

# List of publications

Dr. Dimitrie C. Popescu

## Summary and Scholar Profile

Date: August 1, 2025.

- Publications:
  - 1 research monograph
  - 3 book chapters
  - 4 textbook contributions
  - 50 peer reviewed journal articles
  - 135 peer reviewed papers published in conference proceedings
  - 17 technical reports
- Google scholar profile:
  - <https://scholar.google.com/citations?user=bU6GOrgAAAAJ&hl=en>.
  - *h*-index: 27
  - Total citations: 3,234

## Books and Book Contributions

- B1. Ahmed Temtam and Dimitrie C. Popescu, “Performance Analysis of Spectrum Sensing Employing Pilot Tones”, in *Reference Module in Material Science and Materials Engineering*, (ISBN: 978-0-12-803581-8), Saleem Hashmi editor, Elsevier, December 2019. DOI: 10.1016/B978-0-12-803581-8.11653-4.
- B2. Dimitrie C. Popescu, Sennur Ulukus, Christopher Rose, and Roy Yates, “Interference Avoidance for CDMA Systems”, in *Advances in Multiuser Detection* (ISBN: 978-0-471-77971-1), Michael Honig editor, pp. 365-416, Wiley-IEEE Press, May 2009. DOI: 10.1002/9780470473818.ch7.
- B3. Dimitrie C. Popescu and Christopher Rose, *Interference Avoidance Methods for Wireless Systems*, Kluwer Academic Publishers, Information Technology: Transmission, Processing, and Storage series, March 2004, ISBN 0-306-48188-X. DOI: 10.1007/b105850.
- B4. Dimitrie C. Popescu and Christopher Rose, “Interference Avoidance for Wireless Systems”, in *Wiley Encyclopedia of Telecommunications* (ISBN 0-471-36972-1), John Proakis editor, vol. 2, pp. 1115-1121, December 2002. DOI: 10.1002/0471219282.eot272.
- B5. Sever Șerban, Ioan C. Corâci, Otilia Popescu, Dimitrie C. Popescu, *Problems in Linear Systems Theory. Parts 2 and 3: Response of Linear Systems and Stability Analysis*. (ISBN 973-9254-31-4), MatrixRom Publishing, Bucharest 1997.
- B6. Sever Șerban, Călin Soare, Ioan C. Corâci, Otilia Popescu, Dimitrie C. Popescu, *Problems in Linear Systems Theory. Part 1: System Representation of Industrial Processes*. (ISBN 973-97696-0-8), C&H Publishing Ltd., Bucharest 1996.
- B7. Aurel Stănescu, Simona Caramihai, Otilia Popescu, Adrian Curaj, Dimitrie C. Popescu, Dana Catană, *Discrete Event Dynamic Systems. A Petri Net Approach.*, POLITEHNICA University Publishing, Bucharest 1996.

B8. Sergiu S. Iliescu, Dimitrie C. Popescu, Otilia Popescu, *Regelungstechnik Ia*, a workbook for students in the german division of the Department of Engineering Sciences, POLITEHNICA University Publishing, Bucharest 1995.

## Journal Papers<sup>1</sup>

J1. Călin Vlădeanu, Omer M. K. Al-Dulaimi, Alexandru Martian, and Dimitrie C. Popescu, “Average Energy Detection with Adaptive Threshold for Spectrum Sensing in Cognitive Radio Systems”, *IEEE Transactions on Vehicular Technology*, vol. 73, no. 11, pp. 17222-17230, November 2024. DOI: 10.1109/TVT.2024.3427664.

J2. John A. Snoap<sup>†</sup>, Dimitrie C. Popescu, and Chad M. Spooner, “Deep-Learning-Based Classifier with Custom Feature-Extraction Layers for Digitally Modulated Signals”, *IEEE Transactions on Broadcasting*, vol. 70, no. 3, pp. 763-773, Sep. 2024. DOI: 10.1109/TBC.2024.3391056.

J3. Otilia Popescu, Jason Harris<sup>†</sup>, and Dimitrie C. Popescu, “Framework for Implementing Advanced Radar Plotting Aid Capability for Small Maritime Vessels”, *International Journal of Modern Engineering*, vol. 25, no. 1, pp. 5-14, Fall/Winter 2024. DOI: 10.5281/zenodo.15036323.

