

## List of 10 Selected Publications, Sampsa Pursiainen, 29/04/2024

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- [1] Joonas Lahtinen, Alexandra Koulouri, Stefan Rampp, Jörg Wellmer, Carsten Wolters, and Sampsa Pursiainen. Standardized hierarchical adaptive lp regression for noise robust focal epilepsy source reconstructions. *Clinical Neurophysiology*, 159:24–40, 2024.
- [2] Liisa-Ida Sorsa, Yusuf Oluwatoki Yusuf, Astrid Dufaure, Jean-Michel Geffrin, Christelle Eyraud, and Sampsa Pursiainen. Imaging of the internal structure of an asteroid analogue from quasi-monostatic microwave measurement data-ii. the time domain approach. *Astronomy & Astrophysics*, 674:A73, 2023.
- [3] A Dufaure, C Eyraud, L-I Sorsa, YO Yusuf, S Pursiainen, and J-M Geffrin. Imaging of the internal structure of an asteroid analogue from quasi-monostatic microwave measurement data-i. the frequency domain approach. *Astronomy & Astrophysics*, 674:A72, 2023.
- [4] Maryam Samavaki, Yusuf Oluwatoki Yusuf, Arash Zarrin Nia, Santtu Söderholm, Joonas Lahtinen, Fernando Galaz Prieto, and Sampsa Pursiainen. Pressure–poisson equation in numerical simulation of cerebral arterial circulation and its effect on the electrical conductivity of the brain. *Computer Methods and Programs in Biomedicine*, 242:107844, 2023.
- [5] Fernando Galaz Prieto, Joonas Lahtinen, Maryam Samavaki, and Sampsa Pursiainen. Multi-compartment head modeling in EEG: Unstructured boundary-fitted tetra meshing with subcortical structures. *Plos one*, 18(9):e0290715, 2023.
- [6] Joonas Lahtinen, Alexandra Koulouri, Atena Rezaei, and Sampsa Pursiainen. Conditionally exponential prior in focal near-and far-field EEG source localization via randomized multiresolution scanning (ramus). *Journal of Mathematical Imaging and Vision*, 64(6):587–608, 2022.
- [7] Fernando Galaz Prieto, Atena Rezaei, Maryam Samavaki, and Sampsa Pursiainen. L1-norm vs. l2-norm fitting in optimizing focal multi-channel tes stimulation: linear and semidefinite programming vs. weighted least squares. *Computer Methods and Programs in Biomedicine*, 226:107084, 2022.
- [8] Atena Rezaei, Joonas Lahtinen, Frank Neugebauer, Marios Antonakakis, Maria Carla Piastra, Alexandra Koulouri, Carsten H Wolters, and Sampsa Pursiainen. Reconstructing subcortical and cortical somatosensory activity via the ramus inverse source analysis technique using median nerve sep data. *Neuroimage*, 245:118726, 2021.
- [9] Qin He, Atena Rezaei, and Sampsa Pursiainen. Zeffiro user interface for electromagnetic brain imaging: A gpu accelerated FEM tool for forward and inverse computations in Matlab. *Neuroinformatics*, 18:237–250, 2020.
- [10] Tuuli Miinalainen, Atena Rezaei, Defne Us, Andreas Nüßing, Christian Engwer, Carsten H Wolters, and Sampsa Pursiainen. A realistic, accurate and fast source modeling approach for the EEG forward problem. *NeuroImage*, 184:56–67, 2019.