Vladimir Litvak

List of Publications by Year
in descending order

97 papers	7,942 citations	70961 41 h-index	60497 81 g-index
112 all docs	112 docs citations	112 times ranked	7353 citing authors

#	Article	IF	Citations
1	Good practice for conducting and reporting MEG research. NeuroImage, 2013, 65, 349-363.	2.1	604
2	EEG and MEG Data Analysis in SPM8. Computational Intelligence and Neuroscience, 2011, 2011, 1-32.	1.1	500
3	Bayesian model reduction and empirical Bayes for group (DCM) studies. NeuroImage, 2016, 128, 413-431.	2.1	475
4	Preserved Feedforward But Impaired Top-Down Processes in the Vegetative State. Science, 2011, 332, 858-862.	6.0	444
5	Resting oscillatory cortico-subthalamic connectivity in patients with Parkinsonâ€™s disease. Brain, 2011, 134, 359-374.	3.7	387
6	A guide to group effective connectivity analysis, part 2: Second level analysis with PEB. NeuroImage, 2019, 200, 12-25.	2.1	267
7	Synchronized neural oscillations and the pathophysiology of ParkinsonÊ¼s disease. Current Opinion in Neurology, 2013, 26, 662-670.	1.8	220
8	Deep brain stimulation modulates synchrony within spatially and spectrally distinct resting state networks in Parkinsonâ€™s disease. Brain, 2016, 139, 1482-1496.	3.7	213
9	Excessive synchronization of basal ganglia neurons at 20ÂHz slows movement in Parkinson's disease. Experimental Neurology, 2007, 205, 214-221.	2.0	199
10	Movement-Related Changes in Local and Long-Range Synchronization in Parkinson's Disease Revealed by Simultaneous Magnetoencephalography and Intracranial Recordings. Journal of Neuroscience, 2012, 32, 10541-10553.	1.7	176
11	Alterations in Brain Connectivity Underlying Beta Oscillations in Parkinsonism. PLoS Computational Biology, 2011, 7, e1002124.	1.5	160
12	Electromagnetic source reconstruction for group studies. NeuroImage, 2008, 42, 1490-1498.	2.1	159
13	LFP and oscillationsâ€”what do they tell us?. Current Opinion in Neurobiology, 2015, 31, 1-6.	2.0	159
14	Subthalamic nucleus phaseâ€“amplitude coupling correlates with motor impairment in Parkinsonâ€™s disease. Clinical Neurophysiology, 2016, 127, 2010-2019.	0.7	159
15	Cortico-pallidal oscillatory connectivity in patients with dystonia. Brain, 2015, 138, 1894-1906.	3.7	141
16	Granger causality revisited. NeuroImage, 2014, 101, 796-808.	2.1	136
17	Algorithmic procedures for Bayesian MEG/EEG source reconstruction in SPM. NeuroImage, 2014, 84, 476-487.	2.1	130
18	A DCM study of spectral asymmetries in feedforward and feedback connections between visual areas V1 and V4 in the monkey. NeuroImage, 2015, 108, 460-475.	2.1	129

