

1 Personal Information

Danilo Orlando was born in Gagliano del Capo, Italy, on August 9, 1978. He received the Dr. Eng. Degree (with honors) in computer engineering and the Ph.D. degree (with maximum score) in information engineering, both from the University of Salento, Italy, in 2004 and 2008, respectively. From July 2007 to July 2010, he has worked with the University of Cassino (Italy), engaged in a research project on algorithms for track-before-detect of multiple targets in uncertain scenarios. In 2009, he has been visiting scientist at the NATO Undersea Research Centre (NURC), La Spezia (Italy). From 2011 to 2015, he has worked at Elettronica SpA engaged as system analyst in the field of Electronic Warfare. In May 2015, he joined Università degli Studi “Niccolò Cusano”, where he is currently an associate professor. His main research interests are in the field of statistical signal processing with more emphasis on adaptive detection, classification and tracking of multiple targets in multisensor scenarios. He has held visiting positions at the department of Avionics and Systems of ENSICA (now Institut Supérieur de l’Aéronautique et de l’Espace, ISAE), Toulouse (France) in 2007 and at Chinese Academy of Science, Beijing (China) in 2017-2020. He is Senior Member of IEEE; he has served IEEE Transactions on Signal Processing as Senior Area Editor and currently is Associate Editor for IEEE Open Journal on Signal Processing, EURASIP Journal on Advances in Signal Processing, and MDPI Remote Sensing. He is also author or co-author of more than 150 scientific publications in international journals, conferences, and books.

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2 Scientific Qualifications

- National Scientific Qualification (ASN) to Associate Professor of Telecommunications, Ministero dell’Istruzione, Università e Ricerca, Italy, December 2013.
- National Scientific Qualification (ASN) to Full Professor of Telecommunications, Ministero dell’Istruzione, Università e Ricerca, Italy, March 2018.

3 Publications

3.1 International Journals

- IJ-1** F. Bandiera, D. Orlando, and G. Ricci, “CFAR Detection of Extended and Multiple Point-like Targets without Assignment of Secondary Data,” *IEEE Signal Processing Letters*, Vol. 13, No. 4, pp. 240-243, April 2006.
- IJ-2** F. Bandiera, O. Besson, D. Orlando, G. Ricci, and L.L. Scharf, “GLRT-Based Direction Detectors in Homogeneous Noise and Subspace Interference,” *IEEE Transactions on Signal Processing*, Vol. 55, No. 6, pp. 2386-2394, June 2007.

