

List of Publications, January 2017 (Stefan Werner)

A. PEER-
REVIEWED
SCIENTIFIC
ARTICLES

A1. Journal article (refereed), original research

- [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*, Jan. 2016 (In press).
- [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 Process.*, vol. 130, pp. 74–85, Jan. 2017.
- [51] R. Arablouei, K. Dogançay, S. Werner, Y.-F. Huang, "On the asymptotic bias of the diffusion-based distributed Pareto optimization," *Signal Process.*, vol. 130, pp. 337–342, Jan. 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.
- [49] P. Mathecken, T. Riihonen, S. Werner, R. Wichman, "Phase noise estimation in OFDM: Utilizing its associated spectral geometry," *IEEE Transactions on Signal Processing*, vol. 64, pp. 1999–2012, April 2016.
- [48] F. Chierchie, J. Cousseau, E. Paolini, S. Werner, "Mitigation of pulse-width-modulation distortion using a digital predistorter based on memory polynomials," *Signal Processing*, vol. 120, pp. 562–571, March 2016.
- [47] R. Arablouei, S. Werner, K. Dogançay, Y.-F. Huang, "Analysis of a reduced-communication diffusion LMS algorithm," *Signal Processing*, vol. 117, pp. 355–361, December 2015.
- [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.
- [45] R. Arablouei, K. Dogançay, S. Werner, "Recursive total least-squares algorithm based on the inverse power method and the dichotomous coordinate-descent iterations," *IEEE Transactions on Signal Processing*, vol. 63, pp. 1941–1949, April 2015.
- [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.
- [42] R. Arablouei, K. Dogançay, S. Werner, Y.-F. Huang, "Adaptive distributed estimation based on recursive least-squares and partial diffusion," *IEEE Transactions on Signal Processing*, vol. 62, pp. 3510–3522, July 2014.
- [41] R. Arablouei, S. Werner, K. Dogançay, "Analysis of the gradient-descent total least-squares adaptive filtering algorithm," *IEEE Transactions on Signal Processing*, vol. 62, pp. 1256–1264, March 2014.
- [40] R. Arablouei, S. Werner, Y.-F. Huang, K. Dogançay, "Distributed least mean-square estimation with partial diffusion," *IEEE Transactions on Signal Processing*, vol. 62, pp. 472–484, January 2014.
- [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* (in press), 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.
- [37] C. Schmidt, J. Figueroa, J. Cousseau, R. Wichman, S. Werner, "Post-compensation of a CT first-order sigma-delta ADC using PWL dynamic systems," *Latin American Applied Research*, vol. 43, pp. 287–293, 2013.
- [36] G. González, F. Gregorio, J. Cousseau, S. Werner, R. Wichman, "Data-aided CFO estimators based on the averaged cyclic autocorrelation," *Signal Processing*, July 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).
- [1] M. L. R. de Campos, S. Werner, J. A. Apolinário Jr., "Constrained Adaptive Filtering Algorithms," In Sathish Chandran (Ed.), *Adaptive Antenna Array Techniques*, Springer Verlag (2004).

A4. Conference proceedings

- [103] N. Kashyap, S. Werner, Y.-H. Huang, R. Arablouei "Privacy preserving decentralized power system state estimation with phasor measurement units," *IEEE Sensor Array and Multichannel Signal Processing Workshop, SAM*, Rio de Janeiro, July 2016.
- [102] N. Kashyap, S. Werner, J. Lundén, "Signal-dependent preprocessing of buffered PMU measurements for hybrid state estimation," *IEEE International Instrumentation and Measurement Technology Conference, I2MTC*, Taipei, May 2016.
- [101] S. Werner, J. Lundén, "Event-triggered real-time metering in smart grids," *European Signal Processing Conference, EUSIPCO*, Nice, France, September 2015.
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- [99] E. Antonio-Rodríguez, R. López-Valcarce, T. Riihonen, S. Werner, R. Wichman, "Subspace-constrained SINR optimization in MIMO full-duplex relays under limited dynamic range," *IEEE Workshop on Signal Processing Advances in Wireless Communications, SPAWC*, Stockholm, June 2015.

- [98] R. Arablouei, K. Dogançay, S. Werner, Y.-H. Huang, "Model-distributed solution of regularized least-squares problem over sensor networks," IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP, Brisbane, Australia, April 2015.
- [97] P. Mathecken, S. Werner, T. Riihonen, and R. Wichman, "Subspace-based phase noise estimation in OFDM receivers," IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP, Brisbane, Australia, April 2015.
- [96] J. Lundén, S. Werner, "Real-time smart metering with reduced communication and bounded error," IEEE International Conference on Smart Grid Communications, SmartGridComm, Venice, Italy, November 2014.
- [95] R. Arablouei, K. Dogançay, S. Werner, "Recursive total least-squares estimation of frequency in three-phase power systems," European Signal Processing Conference, EUSIPCO, Lisbon, Portugal, September 2014.
- [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.
- [93] R. Arablouei, K. Dogançay, S. Werner, "Estimating frequency of three-phase power systems via widely-linear modeling and total least-squares," The Fifth International Workshop on Computational Advances in Multi-Sensor Adaptive Processing, CAMSAP, Saint Martin, December 2013.
- [92] R. Arablouei, K. Dogançay, S. Werner, "Partial-diffusion recursive least-squares estimation over adaptive networks," The Fifth International Workshop on Computational Advances in Multi-Sensor Adaptive Processing, CAMSAP, Saint Martin, December 2013.
- [91] T. Rautiainen, J. Lundén, S. Werner, V. Koivunen, "Demand side management through electricity pricing in competitive environments," IEEE European Innovative Smart Grid Technologies, ISGT, October 2013.
- [90] R. Arablouei, K. Dogançay, S. Werner, "Reduced-complexity distributed least-squares estimation over adaptive networks," IEEE Workshop on Signal Processing Advances in Wireless Communications, SPAWC, June 2013.
- [89] E. Antonio-Rodríguez, R. López-Valcarce, T. Riihonen, S. Werner, R. Wichman, "Adaptive self-interference cancellation in wideband full-duplex decode-and-forward MIMO relays," IEEE Workshop on Signal Processing Advances in Wireless Communications, SPAWC, June 2013.
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- [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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- [70] S. Werner, Y.-F. Huang, "Time- and coefficient selective diffusion strategies for distributed parameter estimation," IEEE Asilomar Conference on Signals, Systems and Computers, ACSSC, Pacific Grove, California, November 2010 (Invited).
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- [59] G. González, J. Cousseau, F. Gregorio, R. Wichman, S. Werner, "Single-carrier cyclic-extension block DFE in time varying channels," 4th Conference on Micro-Nanoelectronics, Technology, and Applications, CAMTA, San Carlos de Bariloche, Argentina, October 2009.
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