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19	Movement-Related Theta Rhythm in Humans: Coordinating Self-Directed Hippocampal Learning. PLoS Biology, 2012, 10, e1001267.	2.6	127
20	Optimized beamforming for simultaneous MEG and intracranial local field potential recordings in deep brain stimulation patients. NeuroImage, 2010, 50, 1578-1588.	2.1	123
21	DCM for complex-valued data: Cross-spectra, coherence and phase-delays. NeuroImage, 2012, 59, 439-455.	2.1	120
22	Artifact correction and source analysis of early electroencephalographic responses evoked by transcranial magnetic stimulation over primary motor cortex. NeuroImage, 2007, 37, 56-70.	2.1	112
23	Anticipatory changes in beta synchrony in the human corticospinal system and associated improvements in task performance. European Journal of Neuroscience, 2007, 25, 3758-3765.	1.2	103
24	Empirical Bayes for DCM: A Group Inversion Scheme. Frontiers in Systems Neuroscience, 2015, 9, 164.	1.2	103
25	MEG-BIDS, the brain imaging data structure extended to magnetoencephalography. Scientific Data, 2018, 5, 180110.	2.4	101
26	A Parametric Empirical Bayesian Framework for the EEG/MEG Inverse Problem: Generative Models for Multi-Subject and Multi-Modal Integration. Frontiers in Human Neuroscience, 2011, 5, 76.	1.0	95
27	Oscillatory activity in the pedunculopontine area of patients with Parkinson's disease. Experimental Neurology, 2008, 211, 59-66.	2.0	93
28	Sensory Processing and the Rubber Hand Illusionâ€"An Evoked Potentials Study. Journal of Cognitive Neuroscience, 2015, 27, 573-582.	1.1	93
29	Dynamic Causal Models for phase coupling. Journal of Neuroscience Methods, 2009, 183, 19-30.	1.3	71
30	The functional anatomy of schizophrenia: A dynamic causal modeling study of predictive coding. Schizophrenia Research, 2014, 158, 204-212.	1.1	67
31	Neural signatures of hyperdirect pathway activity in Parkinsonâ€™s disease. Nature Communications, 2021, 12, 5185.	5.8	65
32	Suppression of beta oscillations in the subthalamic nucleus following cortical stimulation in humans. European Journal of Neuroscience, 2008, 28, 1686-1695.	1.2	64
33	Contrast gain control and horizontal interactions in V1: A DCM study. NeuroImage, 2014, 92, 143-155.	2.1	64
34	Changes in the location of cortico-muscular coherence following stroke. NeuroImage: Clinical, 2013, 2, 50-55.	1.4	62
35	Propagation of beta/gamma rhythms in the cortico-basal ganglia circuits of the parkinsonian rat. Journal of Neurophysiology, 2018, 119, 1608-1628.	0.9	62
36	Separating Neural Oscillations from Aperiodic 1/f Activity: Challenges and Recommendations. Neuroinformatics, 2022, 20, 991-1012.	1.5	61

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37	LTP-like changes induced by paired associative stimulation of the primary somatosensory cortex in humans: source analysis and associated changes in behaviour. European Journal of Neuroscience, 2007, 25, 2862-2874.	1.2	58
38	Dynamic causal modelling of lateral interactions in the visual cortex. NeuroImage, 2013, 66, 563-576.	2.1	58
39	Cognitive neuroscience using wearable magnetometer arrays: Non-invasive assessment of language function. NeuroImage, 2018, 181, 513-520.	2.1	56
40	Beta Reactivity, Prospective Facilitation of Executive Processing, and Its Dependence on Dopaminergic Therapy in Parkinson's Disease. Journal of Neuroscience, 2012, 32, 9909-9916.	1.7	54
41	Analysis of simultaneous MEG and intracranial LFP recordings during Deep Brain Stimulation: a protocol and experimental validation. Journal of Neuroscience Methods, 2016, 261, 29-46.	1.3	52
42	Oscillatory Beta Power Correlates With Akinesiaâ€Rigidity in the Parkinsonian Subthalamic Nucleus. Movement Disorders, 2017, 32, 174-175.	2.2	52
43	A unified view on beamformers for M/EEG source reconstruction. NeuroImage, 2022, 246, 118789.	2.1	50
44	Comparison of beamformer implementations for MEG source localization. NeuroImage, 2020, 216, 116797.	2.1	48
45	Response to Comment on â€œPreserved Feedforward But Impaired Top-Down Processes in the Vegetative Stateâ€. Science, 2011, 334, 1203-1203.	6.0	45
46	The Frontal Control of Stopping. Cerebral Cortex, 2015, 25, 4392-4406.	1.6	44
47	Parametric estimation of cross-frequency coupling. Journal of Neuroscience Methods, 2015, 243, 94-102.	1.3	44
48	An MEG signature corresponding to an axiomatic model of reward prediction error. NeuroImage, 2012, 59, 635-645.	2.1	43
49	Empirical Bayes for Group (DCM) Studies: A Reproducibility Study. Frontiers in Human Neuroscience, 2015, 9, 670.	1.0	41
50	Generic dynamic causal modelling: An illustrative application to Parkinson's disease. NeuroImage, 2018, 181, 818-830.	2.1	41
51	Dynamic causal modelling of COVID-19. Wellcome Open Research, 2020, 5, 89.	0.9	41
52	Movement related dynamics of subthalmo-cortical alpha connectivity in Parkinson's disease. NeuroImage, 2013, 70, 132-142.	2.1	40
53	Second waves, social distancing, and the spread of COVID-19 across America. Wellcome Open Research, 2020, 5, 103.	0.9	40
54	The problem of low variance voxels in statistical parametric mapping; a new hat avoids a â€˜haircutâ€™. NeuroImage, 2012, 59, 2131-2141.	2.1	38

