

Cameron C McIntyre

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/7627939/cameron-c-mcintyre-publications-by-year.pdf>

Version: 2024-04-24

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

109
papers

9,883
citations

51
h-index

99
g-index

133
ext. papers

11,779
ext. citations

4.4
avg, IF

6.49
L-index

#	Paper	IF	Citations
109	Cingulum bundle connectivity in treatment-refractory compared to treatment-responsive patients with bipolar disorder and healthy controls: a tractography and surgical targeting analysis.. <i>Journal of Neurosurgery</i> , 2022 , 1-13	3.2	
108	Resistivity/Conductivity of Extracellular Medium 2022 , 3027-3031		
107	Computational Models of Deep Brain Stimulation (DBS) 2022 , 883-886		
106	Feasibility of Interferential and Pulsed Transcranial Electrical Stimulation for Neuromodulation at the Human Scale. <i>Neuromodulation</i> , 2021 , 24, 843-853	3.1	5
105	Deep Brain Stimulation for Depression Informed by Intracranial Recordings.. <i>Biological Psychiatry</i> , 2021 ,	7.9	1
104	Subthalamic deep brain stimulation affects heading perception in Parkinson's disease. <i>Journal of Neurology</i> , 2021 , 1	5.5	0
103	Image-based biophysical modeling predicts cortical potentials evoked with subthalamic deep brain stimulation. <i>Brain Stimulation</i> , 2021 , 14, 549-563	5.1	6
102	Biophysical characterization of local field potential recordings from directional deep brain stimulation electrodes. <i>Clinical Neurophysiology</i> , 2021 , 132, 1321-1329	4.3	0
101	Histology-driven model of the macaque motor hyperdirect pathway. <i>Brain Structure and Function</i> , 2021 , 226, 2087-2097	4	0
100	Levodopa Versus Dopamine Agonist after Subthalamic Stimulation in Parkinson's Disease. <i>Movement Disorders</i> , 2021 , 36, 672-680	7	1
99	Effects of subthalamic deep brain stimulation on fixational eye movements in Parkinson's disease. <i>Journal of Computational Neuroscience</i> , 2021 , 49, 345-356	1.4	0
98	StimVision v2: Examples and Applications in Subthalamic Deep Brain Stimulation for Parkinson's Disease. <i>Neuromodulation</i> , 2021 , 24, 248-258	3.1	9
97	Introduction. Virtual and augmented reality in neurosurgery: a timeline. <i>Neurosurgical Focus</i> , 2021 , 51, E1	4.2	4
96	Comparison of methodologies for modeling directional deep brain stimulation electrodes.. <i>PLoS ONE</i> , 2021 , 16, e0260162	3.7	0
95	Biophysical reconstruction of the signal conduction underlying short-latency cortical evoked potentials generated by subthalamic deep brain stimulation. <i>Clinical Neurophysiology</i> , 2020 , 131, 542-547	4.3	7
94	Deep brain stimulation of terminating axons. <i>Brain Stimulation</i> , 2020 , 13, 1863-1870	5.1	9
93	Clinical Evaluation of Cingulum Bundle Connectivity for Neurosurgical Hypothesis Development. <i>Neurosurgery</i> , 2020 , 86, 724-735	3.2	5

