

List of Publications, September 2020 (Stefan Werner)

A. PEER-
REVIEWED
SCIENTIFIC
ARTICLES

A1. Journal article (refereed), original research

Selected journal articles

- [69] V. R. M. Elias, V. C. Gogineni, W. A. Martins, S. Werner, “Adaptive graph filters in reproducing kernel Hilbert spaces: Design and performance analysis,” *IEEE Transactions on Signal and Information Processing over Networks*, January 2021 (Accepted).
- [68] V. C. Gogineni, P. Talebi, S. Werner, “Performance of clustered multitask diffusion LMS suffering from inter-node communication delays,” *IEEE Transactions on Circuits and Systems, II, Express Briefs*, January 2021 (Accepted).
- [67] N. K. D. Venkatesowda, S. Werner, “Privacy-preserving distributed maximum consensus,” *IEEE Signal Processing Letters*, vol.27, pp. 1839–1843, October 2020.
- [66] V. C. Gogineni, P. Talebi, S. Werner, D. Mandic, “Fractional-order correntropy adaptive filters for distributed processing of alpha-stable signals,” *IEEE Signal Processing Letters*, vol 27, pp. 1884–1888, October 2020.
- [65] P. Talebi, S. Werner, D. Mandic “Quaternion-valued distributed filtering and control,” *IEEE Transactions Automatic Control*, vol. 65, pp. 4246–4257, October 2020.
- [64] V. R. Elias, W. A. Martins, S. Werner, “Extended adjacency and scale-dependent graph Fourier transform via diffusion distances,” *IEEE Transactions on Signal and Information Processing over Networks*, vol. 6, pp. 592–604, 2020.
- [63] K. Chen, S. Werner, Y.-H. Huang, A. Kuh, “Nonlinear adaptive filtering with kernel set-membership approach,” *IEEE Transactions on Signal Processing* vol. 68, pp. 1515–1528, February 2020.
- [62] V. C. Gogineni, P. Talebi, S. Werner, D. Mandic, “Fractional-order correntropy filters for tracking dynamic systems in alpha-stable environments,” *IEEE Transactions on Circuits and Systems, II, Express Briefs*, vol. 67, pp. 3557–3561, December 2020.
- [61] J. Leithon, S. Werner, V. Koivunen, “Cost-aware renewable energy management: Centralized vs. distributed generation,” *Renewable Energy*, vol. 147, pp. 1164–1179, March 2020.
- [60] P. Talebi, S. Werner, D. Mandic, “Complex-valued nonlinear adaptive filters with applications in alpha-stable environments,” *IEEE Signal Processing Letters*, vol. 26, pp. 1315–1319, September 2019.
- [59] J. Leithon, S. Werner, V. Koivunen, “Storage management in a shared solar environment with time-varying electricity prices,” *IEEE Journal on IoT*, vol. 6, pp. 7240–7436, October 2019.
- [58] P. Talebi, S. Werner, “Distributed Kalman filtering and control through embedded average consensus information fusion,” *IEEE Transactions on Automatic Control*, vol. 64, pp. 4396–4403, October 2019.
- [57] E. Antonio-Rodríguez, S. Werner, R. López-Valcarce, R. Wichman, “MMSE filter design for full-duplex filter-and-forward MIMO relays under limited dynamic range,” *Signal Processing*, vol. 156, pp. 208–219, March 2019.
- [56] P. Talebi, S. Werner, “Distributed Kalman filtering in presence of unknown outer network actuations,” *IEEE Control Systems Letters*, vol. 3, pp. 186–191, January 2019.