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55	Linking canonical microcircuits and neuronal activity: Dynamic causal modelling of laminar recordings. NeuroImage, 2017, 146, 355-366.	2.1	38
56	Metastable oscillatory modes emerge from synchronization in the brain spacetime connectome. Communications Physics, 2022, 5, .	2.0	37
57	Convolution models for induced electromagnetic responses. NeuroImage, 2013, 64, 388-398.	2.1	35
58	Differences in TMS-evoked responses between schizophrenia patients and healthy controls can be observed without a dedicated EEG system. Clinical Neurophysiology, 2010, 121, 332-339.	0.7	33
59	Cognitive Factors Modulate Activity within the Human Subthalamic Nucleus during Voluntary Movement in Parkinson's Disease. Journal of Neuroscience, 2013, 33, 15815-15826.	1.7	33
60	Dynamic causal modelling of COVID-19. Wellcome Open Research, 2020, 5, 89.	0.9	32
61	Low-beta cortico-pallidal coherence decreases during movement and correlates with overall reaction time. NeuroImage, 2017, 159, 1-8.	2.1	31
62	Comparing dynamic causal models of neurovascular coupling with fMRI and EEG/MEG. NeuroImage, 2020, 216, 116734.	2.1	31
63	Bayesian fusion and multimodal DCM for EEG and fMRI. NeuroImage, 2020, 211, 116595.	2.1	30
64	Local field potential recordings from the pedunculopontine nucleus in a Parkinsonian patient. NeuroReport, 2008, 19, 59-62.	0.6	28
65	The Parkinsonian Subthalamic Network: Measures of Power, Linear, and Non-linear Synchronization and their Relationship to L-DOPA Treatment and OFF State Motor Severity. Frontiers in Human Neuroscience, 2016, 10, 517.	1.0	28
66	EEG and MEG primers for tracking DBS network effects. NeuroImage, 2021, 224, 117447.	2.1	26
67	Modulation of effective connectivity during vocalization with perturbed auditory feedback. Neuropsychologia, 2013, 51, 1471-1480.	0.7	25
68	The comparative performance of DBS artefact rejection methods for MEG recordings. NeuroImage, 2020, 219, 117057.	2.1	25
69	Balance between competing spectral states in subthalamic nucleus is linked to motor impairment in Parkinsonâ€™s disease. Brain, 2022, 145, 237-250.	3.7	25
70	Cortical connectivity of the nucleus basalis of Meynert in Parkinsonâ€™s disease and Lewy body dementias. Brain, 2021, 144, 781-788.	3.7	24
71	Intersubject variability and induced gamma in the visual cortex: DCM with empirical <scp>B</scp>ayes and neural fields. Human Brain Mapping, 2016, 37, 4597-4614.	1.9	22
72	Functional Connectivity of the Pedunculopontine Nucleus and Surrounding Region in Parkinson's Disease. Cerebral Cortex, 2017, 27, 54-67.	1.6	22