J4. Ahmed Temtam<sup>†</sup> and Dimitrie C. Popescu, “Cognitive Radio Spectrum Sensing Using TDSC: Evaluating Performance in WiMAX and LTE Networks”, *American Journal of Telecommunications*, vol 1, no. 1, article no. 6191002, 20 pages, October 2023. DOI: 10.54647/ajt6191002.

J5. John A. Snoap<sup>†</sup>, James Latshaw<sup>†</sup>, Dimitrie C. Popescu, and Chad M. Spooner, “Deep Learning-Based Classification of Digitally Modulated Signals Using Capsule Networks and Cyclic Cumulants”, *Sensors*, vol 23, no. 12, article no. 5735, 20 pages, June 2023. DOI: 10.3390/s23125735.

J6. Dimitrie C. Popescu and Rolland Vida, “A Primer on Software Defined Radios”, *Infocommunications Journal*, vol. 14, no. 3, pp 16-27, September 2022. DOI: 10.36244/ICJ.2022.3.3.

J7. Călin Vlădeanu, Alexandru Martian, and Dimitrie C. Popescu, “Spectrum Sensing with Energy Detection in Multiple Alternating Time Slots”, *IEEE Access*, vol. 10, pp. 38565-38574, April 2022. DOI: 10.1109/ACCESS.2022.3165556.

J8. Robert E. Litts<sup>†</sup>, Dimitrie C. Popescu, and Otilia Popescu, “Authentication Protocol for Enhanced Security of the Automated Identification System”, *Naval Engineers Journal*, vol. 133, no. 4, pp. 127-138, December 2021. Ingenta Connect link.

J9. Stephan Olariu and Dimitrie C. Popescu, “SEE-TREND: SEcurE Traffic-Related EveNt Detection in Smart Communities”, *Sensors*, vol. 21, no. 22, article no. 7652, 24 pages, November 2021. DOI: 10.3390/s21227652.

J10. Christopher Rogers<sup>†</sup> and Dimitrie C. Popescu, “Compressed Sensing MIMO Radar Waveform Design for Extended Target Detection”, *IEEE Systems Journal*, vol. 15, no. 1, pp. 1381-1389, March 2021. DOI: 10.1109/JSYST.2020.3000500.

J11. Otilia Popescu, John Musson, and Dimitrie C. Popescu, “Empirical Characterization of Man-Made Impulsive Noise Using Open-Source Software Defined Radio Platforms”, *IEEE Electromagnetic Compatibility Magazine*, vol. 9, no. 4, pp. 54-61, Quarter 4, 2020. DOI: 10.1109/MEMC.2020.9327997.

<sup>1</sup>**Note:** Students advised are marked by <sup>†</sup> in the co-author list.

J12. Alexandru Marțian, Mahmood J. A. Al Sammarraie, Călin Vlădeanu, and Dimitrie C. Popescu, “Three-Event Energy Detection with Adaptive Threshold for Spectrum Sensing in Cognitive Radio Systems”, *Sensors*, vol. 20, no. 13, article no. 3614, 16 pages, June 2020. DOI: 10.3390/s20133614.

J13. Dennis Watson, Linda Vahala, Otilia Popescu, Dimitrie C. Popescu, and Jose Fernandez, “Virtual SATCOM: Assured Agile Communication in a Satellite Contested Battlefield”, *Naval Engineers Journal*, vol. 131, no. 4, pp. 83-94, Dec. 2019. Ingenta Connect link.

J14. Sara MacDonald<sup>†</sup>, Dimitrie C. Popescu, and Otilia Popescu, “A Hybrid Framework for Spectrum Sharing with Dynamic Primary Users”, *IEEE Communications Letters*, vol. 23, no. 10, pp. 1871-1874, October 2019. DOI: 10.1109/LCOMM.2019.2926461.

J15. Saygin Bakṣi<sup>†</sup> and Dimitrie C. Popescu, “Secret Key Generation Using Precoded MIMO Channel State Information”, *IEEE Transactions on Wireless Communications*, vol. 18, no. 6, pp. 3104-3112, June 2019. DOI: 10.1109/TWC.2019.2910103.

