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Center for Advanced Communications research personnel.**

Conferences - 2006

- [1] Y. Zhang and M. Amin, "Multi-Channel Smart Antennas in Wireless Ad Hoc Networks," Proceedings of the 40th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, October 29 - November 1, 2006. Invited Paper
- [2] M. Sahmoudi and M. Amin, "Fast Iterative Maximum-Likelihood Algorithm (FIMLA) for Multipath Mitigation in GPS Receivers," Proceedings of the 40th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, October 29 - November 1, 2006. Invited Paper
- [3] J. Wang and M. Amin, "GPS Interference Cancellation Performance for Single and Multiple MVDR Beamformers," Proceedings of the 40th Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, October 29 - November 1, 2006. Invited Paper
- [4] Gandikota, Chengalvala, Fleischer, Jones, "Experimental Characterization of a Carbon Fiber Heat Sink in Boiling Heat Transfer Using FC-72," Proceedings of the 2006 ASME International Mechanical Engineering Congress and Exposition, Chicago, IL, November 2006.
- [5] Weinstein, R.D., Kopec, T.C., D'Addio, E., Fleischer, A.S., Bessel, C.A., "Thermal Analysis Of Phase Change Materials With Embedded Carbon Nanofibers For Transient Thermal Management," Proceedings of the 2006 ASME International Mechanical Engineering Congress and Exposition, Chicago, IL, November 2006.
- [6] H. Huang and A. Hoorfar, "Miniaturization of Dual-Band Planar Inverted-F Antennas Using Peano-Curve Elements," Proceedings of the 2006 International Symposium on Antennas and Propagation, Singapore, November 2006.
- [7] F. Plonski, A. Hoorfar and V. Mancuso "Measurement Accuracy of Stereolithography Scale Models," Proceedings of the 2006 AMTA symposium, Austin, Texas, October 2006.
- [8] M. Sahmoudi and M. G. Amin, "A novel maximum-likelihood synchronization scheme for GPS positioning in multipath, interference and weak signal environments," Proceedings of the 64th IEEE Vehicular Technology Conference, Montréal, Québec, Canada, September 2006.
- [9] Y. Zhang, K. Yang, and M. G. Amin, "Cooperative network communications in dynamic channel environments," Proceedings of the IEEE International Conference on Information Acquisition, Weihai, China, August 2006.
- [10] K. M. Yemelyanov, J. A. McVay, A. Hoorfar and N. Engheta, "An Overview of the Role of Adaptive Polarization-Contrast Techniques in Through-Wall Microwave Imaging Applications," Proceedings of the 2006 IEEE International Symposium on Antennas and Propagation and URSI meeting, Albuquerque, NM, July 2006. Invited Paper
- [11] J. McVay, A. Hoorfar, et al, "Grid-Graph Hamiltonian-Path Based Inclusions for Artificial Magnetic Conductors with Reduced Polarization Sensitivity," Proceedings of the IEEE International Symposium on Antennas and Propagation, July 2006. Invited Paper
- [12] J. McVay and A. Hoorfar, "A Miniaturized Planar Space-filling Curve Antenna with Wideband Monopole-like Radiation Characteristics," Proceedings of the 2006 IEEE International Symposium on Antennas and Propagation, Albuquerque, NM, July 2006.

