-16.2016.	1.9	80
59	Fully Automated Whole-Head Segmentation with Improved Smoothness and Continuity, with Theory Reviewed. <i>PLoS ONE</i> , 2015, 10, e0125477.	2.5	36
60	Transcranial direct current stimulation in obsessiveâ€”compulsive disorder: emerging clinical evidence and considerations for optimal montage of electrodes. <i>Expert Review of Medical Devices</i> , 2015, 12, 381-391.	2.8	52
61	Feasibility of using high-definition transcranial direct current stimulation (HD-tDCS) to enhance treatment outcomes in persons with aphasia. <i>NeuroRehabilitation</i> , 2015, 36, 115-126.	1.3	65
62	Lasting modulation of in vitro oscillatory activity with weak direct current stimulation. <i>Journal of Neurophysiology</i> , 2015, 113, 1334-1341.	1.8	46
63	Concurrent Adaptation of Human and Machine Improves Simultaneous and Proportional Myoelectric Control. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2015, 23, 618-627.	4.9	69
64	Neural Correlates of Perceived Confidence in a Partial Report Paradigm. <i>Journal of Cognitive Neuroscience</i> , 2015, 27, 1090-1103.	2.3	18
65	Simulating pad-electrodes with high-definition arrays in transcranial electric stimulation. <i>Journal of Neural Engineering</i> , 2014, 11, 026003.	3.5	26
66	Evoked Neural Responses to Events in Video. <i>IEEE Journal on Selected Topics in Signal Processing</i> , 2014, 8, 358-365.	10.8	10
67	Audience preferences are predicted by temporal reliability of neural processing. <i>Nature Communications</i> , 2014, 5, 4567.	12.8	195
68	Bayesian correlated component analysis for inference of joint EEG activation. , 2014, , .		0
69	Transcranial Slow Oscillation Stimulation During Sleep Enhances Memory Consolidation in Rats. <i>Brain Stimulation</i> , 2014, 7, 508-515.	1.6	58
70	Imaging artifacts induced by electrical stimulation during conventional fMRI of the brain. <i>NeuroImage</i> , 2014, 85, 1040-1047.	4.2	117
71	Clinician Accessible Tools for GUI Computational Models of Transcranial Electrical Stimulation: BONSAI and SPHERES. <i>Brain Stimulation</i> , 2014, 7, 521-524.	1.6	52
72	Joint decorrelation, a versatile tool for multichannel data analysis. <i>NeuroImage</i> , 2014, 98, 487-505.	4.2	166

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73	Targeted transcranial direct current stimulation for rehabilitation after stroke. <i>NeuroImage</i> , 2013, 75, 12-19.	4.2	142
74	Cellular effects of acute direct current stimulation: somatic and synaptic terminal effects. <i>Journal of Physiology</i> , 2013, 591, 2563-2578.	2.9	456
75	Validation of finite element model of transcranial electrical stimulation using scalp potentials: implications for clinical dose. <i>Journal of Neural Engineering</i> , 2013, 10, 036018.	3.5	106
76	Spatial projections of neural arrays: A short guide to classic and new signal analysis techniques. , 2013, , .		0
77	Subject position affects EEG magnitudes. <i>NeuroImage</i> , 2013, 64, 476-484.	4.2	112
78	Transcranial Electrical Stimulation Accelerates Human Sleep Homeostasis. <i>PLoS Computational Biology</i> , 2013, 9, e1002898.	3.2	74
79	Automated MRI segmentation for individualized modeling of current flow in the human head. <i>Journal of Neural Engineering</i> , 2013, 10, 066004.	3.5	143
80	EEG precursors of detected and missed targets during free-viewing search. <i>Journal of Vision</i> , 2013, 13, 13-13.	0.3	26
81	Effects of weak transcranial alternating current stimulation on brain activity—a review of known mechanisms from animal studies. <i>Frontiers in Human Neuroscience</i> , 2013, 7, 687.	2.0	282