- [55] P. Talebi, S. Werner, D. Mandic, "Distributed adaptive Filtering of α -stable signals," *IEEE Signal Processing Letters*, vol. 25, pp. 1450–1454, October 2018.
- [54] N. Kashyap, S. Werner, Y.-H. Huang, "Decentralized PMU-assisted power system state estimation with reduced interarea communication," *IEEE Journal on Selected Topics in Signal Processing*, vol. 12, pp. 607–616, August 2018.
- [53] P. Mathecken, T. Riihonen, S. Werner, R. Wichman, "Constrained phase noise estimation in OFDM using scattered pilots without decision feedback," *IEEE Transactions on Signal Processing*, vol. 65, pp. 2348–2362, May 2017.
- [52] E. Antonio-Rodríguez, S. Werner, R. López-Valcarce, T. Riihonen, R. Wichman, "Wideband full-duplex MIMO relays with blind adaptive self-interference cancellation," *Signal Processing*, vol. 130, pp. 74–85, January 2017.
- [51] R. Arablouei, K. Dogançay, S. Werner, Y.-F. Huang, "On the asymptotic bias of the diffusion-based distributed Pareto optimization," *Signal Processing*, vol. 130, pp. 337–342, January 2017.
- [50] S. Werner, J. Lundén, "Smart load tracking and reporting for real-time metering in electric power grids," *IEEE Transactions on Smart Grid*, vol. 7, pp. 1723–1731, May 2016.
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- [46] R. Arablouei, K. Dogançay, S. Werner, "On the mean-square performance of the constrained LMS algorithm," *Signal Processing*, vol. 117, pp. 192–197, December 2015.
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- [44] R. Arablouei, K. Dogançay, S. Werner, "Adaptive frequency estimation of three-phase power systems," *Signal Processing*, vol. 109, pp. 290–300, April 2015.
- [43] N. Kashyap, S. Werner, Y.-H. Huang, T. Riihonen, "Power system state estimation under incomplete PMU observability – A reduced-order approach," *IEEE Journal of Selected Topics in Signal Processing, Special Issue on Signal Processing in Smart Electric Power Grid*, vol. 8, pp. 1051–1062, December 2014.
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- [39] G. González, F. Gregorio, J. Cousseau, R. Wichman, S. Werner, “Uplink CFO compensation for FBMC multiple access and OFDMA in a high mobility scenario,” *Physical Communications*, October 2013.
- [38] F. Gregorio, J. Cousseau, S. Werner, T. Riihonen, R. Wichman, “EVM analysis for broadband OFDM direct-conversion transmitters,” *IEEE Transactions on Vehicular Technology*, vol. 62, pp. 3443–3451, September 2013.
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- [32] T. Riihonen, R. Wichman, S. Werner, “Evaluation of OFDM(A) relaying protocols: capacity analysis in infrastructure framework,” *IEEE Transactions on Vehicular Technology*, vol. 61, pp. 360–374, January 2012.
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A2. Review article, Literature review, Systematic review

- [1] Y.-H. Huang, S. Werner, J. Huang, N. Kashyap, V. Gupta, “State estimation in electric power grids – meeting new challenges presented by the requirements of the future grid,” *IEEE Signal Processing Magazine*, September 2012.

A3. Book section, chapters in research books

- [3] S. Werner, M. Mohammed, “Weight extraction of fast QRD-RLS algorithms,” In José A. Apolinário Jr. (Ed.), *QRD-RLS Adaptive Filtering*, Springer Verlag (2009).
- [2] A. L. L. Ramos, S. Werner, “Multichannel fast QRD-RLS algorithms,” In José A. Apolinário Jr. (Ed.), *QRD-RLS Adaptive Filtering*, Springer Verlag (2009).
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A4. Conference proceedings

- [122] C. Gratton, N. K. D. Venkategowda, R. Arablouei, and S. Werner, “Distributed learning with non-smooth objective functions,” *European Speech and Signal Processing Conference, EUSIPCO*, Amsterdam, Netherlands, January 2021.
- [121] F. Gauthier, C. Gratton, N. K. D. Venkategowda, and S. Werner, “Privacy-preserving distributed learning with non-smooth objective functions,” *IEEE Asilomar Conference on Signals, Systems and Computers, ACSSC*, Pacific Grove, CA, USA, November 2020.
- [120] V. W. Håkansson, N. K. D. Venkategowda, S. Werner, “Optimal scheduling of multiple spatio-temporally dependent observations using age-of-information,” *IEEE Asilomar Conference on Signals, Systems and Computers, ACSSC*, Pacific Grove, CA, USA, November 2020.
- [119] V. R. M. Elias, V. C. Gogineni, W. A. Martins, S. Werner, “Graph diffusion kernel LMS using random Fourier features,” *IEEE Asilomar Conference on Signals, Systems and Computers, ACSSC*, Pacific Grove, CA, USA, November 2020.