92	Connectivity-based identification of a potential neurosurgical target for mood disorders. <i>Journal of Psychiatric Research</i> , 2020 , 125, 113-120	5.2	6
91	Emerging technologies for improved deep brain stimulation. <i>Nature Biotechnology</i> , 2019 , 37, 1024-1033	44.5	85
90	Deep brain stimulation: current challenges and future directions. <i>Nature Reviews Neurology</i> , 2019 , 15, 148-160	15	320
89	Vestibular heading perception in Parkinson's disease. <i>Progress in Brain Research</i> , 2019 , 249, 307-319	2.9	8
88	A Driving-Force Predictor for Estimating Pathway Activation in Patient-Specific Models of Deep Brain Stimulation. <i>Neuromodulation</i> , 2019 , 22, 403-415	3.1	13
87	Theoretical principles of deep brain stimulation induced synaptic suppression. <i>Brain Stimulation</i> , 2019 , 12, 1402-1409	5.1	11
86	Holographic Reconstruction of Axonal Pathways in the Human Brain. <i>Neuron</i> , 2019 , 104, 1056-1064.e3	13.9	41
85	Quantifying the axonal pathways directly stimulated in therapeutic subcallosal cingulate deep brain stimulation. <i>Human Brain Mapping</i> , 2019 , 40, 889-903	5.9	29
84	Characterization of the stimulus waveforms generated by implantable pulse generators for deep brain stimulation. <i>Clinical Neurophysiology</i> , 2018 , 129, 731-742	4.3	20
83	Quantifying axonal responses in patient-specific models of subthalamic deep brain stimulation. <i>NeuroImage</i> , 2018 , 172, 263-277	7.9	52
82	StimVision Software: Examples and Applications in Subcallosal Cingulate Deep Brain Stimulation for Depression. <i>Neuromodulation</i> , 2018 , 21, 191-196	3.1	43
81	Biophysical basis of subthalamic local field potentials recorded from deep brain stimulation electrodes. <i>Journal of Neurophysiology</i> , 2018 , 120, 1932-1944	3.2	14
80	Patient-Specific Modeling of Deep Brain Stimulation 2018 , 129-135		
79	Impact of brain shift on subcallosal cingulate deep brain stimulation. <i>Brain Stimulation</i> , 2018 , 11, 445-453	3.1	17
78	Action potential initiation, propagation, and cortical invasion in the hyperdirect pathway during subthalamic deep brain stimulation. <i>Brain Stimulation</i> , 2018 , 11, 1140-1150	5.1	30
77	Evolving Applications, Technological Challenges and Future Opportunities in Neuromodulation: Proceedings of the Fifth Annual Deep Brain Stimulation Think Tank. <i>Frontiers in Neuroscience</i> , 2017 , 11, 734	5.1	42
76	Targeting of the Subthalamic Nucleus for Deep Brain Stimulation: A Survey Among Parkinson Disease Specialists. <i>World Neurosurgery</i> , 2017 , 99, 41-46	2.1	36
75	Role of Soft-Tissue Heterogeneity in Computational Models of Deep Brain Stimulation. <i>Brain Stimulation</i> , 2017 , 10, 46-50	5.1	43