- IJ-3** F. Bandiera, D. Orlando, and G. Ricci, "On the CFAR property of GLRT-based Direction Detectors," *IEEE Transactions on Signal Processing*, Vol. 55, No. 8, pp. 4312-4315, August 2007.
- IJ-4** O. Besson and D. Orlando, "Adaptive Detection in Nonhomogeneous Environments Using the Generalized Eigenrelation," *IEEE Signal Processing Letters*, Vol. 14, No. 10, pp. 731-734, October 2007.
- IJ-5** F. Bandiera, O. Besson, D. Orlando, and G. Ricci, "Theoretical performance analysis of the W-ABORT detector," *IEEE Transactions on Signal Processing*, Vol. 56, No. 5, pp. 2117-2121, May 2008.
- IJ-6** F. Bandiera, D. Orlando, and G. Ricci, "A Subspace-based Adaptive Sidelobe Blanker," *IEEE Transactions on Signal Processing*, Vol. 56, No. 9, pp. 4141-4151, September 2008.
- IJ-7** F. Bandiera, O. Besson, D. Orlando, and G. Ricci, "An Improved Adaptive Sidelobe Blanker," *IEEE Transactions on Signal Processing*, Vol. 56, No. 9, pp. 4152-4161, September 2008.
- IJ-8** F. Bandiera, D. Orlando, and G. Ricci, "One-stage and Two-stage Tunable Receivers," *IEEE Transactions on Signal Processing*, Vol. 57, No. 6, pp. 2064-2073, June 2009 and republished (due to an error of the publisher) Vol. 57, No. 8, pp. 3264-3273, August 2009.
- IJ-9** F. Bandiera, D. Orlando, and G. Ricci, "CFAR Detection strategies for Distributed Targets under Conic Constraints," *IEEE Transactions on Signal Processing*, Vol. 57, No. 9, pp. 3305-3316, September 2009.
- IJ-10** D. Orlando, L. Venturino, M. Lops, and G. Ricci, "Track-Before-Detect Strategies for STAP Radars," *IEEE Transactions on Signal Processing*, Vol. 58, No. 2, pp. 933-938, February 2010.
- IJ-11** D. Orlando, G. Ricci, and Y. Bar-Shalom, "Track-before-detect Algorithms for Targets with Kinematic Constraints," *IEEE Transactions on Aerospace and Electronic Systems*, Vol. 47, No. 3, pp. 1837-1849, July 2011.
- IJ-12** D. Orlando and G. Ricci, "A Rao Test with enhanced selectivity properties in homogeneous scenarios," *IEEE Transactions on Signal Processing*, Vol. 58, No. 10, pp. 5385-5390, October 2010.
- IJ-13** F. Bandiera, A. Farina, D. Orlando, and G. Ricci, "Detection algorithms to discriminate between radar targets and ECM signals," *IEEE Transactions on Signal Processing*, Vol. 58, No. 12, pp. 5984-5993, December 2010.
- IJ-14** D. Orlando and G. Ricci, "Adaptive radar detection and localization of a point-like target," *IEEE Transactions on Signal Processing*, Vol. 59, No. 9, pp. 4086-4096, September 2011.
- IJ-15** C. Hao, D. Orlando, and C. Hou, "Rao and Wald Tests for Nonhomogeneous Scenarios," *MDPI Sensors*, Vol. 12, pp. 4730-4736, April 2012.

- IJ-16** C. Hao, J. Yang, X. Ma, C. Hou, and D. Orlando, "Adaptive detection of distributed targets with orthogonal rejection," *IET Radar, Sonar and Navigation*, Vol. 6, No. 6, pp. 483-493, July 2012.
- IJ-17** F. Ehlers, D. Orlando, and G. Ricci, "A Batch Tracking Algorithm for Multistatic Sonars," *IET Radar, Sonar and Navigation*, Vol. 6, No. 8, pp. 746-752, October 2012.
- IJ-18** C. Hao, F. Bandiera, J. Yang, and D. Orlando, "Adaptive Detection of Multiple Point-Like Targets Under Conic Constraints," *Progress in Electromagnetic Research*, Vol. 129, pp. 231-250, 2012.
- IJ-19** C. Hao, D. Orlando, X. Ma, and C. Hou, "Persymmetric Rao and Wald tests for Partially Homogeneous Environment," *IEEE Signal Processing Letters*, Vol. 19, No. 9, pp. 587-590, September 2012.
- IJ-20** M. Del Coco, D. Orlando, and G. Ricci, "A Tracking System Exploiting Interaction Between a Detector with Localization Capabilities and the KF," *IEEE Transactions on Signal Processing*, Vol. 60, No. 11, pp. 6031-6036, July 2012.
- IJ-21** C. Hao, D. Orlando, G. Foglia, X. Ma, S. Yan, and C. Hou, "Persymmetric Adaptive Detection of Distributed Targets in Partially-Homogeneous Environment," *Elsevier Digital Signal Processing*, Vol. 24, pp. 42-51, January 2014.
- IJ-22** C. Hao, D. Orlando, X. Ma, S. Yan, and C. Hou, "Persymmetric Detectors with Enhanced Rejection Capabilities," *IET Radar, Sonar and Navigation*, Vol. 8, No. 5, pp. 557-563, June 2014.
- IJ-23** A. De Maio, C. Hao, and D. Orlando, "An Adaptive Detector with Range Estimation Capabilities for Partially Homogeneous Environment," *IEEE Signal Processing Letters*, Vol. 21, No. 3, pp. 325-329, March 2014.
- IJ-24** A. Aubry, A. De Maio, D. Orlando, and M. Piezzo, "Adaptive Detection of Point-Like Targets in the Presence of Homogeneous Clutter and Subspace Interference," *IEEE Signal Processing Letters*, Vol. 21, No. 7, pp. 848-852, July 2014.
- IJ-25** A. Aubry, A. De Maio, G. Foglia, C. Hao, and D. Orlando, "A Radar Detector with Enhanced Range Estimation Capabilities for Partially Homogeneous Environment," *IET Radar, Sonar and Navigation*, Vol. 8, No. 9, pp. 1018-1025, September 2014.
- IJ-26** C. Hao, S. Gazor, D. Orlando, G. Foglia, and J. Yang, "Parametric Space-Time Detection and Range Estimation of a small target," *IET Radar, Sonar and Navigation*, Vol. 9, No. 2, pp. 221-231, February 2015.
- IJ-27** A. Aubry, A. De Maio, G. Foglia, C. Hao, and D. Orlando, "Radar Detection and Range Estimation Using Oversampled Data," *IEEE Transactions on Aerospace and Electronic Systems*, Vol. 51, No. 2, pp. 1039-1052, April 2015.
- IJ-28** A. Aubry, A. De Maio, G. Foglia, and D. Orlando, "Diffuse Multipath Exploitation for Adaptive Radar Detection," *IEEE Transactions on Signal Processing*, Vol. 63, No. 5, pp. 1268-1281, May 2015.

