# Vladimir Litvak

## List of Publications by Citations

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|---|---|---|---|
| 98 papers | 5,344 citations | 38 h-index | 72 g-index |
| 112 ext. papers | 6,902 ext. citations | 6.7 avg, IF | 5.62 L-index |

| # | Paper | IF | Citations |
|---|-------|-----|-----------|
| 98 | Good practice for conducting and reporting MEG research. *NeuroImage*, **2013**, 65, 349-63 | 7.9 | 412 |
| 97 | EEG and MEG data analysis in SPM8. *Computational Intelligence and Neuroscience*, **2011**, 2011, 852961 | 3 | 398 |
| 96 | Preserved feedforward but impaired top-down processes in the vegetative state. *Science*, **2011**, 332, 858-62 | 33.3 | 370 |
| 95 | Resting oscillatory cortico-subthalamic connectivity in patients with Parkinson's disease. *Brain*, **2011**, 134, 359-74 | 11.2 | 304 |
| 94 | Bayesian model reduction and empirical Bayes for group (DCM) studies. *NeuroImage*, **2016**, 128, 413-431 | 7.9 | 253 |
| 93 | Excessive synchronization of basal ganglia neurons at 20 Hz slows movement in Parkinson's disease. *Experimental Neurology*, **2007**, 205, 214-21 | 5.7 | 164 |
| 92 | Synchronized neural oscillations and the pathophysiology of Parkinson's disease. *Current Opinion in Neurology*, **2013**, 26, 662-70 | 7.1 | 154 |
| 91 | 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, 10541-53 | 6.6 | 142 |
| 90 | Deep brain stimulation modulates synchrony within spatially and spectrally distinct resting state networks in Parkinson's disease. *Brain*, **2016**, 139, 1482-96 | 11.2 | 130 |
| 89 | Alterations in brain connectivity underlying beta oscillations in Parkinsonism. *PLoS Computational Biology*, **2011**, 7, e1002124 | 5 | 126 |
| 88 | Electromagnetic source reconstruction for group studies. *NeuroImage*, **2008**, 42, 1490-8 | 7.9 | 126 |
| 87 | LFP and oscillations-what do they tell us?. *Current Opinion in Neurobiology*, **2015**, 31, 1-6 | 7.6 | 116 |
| 86 | Subthalamic nucleus phase-amplitude coupling correlates with motor impairment in Parkinson's disease. *Clinical Neurophysiology*, **2016**, 127, 2010-9 | 4.3 | 109 |
| 85 | Cortico-pallidal oscillatory connectivity in patients with dystonia. *Brain*, **2015**, 138, 1894-906 | 11.2 | 100 |
| 84 | Movement-related theta rhythm in humans: coordinating self-directed hippocampal learning. *PLoS Biology*, **2012**, 10, e1001267 | 9.7 | 94 |
| 83 | Optimized beamforming for simultaneous MEG and intracranial local field potential recordings in deep brain stimulation patients. *NeuroImage*, **2010**, 50, 1578-88 | 7.9 | 94 |
| 82 | Algorithmic procedures for Bayesian MEG/EEG source reconstruction in SPM. *NeuroImage*, **2014**, 84, 476-87 | 7.9 | 93 |