J16. Sara MacDonald<sup>†</sup>, Dimitrie C. Popescu, and Otilia Popescu, “Analyzing the Performance of Spectrum Sensing in Cognitive Radio Systems with Dynamic Primary User Activity”, *IEEE Communications Letters*, vol. 21, no. 9, pp. 2037-2040, September 2017. DOI: 10.1109/LCOMM.2019.2926461.

J17. Otilia Popescu, Sarwar A. Sha-Mohammad<sup>†</sup>, Dimitrie C. Popescu, Samy El-Tawab, and Hussein M. Abdel-Wahab, “Automatic Incident Detection Using Aggregation of Traffic Parameters”, *IEEE Intelligent Transportation Systems Magazine*, vol. 9, no. 2, pp. 64-75, Summer 2017. DOI: 10.1109/ITS.2017.2666578.

J18. Saygin Bakṣi<sup>†</sup> and Dimitrie C. Popescu, “Distributed Power Allocation for Spectrum Sharing in Mutually Interfering Wireless Systems”, *Physical Communications*, vol. 22, pp. 42-48, March 2017. DOI: 10.1016/j.phycom.2016.12.003.

J19. Otilia Popescu and Dimitrie C. Popescu, “On the Performance of Sub-Band Precoded OFDM in the Presence of Narrowband Co-Channel Interference”, *IEEE Transactions on Broadcasting*, vol. 62, no. 3, September 2016, pp. 736-743. DOI: 10.1109/TBC.2016.2570004.

J20. Hongfei Wang, Octavia A. Dobre, Cheng Li, and Dimitrie C. Popescu, “Blind Cyclostationarity-Based Symbol Period Estimation for FSK Signals”, *IEEE Communications Letters*, vol. 19, no. 7, pp. 1149-1152, July 2015. DOI: 10.1109/LCOMM.2015.2436915.

J21. Samy El-Tawab, Ahmed Alhafidhi, Dusadee Treeumnuk, Dimitrie C. Popescu, and Stephan Olariu, “Physical Layer Aspects of Information Exchange in the NOTICE Architecture”, *IEEE Intelligent Transportation Systems Magazine*, vol. 7, no. 1, pp. 8-18, Spring 2015. DOI: 10.1109/ITS.2014.2361002.

J22. Shiny Abraham<sup>†</sup>, Dimitrie C. Popescu, and Octavia A. Dobre, “Joint Beamforming and Power Control in Downlink Multiuser MIMO Systems”, *Wireless Communications and Mobile Computing*, vol. 15, no. 3, pp. 552-560, February 2015. DOI: 10.1002/wcm.2362.

J23. Dusadee Treeumnuk<sup>†</sup> and Dimitrie C. Popescu, “Enhanced Spectrum Utilization in Dynamic Cognitive Radios with Adaptive Sensing”, *IET Signal Processing*, vol. 8, no. 4, pp. 339-346, June 2014. DOI: 10.1049/iet-spr.2013.0105.

J24. Shiny Abraham<sup>†</sup> and Dimitrie C. Popescu, “Joint Transmitter Adaptation and Power Control for Cognitive Radio Systems with Target SIR Requirements”, *Physical Communications*, vol. 9, pp. 223-230, December 2013. Special issue on cognitive radio. DOI: 10.1016/j.phycom.2012.05.009.

J25. Dusadee Treeumnu<sup>†</sup> and Dimitrie C. Popescu, “Using Hidden Markov Models to Evaluate Performance of Cooperative Spectrum Sensing”, *IET Communications*, vol. 7, no. 17, pp. 1969-1973, November 2013. Special issue on cooperative wireless and mobile communications. DOI: 10.1049/iet-com.2013.0076.

J26. Gongjun Yan, Stephan Olariu, and Dimitrie C. Popescu, “NOTICE: An Architecture for the Notification of Traffic Incidents”, *IEEE Intelligent Transportation Systems Magazine*, vol. 4, no. 4, pp. 6-16, Winter 2012. DOI: 10.1109/MITTS.2012.2217571.