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73	Controlling false positive rates in mass-multivariate tests for electromagnetic responses. NeuroImage, 2011, 56, 1072-1081.	2.1	20
74	Cortical beta oscillations reflect the contextual gating of visual action feedback. NeuroImage, 2020, 222, 117267.	2.1	20
75	Second waves, social distancing, and the spread of COVID-19 across the USA. Wellcome Open Research, 2020, 5, 103.	0.9	20
76	Nonlinear coupling between occipital and motor cortex during motor imagery: A dynamic causal modeling study. NeuroImage, 2013, 71, 104-113.	2.1	19
77	L-dopa treatment increases oscillatory power in the motor cortex of Parkinson's disease patients. NeuroImage: Clinical, 2020, 26, 102255.	1.4	19
78	Multimodal Integration of M/EEG and f/MRI Data in SPM12. Frontiers in Neuroscience, 2019, 13, 300.	1.4	18
79	Structure learning in coupled dynamical systems and dynamic causal modelling. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20190048.	1.6	17
80	The mirror illusion induces high gamma oscillations in the absence of movement. NeuroImage, 2014, 103, 181-191.	2.1	16
81	Resting state activity and connectivity of the nucleus basalis of Meynert and globus pallidus in Lewy body dementia and Parkinson's disease dementia. NeuroImage, 2020, 221, 117184.	2.1	15
82	Measuring directed functional connectivity using non-parametric directionality analysis: Validation and comparison with non-parametric Granger Causality. NeuroImage, 2020, 218, 116796.	2.1	15
83	Functional connectivity maps of theta/alpha and beta coherence within the subthalamic nucleus region. NeuroImage, 2022, 257, 119320.	2.1	15
84	Cortical drive of low-frequency oscillations in the human nucleus accumbens during action selection. Journal of Neurophysiology, 2015, 114, 29-39.	0.9	14
85	Stimulating at the right time to recover network states in a model of the cortico-basal ganglia-thalamic circuit. PLoS Computational Biology, 2022, 18, e1009887.	1.5	12
86	Cortico-subthalamic Coherence in a Patient With Dystonia Induced by Chorea-Acanthocytosis: A Case Report. Frontiers in Human Neuroscience, 2019, 13, 163.	1.0	9
87	Identification of nonlinear features in cortical and subcortical signals of Parkinson's Disease patients via a novel efficient measure. NeuroImage, 2020, 223, 117356.	2.1	9
88	Optimising beamformer regions of interest analysis. NeuroImage, 2014, 102, 945-954.	2.1	8
89	Thereâ€™s no such thing as a â€˜trueâ€™ model: the challenge of assessing face validity*. , 2019, , .		8
90	Inference of brain networks with approximate Bayesian computation â€“ assessing face validity with an example application in Parkinsonism. NeuroImage, 2021, 236, 118020.	2.1	8

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91	Dynamic analysis on simultaneous iEEG-MEG data via hidden Markov model. NeuroImage, 2021, 233, 117923.	2.1	7
92	Sedation Modulates Frontotemporal Predictive Coding Circuits and the Double Surprise Acceleration Effect. Cerebral Cortex, 2020, 30, 5204-5217.	1.6	5
93	Editorial: From Raw MEG/EEG to Publication: How to Perform MEG/EEG Group Analysis With Free Academic Software. Frontiers in Neuroscience, 2022, 16, 854471.	1.4	5
94	Second waves, social distancing, and the spread of COVID-19 across the USA. Wellcome Open Research, 0, 5, 103.	0.9	2
95	Spontaneous transient states of fronto-temporal and default-mode networks altered by suicide attempt in major depressive disorder. European Archives of Psychiatry and Clinical Neuroscience, 2022, 272, 1547-1557.	1.8	2
96	Conflict Detection in a Sequential Decision Task Is Associated with Increased Cortico-Subthalamic Coherence and Prolonged Subthalamic Oscillatory Response in the Î² Band. Journal of Neuroscience, 2022, 42, 4681-4692.	1.7	2
97	Watching Movies Unfold, a Frame-by-Frame Analysis of the Associated Neural Dynamics. ENeuro, 2021, 8, ENEURO.0099-21.2021.	0.9	0