74	Creating and parameterizing patient-specific deep brain stimulation pathway-activation models using the hyperdirect pathway as an example. <i>PLoS ONE</i> , 2017 , 12, e0176132	3.7	61
73	Analyzing the tradeoff between electrical complexity and accuracy in patient-specific computational models of deep brain stimulation. <i>Journal of Neural Engineering</i> , 2016 , 13, 036023	5	36
72	Deep brain stimulation mechanisms: the control of network activity via neurochemistry modulation. <i>Journal of Neurochemistry</i> , 2016 , 139 Suppl 1, 338-345	6	80
71	Short pulse width widens the therapeutic window of subthalamic neurostimulation. <i>Annals of Clinical and Translational Neurology</i> , 2015 , 2, 427-32	5.3	95
70	Machine Learning Approach to Optimizing Combined Stimulation and Medication Therapies for Parkinson's Disease. <i>Brain Stimulation</i> , 2015 , 8, 1025-32	5.1	42
69	The Use of Stimulation Field Models for Deep Brain Stimulation Programming. <i>Brain Stimulation</i> , 2015 , 8, 976-8	5.1	8
68	Letter to the Editor: Correlation of diffusion tensor imaging and intraoperative macrostimulation. <i>Journal of Neurosurgery</i> , 2015 , 123, 291-2	3.2	3
67	Engineering the next generation of clinical deep brain stimulation technology. <i>Brain Stimulation</i> , 2015 , 8, 21-6	5.1	50
66	Behavioral and neurophysiological evidence for the enhancement of cognitive control under dorsal pallidal deep brain stimulation in Huntington's disease. <i>Brain Structure and Function</i> , 2015 , 220, 2441-8	4	31
65	Computational analysis of kilohertz frequency spinal cord stimulation for chronic pain management. <i>Anesthesiology</i> , 2015 , 122, 1362-76	4.3	85
64	Tractography Activation Patterns in Dorsolateral Prefrontal Cortex Suggest Better Clinical Responses in OCD DBS. <i>Frontiers in Neuroscience</i> , 2015 , 9, 519	5.1	47
63	Defining critical white matter pathways mediating successful subcallosal cingulate deep brain stimulation for treatment-resistant depression. <i>Biological Psychiatry</i> , 2014 , 76, 963-9	7.9	264
62	Fiber tractography of the axonal pathways linking the basal ganglia and cerebellum in Parkinson disease: implications for targeting in deep brain stimulation. <i>Journal of Neurosurgery</i> , 2014 , 120, 988-96	3.2	57
61	Anatomical targets associated with abrupt versus gradual washout of subthalamic deep brain stimulation effects on bradykinesia. <i>PLoS ONE</i> , 2014 , 9, e99663	3.7	13
60	Defining a therapeutic target for pallidal deep brain stimulation for dystonia. <i>Annals of Neurology</i> , 2014 , 76, 22-30	9.4	47
59	Tractography-activation models applied to subcallosal cingulate deep brain stimulation. <i>Brain Stimulation</i> , 2013 , 6, 737-9	5.1	77
58	Theoretical principles underlying optical stimulation of myelinated axons expressing channelrhodopsin-2. <i>Neuroscience</i> , 2013 , 248, 541-51	3.9	24
57	Stimulation region within the globus pallidus does not affect verbal fluency performance. <i>Brain Stimulation</i> , 2013 , 6, 248-53	5.1	18

56	Association of deep brain stimulation washout effects with Parkinson disease duration. <i>JAMA Neurology</i> , 2013 , 70, 95-9	17.2	33
55	Computational modeling of deep brain stimulation. <i>Handbook of Clinical Neurology / Edited By P J Vinken and G W Bruyn</i> , 2013 , 116, 55-61	3	28
54	Artificial neural network based characterization of the volume of tissue activated during deep brain stimulation. <i>Journal of Neural Engineering</i> , 2013 , 10, 056023	5	82
53	Theoretical analysis of the local field potential in deep brain stimulation applications. <i>PLoS ONE</i> , 2013 , 8, e59839	3.7	65
52	Bimanual force coordination in Parkinson's disease patients with bilateral subthalamic deep brain stimulation. <i>PLoS ONE</i> , 2013 , 8, e78934	3.7	5
51	Basal ganglia activity patterns in parkinsonism and computational modeling of their downstream effects. <i>European Journal of Neuroscience</i> , 2012 , 36, 2213-28	3.5	76
50	Theoretical principles underlying optical stimulation of a channelrhodopsin-2 positive pyramidal neuron. <i>Journal of Neurophysiology</i> , 2012 , 107, 3235-45	3.2	44
49	Current steering to activate targeted neural pathways during deep brain stimulation of the subthalamic region. <i>Brain Stimulation</i> , 2012 , 5, 369-377	5.1	73
48	Energy efficient neural stimulation: coupling circuit design and membrane biophysics. <i>PLoS ONE</i> , 2012 , 7, e51901	3.7	22
47	Axonal pathways linked to therapeutic and nontherapeutic outcomes during psychiatric deep brain stimulation. <i>Human Brain Mapping</i> , 2012 , 33, 958-68	5.9	51
46	Neural targets for relieving parkinsonian rigidity and bradykinesia with pallidal deep brain stimulation. <i>Journal of Neurophysiology</i> , 2012 , 108, 567-77	3.2	38
45	Probabilistic analysis of activation volumes generated during deep brain stimulation. <i>NeuroImage</i> , 2011 , 54, 2096-104	7.9	121
44	Dissociation of motor symptoms during deep brain stimulation of the subthalamic nucleus in the region of the internal capsule. <i>Experimental Neurology</i> , 2011 , 228, 294-7	5.7	34
43	Theoretical analysis of intracortical microelectrode recordings. <i>Journal of Neural Engineering</i> , 2011 , 8, 045006	5	70
42	Rules ventral prefrontal cortical axons use to reach their targets: implications for diffusion tensor imaging tractography and deep brain stimulation for psychiatric illness. <i>Journal of Neuroscience</i> , 2011 , 31, 10392-402	6.6	151
41	Anatomical connectivity between subcortical structures. <i>Brain Connectivity</i> , 2011 , 1, 111-8	2.7	4
40	Evaluation of novel stimulus waveforms for deep brain stimulation. <i>Journal of Neural Engineering</i> , 2010 , 7, 066008	5	96
39	Reversing cognitive-motor impairments in Parkinson's disease patients using a computational modelling approach to deep brain stimulation programming. <i>Brain</i> , 2010 , 133, 746-61	11.2	184

