

Full List of Publications

BOOKS

- F. K. Teklehaymanot and M. Muma. *Robust Bayesian Cluster Enumeration for Real Elliptically Symmetric Distributions*. Chapter of book entitled Elliptical Distributions in Signal Processing, To Appear. Springer, 2023.
- A. M. Zoubir, V. Koivunen, E. Ollila, and M. Muma. *Robust Statistics for Signal Processing*. Cambridge University Press, 2018.

PATENTS

- R. Lizio, M. Muma, T. Schäck, S. L. Viñas, and A. M. Zoubir. “Methods to estimate the blood pressure and the arterial stiffness based on photoplethysmographic (PPG) signals”. US Patent App. 17/045,715. Aug. 2021.
- R. Lizio, M. Muma, T. Schäck, S. L. Viñas, and A. M. Zoubir. “Preparations containing anthocyanins for use in the influence of cardiovascular conditions”. US Patent App. 17/049,446. Nov. 2021.

JOURNAL ARTICLES

- T. Koka, M. C. Tsakiris, M. Muma, and B. Béjar Haro. “Shuffled Multi-Channel Sparse Signal Recovery”. In: *IEEE Transactions on Signal Processing* (2023). Under Review, preprint at <https://arxiv.org/abs/2212.07368>.
- J. Machkour, M. Muma, and D. P. Palomar. “The Terminating-Random Experiments Selector: Fast High-Dimensional Variable Selection with False Discovery Rate Control”. In: *IEEE Transactions on Signal Processing* (2023). Under Review - Major Revision (RQ), preprint at <https://arxiv.org/abs/2110.06048>.
- C. Schroth, C. Eckrich, I. Kakouche, S. Fabian, O. von Stryk, A. M. Zoubir, and M. Muma. “Emergency Response Person Localization and Vital Signs Estimation Using Semi-Autonomous Robot Mounted SFCW Radar”. In: *IEEE Transactions on Biomedical Engineering* (2023). Under Review.
- A. Taştan, M. Muma, and A. M. Zoubir. “Fast and Robust Sparsity-Aware Block Diagonal Representation”. In: *IEEE Transactions on Signal Processing* (2023). Under Review.
- A. Taştan, M. Muma, and A. M. Zoubir. “Robust Regularized Locality Preserving Indexing for Fiedler Vector Estimation”. In: *Signal Processing* (2023). Under Review - Major Revision (RQ), preprint at <https://arxiv.org/abs/2107.12070>.
- C. A. Schroth and M. Muma. “Real Elliptically Skewed Distributions and Their Application to Robust Cluster Analysis”. In: *IEEE Transactions on Signal Processing* 69.1 (June 2021), pp. 3947–3962.
- C. A. Schroth and M. Muma. “Robust M-Estimation Based Bayesian Cluster Enumeration for Real Elliptically Symmetric Distributions”. In: *IEEE Transactions on Signal Processing* 69 (Apr. 2021), pp. 3525–3540.
- A. Taştan, M. Muma, and A. M. Zoubir. “Sparsity-aware Robust Community Detection (SPARCODE)”. In: *Signal Processing* (2021), p. 108147.
- F. K. Teklehaymanot, M. Muma, and A. M. Zoubir. “Robust Bayesian Cluster Enumeration Based on the t Distribution”. In: *Signal Processing* 182 (2021), p. 107870.
- J. Machkour, M. Muma, B. Alt, and A. M. Zoubir. “A Robust Adaptive Lasso Estimator for the Independent Contamination Model”. In: *Signal Processing* 174 (Sept. 2020). Art. 107608.
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IN CONFERENCE PROCEEDINGS

- J. Emrich, T. Koka, S. Wirth, and M. Muma. “Accelerated Sample-Accurate R-Peak Detectors Based on Visibility Graphs”. In: *Proc. 31st European Signal Processing Conference (EUSIPCO)*. Accepted for Publication. 2023.
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- A. Taştan, M. Muma, E. Ollila, and A. M. Zoubir. “Sparsity-Aware Block Diagonal Representation for Subspace Clustering”. In: *Proc. 31st European Signal Processing Conference (EUSIPCO)*. Accepted for Publication. 2023.
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- D. Jin, F. Yin, M. Fauß, M. Muma, and A. M. Zoubir. “Exploiting Sparsity for Robust Sensor Network Localization in Mixed LOS/NLOS Environments”. In: *Proc. 45th International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*. virtual Conference. IEEE, Mai 2020, pp. 5915–5919.
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OPEN ACCESS SOFTWARE (PEER REVIEWED)

- J. Machkour, S. Tien, D. P. Palomar, and M. Muma. *tlars: The T-LARS Algorithm: Early-Terminated Forward Variable Selection*. <https://cran.r-project.org/package=tlars>. 2022.
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OPEN ACCESS DATASETS

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CITATION METRICS¹

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