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- [115] C. Gratton, N. K. D. Venkategowda, R. Arablouei, S. Werner, "Consensus-based distributed total least-squares estimation using parametric semidefinite programming," IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP, Brighton, UK, May 2019.
- [114] P. Talebi, S. Werner, "Tracking dynamic systems in alpha-stable environments," IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP, Brighton, UK, May 2019.
- [113] J. Leithon, P. Talebi, S. Werner, V. Koivunen, "Price-aware renewable energy management with transmission losses," IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP, Brighton, UK, May 2019.
- [112] A. Shastri, V. Jain, S. Chaudhari, S. Chouhan, S. Werner, "Improving accuracy of the Shewhart-based data-reduction in IoT nodes using piggybacking," IEEE 5th World Forum on Internet of Things, WF-IoT, Limerick, Ireland, April 2019.
- [111] A. Singh, V. Jain, S. Chaudhari, F. Kraemer, S. Werner, V. Garg, "Machine learning-based occupancy estimation using multivariate sensor nodes," IEEE Global Communications Conference, Globecom, Abu Dhabi, UAE, December 2018.
- [110] N. K. D. Venkategowda, S. Werner, "Privacy-preserving distributed precoder design for decentralized estimation," IEEE Global Conference on Signal and Information Processing, GlobalSIP, Anaheim, CA, USA, November 2018.
- [109] C. Gratton, N. K. D. Venkategowda, R. Arablouei, S. Werner, "Distributed ridge regression with feature partitioning," IEEE Asilomar Conference on Signals, Systems and Computers, ACSSC, Pacific Grove, CA, USA, October 2018.
- [108] J. Leithon, S. Werner, V. Koivunen., "Cooperative renewable energy management with distributed generation," European Signal Processing Conference, EUSIPCO, Rome, Italy, September 2018.
- [107] J. Leithon, S. Werner, V. Koivunen, "Renewable energy optimization with centralized and distributed generation," European Signal Processing Conference, EUSIPCO, Rome, Italy, September 2018.
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- [101] S. Werner, J. Lundén, “Event-triggered real-time metering in smart grids,” European Signal Processing Conference, EUSIPCO, Nice, France, September 2015.
- [100] N. Kashyap, S. Werner, Y.-H. Huang, “Decentralized power system state estimation with reduced inter-area communication,” IEEE International Conference on Digital Signal Processing, DSP, Singapore, July 2015.
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- [94] E. Antonio-Rodríguez, R. López-Valcarce, T. Riihonen, S. Werner, R. Wichman, “SINR optimization in wideband full-duplex MIMO relays under limited dynamic range,” IEEE Sensor Array and Multichannel Signal Processing Workshop, SAM, A Coruña, Spain, June 2014.
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- [87] R. Arablouei, S. Werner, K. Dogançay, “Adaptive frequency estimation of three-phase power systems with noisy measurements,” *IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP, Vancouver, Canada, May 2013.*
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- [85] E. Antonio-Rodríguez, R. López-Valcarce, T. Riihonen, S. Werner, R. Wichman, “Autocorrelation based adaptation rule for feedback equalization in wideband full-duplex amplify-and-forward MIMO relays,” *IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP, May 2013.*
- [84] F. C. Ribeiro Jr., M. L. R. de Campos, S. Werner, “Distributed cooperative spectrum sensing with double-topology,” *IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP, Vancouver, May 2013.*
- [83] N. Kashyap, S. Werner, Y.-H. Huang, T. Riihonen, “Reduced-order synchrophasor-assisted state estimation for smart grids,” *IEEE International Conference on Smart Grid Communications, SmartGridComm, Tainan city, Taiwan, November 2012.*
- [82] P. Mathecken, T. Riihonen, S. Werner, R. Wichman, “Constrained least-squares estimation and compensation of phase noise in OFDM radio link,” *IEEE Asilomar Conference on Signals, Systems, and Computers, ACSSC, Pacific Grove, California, November 2012.*
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- [79] F. C. Ribeiro Jr., M. L. R. de Campos, S. Werner, “Distributed cooperative spectrum sensing with adaptive combining,” *IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP, Kyoto, Japan, March 2012.*
- [78] N. Kashyap, S. Werner, Y.-H. Huang, “Event-triggered multi-area state estimation in power systems,” *The Fourth International Workshop on Computational Advances in Multi-Sensor Adaptive Processing, CAMSAP, San Juan, Puerto Rico, December 2011.*
- [77] P. Mathecken, T. Riihonen, S. Werner, R. Wichman, “Accurate characterization and compensation of phase noise in OFDM receiver,” *45th Annual Asilomar Conference on Signals, Systems, and Computers, ACSSC, Pacific Grove, California, November 2011.*
- [76] T. Riihonen, S. Werner, R. Wichman, “Transmit power optimization for multi-antenna decode-and-forward relays with loopback self-interference from full-duplex operation,” *45th Annual Asilomar Conference on Signals, Systems, and Computers, ACSSC, Pacific Grove, California, November 2011.*
- [75] G. González, F. Gregorio, J. Cousseau, S. Werner, R. Wichman, “Cyclostationary autocorrelation based CFO estimators,” *European Signal Processing Conference, EUSIPCO, Barcelona, Spain, August 2011.*

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