

List of scientific publications



Refereed journal articles with JCR > 1

1. G. P. M. Pinheiro, R. K. Miranda, B. J. G. Praciano, G. A. Santos, F. L. L. Mendonça, E. Javidi, **J. P. C. L. da Costa** and R. T. de Sousa Jr., "Multi-Sensor Wearable Health Device Framework for Real-Time Monitoring of Elderly Patients Using a Mobile Application and High-Resolution Parameter Estimation," *Frontiers in Human Neuroscience*, 2022
2. G. G. Andrade, G. R. S. Silva, F. C. M. Duarte Jr., G. A. Santos, **J. P. J. da Costa** and R. T. de Sousa Jr., "A Conversation-Driven Approach for Chatbot Management," *IEEE Access*, 2022
3. Z. Lu, **J. P. J. da Costa** and T. Fei, "EM-based TDOA Estimation of a Speech Source via Gaussian Mixture Models in Noisy and Anechoic Environments," *IEEE Access*, 2021
4. J. P. A. Maranhão, **J. P. C. L. da Costa**, E. P. de Freitas, E. Javidi, and R. T. de Sousa Jr., "Noise-robust multilayer perceptron architecture for Distributed Denial of Service attack detection," *IEEE Communications Letters*, vol. 25, no. 2, pp. 402 – 406, 2021
5. J. P. A. Maranhão, **J. P. C. L. da Costa**, E. Javidi, C. A. B. de Andrade, and R. T. de Sousa Jr., "Tensor based framework for Distributed Denial of Service attack detection," *Journal of Network and Computer Applications*, vol. 174, 102894, 2021
6. M. R. Zanatta, **J. P. C. L. da Costa**, F. Antreich, G. Elger, F. L. L. Mendonca and R. T. Sousa Jr., "Tensor-based Framework with Model Order Selection and High Accuracy Factor Decomposition for Time-Delay Estimation in Dynamic Multipath Scenarios," *IEEE Access*, v. 1, p. 1-1, 2020
7. D. V. Lima, **J. P. C. L. da Costa**, M. R. Zanatta, R. T. de Sousa Jr. and M. Haardt, "Robust tensor-based techniques for antenna array-based GNSS receivers in scenarios with highly correlated multipath components," *Digital Signal Processing*, v. 101, p. 102715, 2020
8. E. S. Gualberto, R. T. de Sousa Jr., T.P. V. Vieira, **J. P. C. L. da Costa** and C. G. Duque, "From Feature Engineering and Topics Models to Enhanced Prediction Rates in Phishing Detection," *IEEE Access*, v. 8, p. 76368-76385, 2020
9. E. S. Gualberto, R. T. de Sousa Jr., T.P. V. Vieira, **J. P. C. L. da Costa** and C. G. Duque, "The Answer is in the Text: Multi-Stage Methods for Phishing Detection based on Feature Engineering," *IEEE Access*, v. 1, p. 1-1, 2020.
10. M. A. M. Marinho, A. Vinel, F. Antreich, F. Tufvesson, **J. P. C. L. da Costa** and E. P. Freitas, "Spherical Wave Array Based Positioning for Vehicular Scenarios. *IEEE Access*," v. 8, p. 110073-110081, 2020.

11. J. P. A. Maranhão, **J. P. C. L. da Costa**, E. P. Freitas, E. Javidi and R. T. Sousa Jr. , “Error-Robust Distributed Denial of Service Attack Detection Based on an Average Common Feature Extraction Technique,” *Sensors*, v. 20, p. 5845, 2020.
12. J. Milanezi Junior, **J. P. C. L. Da Costa**, A. Arancibia, L. Weichenberger, R. T. De Sousa Jr., Caio C. R. Garcez and Giovanni Del Galdo, “Data Security and Trading Framework for Smart Grids in Neighborhood Area Networks,” *Sensors (Basel)*, 2020, 20(5), 1337
13. C. C. R. Garcez, D. V. de Lima, R. K. Miranda, F. Mendonça, **J. P. C. L. da Costa**, A. L. F. de Almeida and R. T. de Sousa Jr., “Tensor-Based Subspace Tracking for Time-Delay Estimation in GNSS Multi-Antenna Receivers,” *Sensors (Basel)*, Nov. 2019
14. P. R. B. Gomes, A. L. F. de Almeida, **J. P. C. L. da Costa** and R. T. de Sousa Jr., "Joint DL and UL Channel Estimation for Millimeter Wave MIMO Systems Using Tensor Modeling", *Wireless Communications and Mobile Computing*, Vol. 2019, Sept. 2019
15. M. T. de Oliveira, **J. P. C. L. da Costa**, R. K. Miranda, R. T. de Sousa Jr. and A. L. F. de Almeida, "Low Cost Antenna Array Based Drone Tracking Device For Outdoor Environments", *Wireless Communications and Mobile Computing*, Vol. 2019, Jun 2019
16. M. R. Zanatta, F. Antreich, D. V. Lima, **J. P. C. L. da Costa**, R. K. Miranda, “Tensor-Based Time-Delay Estimation for Second and Third Generation Global Positioning System,” *Digital Signal Processing*, Volume 92, September 2019, Pages 1-19
17. D. C. Araújo, A. L. F. de Almeida, **J. P. C. L. da Costa** and R. T. de Sousa Jr., "Tensor-Based Channel Estimation for Massive MIMO-OFDM Systems," *IEEE Access*, Volume: 7, Pages: 42133 – 42147, March 2019
18. P. R. B. Gomes, A. L. F. de Almeida, and **J. P. C. L. da Costa**, “Tensor-Based Multiple Denoising via Successive Spatial Smoothing, Low-Rank Approximation and Reconstruction for R-D Sensor Array Processing,” *Digital Signal Processing*, Jun 2019
19. J. Milanezi Junior, M. A. M. Marinho, R. K. Miranda, **J. P. C. L. da Costa**, G. Del Galdo, F. Roemer, “M-Estimation Based Chinese Remainder Theorem via Kronecker Product Based Mapping Vector for Systems with Few Remainders,” *Digital Signal Processing*, v. 87, p. 60-74, Apr 2019
20. P. R. B. Gomes, A. L. F. de Almeida, and **J. P. C. L. da Costa**, “A Nested-PARAFAC Based Approach for Target Localization in Bistatic MIMO Radar Systems,” *Digital Signal Processing*, Mar 2019
21. R. K. Miranda, **J. P. C. L. da Costa**, B. Guo, A. L. F. de Almeida, G. Del Galdo, R. T. de Sousa Junior, “Low Complexity and High Accuracy Semi-blind Joint Channel and Symbol Estimation for Massive MIMO-OFDM,” *Circuits, Systems, and Signal Processing (CSSP)*, Springer Publisher, 2018.