82	The point spread function of the human head and its implications for transcranial current stimulation. <i>Physics in Medicine and Biology</i> , 2012, 57, 6459-6477.	3.0	30
83	Inter-Individual Variation during Transcranial Direct Current Stimulation and Normalization of Dose Using MRI-Derived Computational Models. <i>Frontiers in Psychiatry</i> , 2012, 3, 91.	2.6	339
84	Correlated Components of Ongoing EEG Point to Emotionally Laden Attention — A Possible Marker of Engagement?. <i>Frontiers in Human Neuroscience</i> , 2012, 6, 112.	2.0	237
85	A multiple electrode scheme for optimal non-invasive electrical stimulation. , 2011, , .		5
86	No EEG evidence for subconscious detection during Rapid Serial Visual Presentation. , 2011, , .		3
87	Impaired cochlear function correlates with the presence of tinnitus and its estimated spectral profile. <i>Hearing Research</i> , 2011, 277, 107-116.	2.0	36
88	Optimized multi-electrode stimulation increases focality and intensity at target. <i>Journal of Neural Engineering</i> , 2011, 8, 046011.	3.5	468
89	In a Blink of an Eye and a Switch of a Transistor: Cortically Coupled Computer Vision. <i>Proceedings of the IEEE</i> , 2010, 98, 462-478.	21.3	126
90	Sensitization to masked tones following notched-noise correlates with estimates of cochlear function using distortion product otoacoustic emissions. <i>Journal of the Acoustical Society of America</i> , 2010, 127, 970-976.	1.1	9

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91	Low-Intensity Electrical Stimulation Affects Network Dynamics by Modulating Population Rate and Spike Timing. <i>Journal of Neuroscience</i> , 2010, 30, 15067-15079.	3.6	465
92	Cortically-Coupled Computer Vision. <i>Human-computer Interaction Series</i> , 2010, , 133-148.	0.6	4
93	On the Maximization of Information Flow Between Spiking Neurons. <i>Neural Computation</i> , 2009, 21, 2991-3009.	2.2	9
94	Single-Trial Analysis of Neuroimaging Data: Inferring Neural Networks Underlying Perceptual Decision-Making in the Human Brain. <i>IEEE Reviews in Biomedical Engineering</i> , 2009, 2, 97-109.	18.0	37
95	Spectrum separation resolves partial volume effect of MRSI as demonstrated on brain tumor scans. <i>NMR in Biomedicine</i> , 2008, 21, 1030-1042.	2.8	18
96	Spatiotemporal Linear Decoding of Brain State. <i>IEEE Signal Processing Magazine</i> , 2008, 25, 107-115.	5.6	111
97	Illusory percepts from auditory adaptation. <i>Journal of the Acoustical Society of America</i> , 2007, 121, 1632-1641.	1.1	86
98	Spike Timing Amplifies the Effect of Electric Fields on Neurons: Implications for Endogenous Field Effects. <i>Journal of Neuroscience</i> , 2007, 27, 3030-3036.	3.6	233
99	Spectral separation resolves partial volume effect in MRSI: A validation study. , 2007, , .		0
100	Smooth bilinear classification of EEG. , 2006, 2006, 4249-52.		6
101	Recipes for the linear analysis of EEG. <i>NeuroImage</i> , 2005, 28, 326-341.	4.2	489
102	Cortical origins of response time variability during rapid discrimination of visual objects. <i>NeuroImage</i> , 2005, 28, 342-353.	4.2	94
103	Model of the effect of extracellular fields on spike time coherence. , 2004, 2004, 4584-7.		20
104	Nonnegative Matrix Factorization for Rapid Recovery of Constituent Spectra in Magnetic Resonance Chemical Shift Imaging of the Brain. <i>IEEE Transactions on Medical Imaging</i> , 2004, 23, 1453-1465.	8.9	143
105	Response error correction-a demonstration of improved human-machine performance using real-time EEG monitoring. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2003, 11, 173-177.	4.9	116
106	Single-Trial Analysis of EEG for Enabling Cognitive User Interfaces. , 0, , 635-650.		1