- [13] J. McVay, A. Hoorfar and N. Engheta, "Space-Filling Curve Antennas above Space-Filling Curve High Impedance Ground-Planes," Proceedings of the 2006 IEEE International Symposium on Antennas and Propagation and URSI, Albuquerque, NM, July 2006.
- [14] J. McVay, N. Engheta and A. Hoorfar, "Three-Dimensional Hilbert Space-Filling-Curve Plasmonics," Proceedings of the 2006 IEEE International Symposium on Antennas and Propagation, Albuquerque, NM, July 2006.
- [15] J. McVay, R. Komanduri, A. Hoorfar, K. Yemelyanov and N. Engheta, "Experimental Study of Wall Effects on the Performance of a Dual Polarized, Broadband Array of Stacked E-Patch Elements in Through-Wall Imaging Applications," Proceedings of the 2006 IEEE International Symposium on Antennas and Propagation and URSI, Albuquerque, NM, July 2006.
- [16] K. M. Yemelyanov, J. A. McVay, N. Engheta and A. Hoorfar, "Transient Adaptive Polarization-Contrast Imaging Algorithm for Through-Wall Detection of Objects inside the Room," Proceedings of the 2006 IEEE International Symposium on Antennas and Propagation and URSI, Albuquerque, NM, July 2006.
- [17] M. Sahmoudi and M. Amin, "Unitary cyclic MUSIC for direction finding in GPS receivers," Proceedings of the IEEE Workshop on Sensor Array and Multi-channel Processing, Waltham, MA, July 2006.
- [18] M. Sahmoudi, H. Boumaraf, M. Amin, and D.-T. Pham, "Blind separation of convolutive mixtures using nonstationarity and fractional lower order statistics: application to audio signals," Proceedings of the IEEE Workshop on Sensor Array and Multi-channel Processing, Waltham, MA, July 2006.
- [19] S. Aviyente, F. Ahmad, and M. Amin, "Information theoretic measures for through-the-wall surveillance," Proceedings of the IEEE Workshop on Sensor Array and Multi-channel Processing, Waltham, MA, July 2006.
- [20] M. Amin, P. Sutler, P. Zeman, and F. Ahmad, "Moving target localization for indoor imaging using dual frequency cw radars," Proceedings of the IEEE Workshop on Sensor Array and Multi-channel Processing, Waltham, MA, July 2006.
- [21] F. Ahmad and M. Amin, "Analyses of autofocusing schemes for indoor imaging with unknown walls," Proceedings of the IEEE Workshop on Sensor Array and Multi-channel Processing, Waltham, MA, July 2006.
- [22] Y. Zhang, G. Wang, and M. Amin, "Distributed Turbo- BLAST for cooperative wireless networks," Proceedings of the IEEE Workshop on Sensor Array and Multi-channel Processing, Waltham, MA, July 2006.
- [23] Fleischer, A.S., Weinstein, R.D., Kopec, T., "Analysis Of Transient Thermal Management Characteristics Of PCM With An Embedded Carbon Fiber Heat Sink," Proceedings of the 2006 ITherm Conference, San Diego, CA, May 30 – June 2, 2006.
- [24] A. S. Fleischer, R. D. Weinstein, T. Kopec, , "Analysis Of Transient Thermal Management Characteristics Of PCM With An Embedded Carbon Fiber Heat Sink" Proceedings of the 2006 ITherm Conference, San Diego, CA, May, 2006.
- [25] H. Estephan, F. Ahmad, M. Amin, "An Interactive Software for Real-Time Simulation of Through-the-Wall Imaging Radar," Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing, Toulouse, France, May 2006.
- [26] Y. Zhang, G. Wang, M. Amin, "Cooperative Spatial Multiplexing in Multi-Hop Wireless Networks," Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing, Toulouse, France, May 2006.