22. M. A. M. Marinho, F. Antreich, S. Caizzone, **J. P. C. L. da Costa**, A. Vinel, and E. P. de Freitas, "Signal Processing Robust Nonlinear Array Interpolation for Direction of Arrival Estimation of Highly Correlated Signals," *Signal Processing*, Elsevier, Vol 144, Mar 2018, Pages 19-28
23. T. P. B. Vieira, D. F. Tenorio, **J. P. C. L. da Costa**, E. P. de Freitas, G. Del Galdo, and R. T. de Sousa Junior, "Model Order Selection and Eigen Similarity based Framework for Detection and Identification of Network Attacks," *Journal of Networking and Computer Applications (JNCA)*, Elsevier, Vol 90, Jul 2017, Pages 26–41
24. P. M. G. I. Reis, **J. P. C. L. da Costa**, R. K. Miranda, and G. Del Galdo, "ESPRIT-Hilbert based audio tampering detection with SVM classifier for forensic analysis via electrical network frequency", *IEEE Transactions on Information Forensics & Security*, Vol 12, Iss 4, Apr 2017, Pages 853-864
25. R. K. Miranda, **J. P. C. L. da Costa**, F. Roemer, L. R.A.X. Menezes, G. Del Galdo, and A. L. F. de Almeida, "Low Complexity Performance Assessment of a Sensor Array via Unscented Transformation," *Digital Signal Processing*, Vol 63, Apr 2017, Pages 190–198
26. T. Galibus, T. P. B. Vieira, E. P. de Freitas, R. Albuquerque, **J. P. C. L. da Costa**, R. T. de Sousa Jr, V. Krasnoproshin, A. Zaleski, H. Vissia, and G. del Galdo, "Offline Mode for Corporate Mobile Client Security Architecture", *Mobile Networks and Applications*, Springer, Mar 2017, Pages 1-17
27. P. R. B. Gomes, A. L. F. de Almeida, **J. P. C. L. da Costa**, and G. del Galdo, "Tensor-Based Methods for Blind Spatial Signature Estimation Under Arbitrary and Unknown Source Covariance Structure," *Digital Signal Processing*, Vol 62, Mar 2017, Pages 197–210
28. P. R. B. Gomes, A. L. F. de Almeida, **J. P. C. L. da Costa**, J. C. M. Mota, D. V. de Lima, and G. del Galdo, "Tensor-Based Methods for Blind Spatial Signature Estimation in Multidimensional Sensor Arrays," *International Journal of Antennas and Propagation*, Hindawi, Volume 2017 (2017), Feb 2017, 11 pages
29. T. F. K. Cordeiro, **J. P. C. L. da Costa**, H. C. So, R. T. Sousa Jr., and G. A. Borges, "Improved Kalman-based Attitude Estimation Framework for UAVs via an Antenna Array," *Digital Signal Processing*, Vol 59, Dec 2016, Pages 49–65
30. K. Liu, **J. P. C. L. da Costa**, H. C. So, L. Huang and J. Ye, "Detection of Number of Components in CANDECOMP/PARAFAC Models via Minimum Description Length," *Digital Signal Processing*, Vol 51, Apr 2016, Pages 110–123
31. R. K. Miranda, **J. P. C. L. da Costa** and F. Antreich, "High Accuracy and Low Complexity Adaptive Generalized Sidelobe Cancelers for Colored Noise Scenarios Corresponding," *Digital Signal Processing*, Vol. 34, pp 48–55, Nov 2014

32. W. C. Freitas, A. L. F. de Almeida, and **J. P. C. L. da Costa**, "Blind Joint Channel Estimation and Data Detection for Precoded Multi-Layered Space-Frequency MIMO Schemes," *Circuits, Systems and Signal Processing*, Vol. 33, Iss. 4, pp 1215-1229, Apr 2014
33. T. J. Lampoltshammer, E. P. de Freitas, T. Nowotny, S. Plank, **J. P. C. L. da Costa**, T. Larsson and T. Heistracher, "Use of Local Intelligence to Reduce Energy Consumption of Wireless Sensor Nodes in Elderly Health Monitoring Systems," *Sensors (Basel)*, Vol 14(3), pp 4932-47, Mar 2014
34. K. Liu, **J. P. C. L. da Costa**, A. L. F. de Almeida, and H. C. So, "Semi-Blind Receivers for Joint Symbol and Channel Estimation in Space-Time-Frequency Diversity based MIMO-OFDM Systems," *IEEE Transactions on Signal Processing*, Vol 61 , Iss 21, pp 5444 – 5457, Nov 2013
35. **J. P. C. L. da Costa**, K. Liu, H. C. So, F. Roemer, M. Haardt, and S. Schwarz, "Generalized Multidimensional Prewhitening for Enhanced Signal Reconstruction and Parameter Estimation," *Signal Processing*, Vol 93, Iss 11, pp 3209–3226, Nov 2013
36. K. Liu, H. C. So, **J. P. C. L. da Costa**, F. Roemer, and H. Lei, "Efficient model order selection for accurate parameter estimation in threshold region," *Digital Signal Processing*, Vol. 23, Issue 5, p. 1668–1677, Sep. 2013
37. K. Liu, H. C. So, **J. P. C. L. da Costa**, and H. Lei, "Subspace based Multi-Dimensional Model Order Selection in Colored Noise Scenarios," *Signal Processing*, Vol 93, Iss 7, pp 1976–1987, Jul 2013
38. K. Liu, **J. P. C. L. da Costa**, H. C. So, F. Roemer, M. Haardt and L. F. A. Gadelha, "3-D Unitary ESPRIT: Accurate Attitude Estimation for Unmanned Aerial Vehicles with a Hexagon-Shaped ESPAR Array," *Digital Signal Processing*, Vol 23, Iss 3, p. 701–711, May 2013
39. **J. P. C. L. da Costa**, F. Roemer, M. Haardt, and R. T. de Souza Jr., "Multi-Dimensional Model Order Selection," *EURASIP Journal on Advances in Signal Processing*, Vol 2011, Iss 1, Dec 2011
40. S. L. de Moraes, A. A. A. Cordeiro Jr., **J. P. C. L. da Costa**, and M. T. M. R. Giralddi, "Modelling of two new kinds of optical filters for use in WDM networks," in *Microwave and Optical Technology Letters*, v. 39, n. 3, p. 249-253, 2003

Refereed conference articles: IEEE, EUSIPCO, WSA and KMIS

41. A. A. S. da Silva, M. Basso, P. J. M. Mendes, D. L. do Rosário, E. C. Cerqueira, B. J. G. Praciano, **J. P. J. da Costa** and E. P. de Freitas "A Map Building and Sharing Framework for Multiple UAV Systems," *International Conference on Unmanned Aircraft Systems (ICUAS)*, 2022