- IJ-29** A. De Maio and D. Orlando, "An Invariant Approach to Adaptive Radar Detection Under Covariance Persymmetry," *IEEE Transactions on Signal Processing*, Vol. 63, No. 5, pp. 1297-1309, May 2015.
- IJ-30** C. Hao, D. Orlando, G. Foglia, X. Ma, and C. Hou, "Adaptive Radar Detection and Range Estimation with Oversampled Data for Partially Homogeneous Environment," *IEEE Signal Processing Letters*, Vol. 22, No. 9, pp. 1359-1363, 2015.
- IJ-31** A. De Maio, D. Orlando, A. Farina, and G. Foglia, "Design and Analysis of Invariant Receivers for Gaussian Targets Under Covariance Persymmetry," *IEEE Journal of Selected Topics in Signal Processing*, Vol. 9, No. 8, pp. 1560-1569, December 2015.
- IJ-32** C. Hao, S. Gazor, X. Ma, S. Yan, C. Hou, and D. Orlando, "Polarimetric Detection and Range Estimation of a Point-Like Target," *IEEE Transactions on Aerospace and Electronic Systems*, Vol. 52, No. 2, pp. 603-616, April 2016.
- IJ-33** A. De Maio and D. Orlando, "Adaptive Radar Detection of a Subspace Signal Embedded in Subspace Structured plus Gaussian Interference Via Invariance," *IEEE Transactions on Signal Processing*, Vol. 64, No. 8, pp. 2156-2167, April 2016.
- IJ-34** D. Ciunzo, A. De Maio, and D. Orlando, "A Unifying Framework for Adaptive Radar Detection in Homogeneous plus Structured Interference-Part I: On the Maximal Invariant Statistic," *IEEE Transactions on Signal Processing*, Vol. 64, No. 11, pp. 2894-2906, June 2016.
- IJ-35** D. Ciunzo, A. De Maio, and D. Orlando, "A Unifying Framework for Adaptive Radar Detection in Homogeneous plus Structured Interference-Part II: Detectors Design," *IEEE Transactions on Signal Processing*, Vol. 64, No. 11, pp. 2907-2919, June 2016.
- IJ-36** A. De Maio and D. Orlando, "A Survey on Two-stage Decision Schemes for Point-like Targets in Gaussian Interference," *IEEE Aerospace and Electronic Systems Magazine*, Vol. 31, No. 4, pp. 20-29, April 2016.
- IJ-37** A. De Maio, D. Orlando, C. Hao, and G. Foglia, "Adaptive Detection of Point-like Targets in Spectrally Symmetric Interference," *IEEE Transactions on Signal Processing*, Vol. 64, No. 12, pp. 3207-3220, March 2016.
- IJ-38** A. De Maio, D. Orlando, I. Soloveychik, and A. Wiesel, "Invariance Theory for Adaptive Detection in Interference with Group Symmetric Covariance Matrix," *IEEE Transactions on Signal Processing*, Vol. 64, No. 23, pp. 6299-6312, July 2016.
- IJ-39** A. Aubry, V. Carotenuto, A. De Maio, and D. Orlando, "Coincidence of Maximal Invariants for Two Adaptive Radar Detection Problems," *IEEE Signal Processing Letters*, Vol. 23, No. 9, pp. 1193-1196, September 2016.
- IJ-40** C. Hao, D. Orlando, G. Foglia, and G. Giunta, "Knowledge-based Adaptive Detection: Joint Exploitation of Clutter and System Symmetry Properties," *IEEE Signal Processing Letters*, Vol. 23, No. 10, pp. 1489-1493, October 2016.