| 81 | A DCM study of spectral asymmetries in feedforward and feedback connections between visual areas V1 and V4 in the monkey. *NeuroImage*, **2015**, 108, 460-75 | 7.9 | 92 |
|---|---|---|---|
| 80 | Artifact correction and source analysis of early electroencephalographic responses evoked by transcranial magnetic stimulation over primary motor cortex. *NeuroImage*, **2007**, 37, 56-70 | 7.9 | 92 |
| 79 | A guide to group effective connectivity analysis, part 2: Second level analysis with PEB. *NeuroImage*, **2019**, 200, 12-25 | 7.9 | 86 |
| 78 | Oscillatory activity in the pedunculopontine area of patients with Parkinson's disease. *Experimental Neurology*, **2008**, 211, 59-66 | 5.7 | 84 |
| 77 | DCM for complex-valued data: cross-spectra, coherence and phase-delays. *NeuroImage*, **2012**, 59, 439-55 | 7.9 | 81 |
| 76 | Anticipatory changes in beta synchrony in the human corticospinal system and associated improvements in task performance. *European Journal of Neuroscience*, **2007**, 25, 3758-65 | 3.5 | 81 |
| 75 | Granger causality revisited. *NeuroImage*, **2014**, 101, 796-808 | 7.9 | 78 |
| 74 | 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 | 3.3 | 72 |
| 73 | Sensory processing and the rubber hand illusion--an evoked potentials study. *Journal of Cognitive Neuroscience*, **2015**, 27, 573-82 | 3.1 | 71 |
| 72 | MEG-BIDS, the brain imaging data structure extended to magnetoencephalography. *Scientific Data*, **2018**, 5, 180110 | 8.2 | 61 |
| 71 | Dynamic Causal Models for phase coupling. *Journal of Neuroscience Methods*, **2009**, 183, 19-30 | 3 | 61 |
| 70 | The functional anatomy of schizophrenia: A dynamic causal modeling study of predictive coding. *Schizophrenia Research*, **2014**, 158, 204-12 | 3.6 | 57 |
| 69 | Empirical Bayes for DCM: A Group Inversion Scheme. *Frontiers in Systems Neuroscience*, **2015**, 9, 164 | 3.5 | 56 |
| 68 | 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, 2862-74 | 3.5 | 54 |
| 67 | Suppression of beta oscillations in the subthalamic nucleus following cortical stimulation in humans. *European Journal of Neuroscience*, **2008**, 28, 1686-95 | 3.5 | 53 |
| 66 | Beta reactivity, prospective facilitation of executive processing, and its dependence on dopaminergic therapy in Parkinson's disease. *Journal of Neuroscience*, **2012**, 32, 9909-16 | 6.6 | 49 |
| 65 | Contrast gain control and horizontal interactions in V1: a DCM study. *NeuroImage*, **2014**, 92, 143-55 | 7.9 | 48 |
| 64 | Dynamic causal modelling of lateral interactions in the visual cortex. *NeuroImage*, **2013**, 66, 563-76 | 7.9 | 44 |

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| 63 | Response to Comment on "Preserved Feedforward But Impaired Top-Down Processes in the Vegetative State". *Science*, **2011**, 334, 1203-1203 | 33.3 | 44 |
| 62 | Changes in the location of cortico-muscular coherence following stroke. *NeuroImage: Clinical*, **2012**, 2, 50-5 | 5.3 | 42 |
| 61 | Oscillatory Beta Power Correlates With Akinesia-Rigidity in the Parkinsonian Subthalamic Nucleus. *Movement Disorders*, **2017**, 32, 174-175 | 7 | 38 |
| 60 | 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 | 3 | 36 |
| 59 | Propagation of beta/gamma rhythms in the cortico-basal ganglia circuits of the parkinsonian rat. *Journal of Neurophysiology*, **2018**, 119, 1608-1628 | 3.2 | 36 |
| 58 | The Frontal Control of Stopping. *Cerebral Cortex*, **2015**, 25, 4392-406 | 5.1 | 35 |
| 57 | An MEG signature corresponding to an axiomatic model of reward prediction error. *NeuroImage*, **2012**, 59, 635-45 | 7.9 | 35 |
| 56 | Cognitive neuroscience using wearable magnetometer arrays: Non-invasive assessment of language function. *NeuroImage*, **2018**, 181, 513-520 | 7.9 | 33 |
| 55 | Movement related dynamics of subthalmo-cortical alpha connectivity in Parkinson's disease. *NeuroImage*, **2013**, 70, 132-42 | 7.9 | 33 |
| 54 | Parametric estimation of cross-frequency coupling. *Journal of Neuroscience Methods*, **2015**, 243, 94-102 | 3 | 30 |
| 53 | Differences in TMS-evoked responses between schizophrenia patients and healthy controls can be observed without a dedicated EEG system. *Clinical Neurophysiology*, **2010**, 121, 332-9 | 4.3 | 30 |
| 52 | Cognitive factors modulate activity within the human subthalamic nucleus during voluntary movement in Parkinson's disease. *Journal of Neuroscience*, **2013**, 33, 15815-26 | 6.6 | 27 |
| 51 | Local field potential recordings from the pedunculopontine nucleus in a Parkinsonian patient. *NeuroReport*, **2008**, 19, 59-62 | 1.7 | 27 |
| 50 | Empirical Bayes for Group (DCM) Studies: A Reproducibility Study. *Frontiers in Human Neuroscience*, **2015**, 9, 670 | 3.3 | 26 |
| 49 | The problem of low variance voxels in statistical parametric mapping; a new hat avoids a 'haircut'. *NeuroImage*, **2012**, 59, 2131-41 | 7.9 | 25 |
| 48 | Dynamic causal modelling of COVID-19. *Wellcome Open Research*, **2020**, 5, 89 | 4.8 | 23 |
| 47 | Dynamic causal modelling of COVID-19. *Wellcome Open Research*, **2020**, 5, 89 | 4.8 | 22 |
| 46 | Second waves, social distancing, and the spread of COVID-19 across America. *Wellcome Open Research*, **2020**, 5, 103 | 4.8 | 21 |

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| 45 | Convolution models for induced electromagnetic responses. *NeuroImage*, **2013**, 64, 388-98 | 7.9 | 20 |
| 44 | Generic dynamic causal modelling: An illustrative application to Parkinson's disease. *NeuroImage*, **2018**, 181, 818-830 | 7.9 | 19 |
| 43 | Low-beta cortico-pallidal coherence decreases during movement and correlates with overall reaction time. *NeuroImage*, **2017**, 159, 1-8 | 7.9 | 19 |
| 42 | Linking canonical microcircuits and neuronal activity: Dynamic causal modelling of laminar recordings. *NeuroImage*, **2017**, 146, 355-366 | 7.9 | 19 |
| 41 | Functional Connectivity of the Pedunculopontine Nucleus and Surrounding Region in Parkinson's Disease. *Cerebral Cortex*, **2017**, 27, 54-67 | 5.1 | 18 |
| 40 | Controlling false positive rates in mass-multivariate tests for electromagnetic responses. *NeuroImage*, **2011**, 56, 1072-81 | 7.9 | 18 |
| 39 | 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 | 3.3 | 18 |
| 38 | Bayesian fusion and multimodal DCM for EEG and fMRI. *NeuroImage*, **2020**, 211, 116595 | 7.9 | 16 |
| 37 | Nonlinear coupling between occipital and motor cortex during motor imagery: a dynamic causal modeling study. *NeuroImage*, **2013**, 71, 104-13 | 7.9 | 16 |
| 36 | Modulation of effective connectivity during vocalization with perturbed auditory feedback. *Neuropsychologia*, **2013**, 51, 1471-80 | 3.2 | 16 |
| 35 | The mirror illusion induces high gamma oscillations in the absence of movement. *NeuroImage*, **2014**, 103, 181-191 | 7.9 | 15 |
| 34 | Comparison of beamformer implementations for MEG source localization. *NeuroImage*, **2020**, 216, 116797 | 7.9 | 14 |
| 33 | Comparing dynamic causal models of neurovascular coupling with fMRI and EEG/MEG. *NeuroImage*, **2020**, 216, 116734 | 7.9 | 11 |
| 32 | Intersubject variability and induced gamma in the visual cortex: DCM with empirical Bayes and neural fields. *Human Brain Mapping*, **2016**, 37, 4597-4614 | 5.9 | 10 |
| 31 | Neural signatures of hyperdirect pathway activity in Parkinson's disease. *Nature Communications*, **2021**, 12, 5185 | 17.4 | 10 |
| 30 | Multimodal Integration of M/EEG and f/MRI Data in SPM12. *Frontiers in Neuroscience*, **2019**, 13, 300 | 5.1 | 9 |
| 29 | Measuring directed functional connectivity using non-parametric directionality analysis: Validation and comparison with non-parametric Granger Causality. *NeuroImage*, **2020**, 218, 116796 | 7.9 | 9 |
| 28 | 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 | 7.9 | 8 |

| # | Publication | IF | Cites |
|---|---|---|---|
| 27 | EEG and MEG primers for tracking DBS network effects. *NeuroImage*, **2021**, 224, 117447 | 7.9 | 8 |
| 26 | L-dopa treatment increases oscillatory power in the motor cortex of Parkinson's disease patients. *NeuroImage: Clinical*, **2020**, 26, 102255 | 5.3 | 7 |
| 25 | The comparative performance of DBS artefact rejection methods for MEG recordings. *NeuroImage*, **2020**, 219, 117057 | 7.9 | 7 |
| 24 | Cortical connectivity of the nucleus basalis of Meynert in Parkinson's disease and Lewy body dementias. *Brain*, **2021**, 144, 781-788 | 11.2 | 7 |
| 23 | Separating Neural Oscillations from Aperiodic 1/f Activity: Challenges and Recommendations.. *Neuroinformatics*, **2022**, 1 | 3.2 | 7 |
| 22 | Structure learning in coupled dynamical systems and dynamic causal modelling. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2019**, 377, 20190048 | 3 | 6 |
| 21 | Optimising beamformer regions of interest analysis. *NeuroImage*, **2014**, 102 Pt 2, 945-54 | 7.9 | 6 |
| 20 | State Dependent Beta Oscillations in the Cortico-Basal Ganglia Circuit and their Neuromodulation under Phase-Locked Inputs | | 5 |
| 19 | Second waves, social distancing, and the spread of COVID-19 across America. *Wellcome Open Research*, **2020**, 5, 103 | 4.8 | 5 |
| 18 | Dynamic analysis on simultaneous iEEG-MEG data via hidden Markov model. *NeuroImage*, **2021**, 233, 117923 | 7.9 | 5 |
| 17 | Cortico-subthalamic Coherence in a Patient With Dystonia Induced by Chorea-Acanthocytosis: A Case Report. *Frontiers in Human Neuroscience*, **2019**, 13, 163 | 3.3 | 4 |
| 16 | Cortical beta oscillations reflect the contextual gating of visual action feedback. *NeuroImage*, **2020**, 222, 117267 | 7.9 | 4 |
| 15 | Neural signatures of pathological hyperdirect pathway activity in Parkinson's disease | | 4 |
| 14 | A unified view on beamformers for M/EEG source reconstruction. *NeuroImage*, **2021**, 246, 118789 | 7.9 | 3 |
| 13 | MEG-BIDS: an extension to the Brain Imaging Data Structure for magnetoencephalography | | 3 |
| 12 | Identification of nonlinear features in cortical and subcortical signals of Parkinson's Disease patients via a novel efficient measure. *NeuroImage*, **2020**, 223, 117356 | 7.9 | 3 |
| 11 | Sedation Modulates Frontotemporal Predictive Coding Circuits and the Double Surprise Acceleration Effect. *Cerebral Cortex*, **2020**, 30, 5204-5217 | 5.1 | 2 |
| 10 | Conflict detection in a sequential decision task is associated with increased cortico-subthalamic coherence and prolonged subthalamic oscillatory response in the beta band | | 2 |

## LIST OF PUBLICATIONS

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|---|---|---|---|
| 9 | Balance between competing spectral states in subthalamic nucleus is linked to motor impairment in Parkinson's disease. *Brain*, **2021**, | 11.2 | 2 |
| 8 | Second waves, social distancing, and the spread of COVID-19 across the USA. *Wellcome Open Research*,5, 103 | 4.8 | 2 |
| 7 | TMS-induzierte Plastizität Ein Fenster zum Verständnis des motorischen Lernens?. *Klinische Neurophysiologie*, **2005**, 36, 178-185 | 0.2 | 1 |
| 6 | Model Based Inference of Large Scale Brain Networks with Approximate Bayesian Computation | | 1 |
| 5 | Propagation of Beta/Gamma Rhythms in the Cortico-Basal Ganglia Circuits of the Parkinsonian Rat | | 1 |
| 4 | Inference of brain networks with approximate Bayesian computation - assessing face validity with an example application in Parkinsonism. *NeuroImage*, **2021**, 236, 118020 | 7.9 | 1 |
| 3 | 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 | 5 | 0 |
| 2 | Functional connectivity maps of theta/alpha and beta coherence within the subthalamic nucleus region.. *NeuroImage*, **2022**, 119320 | 7.9 | 0 |
| 1 | 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**, 1 | 5.1 | |