42. E. B. Magalhães, G. A. Santos, F. C. M. Duarte Junior, **J. P. J. da Costa** and R. T. de Sousa Jr., „Student Dropout Prediction in MOOC using Machine Learning Algorithms,” In: Workshop on Communication Networks and Power Systems (WCNPS) 2021
43. I. V. Brandão, **J. P. C. L. da Costa**, B. J. G. Praciano, R. T. de Sousa Júnior, F. L. L. Mendonca Decision support framework for the stock market using deep reinforcement learning,” In: Workshop on Communication Networks and Power Systems (WCNPS), 2020, Brasília, **Best Paper Award**
44. G. A. Santos, **J. P. C. L. da Costa**, D. V. Lima, M. R. Zanatta, B. J. G. Praciano, G. P. M. Pinheiro, “Improved localization framework for autonomous vehicles via tensor and antenna array based GNSS receivers,” In: Workshop on Communication Networks and Power Systems (WCNPS), 2020, Brasília.
45. G. Danapal, G. A. Santos, **J. P. C. L. da Costa**, B. J. G. Praciano, G. P. M. Pinheiro, “Sensor fusion of camera and LiDAR raw data for vehicle detection. In: Workshop on Communication Networks and Power Systems (WCNPS), 2020, Brasília.
46. J. P. A. Maranhão, **J. P. C. L. da Costa**, E. Javidi and J. Milanezi Jr., “Multidimensional Antenna Array based Framework for Drone Localization in Multipath Environments,” 13rd International Conference on Signal Processing and Communication Systems (ICSPCS), 2019
47. E. Javidi, , **J. P. C. L. da Costa**, R. K. Miranda, J. P. A. Maranhão and J. A. R. Vargas, “Modified Information Theoretic Criteria for Low Complexity Estimation of the Amount of Components in MEG measurements,” 13rd International Conference on Signal Processing and Communication Systems (ICSPCS), 2019
48. E. Javidi, , **J. P. C. L. da Costa**, R. K. Miranda, J. P. A. Maranhão and J. A. R. Vargas, “Unsupervised Framework for the Identification of Visual Evoked Potential in MEG measurements,” 13rd International Conference on Signal Processing and Communication Systems (ICSPCS), 2019
49. P. de Pinho, M. F. K. B. Couras, G. Favier, **J. P. C. L. da Costa**, A. L. F. de Almeida and V. Zarzoso, “Semi-supervised Receivers for MIMO Systems with Multiple Khatri-Rao Coding,” 13rd International Conference on Signal Processing and Communication Systems (ICSPCS), 2019
50. D. G. Rega, R. K. Miranda, **J. P. C. L. da Costa**, E. Javidi and J. P. A. Maranhão, “ESPRIT-Based Step Count for Wearable Devices,” 13rd International Conference on Signal Processing and Communication Systems (ICSPCS), 2019
51. J. Milanezi Jr., **J. P. C. L. da Costa**, J. P. A. Maranhão, R. T. de Sousa Jr., G. Del Galdo, “A Chinese Remainder Theorem Based Perfect Secret Sharing Scheme with Enhanced Secret Range Values Using Tensor Operations,” 13rd International Conference on Signal Processing and Communication Systems (ICSPCS), 2019

52. M. F. K. B. Couras, P. de Pinho, G. Favier, **J. P. C. L. da Costa**, A. L. F. de Almeida and V. Zarzoso, "Multidimensional CX Decomposition of Tensors," Workshop on Communication Networks and Power Systems (WCNPS), 2019, Brasília
53. S. C. Vilaça, T. P. B. Vieira, R. T. de Sousa Júnior and **J. P. C. L. da Costa**, "Botnet traffic detection using RPCA and Mahalanobis Distance," Workshop on Communication Networks and Power Systems (WCNPS), 2019, Brasília
54. V. Brandão, **J. P. C. L. da Costa**, R. T. de Sousa Júnior, G. Santos, F. C. M. Duarte Júnior and B. J. G. Praciano, "Classification and predictive analysis of educational data to improve the quality of distance learning courses," Workshop on Communication Networks and Power Systems (WCNPS), 2019, Brasília
55. L. L. de Mendonça, D. F. da Cunha, B. J. G. Praciano, M. R. Zanatta, **J. P. C. L. da Costa** and R. T. De Sousa Júnior, "P2PIoT: A Peer-To-Peer Communication Model for Internet of Things," Workshop on Communication Networks and Power Systems (WCNPS), 2019, Brasília
56. B. J. G. Praciano, **J. P. C. L. da Costa**, J. P. A. Maranhão, J. B. Prettz, R. T. de Sousa Jr. e F. Mendonça, "Spatio-Temporal Trend Analysis of the Brazilian Elections based on Twitter Data," 2018 IEEE International Conference on Data Mining (ICDM)
57. M. A. M. Marinho, F. Antreich, F. Tufvesson, A. Vinel, and **J. P. C. L. da Costa**, "Performance Assessment for Broadband Radio Localization," Asilomar Conference on Signals, Systems, and Computers, 2018
58. F. G. Constancio, M. F. K. B. Couras, D. X. P. Nogueira, **J. P. C. L. da Costa**, R. T. de Sousa Jr., S. G. Faiad, N. T. da Mota and D. A. da Silva, "Extended ADDIE Model for improved Distance Learning Courses", 48th Annual Frontiers in Education (FIE) Conference, 2018
59. S. Gorlow, **J. P. C. L. da Costa**, M. Haardt, "A root-CMA algorithm for multi-user Separation", Workshop on Communication Networks and Power Systems (WCNPS), Brasília, 2017
60. M. R. Zanatta, R. K. Miranda, **J. P. C. L. da Costa**, F. Antreich and D. V. Lima, "Antenna array based receivers for third generation global positioning system", Workshop on Communication Networks and Power Systems (WCNPS), Brasília, 2017
61. D. V. Lima, **J. P. C. L. da Costa**, F. Antreich and G. Del Galdo, "Time-Delay Estimation via CPD-GEVD Applied to Tensor-based GNSS Arrays with Errors", IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing, Curaçao, 2017
62. R. K. Miranda, **J. P. C. L. da Costa**, F. Roemer and G. Del Galdo, " Broadband Beamforming via Frequency Invariance Transformation and PARAFAC Decomposition,

- IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing, Curaçao, 2017
63. D. V. Lima, **J. P. C. L. da Costa**, J. P. A. Maranhão, R. T. De Sousa Jr., "Time-Delay Estimation via Procrustes Estimation and Khatri-Rao Factorization for GNSS Multipath Mitigation," 11th IEEE International Conference on Signal Processing and Communication Systems (ICSPCS), Gold Coast, 2017
 64. J. P. A. Maranhão, **J. P. C. L. da Costa**, J. A. Braga, G. Del Galdo and R. T. Sousa Jr., "Antenna Array based Framework with Multipath Mitigation for Signal Emitter Detection and Localization, " 11th IEEE International Conference on Signal Processing and Communication Systems (ICSPCS), Gold Coast, 2017
 65. M. A. M. Marinho, A. Vinel, F. Antreich, **J. P. C. L. da Costa** and E. P. de Freitas, "Antenna Array Based Localization Scheme for Vehicular Networks," IEEE International Conference on Computer and Information Technology (CIT), Helsinki, Finland, 2017
 66. J. B. Prettz, **J. P. C. L. da Costa**, M. R. Zanatta, J. R. Alvim and R. K. Miranda, "Efficient and low cost MIMO communication architecture for smartbands applied to postoperative patient care," 2nd IEEE Russian-Pacific Conference on Computer Technology and Applications (RPC-2017), Vladivostok, Russia, 2017
 67. K. Liu, F. Roemer, **J. P. C. L. da Costa**, J. Xiong, Y. Yan, W.-Q. Wang, G. Del Galdo, "Tensor-Based Sparsity Order Estimation for Big Data Applications", European Signal Processing Conference (EUSIPCO), Kos, Greece, 2017
 68. J. Xiong, K. Liu, **J. P. C. L. da Costa**, W.-Q. Wang, "Bayesian information criterion for multidimensional sinusoidal order selection," IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), New Orleans, USA, 2017
 69. L. D. X. Ribeiro, J. Milanezi Júnior, **J. P. C. L. da Costa**, W. F. Giozza, R. K. Miranda and M. V. Vieira, "PCA-Kalman based Load Forecasting of Electric Power Demand," IEEE Symposium on Signal Processing and Information Technology (ISSPIT), 2016
 70. P. F. C. Lima, R. K. Miranda, **J. P. C. L. da Costa**, Y. Yizheng, R. Zelenovsky, and G. Del Galdo, "Low Complexity Blind Separation Technique to Solve the Permutation Ambiguity of Convolutional Speech Mixtures", 10th International Conference on Signal Processing and Communication Systems (ICSPCS'2016), dec 2016, Gold Coast,
 71. P. M. G. I. Reis, **J. P. C. L. da Costa**, R. K. Miranda, and G. Del Galdo, "Audio authentication using the kurtosis of ESPRIT based ENF estimates", 10th International Conference on Signal Processing and Communication Systems (ICSPCS'2016), dec 2016, Gold Coast,
 72. R. R. da Silva, **J. P. C. L. da Costa**, R. K. Miranda, and G. Del Galdo, "Applying Base Value of Fundamental Frequency via the Multivariate Kernel-Density in Forensic Speaker

- Comparison", 10th International Conference on Signal Processing and Communication Systems (ICSPCS'2016), dec 2016, Gold Coast
73. L. R. de Almeida, **J. P. C. L. da Costa**, R. T. de Sousa Júnior, E. P. de Freitas, E. D. Canedo, E. Zacarias, "Motivating distance learning student participation with an automatic messaging plugin for the Moodle platform," 2016 Frontiers in Education (FIE) conference
 74. M. A. M. Marinho, **J. P. C. L. da Costa**, F. Antreich, E. P. Freitas, and A. Vinel, "Adaptive Communication and Cooperative MIMO Cluster Formation for Improved Lifetime in Wireless Sensor Networks," 2016 IEEE International Conference on Wireless for Space and Extreme Environments, Aachen, Germany
 75. R. K. Miranda, **J. P. C. L. da Costa**, F. Roemer, T. Eishima, Y. Nakamura and G. Del Galdo, "Implementation of Improved Software Defined Radio Modulation Scheme and Command and Telemetry Software Interface for Small Satellites in 5G Systems," 19th IEEE International Conference on OFDM and Frequency Domain Techniques (ICOF 2016), Essen, Germany
 76. R. S. Ferreira Junior, **J. P. C. L. da Costa**, R. Zelenovsky, L. R. A. X. de Menezes, D. V. de Lima and G. Del Galdo, "Unscented Transform based Low Complexity Performance Assessment for Adaptive Linearly Constrained Minimum Variance Filters," 19th IEEE International Conference on OFDM and Frequency Domain Techniques (ICOF 2016), Essen, Germany
 77. **J. P. C. L. da Costa**, A. L. F. de Almeida, W. C. Freitas Jr., and D. V. de Lima, "Low complexity closed-form solution to semi-blind joint channel and symbol estimation in MIMO-OFDM," 19th IEEE International Conference on OFDM and Frequency Domain Techniques (ICOF 2016), Essen, Germany, **best paper award**
 78. M. A. M. Marinho, **J. P. C. L. da Costa**, F. Antreich, A. L. F. Almeida, G. Del Galdo, E. P. Freitas, and A. Vinel, "Array Interpolation Based on Multivariate Adaptive Regression Splines," Ninth IEEE Sensor Array and Multichannel Signal Processing Workshop, 2016, Rio de Janeiro
 79. B. Hammoud, F. Antreich, J. A. Nossek, **J. P. C. L. da Costa**, and A. L. F. de Almeida, "Tensor-Based Approach for Time-Delay Estimation," IEEE Workshop on Smart Antennas (WSA'16), Munich, Germany
 80. J. P. A. Maranhão, **J. P. C. L. da Costa**, E. P. de Freitas, M. A. M. Marinho, "Multi-hop Cooperative XIXO Transmission Scheme for Delay Tolerant Wireless Sensor Networks," IEEE Workshop on Smart Antennas (WSA'16), Munich, Germany
 81. L. V. G. L. Larrain and **J. P. C. L. da Costa**, "Identification of Firearm Calibers via Acoustical Signature of the Ejected Cartridge Case," 9th International Conference on Signal Processing and Communication Systems, 2015, Cairns, Australia

82. R. K. Miranda, **J. P. C. L. da Costa**, F. Roemer, A. L. F. de Almeida e G. Delgado, "Generalized Sidelobe Cancellers for Multidimensional Separable Arrays," IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP), Cancún, Mexico
83. J. C.S. dos Anjos, M. D. Assunção, J. Bez, C. Geyer, E. P. de Freitas, A. Carissimi, **J. P. C. L. Costa**, G. Fedak, F. Freitag, V. Markl, P. Fergus, R. Pereira, "SMART: An Application Framework for Real Time Big Data Analysis on Heterogeneous Cloud Environments," 15th IEEE International Conference on Computer and Information Technology (CIT-2015), Liverpool, England
84. M. A. M. Marinho, **J. P. C. L. da Costa**, F. Antreich and L. R. A. X. de Menezes. "Unscented transformation based array interpolation," in Proc. 40th IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP), Apr 2015, Brisbane, Australia
85. M. A. M. Marinho, **J. P. C. L. da Costa**, F. Antreich and A. L. F. de Almeida. "Multidimensional Array Interpolation Applied to Direction of Arrival Estimation," in Proc. IEEE Workshop on Smart Antennas (WSA), 2015, Ilmenau, Germany
86. A. J. Braga, J. D. P. Carreño, **J. P. C. L. da Costa** and R. A. A. Souza. "Continuous Sensing Model in MIMO Cognitive Radio Networks Over Fading Channels." in Proc. 6th IEEE Latin-American Conference on Communications (LATINCOM), 2014, Cartagena de indias, Colombia
87. F. Denk, **J. P. C. L. da Costa**, and M. A. Silveira. "Enhanced Forensic Multiple Speaker Recognition in the Presence of Coloured Noise." in Proc. 8th IEEE International Conference on Signal Processing and Communication Systems, ICSPCS 2014, 2014, Gold Coast, Australia
88. T. F. K. Cordeiro, **J. P. C. L. da Costa**, K. Liu, and G. A. Borges. "Kalman-based attitude estimation for an UAV via an antenna array. " in Proc. 8th IEEE International Conference on Signal Processing and Communication Systems, ICSPCS 2014, 2014, Gold Coast, Australia
89. R. K. Miranda, **J. P. C. L. da Costa**, M. A. M. Marinho, E. P. de Freitas, and R. T. de SOUSA Jr, "Evaluation of Space-Time-Frequency (STF)-coded MIMO-OFDM Systems in Realistic Channel Models," in Proc. IEEE International Conference on Advanced Information Networking and Applications (AINA-2014), 2014, Victoria, Canada
90. A. M. R. Serrano, P. H. B. Rodrigues, R. C. Huacarpuma, **J. P. C. L. da Costa**, E. P. de Freitas, V. L. Assis, A. A. Fernandes, R. T. Sousa Jr, M. A. M. Marinho, and B. H. A. Pilon, "Improved Business Intelligence Solution with Reimbursement Tracking System for the Brazilian Ministry of Planning, Budget and Management," in Proc. 6th International