- [27] L. Cirillo, A. Zoubir, M. Amin, "Estimation of FM Parameters using a Time-Frequency Hough Transform," Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing, Toulouse, France, May 2006.
- [28] F. Ahmad and M. Amin "A Noncoherent Approach to Radar Localization through Unknown Walls" Proceedings of the 2006 IEEE RADAR Conference, Verona, NY, April 2006.
- [29] F. Ahmad, M. Amin, M. Shoeb "Indoor wireless source localization based on area constraints." Proceedings of the SPIE Symposium on Defense and Security, Wireless Sensing and Processing Conference, Orlando, FL, April 2006.
- [30] Y. Zhang, G Wang, and M Amin, "Distributed MIMO-OFDM in imperfectly synchronized cooperative network," Proceedings of the SPIE Symposium on Defense and Security, Wireless Sensing and Processing Conference, Orlando, FL, April 2006.
- [31] Y. Zhang, M. Amin, "RFID-assisted localization and tracking," Proceedings of the SPIE Symposium on Defense and Security, Wireless Sensing and Processing Conference, Orlando, FL, April 2006.
- [32] J. Wang, M. Amin, and Y. Zhang, "Signal and array processing techniques for RFID readers," Proceedings of the SPIE Symposium on Defense and Security, Wireless Sensing and Processing Conference, Orlando, FL, April 2006.
- [33] L. Liu and M. Amin, "GPS Noncoherent Early-Minus-Late Power Discriminator Tracking Performance in Multipath Environment" Proceedings of the SPIE Symposium on Defense and Security, Wireless Sensing and Processing Conference, Orlando, FL, April 2006.
- [34] M. Amin and J. Wang, "On the Movement Direction Estimation of RF Tagged Items," Proceedings of the SPIE Symposium on Defense and Security, Wireless Sensing and Processing Conference, Orlando, FL, April 2006.
- [35] F. Ahmad, P. Setlur, and M. Amin, ""Through-the-wall target localization using dual-frequency CW radars." Proceedings of the SPIE Symposium on Defense and Security, Sensors, and Command, Control, Communications, and Intelligence (C3I) Technologies Conference, Orlando, FL, April 2006.
- [36] P. Sutler, F. Ahmad, and M. Amin, "Analysis of micro-Doppler signals using linear FM basis decomposition," Proceedings of the SPIE Symposium on Defense and Security, Radar Sensor Technology X Conference, Orlando, FL, April 2006.
- [37] J. McVay, A. Hoorfar and N. Engheta, "Theory and experiments on Peano and Hilbert curve RFID tags," Proceedings of the 2006 International Society for Optical Engineering (SPIE) Symposium on Defense and Security, Orlando, FL, April 2006. Invited Paper.
- [38] M. Sahnoudi and M. G. Amin, "Improvement of maximum likelihood time delay estimation for GPS positioning in multipath, jamming and low SNR environments," Proceedings of the 2006 Position Location and Navigation Symposium, Coronado, CA, April 2006.
- [39] M. Sahnoudi, H. Snoussi and M. G. Amin, "Robust Approach for Blind Source Separation in Non-Gaussian Noise Environments", Proceedings of the IEEE-EURASIP International Symposium on Control, Communications, and Signal Processing, Marrakech, Morocco, March, 2006. Invited Paper
- [40] J. McVay, V. Pierro, V. Galdi, A. Hoorfar, N. Engheta and I. M. Pinto, "Metamaterial Inclusions Based on Grid-Graph Hamiltonian Paths," Proceedings of the Third Workshop on Metamaterials and Special Materials for Electromagnetic Applications and TLC, Rome, Italy, March 2006. Invited Paper.

- [41] M. Sahmoudi, H. Snoussi and M. G. Amin, "Robust Approach for Blind Source Separation in Non-Gaussian Noise Environments", Proceedings of the IEEE-EURASIP International Symposium on Control, Communications, and Signal Processing, Marrakech, Morocco, March, 2006.
- [42] M. Sahmoudi, M. G. Amin, K. Abed-Meraim and A. Belouchrani, "Contrast functions for blind source separation based on time-frequency information-theory," Proceedings of the 6th International Conference on Independent Component Analysis and Blind Source Separation, Charleston, SC, March 2006.
- [43] L. He, S. Kassam, F. Ahmad, M. Amin, "Sparse stepped-frequency waveform design for through-the-wall radar imaging," Proceedings of the 2006 Waveform Diversity & Design Conference, Lihue, Hawaii, January 2006.
- [44] J. McVay, A. Hoorfar and N. Engheta, "Space-Filling Curve RFID Tags," Proceedings of the IEEE Radio and Wireless Symposium, San Diego, January 2006.