J27. Deepak R. Joshi<sup>†</sup>, Dimitrie C. Popescu, and Octavia A. Dobre, “Joint Spectral Shaping and Power Control in Spectrum Overlay Cognitive Radio Systems”, *IEEE Transactions on Communications*, vol. 60, no. 9, pp. 2396-2401, Sep. 2012. DOI: 10.1109/TCOMM.2012.062512.110157.

J28. Danda B. Rawat<sup>†</sup> and Dimitrie C. Popescu, “Precoder Adaptation and Power Control for Cognitive Radios in Dynamic Spectrum Access Environments”, *IET Communications*, vol. 6, no. 8, pp. 836-844, May 2012. Special issue on cognitive communications. DOI: 10.1049/iet-com.2010.0585.

J29. Ala'a Al-Habashna, Octavia A. Dobre, Ramachandran Venkatesan, and Dimitrie C. Popescu, “Second-Order Cyclostationarity of Mobile WiMAX and LTE OFDM Signals and Application to Spectrum Awareness in Cognitive Radio Systems”, *IEEE Journal on Selected Topics in Signal Processing*, vol. 6, no. 1, pp. 26-42, February 2012. Special issue on robust measures and tests using sparse data for detection and estimation. DOI: 10.1109/JSTSP.2011.2174773.

J30. Danda B. Rawat<sup>†</sup>, Dimitrie C. Popescu, Gongjun Yan, and Stephan Olariu, “Enhancing VANET Performance by Joint Adaptation of Transmission Power and Contention Window Size”, *IEEE Transactions on Parallel and Distributed Systems*, vol. 22, no. 9, pp. 1528-1535, September 2011. DOI: 10.1109/TPDS.2011.41.

J31. Deepak R. Joshi<sup>†</sup>, Dimitrie C. Popescu, and Octavia A. Dobre, “Gradient-Based Threshold Adaptation for Energy Detector in Cognitive Radio Systems”, *IEEE Communications Letters*, vol. 15, no. 1, pp. 19-21, January 2011. DOI: 10.1109/LCOMM.2010.11.100654.

J32. Dimitrie C. Popescu, Danda B. Rawat<sup>†</sup>, Otilia Popescu, and Mohammad Saquib, “Game Theoretic Approach To Joint Transmitter Adaptation And Power Control in Wireless Systems”, *IEEE Transactions on Systems, Man, and Cybernetics – Part B*, vol. 40, no. 3, pp. 675-682, June 2010. Special issue on game theory. DOI: 10.1109/TSMCB.2009.2033704.

J33. Madhusudhan Musku<sup>†</sup>, Anthony T. Chronopoulos, Dimitrie C. Popescu, Anton Ștefănescu, “A Game-Theoretic Approach to Joint Rate and Power Control for Uplink CDMA Communications”, *IEEE Transactions on Communications*, vol. 58, no. 3, pp. 923-932, March 2010. DOI: 10.1109/TCOMM.2010.03.070205.

J34. Dimitrie C. Popescu, Otilia Popescu, and Octavia A. Dobre, “User Admissibility in Uplink Wireless Systems with Multipath and Target SIR Requirements”, *IEEE Communications Letters*, vol. 14, no. 2, pp. 106-108, February 2010. DOI: 10.1109/LCOMM.2010.02.092051.

J35. Faheed Hameed, Octavia A. Dobre, and Dimitrie C. Popescu, “On the Likelihood-Based Approach to Modulation Classification”, *IEEE Transactions on Wireless Communications*, vol. 8, no. 12, pp. 5884-5892, December 2009. DOI: 10.1109/TWC.2009.12.080883.

J36. Anthony T. Chronopoulos, Madhusudhan Musku<sup>†</sup>, Satish Penmatsa, and Dimitrie C. Popescu, “Spectrum Load Balancing for Medium Access in Cognitive Radio Systems”, *IEEE Communications Letters*, vol. 12, no. 5, pp. 353-355, May 2008. DOI: 10.1109/LCOMM.2008.071968.

J37. Cătălin Lăcătuș<sup>†</sup>, Dimitrie C. Popescu, and Mehdi Shadaram, “Distributed Algorithm for Optimal Sequence and Power Allocation in Uplink Code Division Multiple Access Systems”, *IET Communications*, vol. 2, no. 2, pp. 292-299, February 2008. DOI: 10.1049/iet-com:20060688.