- Conference on Knowledge Management and Information Sharing (KMIS'04), 2014, Rome, Italy
91. J. Milanezi Junior, **J. P. C. L. da Costa** and E. P. de Freitas, "Improved Radiofrequency Energy Harvesting based on a Rectenna Array System and its Feasibility Evaluation in Urban Environments," in Proc. IEEE International Conference on Renewable Energy Research and Applications, Oct 2014, Milwaukee, USA
 92. J. Milanezi Junior, **J. P. C. L. da Costa** and E. P. de Freitas, "Sustainable Electric Energy Microgeneration System Based on Electric Eels," in Proc. IEEE International Conference on Renewable Energy Research and Applications, Oct 2014, Milwaukee, USA
 93. M. A. M. Marinho, F. Antreich, **J. P. C. L. da Costa**, and J. A. Nosseck, "A Signal Adaptive Array Interpolation Approach with Reduced Transformation Bias for DOA estimation of Highly Correlated Signals," in Proc. IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP), May 2014, Florence, Italy
 94. P. Gomes, A. L. F. de Almeida, **J. P. C. L. da Costa**, "Fourth-Order Tensor Method for Blind Spatial Signature Estimation," in Proc. IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP), May 2014, Florence, Italy
 95. M. A. M. Marinho, E. P. de Freitas, **J. P. C. L. da Costa** and R. T. de Sousa Jr., "Sensor Localization via Diversely Polarized Antennas," in Proc. IEEE International Workshop on Performance Control in Wireless Sensor Networks (PWSN), May 2014, Marina Del Ray, California
 96. M. A. M. Marinho, F. Antreich, **J. P. C. L. da Costa**, and J. A. Nosseck, "Reduced Rank TLS Array Interpolation for DOA Estimation," in Proc. Workshop on Smart Antennas (WSA), Mar 2014, Erlangen, Germany
 97. J. Milanezi Junior, **J. P. C. L. da Costa**, R. S. Ferreira Junior, M. A. M. Marinho, R. A. Shayani, and R. T. de Sousa Junior, "Energy Harvesting Photovoltaic System to Charge a Cell Phone in Indoor Environments," in Proc. IEEE International Conference on Composite Materials & Renewable Energy Applications (ICCMREA), Sousse, Tunisia, Jan 2014
 98. M. A. M. Marinho, E. P. de Freitas, **J. P. C. L. da Costa**, and R. T. de Sousa Jr., "Applying Cooperative MIMO Technique in an Adaptive Routing Mechanism for Wireless Sensor Networks," in Proc. IEEE Conference on Wireless Sensors (ICWiSe2013), Kuala Lumpur, Malaysia, Dec 2013
 99. K. Liu, H. C. So, and **J. P. C. L. da Costa**, "Generalized Iterative Multidimensional Prewhitening: New Variants and Comparative Study," in Proc. Fifth IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP), Dec 2013, St. Martin

100. K. Liu, H. C. So, **J. P. C. L. da Costa**, F. Roemer, H. Lei and R. T. de Sousa Jr. On the Use of Order Selection Rules for Accurate Parameter Estimation in Threshold Region. in Proc. 21st European Signal Processing Conference (EUSIPCO), 2013, Marrakech.
101. M. A. M. Marinho, R. S. Ferreira Júnior, **J. P. C. L. da Costa**, E. P. de Freitas, K. Liu, H. Cheung, and A. Antreich, "Antenna Array Based Positioning Scheme for Unmanned Aerial Vehicles," in Proc. 17th International ITG Workshop on Smart Antennas (WSA 2013), Stuttgart, Germany
102. K. Liu, H. C. So, **J. P. C. L. da Costa** and H. Lei. Core consistency diagnostic aided by reconstruction error for accurate enumeration of the number of components in PARAFAC models. in Proc. IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), 2013, pp 6635, Vancouver, Canada
103. M. A. M. Marinho, E. P. de Freitas, **J. P. C. L. da Costa**, A. L. F. de Almeida, and R. T. de Sousa Jr., "Using Cooperative MIMO Techniques and UAV Relay Networks to Support Connectivity in Sparse Wireless Sensor Networks," in Proc. 27th IEEE International Conference on Advanced Information Networking and Applications (AINA-2013), Mar. 2013, Barcelona, Spain
104. M. A. M. Marinho, E. P. de Freitas, **J. P. C. L. da Costa**, A. L. F. de Almeida, and R. T. de Sousa Jr., "Using Cooperative MIMO Techniques and UAV Relay Networks to Support Connectivity in Sparse Wireless Sensor Networks," in Proc. IEEE International Conference on Computing, Management and Telecommunications (ComManTEL), Jan. 2013, Ho Chi Minh City, Vietnam
105. R. S. Ferreira Júnior, M. A. M. Marinho, K. Liu, **J. P. C. L. da Costa**, A. V. Amaral, and H. C. So, "Improved Landing Radio Altimeter for Unmanned Aerial Vehicles based on an Antenna Array," in Proc. IEEE IV International Conference on Ultra Modern Telecommunications and Control Systems (ICUMT) 2012, Saint Petersburg, Russia, **best paper award**
106. V. A. Martins, **J. P. C. L. da Costa** and R. T. de Sousa Jr., "Architecture of a Collaborative Business Intelligence Environment based on an Ontology Repository and Distributed Data Services," in Proc. 4th International Conference on Knowledge Management and Information Sharing (KMIS), Oct 2012, Barcelona, Spain
107. K. Liu, **J. P. C. L. da Costa**, A. L. F. de Almeida and H. C. So, "A Closed Form Solution to Semi-Blind Joint Symbol and Channel Estimation in MIMO-OFDM Systems," in Proc. 2012 IEEE International Conference on Signal Processing, Communications and Computing (ICSPCC'12), Aug 2012, Hong Kong
108. L. C. Amaro, **J. P. C. L. da Costa**, A. A. Fernandes, V. A. Martins, A. M. R. Serrano und R. T. de Sousa Jr., "Construction of Ontologies by using Concept Maps: a Study Case of Business Intelligence for the Federal Property Department," in Proc. International

