Charlotte Jane Stagg

List of Publications by Year
in descending order

104	11,854	57758 44	39675 94
papers	citations	h-index	g-index

125	125	125	12224
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Evidence-based guidelines on the therapeutic use of repetitive transcranial magnetic stimulation (rTMS). Clinical Neurophysiology, 2014, 125, 2150-2206.	1.5	1,647
2	Physiological Basis of Transcranial Direct Current Stimulation. Neuroscientist, 2011, 17, 37-53.	3.5	1,292
3	A technical guide to tDCS, and related non-invasive brain stimulation tools. Clinical Neurophysiology, 2016, 127, 1031-1048.	1.5	998
4	Polarity-Sensitive Modulation of Cortical Neurotransmitters by Transcranial Stimulation. Journal of Neuroscience, 2009, 29, 5202-5206.	3.6	771
5	The Role of GABA in Human Motor Learning. Current Biology, 2011, 21, 480-484.	3.9	496
6	Polarity and timing-dependent effects of transcranial direct current stimulation in explicit motor learning. Neuropsychologia, 2011, 49, 800-804.	1.6	378
7	Faciobrachial dystonic seizures: the influence of immunotherapy on seizure control and prevention of cognitive impairment in a broadening phenotype. Brain, 2013, 136, 3151-3162.	7.6	373
8	Relationship between physiological measures of excitability and levels of glutamate and GABA in the human motor cortex. Journal of Physiology, 2011, 589, 5845-5855.	2.9	324
9	Physiology of Transcranial Direct Current Stimulation. Journal of ECT, 2018, 34, 144-152.	0.6	268
10	Neurochemical Effects of Theta Burst Stimulation as Assessed by Magnetic Resonance Spectroscopy. Journal of Neurophysiology, 2009, 101, 2872-2877.	1.8	250
11	Diffusion imaging of whole, post-mortem human brains on a clinical MRI scanner. NeuroImage, 2011, 57, 167-181.	4.2	239
12	Widespread Modulation of Cerebral Perfusion Induced during and after Transcranial Direct Current Stimulation Applied to the Left Dorsolateral Prefrontal Cortex. Journal of Neuroscience, 2013, 33, 11425-11431.	3.6	238
13	Modulation of GABA and resting state functional connectivity by transcranial direct current stimulation. ELife, 2015, 4, e08789.	6.0	184
14	Ipsilesional anodal tDCS enhances the functional benefits of rehabilitation in patients after stroke. Science Translational Medicine, 2016, 8, 330re1.	12.4	178
15	Local GABA concentration is related to network-level resting functional connectivity. ELife, 2014, 3, e01465.	6.0	157
16	Modulation of movementâ€associated cortical activation by transcranial direct current stimulation. European Journal of Neuroscience, 2009, 30, 1412-1423.	2.6	156
17	Cortical activation changes underlying stimulation-induced behavioural gains in chronic stroke. Brain, 2012, 135, 276-284.	7.6	156
18	Predicting behavioural response to TDCS in chronic motor stroke. NeuroImage, 2014, 85, 924-933.	4.2	150