- IJ-41** D. Ciuonzo, D. Orlando, and L. Pallotta, "On the Maximal Invariant Statistic for Adaptive Radar Detection in Partially-Homogeneous Disturbance with Persymmetric Covariance," *IEEE Signal Processing Letters*, Vol. 23, No. 12, pp. 1830-1834, December 2016.
- IJ-42** A. De Maio, D. Orlando, L. Pallotta, and C. Clemente, "A Multi-family GLRT for Oil Spills Detection," *IEEE Transactions on Geoscience and Remote Sensing*, Vol. 55, No. 1, pp. 63-79, January 2017.
- IJ-43** D. Ciuonzo, A. De Maio, and D. Orlando, "On the Statistical Invariance for Adaptive Radar Detection in Partially-homogeneous Disturbance plus Structured Interference," *IEEE Transactions on Signal Processing*, Vol. 65, No. 5, pp. 1222-1234, March 2017.
- IJ-44** D. Orlando, "A Novel Noise Jamming Detection Algorithm for Radar Applications," *IEEE Signal Processing Letters*, Vol. 24, No. 2, pp. 206-210, February 2017.
- IJ-45** G. Foglia, C. Hao, D. Orlando, A. Farina, and G. Giunta, "Adaptive Detection in Partially Homogeneous Clutter with Symmetric Spectrum," *IEEE Transactions on Aerospace and Electronic Systems*, Vol. 53, No. 4, pp. 2110-2119, August 2017.
- IJ-46** G. Foglia, G. Giunta, C. Hao, and D. Orlando, "Knowledge-Aided Adaptive Detection in Partially Homogeneous Clutter: Joint Exploitation of Persymmetry and Symmetric Spectrum," *Elsevier Digital Signal Processing*, Vol. 67, pp. 131-138, 2017.
- IJ-47** D. Orlando, C. Hao, A. Aubry, G. Cui, A. C. Gurbuz, and S. Gazor, Editorial of "Special Issue: Advanced Techniques for Radar Signal Processing," *EURASIP Journal on Advances in Signal Processing*, June 2017.
- IJ-48** V. Carotenuto, A. De Maio, D. Orlando, and P. Stoica, "Model Order Selection Rules For Covariance Structure Classification in Radar," *IEEE Transactions on Signal Processing*, Vol. 65, No. 20, pp. 5305-5317, October 2017.
- IJ-49** S. Yan, D. Orlando, C. Hao, D. Massaro, and A. Farina, "Adaptive Detection and Range Estimation of point-like targets with Symmetric Spectrum," *IEEE Signal Processing Letters*, Vol. 24, No. 11, pp. 1744-1748, November 2017.
- IJ-50** V. Carotenuto, A. De Maio, D. Orlando, and L. Pallotta, "Adaptive Radar Detection Using Two Sets of Training Data," *IEEE Transactions on Signal Processing*, in print, October 2017.
- IJ-51** G. Giunta, C. Hao, and D. Orlando, "Estimation of Rician K-Factor in the Presence of Nakagami- m Shadowing for the LoS Component," *IEEE Wireless Communications Letters*, in print, January 2018.
- IJ-52** V. Carotenuto, A. De Maio, D. Orlando, and P. Stoica, "Radar Detection Architecture based on Interference Covariance Structure Classification," *IEEE Transactions on Aerospace and Electronic Systems*, in print, April 2018.

- IJ-53** A. De Maio, S. Han, and D. Orlando, "Adaptive Radar Detectors Based on the Observed FIM," *IEEE Transactions on Signal Processing*, Vol. 66, No. 14, pp. 3838-3847, July 2018.
- IJ-54** L. Pallotta, A. De Maio, and D. Orlando, "A Robust Framework for Covariance Classification in Heterogeneous Polarimetric SAR Images," *IEEE Transactions on Geoscience and Remote Sensing*, in print, July 2018.
- IJ-55** L. Pallotta and D. Orlando, "Polarimetric Covariance Eigenvalues Classification in SAR Images," *IEEE Geoscience and Remote Sensing Letters*, Vol. 16, No. 5, pp. 746-750, 2019.
- IJ-56** J. Liu, D. Orlando, P. Addabbo, and W. Liu, "SINR Distribution for the Persymmetric SMI Beamformer With Steering Vector Mismatches," *IEEE Transactions on Signal Processing*, Vol. 67, No. 5, pp. 1382-1392, March 2019.
- IJ-57** P. Addabbo, F. Biondi, C. Clemente, D. Orlando, and L. Pallotta, "Classification of Covariance Matrix Eigenvalues in Polarimetric SAR for Environmental Monitoring Applications," *IEEE Aerospace and Electronic Systems Magazine*, Vol. 19, No. 6, 2019.
- IJ-58** F. Biondi, C. Clemente, and D. Orlando, "An Atmospheric Phase Screen Estimation Strategy Based on Multi-Chromatic Analysis for Differential Interferometric Synthetic Aperture Radar," *IEEE Transactions on Geoscience and Remote Sensing*, in print, April 2019.
- IJ-59** L. Yan, P. Addabbo, C. Hao, D. Orlando, and A. Farina, "New ECCM Techniques Against Noise-like and/or Coherent Interferers," *IEEE Transactions on Aerospace and Electronic Systems*, in print, June 2019.
- IJ-60** L. Yan, C. Hao, D. Orlando, A. Farina, and C. Hou, "Parametric space-time detection and range estimation of point-like targets in PHE," *IEEE Transactions on Aerospace and Electronic Systems*, in print, July 2019.
- IJ-61** F. Biondi, P. Addabbo, D. Orlando, and C. Clemente, "Pixel Tracking for Micro-Motion Estimation of Maritime Targets by COSMO-SkyMed Synthetic Aperture Radar Data - An Operative Assessment," *MDPI Remote Sensing*, in print, 2019.
- IJ-62** J. Liu, F. Biondi, D. Orlando, and A. Farina, "Training Data Classification Algorithms for Radar Applications," *IEEE Signal Processing Letters*, in print, August 2019.
- IJ-63** V. Carotenuto, D. Orlando, and A. Farina "Interference Covariance Matrix Structure Classification in Heterogeneous Environment," *IEEE Signal Processing Letters*, in print, August 2019.
- IJ-64** P. Addabbo, D. Orlando, and G. Ricci "Adaptive Radar Detection of Dim Moving Targets in Presence of Range Migration," *IEEE Signal Processing Letters*, in print, August 2019.

- IJ-65** F. Biondi, C. Clemente, and D. Orlando, “An Eigenvalue-based Approach for Structure Classification in Polarimetric SAR Images,” *IEEE Geoscience and Remote Sensing Letters*, in print, September 2019.
- IJ-66** J. Liu, W. Liu, B. Tang, and D. Orlando, “Persymmetric Adaptive Detection in Subspace Interference Plus Gaussian Noise,” *Signal Processing*, in print, September 2019.
- IJ-67** F. Biondi, A. Tarpanelli, P. Addabbo, C. Clemente, and D. Orlando, “Pixel Tracking to Estimate Rivers Water Flow Elevation Using Cosmo-SkyMed SAR data,” *MDPI Remote Sensing*, in print, 2019.
- IJ-68** P. Addabbo, O. Besson, D. Orlando, and G. Ricci, “Adaptive Detection of Coherent Radar Targets in the Presence of Noise Jamming,” *IEEE Transactions on Signal Processing*, in print, November 2019.
- IJ-69** J. Liu, W. Liu, C. Hao, and D. Orlando, “Persymmetric Subspace Detectors With Multiple Observations in Homogeneous Environments,” *IEEE Transactions on Aerospace and Electronic Systems*, in print, January 2020.
- IJ-70** F. Biondi, P. Addabbo, C. Clemente, and D. Orlando, “Measurements of Surface River Doppler Velocities with Along-Track InSAR Using a Single Antenna,” *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, in print, February 2020.
- IJ-71** S. Han, L. Pallotta, X. Huang, G. Giunta, and D. Orlando “A Sparse Learning Approach to the Design of Radar Tunable Architectures with Enhanced Selectivity Properties,” *IEEE Transactions on Aerospace and Electronic Systems*, in print, March 2020.
- IJ-72** J. Liu, Y. Feng, W. Liu, D. Orlando, and H. Li, “Training Data Assisted Anomaly Detection of Multi-Pixel Targets in Hyperspectral Imagery” *IEEE Transactions on Signal Processing*, Vol. 68, pp. 3022-3032, April 2020.
- IJ-73** L. Yan, P. Addabbo, Y. Zhang, C. Hao, J. Liu, J. Li, and D. Orlando, “A Sparse Learning Approach to the Detection of Multiple Noise-Like Jammers,” *IEEE Transactions on Aerospace and Electronic Systems*, in print, April 2020.
- IJ-74** W. Lia, W. Yia, M. Wena, L. Konga, and D. Orlando, “Multi-PRF and Multi-frame Track-Before-Detect Algorithm in Multiple PRF Radar System Signal Processing,” *Signal Processing*, Vol. 174, September 2020.
- IJ-75** B. Shi, L. Pallotta, G. Giunta, C. Hao, and D. Orlando, “Parameter Estimation of Fluctuating Two-Ray Model for Next Generation Mobile Communications,” *IEEE Transactions on Vehicular Technology*, Vol. 69, No. 8, August 2020.
- IJ-76** J. Liu, T. Jian, W. Liu, C. Hao, and D. Orlando, “Persymmetric Adaptive Detection With Improved Robustness to Steering Vector Mismatches,” *Signal Processing*, Vol. 176, November 2020.

- IJ-77** J. Liu, D. Massaro, D. Orlando, and A. Farina, “Radar Adaptive Detection Architectures for Heterogeneous Environments,” *IEEE Transactions on Signal Processing*, Vol. 68, pp. 4307-4319, July 2020.
- IJ-78** P. Addabbo, J. Liu, D. Orlando, and G. Ricci, “Novel Parameter Estimation and Radar Detection Approaches for Multiple Point-like Targets: Designs and Comparisons” *IEEE Signal Processing Letters*, Vol. 27, pp.1789-1793, September 2020.
- IJ-79** F. Biondi, P. Addabbo, C. Clemente, S. Ullo, and D. Orlando, “Monitoring of Critical Infrastructures by Micro-Motion Estimation: the Mosul Dam Destabilization,” *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, in print, October 2020.
- IJ-80** F. Biondi, P. Addabbo, C. Clemente, S. Ullo, and D. Orlando, “Perspectives on the Structural Health Monitoring of Bridges by Synthetic Aperture Radar,” *MDPI Remote Sensing*, in print, 2020.
- IJ-81** S. Han, L. Yan, Y. Zhang, P. Addabbo, C. Hao, and D. Orlando, “Adaptive Radar Detection and Classification Algorithms for Multiple Coherent Signals,” *IEEE Transactions on Signal Processing*, in print, December 2020.
- IJ-82** P. Addabbo, S. Han, D. Orlando, and G. Ricci, “Learning Strategies for Radar Clutter Classification,” *IEEE Transactions on Signal Processing*, in print, January 2021.
- IJ-83** P. Addabbo, M. L. Bernardi, F. Biondi, M. Cimitile, C. Clemente, and D. Orlando, “Temporal Convolutional Neural Networks for Radar Micro-Doppler Based Gait Recognition,” *Sensors*, Vol. 1, No. 5, 2021.
- IJ-84** N. Fiscante, P. Addabbo, C. Clemente, F. Biondi, G. Giunta, and D. Orlando, “A Track-Before-Detect strategy based on sparse data processing for air surveillance radar applications,” *MDPI Remote Sensing*, in print, 2021.
- IJ-85** S. Yan, P. Addabbo, C. Hao, D. Orlando, “Adaptive Detection of Dim Maneuvering Targets in Adjacent Range Cells,” *IEEE Signal Processing Letters*, in print, February 2021.
- IJ-86** X. Da, P. Addabbo, C. Hao, J. Liu, A. Farina, and D. Orlando, “Adaptive Strategies for Cutter Edge Detection in Radar,” *Signal Processing*, Vol. 186, 2021.
- IJ-87** J. Liu, Z. Hou, W. Li, R. Tao, and D. Orlando, “Multi-Pixel Anomaly Detection With an Unknown Pattern for Hyperspectral Imagery,” *IEEE Transactions on Neural Networks and Learning Systems*, in print, 2021.
- IJ-88** S. Yan, F. Lotfi, S. Chen, C. Hao, and D. Orlando, “Innovative Two-Stage Radar Detection Architectures in Adverse Scenarios Using Two Training Data Sets,” *IEEE Signal Processing Letters*, Vol. 28, pp. 1165-1169, May 2021.
- IJ-89** P. Addabbo, S. Han, F. Biondi, G. Giunta, and D. Orlando, “Adaptive Radar Detection in the Presence of Multiple Alternative Hypotheses Using Kullback-Leibler Information Criterion-Part I: Detector Designs,” *IEEE Transactions on Signal Processing*, Vol. 69, pp. 3730-3741, 2021.

- IJ-90** P. Addabbo, S. Han, F. Biondi, G. Giunta, and D. Orlando, “Adaptive Radar Detection in the Presence of Multiple Alternative Hypotheses Using Kullback-Leibler Information Criterion-Part II: Applications,” *IEEE Transactions on Signal Processing*, Vol. 69, pp. 3742-3754, 2021.
- IJ-91** D. Orlando, I. Palama, S. Bartoletti, G. Bianchi, and N. Blefari Melazzi, “Design and Experimental Assessment of Detection Schemes for Air Interface Attacks in Adverse Scenarios,” *IEEE Wireless Communication Letters*, Vol. 10, No. 9, pp. 1989-1993, September 2021.
- IJ-92** C. Yin, G. Giunta, D. Orlando, C. Hao, and C. Hou, “A Channel Classification Scheme Accounting for Nakagami-m Shadowing and FTR Model,” *IEEE Wireless Communication Letters*, in print, July 2021.
- IJ-93** Z. Huang, S. Chen, C. Hao, and D. Orlando, “Bearings-only target tracking with an unbiased pseudo-linear Kalman filter,” *MDPI Remote Sensing*, Vol. 13, No. 15, 2021.
- IJ-94** J. Liu, W. Liu, X. Chen, D. Orlando, and A. Farina, “Performance Analysis of the Generalized Likelihood Ratio Test in General Phased Array Radar Configuration,” *IEEE Transactions on Signal Processing*, Vol. 69, pp. 4544-4555, July 2021.
- IJ-95** A. Coluccia, D. Orlando, and G. Ricci “A GLRT-like CFAR Detector for Fully-Heterogeneous Environments,” *Signal Processing*, in print, 2022.
- IJ-96** N. Fiscante, P. Addabbo, F. Biondi, G. Giunta, and D. Orlando, “Unsupervised Sparse Unmixing of Atmospheric Trace Gases from Hyperspectral Satellite Data,” *Geoscience and Remote Sensing Letters*, in print, 2022.

3.2 International Conferences

- IC-1** F. Bandiera, D. Orlando, and G. Ricci, “Adaptive Radar Detection for Extended and Distributed Targets without Assignment of Secondary Data,” *13 th Annual Workshop on Adaptive Sensor Array Processing, ASAP 2005*, Massachusetts Institute of Technology (MIT) and Lincoln Laboratory, Lexington, Massachusetts (USA), June 2005.
- IC-2** F. Bandiera, O. Besson, D. Orlando, G. Ricci, and L.L. Scharf, “GLRT-Based Direction Detectors in Noise and Subspace Interference,” *2006 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2006*, Toulouse (France), May 2006.
- IC-3** F. Bandiera, O. Besson, D. Orlando, and G. Ricci, “Derivation and analysis of an adaptive detector with enhanced mismatched signals rejection capabilities,” *41 th Asilomar Conference on Signals, Systems and Computers*, Pacific Grove, CA, USA, November 2007.
- IC-4** F. Bandiera, O. Besson, D. Orlando, and G. Ricci, “A Two-Stage Detector with Improved Acceptance/Rejection Capabilities,” *2008 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2008*, Las Vegas, NV, USA, March-April 2008.

- IC-5** F. Bandiera, D. Orlando, and G. Ricci, "Adaptive Radar Detection of Distributed Targets under Conic Constraints," *2008 IEEE Radar Conference, RadarCon 2008*, Rome (Italy), May 2008.
- IC-6** F. Bandiera, D. Orlando, and G. Ricci, "A Parametric Adaptive Radar Detector," *2008 IEEE Radar Conference, RadarCon 2008*, Rome (Italy), May 2008.
- IC-7** D. Orlando, L. Venturino, M. Lops, and G. Ricci, "Space-Time Adaptive Algorithms for Track-Before-Detect in Clutter Environments," *International Radar Conference, Radar '09*, Bordeaux (France), October 2009.
- IC-8** F. Bandiera, A. Farina, D. Orlando, and G. Ricci, "A Ternary Detection Test with Applications to the Sidelobe Blanking Problem," *International Radar Conference, Radar '09*, Bordeaux, France, 12-16 October 2009.
- IC-9** D. Orlando, G. Ricci, and Y. Bar-Shalom, "Adaptive Track-before-detect Algorithms for Targets with Kinematic Constraints in Cluttered Environments," *NATO Workshop on Data Fusion and Anomaly Detection for Maritime Situational Awareness (WMSA)*, NATO Undersea Research Centre (NURC), La Spezia, Italy, 15-17 September 2009.
- IC-10** D. Orlando, F. Ehlers, and G. Ricci, "Track-before-detect Algorithms for Bistatic Sonars," *the 2nd International Workshop on Cognitive Information Processing*, Elba Island, Italy, June 2010.
- IC-11** F. Bandiera, D. Orlando, G. Ricci, and L.L. Scharf, "Adaptive Radar Detection: a subspace identification approach," *the 2nd International Workshop on Cognitive Information Processing*, Elba Island, Italy, June 2010.
- IC-12** F. Bandiera, A. De Maio, S. De Nicola, A. Farina, D. Orlando, and G. Ricci, "Adaptive strategies for discrimination between mainlobe and sidelobe signals," *IEEE International Radar Conference*, Washington DC, USA, May 2010.
- IC-13** D. Orlando, F. Ehlers, and G. Ricci, "A Maximum Likelihood Tracker for Multistatic Sonars," *13th International Conference on Information Fusion*, Edinburgh, UK, July 2010.
- IC-14** M. Lops, M. Mancino, D. Orlando, G. Ricci, and L. Venturino, "A Model-based Track-Before-Detect Strategy," *European Radar Conference 2010*, Paris, France, September-October 2010.
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