- Conference on Business Intelligence and Financial Engineering (BIFE'12), Aug 2012, Lanzhou, China
109. A. A. Marins, D. M. Lyra-Leite und **J. P. C. L. da Costa**, "Simulations of a Dynamical System Model for Electronic Circuits," in Proc. IEEE Workshop on Engineering Applications (WEA'12), Apr 2012, Bogotá, Colombia
 110. D. M. Lyra-Leite, **J. P. C. L. da Costa**, und J. L. A. de Carvalho, "Improved MRI reconstruction and denoising using SVD-based low-rank approximation," in Proc. IEEE Workshop on Engineering Applications (WEA'12), Apr 2012, Bogotá, Colombia
 111. **J. P. C. L. da Costa**, S. Schwarz, L. F. de A. Gadêlha, H. C. de Moura, G. A. Borges und L. A. R. Pinheiro, "Attitude Determination for Unmanned Aerial Vehicles via an Antenna Array," in Proc. ITG IEEE Workshop on Smart Antennas (WSA'12), Mar 2012, Dresden, Germany
 112. D. Schulz, J. Seitz, and **J. P. C. L. da Costa**, "Widely Linear SIMO Filtering for Hypercomplex Numbers," IEEE Information Theory Workshop (ITW), 2011, Paraty, Brazil
 113. **J. P. C. L. da Costa**, F. Roemer, D. Schulz, and R. T. de Souza Jr., "Subspace based Multi-Dimensional Model Order Selection in Colored Noise Scenarios," in Proc. IEEE Information Theory Workshop (ITW), 2011, Paraty, Brazil
 114. **J. P. C. L. da Costa**, D. Schulz, F. Roemer, M. Haardt, and J. A. Apolinario Jr., "Robust R-D Parameter Estimation via Closed-Form PARAFAC in Kronecker Colored Environments," in Proc. 7-th International Symposium on Wireless Communications Systems (ISWCS 2010), (York, United Kingdom), Sept. 2010
 115. **J. P. C. L. da Costa**, F. Roemer, M. Weis, und M. Haardt, "Robust R-D parameter estimation via closed-form PARAFAC," in Proc. ITG Workshop on Smart Antennas (WSA'10), (Bremen, Germany), Feb. 2010
 116. **J. P. C. L. da Costa**, F. Roemer, und M. Haardt, "Iterative sequential GSVD (I-S-GSVD) based prewhitening for multidimensional HOSVD based subspace estimation without knowledge of the noise covariance information," in Proc. ITG Workshop on Smart Antennas (WSA'10), (Bremen, Germany), pp. 151 - 155, Feb. 2010
 117. **J. P. C. L. da Costa**, M. Haardt, und F. Roemer, "Sequential GSVD based prewhitening for multidimensional HOSVD based subspace estimation," in Proc. International ITG Workshop on Smart Antennas (WSA 2009), (Berlin, Germany), Feb. 2009
 118. **J. P. C. L. da Costa**, M. Haardt, und F. Roemer, "Robust methods based on the HOSVD for estimating the model order in PARAFAC models," in Proc. 5-th IEEE Sensor Array and Multichannel Signal Processing Workshop (SAM 2008), (Darmstadt, Germany), pp. 510 - 514, July 2008

119. **J. P. C. L. da Costa**, M. Haardt, F. Römer, und G. Del Galdo, "Enhanced model order estimation using higher-order arrays," in Proc. 41-st Asilomar Conf. on Signals, Systems, and Computers, (Pacific Grove, CA, USA), pp. 412-416, Nov 2007

Refereed journal articles with JCR ≤ 1

120. S. Gorlow, **J. P. C. L. da Costa** and M. Haardt, "An Adaptive CM Array Preconditioner for Blind Multi-User Separation," arXiv Electrical Engineering and Systems Science (EESS), 2018
121. R. R. da Silva, **J. P. C. L. da Costa**, R. K. Miranda, G. Del Galdo, "Aplicação do Valor de Base da Frequência Fundamental Via Estatística MvKD em Comparação Forense de Locutor", Revista Brasileira de Criminalística, 2016
122. K. H. C. Ramos, R. T. Sousa Jr, T. P. B. Vieira, and **J. P. C. L. da Costa**, "Discovering Critical Success Factors for Information Technologies Governance through Bibliometric Analysis of Research Publications in this Domain," Information (Yamaguchi), 2016, No. 6B, Pages 2193-2207
123. A. J. Braga, R. A. A. Souza, **J. P. C. L. da Costa**, J. D. P. Carreno, "Continuous Spectrum Sensing and Transmission in MIMO Cognitive Radio Network," Revista IEEE América Latina
124. M. A. Silveira, C. P. Schroeder, C. G. de Oliveira, **J. P. C. L. da Costa**, A. M. Rubio Serrano, J. A. Apolinário Junior, P. Quintiliano, and R. T. de Sousa Junior, "Convolutional ICA-Based Forensic Speaker Identification Using Mel Frequency Cepstral Coefficients and Gaussian Mixture Models," International Journal of Forensic Computer Science (IJoFCS), Vol 8, N 1, pp 27-34, 2013
125. D. M. Lyra-Leite, **J. P. C. L. da Costa**, and J. L. A. de Carvalho, "Improved MRI reconstruction and denoising using SVD-based low-rank approximation," Revista Ingeniería, Vol 17, N. 2, 2012
126. **J. P. C. L. da Costa**, E. P. de Freitas, A. M. R. Serrano, and R. T. de Sousa Jr. "Improved Parallel Approach to PCA Based Malicious Activity Detection in Distributed Honey-pot Data," International Journal of Forensic Computer Science (IJoFCS), Vol 7, N 2, pp 8-20, 2012
127. B. M. David, **J. P. C. L. da Costa**, A. C. A. Nascimento, M. D. Holtz, D. Amaral, and R. T. de Sousa Jr., "A Parallel Approach to PCA Based Malicious Activity Detection in Distributed Honey-pot Data," International Journal of Forensic Computer Science (IJoFCS), Vol 6, N 1, 2011