J38. Dimitrie C. Popescu, “Interference Suppressing OFDM UWB System With Multiple Users and MMSE Receivers”, *IEEE Communications Letters*, vol. 11, no. 12, pp. 925-927, December 2007. DOI: 10.1109/LCOMM.2007.071374.

J39. Otilia Popescu, Mohammad Saquib, Dimitrie C. Popescu, and Michael D. Rice, “Interference Mitigation and Channel Equalization in Aeronautical Telemetry Using Kalman Filter”, *IEEE Transactions on Aerospace and Electronic Systems*, vol. 43, no. 4, pp. 1624-1630, October 2007. DOI: 10.1109/TAES.2007.4441763.

J40. Dimitrie C. Popescu and Prasad Yaddanapudi<sup>†</sup>, “Narrowband Interference Avoidance in OFDM-Based UWB Communication Systems”, *IEEE Transactions on Communications*, vol. 55, no. 9, pp. 1667-1673, September 2007. DOI: 10.1109/TCOMM.2007.904370.

J41. Dimitrie C. Popescu, Otilia Popescu, and Christopher Rose, “Interference Avoidance and Multiaccess Vector Channels”, *IEEE Transactions on Communications*, vol. 55, no. 8, pp. 1466-1471, August 2007. DOI: 10.1109/TCOMM.2007.902528.

J42. Cătălin Lăcătuș<sup>†</sup> and Dimitrie C. Popescu, “Adaptive Interference Avoidance for Dynamic Wireless Systems: A Game-Theoretic Approach”, *IEEE Journal on Selected Topics in Signal Processing*, vol. 1, no. 1, pp. 189-202, June 2007. Special issue on adaptive waveform design for agile sensing and communication. DOI: 10.1109/JSTSP.2007.897060.

J43. Otilia Popescu, Dimitrie C. Popescu, and Christopher Rose, “Simultaneous Water Filling in Mutually Interfering Systems”, *IEEE Transactions on Wireless Communications*, vol. 6, no. 3, pp. 1102-1113, March 2007. DOI: 10.1109/TWC.2007.05464.

J44. Dimitrie C. Popescu and Christopher Rose, “Codeword Optimization for Uplink CDMA Dispersive Channels”, *IEEE Transactions on Wireless Communications*, vol. 4, no. 4, pp. 1563-1574, July 2005. DOI: 10.1109/TWC.2005.850351.

J45. Otilia Popescu, Christopher Rose, Dimitrie C. Popescu, “Maximizing the Determinant for a Special Class of Block-Partitioned Matrices”, *Mathematical Problems in Engineering*, vol. 2004, no. 1, pp. 49-62, May 2004. DOI: 10.1155/S1024123X04307027.

J46. Dimitrie C. Popescu and Christopher Rose, “Interference Avoidance and Multiuser MIMO Systems”, *International Journal of Satellite Communications and Networking*, vol. 21, no.1, pp. 143-161, January 2003. Special issue on interference suppression techniques for satellite systems. DOI: 10.1002/sat.740.

J47. Otilia Popescu, Dimitrie C. Popescu, Joseph Wilder, and Mukund V. Karwe, “A New Approach to Modeling and Control of a Food Extrusion Process Using Artificial Neural Network and an Expert System”, *Journal of Food Process Engineering*, vol. 24, no. 1, pp. 17-36, March 2001. DOI: 10.1111/j.1745-4530.2001.tb00529.x.

J48. Dimitrie C. Popescu and Zoran Gajić, “Singular Perturbation Analysis of Cheap Control Problem for Sampled Data Systems”, *IEEE Transactions on Automatic Control*, vol. 44, no. 11, pp. 2209-2214, November 1999. DOI: 10.1109/9.802947.

J49. Dimitrie C. Popescu, Călin Soare, and Otilia Popescu, “The Use of a Root-Locus Type Plot in the Linear Quadratic Regulator Design”, *The Scientific Bulletin of POLITEHNICA University of Bucharest*, series C, vol. 58, no. 1-2, pp. 85-88, 1996.

