## <u>These publications are authored by the</u> <u>Center for Advanced Communications research personnel.</u>

## **Books**

- [1] M. G. Amin, Editor, Radar for Indoor Monitoring, CRC Press, 2017.
- [2] M. G. Amin, Editor, Compressive Sensing for Urban Radar, CRC Press, 2014.
- [3] F. Ahmad, Editor, Compressive Sensing, Proceedings of SPIE, vol. 8365, SPIE, Bellingham, WA, 2012.
- [4] M. G. Amin, Editor, Through the Wall Radar Imaging, CRC Press, 2011.

## **Book Chapters**

- [1] A. Seifert, M. G. Amin, A. Zoubir, "Radar Monitoring of Humans with Assisted Walking Devices," in M. Amin (Ed.), Radar for Indoor Monitoring, CRC Press, 2017.
- [2] F. Ahmad and M.G. Amin, "Radar Imaging of Building Interiors," in R. Klemm (Ed.), Novel Radar Techniques and Applications, IET, UK, 2016.
- [3] F. Ahmad, T. Dogaru, and M.G. Amin, "Ultrawideband Sense Through The Wall Radar Technology," in J.D. Taylor (Ed.), Advanced Ultrawideband Radar: Targets, Signals and Applications, CRC Press, 2016.
- [4] M. G. Amin, "Sparsity-aware moving target indication," in M. G. Amin, Editor, Compressive Sensing for Urban Radar, CRC Press 2014.
- [5] F. Ahmad, "Wall clutter mitigations for compressive imaging of building interiors," in M. G. Amin, Editor, Compressive Sensing for Urban Radars, CRC Press, 2014.
- [6] L. Stankovic, S. Stankovic, I. Orovic, and Y. D. Zhang, "Time-frequency analysis of micro-Doppler signals based on compressive sensing," in M. G. Amin, Editor, Compressive Sensing for Urban Radars, CRC Press, 2014.
- [7] M. G. Amin and Y. Zhang, "DOA Estimation of Nonstationary Signals," in R. Chellappa and S. Theodoridis (eds), Academic Press' Library in Signal Processing, Academic Press, 2013.
- [8] M. G. Amin and F. Ahmad, "Through-the-Wall Radar Imaging: Theory and Applications," in R. Chellappa and S. Theodoridis (eds), Academic Press' Library in Signal Processing, Academic Press, 2013.
- [9] F. Ahmad and R. Narayanan, "Conventional and Emerging Waveforms for Detection and Imaging of Targets behind Walls," in M. Amin (Ed.), Through-the-Wall Radar Imaging, CRC Press, 2011.
- [10] A. Hoorfar and A. Fathy, "Antenna Elements, Arrays and Systems for Through-Wall Imaging Radar" in M. Amin (Ed.), Through-the-Wall Radar Imaging, CRC Press, 2011.
- [11] Y. D. Zhang and A. Hunt, "Image and Localization of Behind-the-Wall Targets Using Linear and Distributed Apertures," in M. Amin (Ed.), Through-the-Wall Radar Imaging, CRC Press, 2011.
- [12] V.C. Chen, G.E. Smith, K. Woodbridge and C. J. Baker, "Radar Micro-Doppler Signatures for Characterization of Human Motion" in M. Amin (Ed.), Through-the-Wall Radar Imaging, CRC Press, 2011.

- [13] M. Amin, Y.-S. Yoon, S. Kassam, "Fast Acquisition and Compressive Sensing Techniques for Through Wall Radar Imaging" in M. Amin (Ed.), Through-the-Wall Radar Imaging, CRC Press, 2011.
- [14] Y. Zhang, X. Li, and M. G. Amin, "Principles and techniques of RFID positioning," in M. Bolic, D. Simplot-Ryl, and I. Stojmenovic (eds.), RFID Systems, Research trends and challenges, New York, NY: Wiley, 2010.
- [15] M. G. Amin and Y. Zhang, "Spatial time-frequency distributions and DOA estimation," in E. Tuncer and B. Friedlander (eds), Classical and Modern Direction of Arrival Estimation, Elsevier, 2009.
- [16] L. He, S. A. Kassam, F. Ahmad, and M. G. Amin, "Sparse multi-frequency waveform design for wideband imaging," in V. Amuso, S. Blunt, E. Mokole, R. Schneible and M. Wicks (Eds.), Applications and Methods of Waveform Diversity, SciTech Publishing, 2009.
- [17] N. Thirion and M. G. Amin, "Spatial quadratic distributions based methods," P. Comon and C. Jutten, Editors, in From Blind Source Separation to Independent Component Analyses, Academic Press, 2009.
- [18] Y. Zhang, X. Li, and M. G. Amin, "Mobile Ad Hoc Networks Exploiting Multi-Beam Antennas," in C. Sun, J. Cheng, T. Ohira (ed.), Handbook on Advancements in Smart Antenna Technologies for Wireless Networks, Hersey, PA: IGI Global, 2008.
- [19] K. M. Yemelyanov, J. McVay A, Hoorfar and N. Engheta, "Transient Adaptive Polarization-Difference Imaging Algorithm for Through-Wall Microwave Imaging Applications," Ultra Wideband, Short Pulse Electromagnetics, Springer, 2008.
- [20] M. Amin, "Adaptive Interference Nulling and Direction of Arrival Estimation in GPS Dual Polarized Antenna Receiver," M. Ibnkahla, Editor, in Adaptive Processing in Wireless Communications, CRC Press, 2008.
- [21] T. Kopec, A.S. Fleischer, R.D. Weinstein, C.A. Bessel, "Transient thermal performance of phase change materials with embedded graphite nanofibers," in Thermes 2007: Thermal Challenges in Next Generation Systems, S. V. Arimella, and A. S. Fleischer, eds., Millpress, Rotterdam, the Netherlands, 2007.
- [22] J. McVay, N. Engheta, and A. Hoorfar "Space-Filling-Curve High-Impedance Ground Planes," Chapter 14 in Metamaterials: Physics and Engineering Explorations, Wiley-IEEE Press Publications, 2006.
- [23] Y. Zhang, B. Obeidat, and M. G. Amin, "Polorimetric time-frequency MUSIC for direction finding of moving sources with time-varying polarizations," in S.Chandran, Editor, Advances in Direction of Arrival Estimation, Boston, MA: Artech House, 2006.