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19	Dysmenorrhoea is associated with central changes in otherwise healthy women. Pain, 2011, 152, 1966-1975.	4.2	148
20	What are we measuring with GABA Magnetic Resonance Spectroscopy?. Communicative and Integrative Biology, 2011, 4, 573-575.	1.4	136
21	A combined post-mortem magnetic resonance imaging and quantitative histological study of multiple sclerosis pathology. Brain, 2012, 135, 2938-2951.	7.6	131
22	The dynamics of cortical GABA in human motor learning. Journal of Physiology, 2019, 597, 271-282.	2.9	125
23	Multi-modal characterization of rapid anterior hippocampal volume increase associated with aerobic exercise. NeuroImage, 2016, 131, 162-170.	4.2	119
24	Magnetic Resonance Spectroscopy as a tool to study the role of GABA in motor-cortical plasticity. NeuroImage, 2014, 86, 19-27.	4.2	116
25	GABA Levels Are Decreased After Stroke and GABA Changes During Rehabilitation Correlate With Motor Improvement. Neurorehabilitation and Neural Repair, 2015, 29, 278-286.	2.9	110
26	Investigating the Stability of Fine-Grain Digit Somatotopy in Individual Human Participants. Journal of Neuroscience, 2016, 36, 1113-1127.	3.6	102
27	Driving Human Motor Cortical Oscillations Leads to Behaviorally Relevant Changes in Local GABA_AInhibition: A tACS-TMS Study. Journal of Neuroscience, 2017, 37, 4481-4492.	3.6	96
28	A tool for functional brain imaging with lifespan compliance. Nature Communications, 2019, 10, 4785.	12.8	96
29	Changes in functional connectivity and GABA levels with long-term motor learning. NeuroImage, 2015, 106, 15-20.	4.2	95
30	Polarity-specific effects of motor transcranial direct current stimulation on fMRI resting state networks. NeuroImage, 2014, 88, 155-161.	4.2	92
31	The impact of large structural brain changes in chronic stroke patients on the electric field caused by transcranial brain stimulation. NeuroImage: Clinical, 2017, 15, 106-117.	2.7	84
32	Visual mismatch negativity: the detection of stimulus change. NeuroReport, 2004, 15, 659-663.	1.2	82
33	What are we measuring with GABA magnetic resonance spectroscopy?. Communicative and Integrative Biology, 2011, 4, 573-5.	1.4	82
34	Guidelines for TMS/tES clinical services and research through the COVID-19 pandemic. Brain Stimulation, 2020, 13, 1124-1149.	1.6	78
35	Brain imaging reveals that engagement of descending inhibitory pain pathways in healthy women in a low endogenous estradiol state varies with testosterone. Pain, 2013, 154, 515-524.	4.2	71
36	Walking performance and its recovery in chronic stroke in relation to extent of lesion overlap with the descending motor tract. Experimental Brain Research, 2008, 186, 325-333.	1.5	70

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37	The Homeostatic Interaction Between Anodal Transcranial Direct Current Stimulation and Motor Learning in Humans is Related to GABAA Activity. Brain Stimulation, 2015, 8, 898-905.	1.6	70
38	Relationships between functional and structural corticospinal tract integrity and walking post stroke. Clinical Neurophysiology, 2012, 123, 2422-2428.	1.5	69
39	Visualization of Altered Neurovascular Coupling in Chronic Stroke Patients using Multimodal Functional MRI. Journal of Cerebral Blood Flow and Metabolism, 2012, 32, 2044-2054.	4.3	64
40	Motor Cortical Gamma Oscillations: What Have We Learnt and Where Are We Headed?. Current Behavioral Neuroscience Reports, 2018, 5, 136-142.	1.3	64
41	Altered neurochemical coupling in the occipital cortex in migraine with visual aura. Cephalalgia, 2015, 35, 1025-1030.	3.9	63
42	Modulating Regional Motor Cortical Excitability with Noninvasive Brain Stimulation Results in Neurochemical Changes in Bilateral Motor Cortices. Journal of Neuroscience, 2018, 38, 7327-7336.	3.6	55
43	Structural Connectivity Variances Underlie Functional and Behavioral Changes During Pain Relief Induced by Neuromodulation. Scientific Reports, 2017, 7, 41603.	3.3	54
44	The role of inhibition in human motor cortical plasticity. Neuroscience, 2014, 278, 93-104.	2.3	53
45	Motor Practice Promotes Increased Activity in Brain Regions Structurally Disconnected After Subcortical Stroke. Neurorehabilitation and Neural Repair, 2011, 25, 607-616.	2.9	52
46	Whole-brain magnetic resonance spectroscopic imaging measures are related to disability in ALS. Neurology, 2013, 80, 610-615.	1.1	50
47	FSLâ€MRS: An endâ€toâ€end spectroscopy analysis package. Magnetic Resonance in Medicine, 2021, 85, 2950-2964.	3.0	49
48	A Mechanistic Link from GABA to Cortical Architecture and Perception. Current Biology, 2017, 27, 1685-1691.e3.	3.9	48
49	Modulation of Long-Range Connectivity Patterns via Frequency-Specific Stimulation of Human Cortex. Current Biology, 2017, 27, 3061-3068.e3.	3.9	48
50	Consensus statement on current and emerging methods for the diagnosis and evaluation of cerebrovascular disease. Journal of Cerebral Blood Flow and Metabolism, 2018, 38, 1391-1417.	4.3	48
51	Studying the Effects of Transcranial Direct-Current Stimulation in Stroke Recovery Using Magnetic Resonance Imaging. Frontiers in Human Neuroscience, 2013, 7, 857.	2.0	46
52	Phosphene Perception Relates to Visual Cortex Glutamate Levels and Covaries with Atypical Visuospatial Awareness. Cerebral Cortex, 2015, 25, 4341-4350.	2.9	44
53	Relevance of Structural Brain Connectivity to Learning and Recovery from Stroke. Frontiers in Systems Neuroscience, 2010, 4, 146.	2.5	43
54	Autoantibodies to glutamic acid decarboxylase in patients with epilepsy are associated with low cortical GABA levels. Epilepsia, 2010, 51, 1898-1901.	5.1	43