J50. Dimitrie C. Popescu, Călin Soare, and Otilia Popescu, “Algorithms for Evaluating the Dominant Components of the Feedback Gain Matrix”, *The Scientific Bulletin of POLITEHNICA University of Bucharest*, series C, vol. 57, no. 1-4, pp. 75-79, 1995.

## Conference Papers<sup>1</sup>

C1. Otilia Popescu, Dimitrie C. Popescu, and Emanuel Pușchiță, “Collaborative Online Interactive Laboratory on Software Defined Radio Fundamentals”, *Proceedings 2025 ASEE Annual Conference*, Montreal, Canada, June 2025.

C2. Otilia Popescu, Dimitrie C. Popescu, and Murat Kuzlu, “Modeling of Indoor Radio Frequency Propagation for a Ship Environment”, *Proceedings 2024 IEEE Virtual Conference on Communications – VCC*, pp. 245-249, December 2024. DOI: 10.1109/VCC63113.2024.10914475.

C3. Otilia Popescu, Andrew Grow<sup>†</sup>, Dimitrie C. Popescu, and Murat Kuzlu, “Prototyping a 5G-Enabled IoT Gateway Using Off-the-Shelf Components and Open Source Software”, *Proceedings 15<sup>th</sup> IEEE International Communications Conference – COMM 2024*, Bucharest, Romania, October 2024. DOI: 10.1109/COMM62355.2024.10741427.

C4. Otilia Popescu, Dimitrie C. Popescu, and Murat Kuzlu, “Undergraduate Research on 5G Propagation Analysis in Naval Ship Environment”, *Proceedings 2024 ASEE Conference for Industry and Education Collaboration (CIEC)*, February 2024, Los Angeles, CA.

C5. John A. Snoap<sup>†</sup>, Dimitrie C. Popescu, and Chad M. Spooner, “Novel Nonlinear Neural-Network Layers for High Performance and Generalization in Modulation-Recognition Applications”, *Proceedings 2023 IEEE Military Communications Conference – MILCOM*, pp. 353-358, October 2023, Boston, MA.

C6. James Latshaw<sup>†</sup> and Dimitrie C. Popescu, “On the FPGA Implementation of Capsule Networks”, *Proceedings 16<sup>th</sup> IEEE International Symposium on Signals, Circuits, and Systems – ISSCS 2023*, July 2023, Iași, Romania.

C7. John A. Snoap<sup>†</sup>, James Latshaw<sup>†</sup>, Dimitrie C. Popescu, and Chad M. Spooner, “Robust Classification of Digitally Modulated Signals Using Capsule Networks and Cyclic Cumulant Features”, *Proceedings 2022 IEEE Military Communications Conference – MILCOM*, pp. 298-303, November 2022, Rockville, MD.

C8. Jason Harris<sup>†</sup>, and Dimitrie C. Popescu, “Evaluation of Vessel Yaw Uncertainties on RADAR Tracking Performance”, *Proceedings 2022 IEEE OCEANS Hampton Roads Conference*, October 2022, Virginia Beach, VA.

C9. James Latshaw<sup>†</sup>, Dimitrie C. Popescu, John A. Snoap<sup>†</sup>, and Chad M. Spooner, “Using Capsule Networks to Classify Digitally Modulated Signals with Raw I/Q Data”, *Proc. 14<sup>th</sup> IEEE International Communications Conference – COMM 2022*, June 2022, Bucharest, Romania.

C10. Jason Harris<sup>†</sup>, and Dimitrie C. Popescu, “Process for Automatic Target Detection Using Small Marine RADAR”, *Proceedings 2022 IEEE Southeast Conference – SoutheastCon*, pp. 158-162, March 2022, Mobile, AL.

C11. John A. Snoap<sup>†</sup>, Dimitrie C. Popescu, and Chad M. Spooner, “On Deep Learning Classification of Digitally Modulated Signals Using Raw I/Q Data”, *Proceedings 2022 IEEE Consumer Communications and Networking Conference – CCNC*, pp. 441-444, January 2022.

C12. Robert E. Litts<sup>†</sup>, Dimitrie C. Popescu, and Otilia Popescu, “Authentication Protocol for Enhanced Security of the Automated Identification System”, *Proceedings 9<sup>th</sup> IEEE International Black Sea Conference on Communications and Networking – BlackSeaCom*, May 2021, pp. 26-31, Bucharest, Romania.