38	Current-controlled deep brain stimulation reduces in vivo voltage fluctuations observed during voltage-controlled stimulation. <i>Clinical Neurophysiology</i> , 2010 , 121, 2128-33	4.3	85
37	Modeling shifts in the rate and pattern of subthalamopallidal network activity during deep brain stimulation. <i>Journal of Computational Neuroscience</i> , 2010 , 28, 425-41	1.4	91
36	Network perspectives on the mechanisms of deep brain stimulation. <i>Neurobiology of Disease</i> , 2010 , 38, 329-37	7.5	322
35	Patient-specific models of deep brain stimulation: influence of field model complexity on neural activation predictions. <i>Brain Stimulation</i> , 2010 , 3, 65-7	5.1	142
34	In vivo impedance spectroscopy of deep brain stimulation electrodes. <i>Journal of Neural Engineering</i> , 2009 , 6, 046001	5	158
33	Automated 3-dimensional brain atlas fitting to microelectrode recordings from deep brain stimulation surgeries. <i>Stereotactic and Functional Neurosurgery</i> , 2009 , 87, 229-40	1.6	24
32	Experimental and theoretical characterization of the voltage distribution generated by deep brain stimulation. <i>Experimental Neurology</i> , 2009 , 216, 166-76	5.7	124
31	Current steering to control the volume of tissue activated during deep brain stimulation. <i>Brain Stimulation</i> , 2008 , 1, 7-15	5.1	154
30	Chronic subdural electrodes in the management of epilepsy. <i>Clinical Neurophysiology</i> , 2008 , 119, 11-28	4.3	97
29	Quantifying the neural elements activated and inhibited by globus pallidus deep brain stimulation. <i>Journal of Neurophysiology</i> , 2008 , 100, 2549-63	3.2	91
28	Thalamocortical relay fidelity varies across subthalamic nucleus deep brain stimulation protocols in a data-driven computational model. <i>Journal of Neurophysiology</i> , 2008 , 99, 1477-92	3.2	130
27	Tracking the mechanisms of deep brain stimulation for neuropsychiatric disorders. <i>Frontiers in Bioscience - Landmark</i> , 2008 , 13, 5892-904	2.8	52
26	Mechanisms and targets of deep brain stimulation in movement disorders. <i>Neurotherapeutics</i> , 2008 , 5, 294-308	6.4	223
25	Stereotactic neurosurgical planning, recording, and visualization for deep brain stimulation in non-human primates. <i>Journal of Neuroscience Methods</i> , 2007 , 162, 32-41	3	55
24	Differences among implanted pulse generator waveforms cause variations in the neural response to deep brain stimulation. <i>Clinical Neurophysiology</i> , 2007 , 118, 1889-94	4.3	71
23	Patient-specific analysis of the volume of tissue activated during deep brain stimulation. <i>NeuroImage</i> , 2007 , 34, 661-70	7.9	359
22	Computational analysis of deep brain stimulation. <i>Expert Review of Medical Devices</i> , 2007 , 4, 615-22	3.5	44
21	Cicerone: stereotactic neurophysiological recording and deep brain stimulation electrode placement software system. <i>Acta Neurochirurgica Supplementum</i> , 2007 , 97, 561-7	1.7	88

