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Center for Advanced Communications research personnel.**

Conferences - 2015

- [1] S. Subedi, Y Zhang, and M. Amin, "Sparse reconstruction of multi-component Doppler signature exploiting target dynamics," Proceeding of the 2015 IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP), Cancun, Mexico, December 13-16, 2015
- [2] D. Comite, F. Ahmad, **M.G. Amin**, and T. Dogaru, "Detection of low-signature targets in rough surface terrain for forward-looking ground penetrating radar imaging," Proceeding of the Asilomar Conference on Signals, Systems, and Computers, Pacific Grove, CA, November 2015.
- [3] A. Golato, S. Santhanam, F. Ahmad, and **M.G. Amin**, "Multipath exploitation in a sparse reconstruction approach to lamb wave based structural health monitoring," Proceeding of the 10th International Workshop on Structural Health Monitoring, Stanford, CA, September 2015.
- [4] Q. Shen, W. Liu, W. Cui, S. Wu, Y. D. Zhang, and **M. G. Amin**, "Wideband DOA estimation for uniform linear arrays based on the co-array concept," Proceeding of the 23rd European Signal Processing Conference, Nice, France, August-September 2015.
- [5] A. Hassaniien, **M. G. Amin**, Y. D. Zhang, and F. Ahmad, "Dual-function radar-communications using phase-rotational invariance," Proceeding of the European Signal Processing Conference, Nice, France, August-September. 2015.
- [6] K. AlKadry, F. Ahmad, and **M.G. Amin**, "Moving Target Localization Using Distributed Dual-Frequency Radars and Sparse Reconstruction," Proceeding of the 23rd European Signal Processing Conference, Nice, France, August-September 2015.
- [7] E. BouDaher, F. Ahmad, **M.G. Amin**, and A. Hoorfar, "DOA Estimation with Co-prime Arrays in the Presence of Mutual Coupling," Proceeding of the 23rd European Signal Processing Conference, Nice, France, August-September 2015.
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- [9] L. Guo, Y. D. Zhang, Q. Wu, and M. G. Amin, "DOA estimation of sparsely sampled nonstationary signals," Proceeding of the IEEE China Summit and International Conference on Signal and Information Processing, Chengdu, China, July 2015.
- [10] S. Qin, Y. D. Zhang, and M. G. Amin, "Sparsity-based multi-target localization exploiting multi-frequency coprime array," Proceeding of the IEEE China Summit and International Conference on Signal and Information Processing, Chengdu, China, July 2015.
- [11] Y. Tang, Y. D. Zhang, M. G. Amin, and W. Sheng, "Design of wideband MIMO radar waveforms with low peak-to-average ratio," Proceeding of the IEEE China Summit and International Conference on Signal and Information Processing, Chengdu, China, July 2015.
- [12] E. Lagunas, M. G. Amin, and F. Ahmad, "Through-the-wall radar imaging for heterogeneous walls using compressive sensing," Proceeding of the 2015 Workshop on Compressed Sensing Theory and its Applications to Radar, Sonar and Remote Sensing (CoSeRa), Pisa, Italy, June 2015.

- [13] F. Ahmad, M. G. Amin, G. Alli, and G. Mollo, "Sparsity-based motion detection inside enclosed structures," Proceeding of the 2015 Workshop on Compressed Sensing Theory and its Applications to Radar, Sonar and Remote Sensing (CoSeRa), Pisa, Italy, June 2015.
- [14] Q. Wu, Y. D. Zhang, M. G. Amin, and B. Himed, "Space-time adaptive processing in multi-static passive radar exploiting group sparsity," Proceeding of the IEEE International Radar Conference, Arlington, VA, May 2015.
- [15] A. Hassanien, M. G. Amin, Y. D. Zhang, and F. Ahmad, "A dual function radar-communication system using sidelobe control and waveform diversity," Proceeding of the IEEE International Radar Conference, Arlington, VA, May 2015.
- [16] A. Hassanien, M. G. Amin, Y. D. Zhang, and F. Ahmad, "High-resolution single-snapshot DOA estimation in MIMO radar with colocated antennas," Proceeding of the IEEE International Radar Conference, Arlington, VA, May 2015.
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- [18] S. Subedi, Y. D. Zhang, M. G. Amin, and B. Himed, "Group sparsity based multi-target tracking in multi-static passive radar systems using Doppler-only measurements," Proceeding of the IEEE International Radar Conference, Arlington, VA, May 2015.
- [19] Y. D. Zhang, S. Qin, and M. G. Amin, "Near-field source localization using thinned array based on sparse reconstruction of sensor-angle distributions," Proceeding of the IEEE International Radar Conference, Arlington, VA, May 2015.
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- [21] B. Jokanovic and M. G. Amin, "Sparsity vs concentration measures for optimum quadratic time-frequency distributions of nonstationary signals," Proceeding of the IEEE International Radar Conference, Arlington, VA, May 2015.
- [22] Y. Nguyen, M. G. Amin, and M. Ghogho, "Local sparse reconstruction of doppler frequency using chirp atoms," Proceeding of the IEEE International Radar Conference, Arlington, VA, May 2015.
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- [30] A. Golato, S. Santhanam, F. Ahmad, and M.G. Amin, "multimodal sparse reconstruction in lamb wave based structural health monitoring," Proceedings of the SPIE Symposium on Defense, Security, and Sensing, Compressive Sensing IV Conference, Baltimore, MD, April 2015.
- [31] S. Qin, Y. D. Zhang, and M. G. Amin, "Nonparametric spectrum estimation using generalized coprime sampling," Proceeding of the SPIE Symposium on Defense, Security, and Sensing, Mobile Multimedia/Image Processing, Security, and Applications Conference, Baltimore, MD, April 2015.
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- [38] X. Wang, M. Amin, F. Ahmad, and E. Aboutanios, "Bayesian compressive sensing for doa estimation using the difference coarray," Proceeding of the IEEE International Conference on Acoustics, Speech, and Signal Processing, Brisbane, Australia, April 2015.
- [39] M. Leigsnering, F. Ahmad, M. G. Amin, and A. M. Zoubir, "Multipath Exploitation in Sparse Scene Recovery Using Sensing-Through-Wall Distributed Radar Sensor Configurations," Proceeding of the IEEE International Conference on Acoustics, Speech, and Signal Processing, Brisbane, Australia, April 2015.

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- [44] A. Hoorfar and W. Zhang, "MIMO Radar Imaging of Targets Behind Multilayered Walls using Compressive Sensing," Proceeding of the Applied Computational Electromagnetics Society (ACES) Symposium, Williamsburg, VA, March 2015.