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55	White matter abnormalities in methcathinone abusers with an extrapyramidal syndrome. Brain, 2010, 133, 3676-3684.	7.6	42
56	Perceptually relevant remapping of human somatotopy in 24 hours. ELife, 2016, 5, .	6.0	40
57	Learning to optimize perceptual decisions through suppressive interactions in the human brain. Nature Communications, 2019, 10, 474.	12.8	37
58	GABA Predicts Time Perception. Journal of Neuroscience, 2014, 34, 4364-4370.	3.6	36
59	Effect of age and the APOE gene on metabolite concentrations in the posterior cingulate cortex. NeuroImage, 2017, 152, 509-516.	4.2	36
60	An Ultra-High Field Magnetic Resonance Spectroscopy Study of Post Exercise Lactate, Glutamate and Glutamine Change in the Human Brain. Frontiers in Physiology, 2015, 6, 351.	2.8	35
61	Excitation and inhibition in anterior cingulate predict use of past experiences. ELife, 2017, 6, .	6.0	34
62	Transcranial Magnetic Stimulation: From Neurophysiology to Pharmacology, Molecular Biology and Genomics. Neuroscientist, 2010, 16, 210-221.	3.5	32
63	Dopamine depletion effects on cognitive flexibility as modulated by tDCS of the dlPFC. Brain Stimulation, 2020, 13, 105-108.	1.6	32
64	Motor training modulates intracortical inhibitory dynamics in motor cortex during movement preparation. Brain Stimulation, 2019, 12, 300-308.	1.6	30
65	Twoâ€voxel spectroscopy with dynamic B₀ shimming and flip angle adjustment at 7 T in the human motor cortex. NMR in Biomedicine, 2015, 28, 852-860.	2.8	28
66	Cerebellar and cortical abnormalities in paediatric opsoclonusâ€myoclonus syndrome. Developmental Medicine and Child Neurology, 2015, 57, 265-272.	2.1	28
67	Metabolite-cycled density-weighted concentric rings k-space trajectory (DW-CRT) enables high-resolution 1â€‰H magnetic resonance spectroscopic imaging at 3-Tesla. Scientific Reports, 2018, 8, 7792.	3.3	28
68	â€œLuteal Analgesiaâ€• Progesterone Dissociates Pain Intensity and Unpleasantness by Influencing Emotion Regulation Networks. Frontiers in Endocrinology, 2018, 9, 413.	3.5	21
69	Relating diffusion tensor imaging measurements to microstructural quantities in the cerebral cortex in multiple sclerosis. Human Brain Mapping, 2019, 40, 4417-4431.	3.6	21
70	A checklist for assessing the methodological quality of concurrent tES-fMRI studies (ConTES) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 142 T	12.0	21
71	Imaging the effects of rTMS-induced cortical plasticity. Restorative Neurology and Neuroscience, 2010, 28, 425-436.	0.7	20
72	Neurophysiological signatures of hand motor response to dual-transcranial direct current stimulation in subacute stroke: a TMS and MEG study. Journal of NeuroEngineering and Rehabilitation, 2020, 17, 72.	4.6	18