C13. Zach Leffke, Kevin Shinpaugh, Ian Harnett, Bryce Clegg, Nick Angle, Chris Goyne, Connor Segal, William LaCour, Mike McPherson, Dimitrie C. Popescu, Samuel Jensen, Jason Harris, and Mike Miller, “A Prototype Virginia Ground Station Network”, *Proceedings 34<sup>th</sup> Annual Small Satellite Conference – SmallSat 2020*, August 2020, Logan, UT.

C14. Andra Păstrăv, Raluca Simendroni, Tudor Palade, Paul Dolea, Dimitrie C. Popescu, and Emanuel Puschiță, “Evaluation of UWB Transmissions in Highly Reflective Environments”, *Proceedings 13<sup>th</sup> IEEE International Communications Conference – COMM 2020*, pp. 527-532, June 2020, Bucharest, Romania.

C15. Omer M. K. Al-Dulaimi, Mahmood J. A. Al-Sammarraie, Călin Vlădeanu, Alexandru Marțian, and Dimitrie C. Popescu, “Cooperative Spectrum Sensing for Three Secondary Users with Sequential Relaying for Cognitive Radio”, *Proceedings 13<sup>th</sup> IEEE International Communications Conference – COMM 2020*, pp. 221-226, June 2020, Bucharest, Romania.

C16. Sara MacDonald<sup>†</sup>, Dimitrie C. Popescu, and Otilia Popescu, “Incremental Expectation Maximization for Estimating Dynamic Primary User Activity in Cognitive Radio”, *Proceedings 13<sup>th</sup> IEEE International Communications Conference – COMM 2020*, pp. 215-220, June 2020, Bucharest, Romania.

C17. Dimitrie C. Popescu, John Musson<sup>†</sup>, and Otilia Popescu, “Empirical Characterization of Man-Made Impulsive Noise Using Open-Source Software Defined Radio Platforms”, *Proceedings 14<sup>th</sup> IEEE International Symposium on Signals, Circuits, and Systems – ISSCS 2019*, July 2019, Iași, Romania.

C18. Anthony Cappiello<sup>†</sup>, Dimitrie C. Popescu, Jason Harris<sup>†</sup>, and Otilia Popescu, “Radio Link Design for CubeSat-to-Ground Station Communications Using An Experimental License”, *Proceedings 14<sup>th</sup> IEEE International Symposium on Signals, Circuits, and Systems – ISSCS 2019*, July 2019, Iași, Romania.

C19. Jason Harris<sup>†</sup>, Wayne Kim, Michael O’Brien<sup>†</sup>, and Dimitrie C. Popescu, “Adapting a Commercial Off the Shelf Cross Polarized Beam Amateur Radio Antenna for Use in Small Satellite Ground Station Radio Link”, *Proceedings 40<sup>th</sup> Annual Meeting and Symposium of the Antenna Measurement Techniques Association – AMTA 2018*, November 2018, Williamsburg, VA.

C20. Michael W. O’Brien<sup>†</sup>, Jason Harris<sup>†</sup>, Otilia Popescu, and Dimitrie C. Popescu, “An Experimental Study of the Transmit Power for a USRP Software-Defined Radio”, *Proceedings 12<sup>th</sup> IEEE International Communications Conference – COMM 2018*, pp. 377-380, June 2018, Bucharest, Romania.

C21. Dimitrie C. Popescu and Otilia Popescu, “Transmitter Adaptation in Cognitive Radio Systems and Applications to Cognitive Radar”, *Proceedings 12<sup>th</sup> IEEE International Communications Conference – COMM 2018*, pp. 11-18, June 2018, Bucharest, Romania.

C22. Christopher Rogers<sup>†</sup> and Dimitrie C. Popescu, “Fluctuating Extended Target Detection in Clutter Environment Using Compressed Sensing MIMO Radar”, *Proceedings 2017 IEEE Military Communications Conference – MILCOM*, pp. 507-512, October 2017, Baltimore, MD.