Remaining refereed conference articles

128. C. R. Garcez, D. V. de Lima, R. K. Miranda, F. L. L. de Mendonça, J. P. C. L. da Costa, A. L. F. de Almeida and R. T. de Sousa Jr., "Técnicas Tensoriais Baseadas em Rastreamento de Subespaços Aplicadas a Receptores GNSS," SBRT 2019: XXXVI Simpósio Brasileiro de Telecomunicações e Processamento de Sinais, 2019
129. L. L. de Mendonça, D. V. de Lima, M. R. Zanatta, J. P. C. L. da Costa, R. K. Miranda, A. L. F. de Almeida and R. T. de Sousa Jr., "Estimação de Componentes de Multipercorso para Receptor Tensorial de GPS de 2a e 3a Geração," SBRT 2019: XXXVI Simpósio Brasileiro de Telecomunicações e Processamento de Sinais, 2019
130. M. da R. Zanata, D. V. de Lima, **J. P. C. L. da Costa**, R. K. Miranda, F. Antreich, "Técnica Tensorial de Estimação de Atraso para GPS de Segunda e Terceira Geração," SBRT 2018: XXXVI Simpósio Brasileiro de Telecomunicações e Processamento de Sinais, 2018
131. F. A. Coelho Junior, D. Alves, S. G. Faiad, **J. P. C. L. da Costa**, R. T. de Sousa Junior, N. T. da Mota, "Fatores associados à evasão em curso a distância," Congresso Brasileiro de Psicologia Organizacional e do Trabalho, Goiânia, Jul. 2018
132. L. Martins, R. T. Júnior, W. F. Giozza, and **J. P. C. da Costa**, "Increasing the Dependability of IoT Middleware with Cloud Computing and Microservices", Companion Proceedings of the 10th International Conference on Utility and Cloud Computing, ACM, 2017
133. L. Martins, I. P. Araújo, F. L. de Mendonça, **J. P. C. da Costa**, and R. T. Júnior, "Design and Evaluation of a Semantic Gateway Prototype for IoT Networks", Companion Proceedings of the 10th International Conference on Utility and Cloud Computing, ACM, 2017
134. J. Milanezi Junior, **J. P. C. L. da Costa**, E. P. de Freitas, G. Del Galdo, W. Felber, R. S. Ferreira Junior, and R. K. Miranda, "Radiofrequency energy harvesting system based on a rectenna array in the urban environment of Brasilia, Brazil," The International Symposium "New Tendencies of Developing Fundamental and Applied Physics: Problems, Achievements, Prospectives", Nov 2016, Tashkent, Uzbekistan
135. P. R. B. Gomes, A. L. F. de Almeida, **J. P. C. L. da Costa**, and J. C. M. Mota, "Métodos Tensoriais para Estimação Cega de Assinaturas Espaciais em Arranjos Multidimensionais de Sensores," XXXIV Simpósio Brasileiro de Telecomunicações (SBRT2016), Santarém, Pará
136. A. A. Pennachio, **J. P. C. L. da Costa**, V. M. Bordini, G. Del Galdo, and S. M. L. da Silva, "Eigenfilter-based Automatic Modulation Classification with Offsets for Distributed Antenna Systems," XXXIV Simpósio Brasileiro de Telecomunicações (SBRT2016), Santarém, Pará
137. E. Zacarias, L. R. de Almeida, J. B. Prettz, **J. P. C. L. da Costa**, E. P. de Freitas, E. D. Canedo, and R. T. de Sousa Júnior, "Optimizing the Access Records of Students in the

- Moodle Virtual Learning Environment Database," 4th IFAC Symposium on Telematics Applications, 2016
138. R. K. Miranda, **J. P. C. L. da Costa**, T. Eishima, Y. Nakamura, G. Del Galdo, and F. Roemer, "Procedures for Integrating, Testing and Operating Advanced Microsatellites," 4th IFAC Symposium on Telematics Applications, 2016
 139. G. C. Ornelas, M. V. V. da Silva, J. Milanezi Junior, **J. P. C. L. da Costa**, F. E. G. de Deus, and G. Del Galdo, "First Step Towards a Smart Grid Communication Architecture for the Brazilian Federal District (DF)," 4th IFAC Symposium on Telematics Applications, 2016
 140. A. S. de Oliveira, F. R. S. Feres, M. B. de Lima, E. D. Canedo, **J. P. C. L. da Costa**, R. T. de Sousa Júnior, "INOVAÇÃO NO DESIGN INSTRUCIONAL DOS CURSOS A DISTÂNCIA DA ESCOLA NACIONAL DE ADMINISTRAÇÃO PÚBLICA E SUA INTERFACE COM A EQUIPE INTERDISCIPLINAR," 22º CIAED – International Congress of Distance Education, Águas de Lindóia, 2016
 141. F. G. Constancio, F. K. A. R. da Silva, S. L. de O. Aguiar, **J. P. C. L. da Costa**, E. D. Canedo, e R. T. de Sousa Júnior, "A CONSTRUÇÃO DA LINGUAGEM DIALÓGICA INSTRUCIONAL: DA TEORIA EDUCACIONAL À PRÁTICA NA ELABORAÇÃO DOS CURSOS AUTOINSTRUCIONAIS DA ESCOLA NACIONAL DE ADMINISTRAÇÃO PÚBLICA," 22º CIAED - International Congress of Distance Education, Águas de Lindóia, 2016
 142. P. Gomes, A. L. F. de Almeida, **J. P. C. L. da Costa**, and J. C. M. Mota, "Métodos Tensoriais para Estimacao Cega de Assinaturas Espaciais em Arranjos Multidimensionais de Sensores," Brazilian Symposium of Telecommunications (SBRT), Brazil
 143. F. G. Constancio, D. X. P. Nogueira, and **J. P. C. L. da Costa**, "PROPOSTA DE MODELO ADDIE ESTENDIDO COM APLICAÇÃO NOS CURSOS AUTOINSTRUCIONAIS MEDIADOS POR TECNOLOGIAS NA ESCOLA NACIONAL DE ADMINISTRAÇÃO PÚBLICA," XIII Encontro Virtual de Documentação em Software Livre (EVIDOSOL) e X Congresso Internacional de Linguagem e Tecnologia online (CILTec-Online), 2016
 144. V. C. G. Coelho, **J. P. C. L. da Costa**, D. C. R. de Sousa, E. D. Canedo, D. G. Silva, R. T. de Sousa Jr., "MINERAÇÃO DE DADOS EDUCACIONAIS PARA IDENTIFICAÇÃO DE BARREIRAS NA UTILIZAÇÃO DA EDUCAÇÃO A DISTÂNCIA," 21st ABED International Congress of Distance Education, Bento Gonçalves, Brazil
 145. O. P. Paranayba, F. K. A. R. da Silva, **J. P. C. L. da Costa**, E. D. Canedo, "METODOLOGIA DE ESTRUTURAÇÃO E UNIFORMIZAÇÃO DO LEIAUTE DOS CURSOS DA ESCOLA VIRTUAL DA ESCOLA NACIONAL DE ADMINISTRAÇÃO PÚBLICA," 21st ABED International Congress of Distance Education, Bento Gonçalves, Brazil