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73	Î²-Oscillations Reflect Recovery of the Paretic Upper Limb in Subacute Stroke. Neurorehabilitation and Neural Repair, 2020, 34, 450-462.	2.9	18
74	Increasing human motor skill acquisition by driving thetaâ€“gamma coupling. ELife, 2021, 10, .	6.0	18
75	Catecholaminergic modulation of indices of cognitive flexibility: AÂpharmaco-tDCS study. Brain Stimulation, 2019, 12, 290-295.	1.6	17
76	New Mechanistic Insights, Novel Treatment Paradigms, and Clinical Progress in Cerebrovascular Diseases. Frontiers in Aging Neuroscience, 2021, 13, 623751.	3.4	17
77	Neurochemical changes underpinning the development of adjunct therapies in recovery after stroke: A role for GABA?. Journal of Cerebral Blood Flow and Metabolism, 2018, 38, 1564-1583.	4.3	16
78	Visual training in hemianopia alters neural activity in the absence of behavioural improvement: a pilot study. Ophthalmic and Physiological Optics, 2018, 38, 538-549.	2.0	14
79	A range of pulses commonly used for human transcranial ultrasound stimulation are clearly audible. Brain Stimulation, 2021, 14, 1353-1355.	1.6	14
80	Other Significant Metabolites. , 2014, , 122-138.		12
81	The Physiological Basis of Brain Stimulation. , 2014, , 145-177.		12
82	Recent advances in the role of excitationâ€“inhibition balance in motor recovery post-stroke. Faculty Reviews, 2021, 10, 58.	3.9	12
83	Differential impact of reward and punishment on functional connectivity after skill learning. NeuroImage, 2019, 189, 95-105.	4.2	11
84	Reassessing associations between white matter and behaviour with multimodal microstructural imaging. Cortex, 2021, 145, 187-200.	2.4	10
85	Grey matter abnormalities in methcathinone abusers with a Parkinsonian syndrome. Brain and Behavior, 2016, 6, e00539.	2.2	9
86	Hippocampal Functional Dynamics Are Clinically Implicated in Autoimmune Encephalitis With Faciobrachial Dystonic Seizures. Frontiers in Neurology, 2018, 9, 736.	2.4	7
87	Therapeutic non-invasive brain stimulation in amyotrophic lateral sclerosis: rationale, methods and experience. Journal of Neurology, Neurosurgery and Psychiatry, 2019, 90, 1131-1138.	1.9	7
88	A single, clinically relevant dose of the GABA B agonist baclofen impairs visuomotor learning. Journal of Physiology, 2021, 599, 307-322.	2.9	7
89	An In-vivo 1H-MRS short-echo time technique at 7T: Quantification of metabolites in chronic multiple sclerosis and neuromyelitis optica brain lesions and normal appearing brain tissue. NeuroImage, 2021, 238, 118225.	4.2	5
90	Transcranial Direct Current Stimulation Integration with Magnetic Resonance Imaging, Magnetic Resonance Spectroscopy, Near Infrared Spectroscopy Imaging, and Electroencephalography. , 2019, , 293-345.		4

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91	Alcohol consumption is associated with reduced creatine levels in the hippocampus of older adults. Psychiatry Research - Neuroimaging, 2020, 295, 111019.	1.8	4
92	Exploring the infinite parameter space: rethinking assumptions underpinning the use of transcranial direct current stimulation to induce longâ€term effects. Journal of Physiology, 2020, 598, 621-622.	2.9	3
93	Intention to learn modulates the impact of reward and punishment on sequence learning. Scientific Reports, 2020, 10, 8906.	3.3	3
94	Motor Dysfunction Simulation in Able-Bodied Participants for Usability Evaluation of Assistive Technology: A Research Proposal. Lecture Notes in Information Systems and Organisation, 2021, , 30-37.	0.6	3
95	Investigating Different Levels of Bimanual Interaction With a Novel Motor Learning Task: A Behavioural and Transcranial Alternating Current Stimulation Study. Frontiers in Human Neuroscience, 2021, 15, 755748.	2.0	2
96	tDCS and Magnetic Resonance Imaging. , 2016, , 169-195.		1
97	tDCS and Magnetic Resonance Imaging. , 2021, , 127-158.		1
98	Interindividual Differences in Behavior and Plasticity. , 2014, , 243-253.		0
99	Neuroplasticity in Constraint-Induced Movement Therapy. Biosystems and Biorobotics, 2014, , 23-24.	0.3	0
100	Stimulation is never quite as simple as it seems. Journal of Physiology, 2015, 593, 1529-1530.	2.9	0
101	Less practice makes just as perfect. Trends in Cognitive Sciences, 2021, 25, 823-825.	7.8	0
102	Technology Integration Methods for Bi-directional Brain-computer Interfaces and XR-based Interventions. Conference Proceedings IEEE International Conference on Systems, Man, and Cybernetics, 2020, 2020, 3695-3701.	0.0	0
103	Technology Integration Methods for Bi-directional Brain-computer Interfaces and XR-based Interventions. , 2020, 2020, 3695-3701.		0
104	Neuroanatomical correlates of working memory performance in Neurofibromatosis 1. Cerebral Cortex Communications, 2022, 3, .	1.6	0