20	StimExplorer: deep brain stimulation parameter selection software system. <i>Acta Neurochirurgica Supplementum</i> , 2007 , 97, 569-74	1.7	18
19	Computational analysis of subthalamic nucleus and lenticular fasciculus activation during therapeutic deep brain stimulation. <i>Journal of Neurophysiology</i> , 2006 , 96, 1569-80	3.2	241
18	Optimizing deep brain stimulation parameter selection with detailed models of the electrode-tissue interface. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2006 , 2006, 893-5		30
17	Sources and effects of electrode impedance during deep brain stimulation. <i>Clinical Neurophysiology</i> , 2006 , 117, 447-54	4.3	267
16	Role of electrode design on the volume of tissue activated during deep brain stimulation. <i>Journal of Neural Engineering</i> , 2006 , 3, 1-8	5	210
15	Model-based analysis of cortical recording with silicon microelectrodes. <i>Clinical Neurophysiology</i> , 2005 , 116, 2240-50	4.3	114
14	Tissue and electrode capacitance reduce neural activation volumes during deep brain stimulation. <i>Clinical Neurophysiology</i> , 2005 , 116, 2490-500	4.3	241
13	Deep brain stimulation of the subthalamic nucleus: model-based analysis of the effects of electrode capacitance on the volume of activation 2005 ,		2
12	Cellular effects of deep brain stimulation: model-based analysis of activation and inhibition. <i>Journal of Neurophysiology</i> , 2004 , 91, 1457-69	3.2	592
11	Prediction of myelinated nerve fiber stimulation thresholds: limitations of linear models. <i>IEEE Transactions on Biomedical Engineering</i> , 2004 , 51, 229-36	5	47
10	Electric field and stimulating influence generated by deep brain stimulation of the subthalamic nucleus. <i>Clinical Neurophysiology</i> , 2004 , 115, 589-95	4.3	392
9	Uncovering the mechanism(s) of action of deep brain stimulation: activation, inhibition, or both. <i>Clinical Neurophysiology</i> , 2004 , 115, 1239-48	4.3	566
8	How does deep brain stimulation work? Present understanding and future questions. <i>Journal of Clinical Neurophysiology</i> , 2004 , 21, 40-50	2.2	249
7	Extracellular stimulation of central neurons: influence of stimulus waveform and frequency on neuronal output. <i>Journal of Neurophysiology</i> , 2002 , 88, 1592-604	3.2	285
6	Modeling the excitability of mammalian nerve fibers: influence of afterpotentials on the recovery cycle. <i>Journal of Neurophysiology</i> , 2002 , 87, 995-1006	3.2	461
5	Uncovering the mechanisms of deep brain stimulation for Parkinson's disease through functional imaging, neural recording, and neural modeling. <i>Critical Reviews in Biomedical Engineering</i> , 2002 , 30, 249-81	1.1	41
4	Finite element analysis of the current-density and electric field generated by metal microelectrodes. <i>Annals of Biomedical Engineering</i> , 2001 , 29, 227-35	4.7	121
3	Selective microstimulation of central nervous system neurons. <i>Annals of Biomedical Engineering</i> , 2000 , 28, 219-33	4.7	171

- 2 Excitation of central nervous system neurons by nonuniform electric fields. *Biophysical Journal*, **1999**, 76, 878-88 2.9 253
- 1 Sensitivity analysis of a model of mammalian neural membrane. *Biological Cybernetics*, **1998**, 79, 29-37 2.8 36