146. R. K. Miranda, M. A. M. Marinho, E. P. Freitas, **J. P. C. L. da Costa**, and C. E. Pereira, "A Practical Implementation of a Cooperative Antenna Array for Wireless Sensor Networks," in Proc. 15th International Conference on Next Generation Wired/Wireless Networking NEW2AN 2015, St. Petersburg, Russia
147. M. A. M. Marinho, P. R.L. Gondim and **J. P. C. L. da Costa**, "Continuous authentication via localization using triangulation of Directions of Arrival of line of sight components," in Proc. International Conference on Forensic Computer Science (ICoFCS'15), Brasília, Brazil
148. L. V. G. L. Larrain, **J. P. C. L. da Costa** and T. J. Gross, "Identificação do calibre de pistolas por meio da assinatura acústica dos estojos ejetados," in Proc. International Conference on Forensic Computer Science (ICoFCS'15), Brasília, Brazil, **best paper award**
149. R. O. Albuquerque, R. T. de Sousa Júnior and **J. P. C. L. da Costa**, "Um Levantamento sobre o Mercado de Exploração de Vulnerabilidades do Espaço Cibernético," in Proc. International Conference on Forensic Computer Science (ICoFCS'15), Brasília, Brazil
150. B. H. A. Pilon, **J. P. C. L. da Costa**, J. J. Murillo-Fuentes, and R. T. Sousa Jr., "Statistical Audit via Gaussian Mixture Models in Business Intelligence Systems," in Proc. XI Simpósio Brasileiro de Sistemas de Informação (SBSI), Goiânia, Brazil,
151. K. H. C. Ramos, T. P. B. Vieira, **J. P. C. L. da Costa**, and R. T. Sousa Jr., "ANÁLISE MULTIDIMENSIONAL DE FATORES CRÍTICOS DE SUCESSO EM GOVERNANÇA DE TI NA ADMINISTRAÇÃO PÚBLICA FEDERAL À LUZ DOS DADOS DE CONTROLE EXTERNO," in Proc. 12th International Conference on Management of Technology and Information Systems (CONTECSI), São Paulo, Brazil
152. E. P. de Freitas, I. Müller, R. Allgayer, C. E. Pereira, A. Cavalcante, **J. P. C. L. da Costa** and R. T. de Sousa Jr., "Intelligent and Flexible Manufacturing Product Line Supported by Agents and Wireless Sensor and Actuator Network," in Proc. International Federation of Automatic Control (IFAC) Conference on Manufacturing Modelling, Management, and Control (MIM), Jun. 2013, Saint Petersburg, Russia
153. R. K. Miranda, **J. P. C. L. da Costa**, and R. Zelenovsky, "Improved Frequency Domain Blind Source Separation for Audio Signals via Direction of Arrival Knowledge," in Proc. Society for Design and Process Science (SDPS) 2013, Campinas, São Paulo
154. R. C. Huacarpuma, D. da C. Rodrigues, A. M. Rubio Serrano, **J. P. C. L. da Costa**, R. T. de Sousa Junior, and M. T. de Holanda, "Big Data: A Study Case on Data from Brazilian Ministry of Planning, Budget and Management," in Proc. IADIS Applied Computing 2013 (AC 2013) Conference, Oct. 2013, Fort Worth, Texas, USA
155. P. Quintiliano, **J. P. C. L. da Costa**, F. E. de Deus, and R. T. de Sousa Jr., "Computer Forensic Laboratory: Aims, Functionalities, Hardware and Software," in Proc.

- International Conference on Forensic Computer Science (ICoFCS) 2013, São Paulo, Brazil
156. D. F. Tenório, **J. P. C. L. da Costa**, and R. T. de Sousa Jr., "Greatest Eigenvalue Time Vector Approach for Blind Detection of Malicious Traffic," in Proc. International Conference on Forensic Computer Science (ICoFCS) 2013, São Paulo, Brazil, **best paper award**
 157. D. F. Tenório, **J. P. C. L. da Costa**, R. T. de Sousa Jr. and E. P. de Freitas, "Detecção cega de tráfego malicioso através da variação temporal do maior autovalor," Workshop de Forense Computacional (WFC) - Segurança da Informação e de Sistemas Computacionais (SBSeg) 2013, Manaus, Brazil
 158. S. R. Campos, A. A. Fernandes, R. T. de Sousa Jr., E. P. de Freitas, **J. P. C. L. da Costa**, A. M. Rubio Serrano, D. C. Rodrigues, and C. T. Rodrigues, "Ontologic Audit Trails Mapping for Detection of Irregularities in Payrolls," in Proc. International Conference on Next Generation Web Services Practices (NWeSP 2012), São Carlos, Brazil, Nov. 2012
 159. A. M. R. Serrano, **J. P. C. L. da Costa**, C. Cardonha, and R. T. de Sousa Jr., "Neural Network Predictor for Fraud Detection: A Study Case for the Federal Patrimony Department," in Proc. International Conference on Forensic Computer Science (ICoFCS) 2012, Brasília, Brazil
 160. **J. P. C. L. da Costa**, E. P. de Freitas, B. M. David, D. Amaral, and R. T. de Sousa Jr., "Improved Blind Automatic Malicious Activity Detection in Honeypot Data," in Proc. International Conference on Forensic Computer Science (ICoFCS) 2012, Brasília, Brazil, **best paper award**
 161. K. Liu, **J. P. C. L. da Costa**, L. F. A. Gadelha, H. C. So and G. A. Borges, "Improved Attitude Determination for Unmanned Aerial Vehicles with a Cross-Shaped Antenna Array," in Proc. 14th IASTED International Conference on Signal and Image Processing, Honolulu, USA, Aug. 2012
 162. **J. P. C. L. da Costa**, F. Roemer, and R. T. de Souza Jr., "Enhanced Model Order Estimation in Colored Noise Scenarios via Noise Prewhitening," in Proc. XXIX Simpósio Brasileiro de Telecomunicações (SBrT'11), 2011, Curitiba, Brazil
 163. **J. P. C. L. da Costa**, F. Roemer, F. A. de Castro Junior, R. F. Ramos, L. Sabirova, and S. Schwarz, "Ilmenau Package for Model Order Selection and Evaluation of Model Order Estimation Scheme of Users of MIMO Channel Sounders," in Proc. XXIX Simpósio Brasileiro de Telecomunicações (SBrT'11), 2011, Curitiba, Brazil
 164. L. F. Aguiar, E. Grzeidak, **J. P. C. L. da Costa**, and R. A. Shayani, "Tradeoff Between Total Harmonic Distortion and Efficiency in Coupling of a Classical Bridge Inverter and a Photovoltaic System," in Proc. ISES Solar World Congress 2011, Kassel, Germany

165. B. M. David, **J. P. C. L. da Costa**, A. C. A. Nascimento, M. D. Holtz, D. Amaral, and R. T. de Sousa Jr., "Blind Automatic Malicious Activity Detection in Honeypot Data," The International Conference on Forensic Computer Science (ICoFCS), 2011, Florianópolis, Brazil
166. **J. P. C. L. da Costa**, A. Thakre, F. Roemer, and M. Haardt, "Comparison of model order selection techniques for high-resolution parameter estimation algorithms," in Proc. 54th International Scientific Colloquium (IWK), (Ilmenau, Germany), Sept. 2009
167. **J. P. C. L. da Costa**, F. Roemer, and M. Haardt, "Deterministic prewhitening to improve subspace parameter estimation techniques in severely colored noise environments," in Proc. 54th International Scientific Colloquium (IWK), (Ilmenau, Germany), Sept. 2009
168. **J. P. C. L. da Costa**, R. Zelenovsky, and S. B. Puttini, "Estudo de Viabilidade da Prótese Auditiva Inteligente," in Congresso Ibero-Americano sobre Tecnologias de Apoio a Portadores de Deficiência (IBERDISCAP), Vitória, Brazil, 2006
169. **J. P. C. L. da Costa**, R. Zelenovsky, and S. B. Puttini, "Simulação da Prótese Auditiva Inteligente," in Congresso Ibero-Americano sobre Tecnologias de Apoio a Portadores de Deficiência (IBERDISCAP), