



2024

Kujala, J., Ciumas, C., Jung, J., Bouvard, S., Lecaigard, F., Lothe, A., Bouet, R., Ryvlin, P., et **Jerbi, K.** (2024) GABAergic inhibition shapes behavior and neural dynamics in human visual working memory. *Cerebral Cortex*. 34 2. [Pubmed](#)

D'Andrea, A., Croce, P., O'Byrne, J., **Jerbi, K.**, Pascarella, A., Raffone, A., Pizzella, V., et Marzetti, L. (2024) Mindfulness meditation styles differently modulate source-level MEG microstate dynamics and complexity. *Frontiers in Neuroscience*. Original Research. 18. [Abstract](#)

2023

Harel, Y., Cyr, A., Boyle, J., Pinsard, B., Bernard, J., Fourcade, M.F., Aggarwal, H., Ponce, A.F., Thirion, B., **Jerbi, K.**, et Bellec, P. (2023) Open design of a reproducible videogame controller for MRI and MEG. *PLoS One*. 18 11: e0290158. [Pubmed](#)

Cui, W., Jeong, W., Tholke, P., Medani, T., **Jerbi, K.**, Joshi, A.A., et Leahy, R.M. (2023) Neuro-GPT: Developing A Foundation Model for EEG. *arXiv*. abs/2311.03764. [Abstract](#)

Oswald, V., Vanhauzenhuyse, A., Annen, J., Martial, C., Bicego, A., Rousseaux, F., Sombrun, C., Harel, Y., Faymonville, M.E., Laureys, S., **Jerbi, K.**, et Gosseries, O. (2023) Autonomic nervous system modulation during self-induced non-ordinary states of consciousness. *Scientific Reports*. 13 1: 15811. [Pubmed](#)

Vallarino, E., Hincapié, A.S., **Jerbi, K.**, Leahy, R., Pascarella, A., Sorrentino, A., et Sommariva, S. (2023 epub ahead of print) Tuning Minimum-Norm regularization parameters for optimal MEG connectivity estimation. *bioRxiv*. 2023.04.15.537017. [Abstract](#)

Caplette, L., **Jerbi, K.**, et Gosselin, F. (2023) Rhythmic Information Sampling in the Brain during Visual Recognition. *Journal of Neuroscience*. 43 24: 4487-4497. [Pubmed](#)

Landry, M., da Silva Castanheira, J., et **Jerbi, K.** (2023) Differential and Overlapping Effects between Exogenous and Endogenous Attention Shape Perceptual Facilitation during Visual Processing. *Journal of Cognitive Neuroscience*. 35 8: 1279-1300. [Pubmed](#)

Maschke, C., Duclos, C., Owen, A.M., **Jerbi, K.**, et Blain-Moraes, S. (2023) Aperiodic brain activity and response to anesthesia vary in disorders of consciousness. *Neuroimage*. 275: 120154. [Pubmed](#)

Thölke, P., Mantilla-Ramos, Y.J., Abdelhedi, H., Maschke, C., Dehgan, A., Harel, Y., Kemtur, A., Mekki Berrada, L., Sahraoui, M., Young, T., Bellemare Pépin, A., El Khantour, C., Landry, M., Pascarella, A., Hadid, V., Combrisson, E., O'Byrne, J., et **Jerbi, K.** (2023) Class imbalance should not throw you off balance: Choosing the right classifiers and performance metrics for brain decoding with imbalanced data. *Neuroimage*. 277: 120253. [Pubmed](#)

Charlotte, M., Jordan, O.B., Michele Angelo, C., Melanie, B., Olivia, G., Steven, L., Mario, R., Karim, J., et Stefanie, B.-M. (2023) Criticality of resting-state EEG predicts perturbational complexity and level of consciousness during anesthesia. *bioRxiv*. 2023.10.26.564247.



Maschke, C., O'Byrne, J., Colombo, M.A., Boly, M., Gosseries, O., Laureys, S., Rosanova, M., **Jerbi, K.**, et Blain-Moraes, S. (2023) Criticality of resting-state EEG predicts perturbational complexity and level of consciousness during anesthesia. *bioRxiv*. 2023.10.26.564247. [Abstract](#)

Kemtur, A., Paugam, F., Pinsard, B., Sainath, P., Le clei, M., Boyle, J., **Jerbi, K.**, et Bellec, P. (2023) Behavioral Imitation with Artificial Neural Networks Leads to Personalized Models of Brain Dynamics During Videogame Play. *bioRxiv*. 2023.10.28.564546. [Abstract](#)

Combrisson, E., Rienzo, F.D., *Saive, A.L., Perrone-Bertolotti, M., L. P. Soto, J., Kahane, P., Lachaux, J.P., Guillot, A., et **Jerbi, K.** (2023) Local field potentials in human motor and non-motor brain areas encode the direction of upcoming movements: An intracerebral EEG classification study. *bioRxiv*. 2023.09.07.556727. [Abstract](#)

Berezutskaya, J., *Saive, A.L., Jerbi, K., et Gerven, M.V. (2023) How Does Artificial Intelligence Contribute to iEEG Research? in *Intracranial EEG: A Guide for Cognitive Neuroscientists*, N. Axmacher, Editor Springer International Publishing: Cham. p. 761-802. [Book section](#)

2022

O'Byrne, J. et Jerbi, K. (2022) How critical is brain criticality? *Trends in Neurosciences*. 45 11: 820-837. [Pubmed](#)

Pepin, A.B., Harel, Y., O'Byrne, J., Mageau, G., Dietrich, A., et Jerbi, K. (2022) Processing visual ambiguity in fractal patterns: Pareidolia as a sign of creativity. *iScience*. 25 10: 105103. [Pubmed](#)

Thiery, T., Rainville, P., Cisek, P., et **Jerbi, K.** (2022) Distinct trajectories in low-dimensional neural oscillation state space track dynamic decision-making in humans. *bioRxiv*. 16. [Pubmed](#)

Oswald, V., Zerouali, Y., Boulet-Craig, A., Krajcinovic, M., Laverdiere, C., Sinnett, D., Jolicoeur, P., Lippe, S., **Jerbi, K.**, et Robaey, P. (2022) Magnetoencephalography resting-state correlates of executive and language components of verbal fluency. *Scientific reports*. 12 1: 476. [Pubmed](#)

Niso, G., Krol, L.R., Combrisson, E., Dubarry, A.S., Elliott, M.A., François, C., Héjja-Brichard, Y., Herbst, S.K., **Jerbi, K.**, Kovic, V., Lehongre, K., Luck, S.J., Mercier, M., Mosher, J.C., Pavlov, Y.G., Puce, A., Schettino, A., Schön, D., Sinnott-A., W., Somon, B., Šoškić, A., Styles, S.J., Tibon, R., Vilas, M.G., van Vliet, M., et Chaumon, M. (2022) Good scientific practice in EEG and MEG research: Progress and perspectives. *Neuroimage*. 257: 119056. [Abstract](#)

*Alamian, G., *Lajnef, T., Pascarella, A., Lina, J.-M., Knight, L., Walters, J., Singh, K.D., et **Jerbi, K.** (2022) Altered brain criticality in Schizophrenia: New insights from Magnetoencephalography. *Frontiers in Neural Circuits*. 16: 630621. [Pubmed](#)



2021

Hincapié Casas, A.S., Lajnef, T., Pascarella, A., Guiraud-Vinatea, H., Laaksonen, H., Bayle, D., **Jerbi, K.**, et Boulenger, V. (2021) Neural oscillations track natural but not artificial fast speech: Novel insights from speech-brain coupling using MEG. *Neuroimage*. 244 118577: 118577. [Pubmed](#)

2020

*Alamian, G., Pascarella, A., *Lajnef, T., Knight, L., Walters, J., Singh, K.D., et **Jerbi, K.** (2020) Patient, interrupted: MEG oscillation dynamics reveal temporal dysconnectivity in schizophrenia. *NeuroImage: Clinical*. 28: 102485. [Abstract](#)

*Thiery, T., *Saive, A.L., Combrisson, E., Dehgan, A., Bastin, J., Kahane, P., Berthoz, A., Lachaux, J.P., et **Jerbi, K.** (2020) Decoding the neural dynamics of free choice in humans. *PLoS Biol*. 18 12: e3000864. [Pubmed](#)

Combrisson, E., Nest, T., Brovelli, A., Ince, R.A.A., Soto, J.L.P., Guillot, A., et **Jerbi, K.** (2020) Tensorpac: An open-source Python toolbox for tensor-based phase-amplitude coupling measurement in electrophysiological brain signals. *PLoS computational biology*. 16 10: e1008302. [Pubmed](#)

Meunier, D., Pascarella, A., Altukhov, D., Jas, M., Combrisson, E., *Lajnef, T., Bertrand-Dubois, D., *Hadid, V., *Alamian, G., Alves, J., Barlaam, F., *Saive, A.-L., *Dehgan, A., et **Jerbi, K.** (2020) NeuroPycon: An open-source python toolbox for fast multi-modal and reproducible brain connectivity pipelines. *Neuroimage*. 219: 117020. [Abstract](#)

Andersen, L.M., **Jerbi, K.**, et Dalal, S.S. (2020) Can EEG and MEG detect signals from the human cerebellum? *Neuroimage*. 2215: 116817. [Pubmed](#)

Caplette, L., Ince, R.A.A., **Jerbi, K.**, et Gosselin, F. (2020) Disentangling presentation and processing times in the brain. *Neuroimage*. 218: 116994. [Abstract](#)

Billeke, P., Ossandon, T., Perrone-Bertolotti, M., Kahane, P., Bastin, J., **Jerbi, K.**, Lachaux, J.P., et Fuentealba, P. (2020) Human Anterior Insula Encodes Performance Feedback and Relays Prediction Error to the Medial Prefrontal Cortex. *Cerebral cortex*. 30 7: 4011-4025. [Pubmed](#)

2019

Combrisson, E., Vallat, R., O'Reilly, C., Jas, M., Pascarella, A., Saive, A., Thiery, T., Meunier, D., Altukhov, D., Lajnef, T., Ruby, P., Guillot, A., et **Jerbi, K.** (2019) Visbrain: A Multi-Purpose GPU-Accelerated Open-Source Suite for Multimodal Brain Data Visualization. *Frontiers in Neuroinformatics*. 13 14. [Abstract](#)

Di Rienzo, F., Barlaam, F., Daligault, S., Delpuech, C., Roy, A.C., Bertrand, O., **Jerbi, K.**, et Schmitz, C. (2019) Tracking the acquisition of anticipatory postural adjustments during a bimanual load-lifting task: A MEG study. *Hum Brain Mapp*. 40 10: 2955-2966. [Pubmed](#)

Breton, A., Ligneul, R., **Jerbi, K.**, George, N., Baudouin, J.Y., et Van der Henst, J.B. (2019) How occupational status influences the processing of faces: An EEG study. *Neuropsychologia*. 122: 125-135. [Pubmed](#)



Bourguignon, M., Jousmaki, V., Dalal, S.S., **Jerbi, K.**, et De Tiege, X. (2019) Coupling between human brain activity and body movements: Insights from non-invasive electromagnetic recordings. *Neuroimage*. 116177. [Abstract](#)

Boulet-Craig, A., Robaey, P., Barlaam, F., Laniel, J., Oswald, V., **Jerbi, K.**, Sultan, S., Affret-Bertout, L., Drouin, S., Krajinovic, M., Laverdière, C., Sinnett, D., Jolicoeur, P., et Lippé, S. (2019) Visual short-term memory activation patterns in adult survivors of childhood acute lymphoblastic leukemia. *Cancer*. 125 20: 3639-3648. [Pubmed](#)

2018

Ossadtchi, A., Altukhov, D., et **Jerbi, K.** (2018) Phase shift invariant imaging of coherent sources (PSIICOS) from MEG data. *Neuroimage*. **183**: 950-971. [Pubmed](#)

Knoth, I.S., Lajnef, T., Rigoulot, S., Lacourse, K., Vannasing, P., Michaud, J.L., Jacquemont, S., Major, P., **Jerbi, K.**, et Lippe, S. (2018) Auditory repetition suppression alterations in relation to cognitive functioning in fragile X syndrome: a combined EEG and machine learning approach. *Journal of neurodevelopmental disorders*. 10 1: 4. [Pubmed](#)

Palva, J.M., Wang, S.H., Palva, S., Zhigalov, A., Monto, S., Brookes, M.J., Schoffelen, J.M., et **Jerbi, K.** (2018) Ghost interactions in MEG/EEG source space: A note of caution on inter-areal coupling measures. *Neuroimage*. 173: 632-643. [Pubmed](#)

Thiery, T., Lajnef, T., Combrisson, E., Dehgan, A., Rainville, P., Mashour, G.A., Blain-Moraes, S., et **Jerbi, K.** (2018) Long-range temporal correlations in the brain distinguish conscious wakefulness from induced unconsciousness. *Neuroimage*. 179: 30-39. [Pubmed](#)

2017

Oswald, V., Zerouali, Y., Boulet-Craig, A., Krajinovic, M., Laverdiere, C., Sinnett, D., Jolicoeur, P., Lippe, S., **Jerbi, K.**, et Robaey, P. (2017) Spontaneous brain oscillations as neural fingerprints of working memory capacities: A resting-state MEG study. *Cortex*. 97: 109-124. [Pubmed](#)

Combrisson, E., Vallat, R., Eichenlaub, J.B., O'Reilly, C., Lajnef, T., Guillot, A., Ruby, P.M., et **Jerbi, K.** (2017) Sleep: an open-source python software for visualization, analysis and staging of sleep data. *Front Neuroinform*. [Abstract](#)

Alamian, G., Hincapie, A.S., Pascarella, A., Thiery, T., Combrisson, E., Saive, A.L., Martel, V., Althukov, D., Haesebaert, F., et **Jerbi, K.** (2017) Measuring alterations in oscillatory brain networks in schizophrenia with resting-state MEG: State-of-the-art and methodological challenges. *Clin Neurophysiol*. 128 9: 1719-1736. [Pubmed](#)

Hincapie, A.S., Kujala, J., Mattout, J., Pascarella, A., Daligault, S., Delpuech, C., Mery, D., Cosmelli, D., et **Jerbi, K.** (2017) The impact of MEG source reconstruction method on source-space connectivity estimation: A comparison between minimum-norm solution and beamforming. *Neuroimage*. 156: 29-42. [Pubmed](#)



Combrisson, E., Perrone-Bertolotti, M., Soto, J.L., Alamian, G., Kahane, P., Lachaux, J.P., Guillot, A., et **Jerbi, K.** (2017) From intentions to actions: Neural oscillations encode motor processes through phase, amplitude and phase-amplitude coupling. *Neuroimage*. 147: 473-487. [Pubmed](#)

Alamian, G., Hincapie, A.S., Combrisson, E., Thiery, T., Martel, V., Althukov, D., et **Jerbi, K.** (2017) Alterations of Intrinsic Brain Connectivity Patterns in Depression and Bipolar Disorders: A Critical Assessment of Magnetoencephalography-Based Evidence. *Front Psychiatry. Review*. 8: 41. [Pubmed](#)

Boulet-Craig, A., Robaey, P., Lacourse, K., **Jerbi, K.**, Oswald, V., Krajinovic, M., Laverdiere, C., Sinnott, D., Jolicoeur, P., et Lippe, S. (2017) Visual Short Term Memory Related Brain Activity Predicts Mathematical Abilities. *Neuropsychology*. [Pubmed](#)

*Lajnef, T., O'Reilly, C., Combrisson, E., Chaibi, S., Eichenlaub, J.B., Ruby, P.M., Aguera, P.E., Samet, M., Kachouri, A., Frenette, S., Carrier, J., et **Jerbi, K.** (2017) Meet Spinky: An Open-Source Spindle and K-Complex Detection Toolbox Validated on the Open-Access Montreal Archive of Sleep Studies (MASS). *Front Neuroinform*. 11: 15. [Pubmed](#)

Rigoulot, S., Knoth, I.S., Lafontaine, M.P., Vannasing, P., Major, P., Jacquemont, S., Michaud, J.L., **Jerbi, K.**, et Lippe, S. (2017) Altered visual repetition suppression in Fragile X Syndrome: New evidence from ERPs and oscillatory activity. *Int J Dev Neurosci*. 59: 52-59. [Pubmed](#)

Vallat, R., Lajnef, T., Eichenlaub, J.B., Berthomier, C., **Jerbi, K.**, Morlet, D., et Ruby, P.M. (2017) Increased Evoked Potentials to Arousing Auditory Stimuli during Sleep: Implication for the Understanding of Dream Recall. *Front Hum Neurosci*. 11: 132. [Pubmed](#)

Bastin, J., Deman, P., David, O., Gueguen, M., Benis, D., Minotti, L., Hoffman, D., Combrisson, E., Kujala, J., Perrone-Bertolotti, M., Kahane, P., Lachaux, J.P., et **Jerbi, K.** (2017) Direct Recordings from Human Anterior Insula Reveal its Leading Role within the Error-Monitoring Network. *Cereb Cortex*. 27 2: 1545-1557. [Pubmed](#)

2016

Soto, J.L., Lachaux, J.P., Baillet, S., et **Jerbi, K.** (2016) A multivariate method for estimating cross-frequency neuronal interactions and correcting linear mixing in MEG data, using canonical correlations. *Journal of Neuroscience Methods*. 271: 169-81. [Pubmed](#)

Thiery, T., Lajnef, T., **Jerbi, K.**, Arguin, M., Aubin, M., et Jolicoeur, P. (2016) Decoding the Locus of Covert Visuospatial Attention from EEG Signals. *PLoS One*. 11 8: e0160304. [Abstract](#)

Hincapie, A.S., Kujala, J., Mattout, J., Daligault, S., Delpuech, C., Mery, D., Cosmelli, D., et **Jerbi, K.** (2016) MEG Connectivity and Power Detections with Minimum Norm Estimates Require Different Regularization Parameters. *Computational intelligence and neuroscience*. 3979547. [Pubmed](#)



Foster, B.L., He, B.J., Honey, C.J., **Jerbi, K.**, Maier, A., et Saalman, Y.B. (2016) Spontaneous Neural Dynamics and Multi-scale Network Organization. *Frontiers in systems neuroscience*. 10: 7. [Pubmed](#)

2015

Kujala, J., Jung, J., Bouvard, S., Lecaigard, F., Lothe, A., Bouet, R., Ciumas, C., Ryvlin, P., et **Jerbi, K.** (2015) Gamma oscillations in V1 are correlated with GABA(A) receptor density: A multi-modal MEG and Flumazenil-PET study. *Scientific reports*. 5: 16347. [Pubmed](#)

Lajnef, T., Chaibi, S., Eichenlaub, J.B., Ruby, P.M., Aguera, P.E., Samet, M., Kachouri, A., et **Jerbi, K.** (2015) Sleep spindle and K-complex detection using tunable Q-factor wavelet transform and morphological component analysis. *Frontiers in Human Neuroscience*. 9: 414. [Pubmed](#)

Combrisson, E. et Jerbi, K. (2015) Exceeding chance level by chance: The caveat of theoretical chance levels in brain signal classification and statistical assessment of decoding accuracy. *Journal of Neuroscience Methods*. 250: 126-136. [Pubmed](#)

Lajnef, T., Chaibi, S., Ruby, P., Aguera, P.E., Eichenlaub, J.B., Samet, M., Kachouri, A., et **Jerbi, K.** (2015) Learning machines and sleeping brains: Automatic sleep stage classification using decision-tree multi-class support vector machines. *Journal of Neuroscience Methods*. 250: 94-105. [Pubmed](#)

2014

Breton, A., **Jerbi, K.**, Henaff, M.A., Cheylus, A., Baudouin, J.Y., Schmitz, C., Krolak-Salmon, P., et Van der Henst, J.B. (2014) Face the hierarchy: ERP and oscillatory brain responses in social rank processing. *PLoS One*. 9 3: e91451. [Pubmed](#)

Vidal, J.R., Perrone-Bertolotti, M., Levy, J., De Palma, L., Minotti, L., Kahane, P., Bertrand, O., Lutz, A., **Jerbi, K.**, et Lachaux, J.P. (2014) Neural repetition suppression in ventral occipito-temporal cortex occurs during conscious and unconscious processing of frequent stimuli. *Neuroimage*. 95: 129-135. [Pubmed](#)

Hamame, C.M., Vidal, J.R., Perrone-Bertolotti, M., Ossandon, T., **Jerbi, K.**, Kahane, P., Bertrand, O., et Lachaux, J.P. (2014) Functional selectivity in the human occipitotemporal cortex during natural vision: evidence from combined intracranial EEG and eye-tracking. *Neuroimage*. 95: 276-186. [Pubmed](#)

2013

Dalal, S.S., Osipova, D., Bertrand, O., et **Jerbi, K.** (2013) Oscillatory activity of the human cerebellum: the intracranial electrocerebologram revisited. *Neuroscience and biobehavioral reviews* 37 4: 585-593. [Pubmed](#)