C23. Saygın Bakṣı<sup>†</sup> and Dimitrie C. Popescu, “Secret Key Generation in MIMO Wireless Systems Using Precoded Channel Measurements”, *Proceedings 28<sup>th</sup> Annual IEEE International Symposium on Personal, Indoor and Mobile Radio Communications – PIMRC 2017*, October 2017, Montreal, Canada.

C24. Saygın Bakṣı<sup>†</sup>, John Snoap<sup>†</sup>, and Dimitrie C. Popescu, “Secret Key Generation Using One-Bit Quantized Channel State Information”, *Proceedings 2017 IEEE Wireless Communications and Networking Conference – WCNC*, March 2017, San Francisco, CA.

C25. Christopher Rogers<sup>†</sup> and Dimitrie C. Popescu, “Performance Analysis of Extended Target Detection with Radar Waveforms Designed Using Compressed Sensing”, *Proceedings 2016 IEEE Military Communications Conference – MILCOM*, pp. 900-905, November 2016, Baltimore, MD.

C26. Sara L. MacDonald<sup>†</sup>, Dean J. Krusienski, and Dimitrie C. Popescu, “Cyclostationary-Based Detection of Steady-State Visually Evoked Potential Signals Recorded from EEG”, *Proceedings 41<sup>st</sup> IEEE International Conference on Acoustics, Speech, and Signal Processing – ICASSP 2016*, pp. 764-768, Shanghai, China, March 2016.

C27. Amanda Daniel<sup>†</sup> and Dimitrie C. Popescu, “MIMO Radar Waveform Design for Multiple Extended Target Estimation Based on Greedy SINR Maximization”, *Proceedings 41<sup>st</sup> IEEE International Conference on Acoustics, Speech, and Signal Processing – ICASSP 2016*, pp. 3006-3010, Shanghai, China, March 2016.

C28. Otilia Popescu, Jason Harris<sup>†</sup>, and Dimitrie C. Popescu, “Designing the Communication Sub-System for Nanosatellite CubeSat Missions: Operational and Implementation Perspectives”, *Proc. 2016 IEEE Southeast Conference – SoutheastCon*, March 2016, Norfolk, VA.

C29. Jason Harris<sup>†</sup>, Dimitrie C. Popescu, and Christopher G. Bailey, “An Experimental Study of InGaAs Photovoltaic Cell to Solar Exposure in Outer Space Environment”, *Proceedings 2016 IEEE Southeast Conference – SoutheastCon*, March 2016, Norfolk, VA.

C30. Meena Sreekantamurthy, Dimitrie C. Popescu, and Ravindra P. Joshi, “Classification of Digital Modulation Schemes in Multipath Environments Using Higher Order Statistics”, *Proceedings 2016 IEEE Southeast Conference – SoutheastCon*, March 2016, Norfolk, VA.

C31. Otilia Popescu and Dimitrie C. Popescu, “Sub-Band Precoded OFDM for Enhanced Physical Layer Resiliency in Wireless Communication Systems”, *Proceedings 3<sup>rd</sup> IEEE International Black Sea Conference on Communications and Networking – BlackSeaCom 2015*, pp. 1-4, May 2015, Constanta, Romania.

C32. Saygın Bakṣı<sup>†</sup> and Dimitrie C. Popescu, “Horizontal Spectrum Sharing and Coexistence Scenarios for Mutually Interfering Systems”, *Proceedings 3<sup>rd</sup> IEEE International Black Sea Conference on Communications and Networking – BlackSeaCom 2015*, May 2015, pp. 34-37, Constanta, Romania.

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C95. Dimitrie C. Popescu, “Interference Avoidance for Downlink CDMA”, *Proceedings 64<sup>th</sup> IEEE Vehicular Technologies Conference* – VTC 2006 Fall, vol. 4, pp. 1563-1566, September 2006, Montreal, Canada.

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C115. Dimitrie C. Popescu and Christopher Rose, “Multiuser MIMO Systems and Interference Avoidance”, *Proceedings 2003 IEEE International Conference on Acoustics, Speech, and Signal Processing – ICASSP 2003*, vol. 4, pp. IV-828 – IV-831, April 6-10, 2003, Hong Kong, People’s Republic of China. Invited paper for special session on multiuser MIMO systems.

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