Gross, J., Baillet, S., Barnes, G.R., Henson, R.N., Hillebrand, A., Jensen, O., **Jerbi, K.**, Litvak, V., Maess, B., Oostenveld, R., Parkkonen, L., Taylor, J.R., van Wassenhove, V., Wibral, M., et Schoffelen, J.M. (2013) Good practice for conducting and reporting MEG research. *Neuroimage*. 65: 349-363. [Pubmed](#)

Korczyński, A.D., Schachter, S.C., Brodie, M.J., Dalal, S.S., Engel, J., Jr., Guekht, A., Hecimovic, H., **Jerbi, K.**, Kanner, A.M., Johannessen Landmark, C., Mares, P., Marusic, P., Meletti, S., Mula, M., Patsalos, P.N., Reuber, M., Ryvlin, P., Stilova, K., Tuchman, R., et Rektor, I. (2013) Epilepsy, cognition, and neuropsychiatry (Epilepsy, Brain, and Mind, part 2). *Epilepsy & behavior : E&B*. 28 2: 283-302. [Pubmed](#)

2012

Worrell, G.A., **Jerbi, K.**, Kobayashi, K., Lina, J.M., Zelman, R., et Le Van Quyen, M. (2012) Recording and analysis techniques for high-frequency oscillations. *Progress in neurobiology*. 98 3: 265-278. [Pubmed](#)

Perrone-Bertolotti, M., Kujala, J., Vidal, J.R., Hamame, C.M., Ossandon, T., Bertrand, O., Minotti, L., Kahane, P., **Jerbi, K.**, et Lachaux, J.P. (2012) How silent is silent reading? Intracerebral evidence for top-down activation of temporal voice areas during reading. *The Journal of neuroscience : the official journal of the Society for Neuroscience*. 32 49: 17554-17562. [Pubmed](#)

Soto, J.L. et **Jerbi, K.** (2012) Investigation of cross-frequency phase-amplitude coupling in visuomotor networks using magnetoencephalography. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society*. 1550-1553. [Pubmed](#)

Bastin, J., Lebranchu, P., Jerbi, K., Kahane, P., Orban, G., Lachaux, J.P., et Berthoz, A. (2012) Direct recordings in human cortex reveal the dynamics of gamma-band [50-150 Hz] activity during pursuit eye movement control. *Neuroimage*. 63 1: 339-347. [Pubmed](#)

Vidal, J.R., Freyermuth, S., **Jerbi, K.**, Hamame, C.M., Ossandon, T., Bertrand, O., Minotti, L., Kahane, P., Berthoz, A., et Lachaux, J.P. (2012) Long-distance amplitude correlations in the high gamma band reveal segregation and integration within the reading network. *The Journal of neuroscience : the official journal of the Society for Neuroscience*. 32 19: 6421-634. [Pubmed](#)

Ossandon, T., Vidal, J.R., Ciumas, C., **Jerbi, K.**, Hamame, C.M., Dalal, S.S., Bertrand, O., Minotti, L., Kahane, P., et Lachaux, J.P. (2012) Efficient "pop-out" visual search elicits sustained broadband gamma activity in the dorsal attention network. *The Journal of neuroscience : the official journal of the Society for Neuroscience*. 32 10: 3414-3421. [Pubmed](#)

Hamame, C.M., Vidal, J.R., Ossandon, T., **Jerbi, K.**, Dalal, S.S., Minotti, L., Bertrand, O., Kahane, P., et Lachaux, J.P. (2012) Reading the mind's eye: online detection of visuo-spatial working memory and visual imagery in the inferior temporal lobe. *Neuroimage*. 59 1: 872-879. [Pubmed](#)



2011

Dalal SS, Vidal JR, Hamame CM, Ossandon T, Bertrand O, Lachaux JP, Jerbi K. Spanning the rich spectrum of the human brain: Slow waves to gamma and beyond. *Brain Struct Funct*, 2011 , 216(2), pp J77-84. [Pubmed](#)

Ossandon, T., **Jerbi, K.**, Vidal, J.R., Bayle, D.J., Henaff, M.A., Jung, J., Minotti, L., Bertrand, O., Kahane, P., et Lachaux, J.P. (2011) Transient suppression of broadband gamma power in the default-mode network is correlated with task complexity and subject performance. *The Journal of neuroscience: the official journal of the Society for Neuroscience*. 31 41: 14521-14530. [Pubmed](#)

Ogawa, T., Riera, J., Goto, T., Sumiyoshi, A., Nonaka, H., **Jerbi, K.**, Bertrand, O., et Kawashima, R. (2011) Large-scale heterogeneous representation of sound attributes in rat primary auditory cortex: from unit activity to population dynamics. *The Journal of neuroscience : the official journal of the Society for Neuroscience*. 31 41: 14639-14653. [Pubmed](#)

Jerbi K, Vidal JR, Mattout J, Maby E, Lecaigard F, Ossandon T, Hamamé CM, Dalal SS, Bouet R, Lachaux JP, Leahy RM, Baillet S, Garnero L, Delpuech C, Bertrand O. (2011) Inferring hand movement kinematics with MEG, EEG and intracranial EEG: from brain-machine interfaces to motor rehabilitation. *IRBM BioMedical Engineering and Research*, 32: 1 8-18. [Abstract](#)

Aguera, P.E., **Jerbi, K.**, Caclin, A., et Bertrand, O. (2011) ELAN: a software package for analysis and visualization of MEG, EEG, and LFP signals. *Computational intelligence and neuroscience*. 2011: 158970. [Pubmed](#)

Vidal JR, Hamame CM, **Jerbi K**, Dalal SS, Ciumas C, Perrone-Bertolotti M, Ossandon T, Minotti L, Kahane P, Lachaux JP (2011). Localizing cognitive functions in epilepsy with intracranial gamma-band dynamic responses. In Helmstaedter, C., Lassonde, M., Hermann, B., Kahane, P., and Arzimanoglou, A. *Neuropsychology in the Care of People with Epilepsy*. Paris: John Libbey Eurotext. [Book section](#)

2010

Jerbi, K., Vidal, J.R., Ossandon, T., Dalal, S.S., Jung, J., Hoffmann, D., Minotti, L., Bertrand, O., Kahane, P., et Lachaux, J.P. (2010) Exploring the electrophysiological correlates of the default-mode network with intracerebral EEG. *Frontiers in systems neuroscience*. 4: 27. [Pubmed](#)

Jung, J., **Jerbi, K.**, Ossandon, T., Ryvlin, P., Isnard, J., Bertrand, O., Guenot, M., Mauguire, F., et Lachaux, J.P. (2010) Brain responses to success and failure: Direct recordings from human cerebral cortex. *Human brain mapping*. 31 8: 1217-1232. [Pubmed](#)



Luo, L., Rodriguez, E., Jerbi, K., Lachaux, J.P., Martinerie, J., Corbetta, M., Shulman, G.L., Piomelli, D., Turrigiano, G.G., Nelson, S.B., Joels, M., de Kloet, E.R., Holsboer, F., Amodio, D.M., Frith, C.D., Block, M.L., Zecca, L., Hong, J.S., Dantzer, R., Kelley, K.W., et Craig, A.D. (2010) Ten years of Nature Reviews Neuroscience: insights from the highly cited. *Nature reviews Neuroscience*. 11 10: 718-726. [Pubmed](#)

Dalal, S.S., Hamame, C.M., Eichenlaub, J.B., et **Jerbi, K.** (2010) Intrinsic coupling between gamma oscillations, neuronal discharges, and slow cortical oscillations during human slow-wave sleep. *The Journal of neuroscience: the official journal of the Society for Neuroscience*. 30 43: 14285-14287. [Pubmed](#)

Vidal, J.R., Ossandon, T., **Jerbi, K.**, Dalal, S.S., Minotti, L., Ryvlin, P., Kahane, P., et Lachaux, J.P. (2010) Category-Specific Visual Responses: An Intracranial Study Comparing Gamma, Beta, Alpha, and ERP Response Selectivity. *Frontiers in Human Neuroscience*. 4: 195. [Pubmed](#)

2009

Jerbi, K., Freyermuth, S., Dalal, S., Kahane, P., Bertrand, O., Berthoz, A., et Lachaux, J.P. (2009) Saccade related gamma-band activity in intracerebral EEG: dissociating neural from ocular muscle activity. *Brain topography*. 22 1: 18-23. [Pubmed](#)

Jerbi, K. et Bertrand, O. (2009) Cross-frequency coupling in parieto-frontal oscillatory networks during motor imagery revealed by magnetoencephalography. *Frontiers in neuroscience*. 3 1: 3-4. [Pubmed](#)

Jerbi, K., Freyermuth, S., Minotti, L., Kahane, P., Berthoz, A., et Lachaux, J.P. (2009) Watching brain TV and playing brain ball exploring novel BCI strategies using real-time analysis of human intracranial data. *International review of neurobiology*. 86: 159-168. [Pubmed](#)

Jerbi, K., Ossandon, T., Hamame, C.M., Senova, S., Dalal, S.S., Jung, J., Minotti, L., Bertrand, O., Berthoz, A., Kahane, P., et Lachaux, J.P. (2009) Task-related gamma-band dynamics from an intracerebral perspective: review and implications for surface EEG and MEG. *Human brain mapping*. 30 6: 1758-1771. [Pubmed](#)

Dalal, S.S., Baillet, S., Adam, C., Ducorps, A., Schwartz, D., **Jerbi, K.**, Bertrand, O., Garnero, L., Martinerie, J., et Lachaux, J.P. (2009) Simultaneous MEG and intracranial EEG recordings during attentive reading. *Neuroimage*. 45 4: 1289-1304. [Pubmed](#)

Soto, J.L., Pantazis, D., **Jerbi, K.**, Lachaux, J.P., Garnero, L., et Leahy, R.M. (2009) Detection of event-related modulations of oscillatory brain activity with multivariate statistical analysis of MEG data. *Human brain mapping*. 30 6: 1922-1934. [Pubmed](#)



2008

Jerbi, K., Hamame, C.M., Ossandon, T., et Dalal, S.S. (2008) Role of posterior parietal gamma activity in planning prosaccades and antisaccades. *The Journal of neuroscience: the official journal of the Society for Neuroscience*. 28 51: 13713-13715. [Pubmed](#)

2007

Jerbi K, Lachaux J-P, N'Diaye K, Pantazis D, Leahy RM, Garnero L and Baillet S. Neural representation of hand speed in humans revealed by MEG imaging. *Proc. Nat. Acad. Sci. USA*, 2007 May 1;104(18):7676-81. [Pubmed](#)

Lachaux, J.P., **Jerbi, K.**, Bertrand, O., Minotti, L., Hoffmann, D., Schoendorff, B., et Kahane, P. (2007) A blueprint for real-time functional mapping via human intracranial recordings. *PLoS One*. 2 10: e1094. [Pubmed](#)

Cottereau, B., **Jerbi, K.**, et Baillet, S. (2007) Multiresolution imaging of MEG cortical sources using an explicit piecewise model. *Neuroimage*. 38 3: 439-451. [Pubmed](#)

Lachaux, J.P., **Jerbi, K.**, Bertrand, O., Minotti, L., Hoffmann, D., Schoendorff, B., et Kahane, P. (2007) BrainTV: a novel approach for online mapping of human brain functions. *Biological research*. 40 4: 401-413. [Pubmed](#)

Jerbi, K., Lachaux, J.P., N'Diaye, K., Pantazis, D., Leahy, R.M., Garnero, L., et Baillet, S. (2007) Coherent neural representation of hand speed in humans revealed by MEG imaging. *Proceedings of the National Academy of Sciences of the United States of America*. 104 18: 7676-7681. [Pubmed](#)

Besserve, M., **Jerbi, K.**, Laurent, F., Baillet, S., Martinerie, J., et Garnero, L. (2007) Classification methods for ongoing EEG and MEG signals. *Biological research*. 40 4: 415-437. [Pubmed](#)

2004

Jerbi K, Baillet S, Mosher JC, Nolte G, Garnero L and Leahy RM, "Localization of Realistic Cortical Activity in MEG Using Current Multipoles", *NeuroImage*, 2004 Jun;22(2):779-93. [Pubmed](#)

2002

Jerbi K, Mosher JC, Baillet S, Leahy RM. On MEG Forward Modelling using Multipolar Expansions. *Physics in Medicine & Biology*, Vol. 47, pp. 523-555, February 2002. [Pubmed](#)

2000

Jerbi K, Lionheart WRB, Vauhkonen PJ and Vauhkonen M. Sensitivity Matrix and Reconstruction Algorithm for EIT Assuming Axial Uniformity. *J. Physiological Measurement*, Volume 21, Issue 1, pp. 61-66, 2000. [Pubmed](#)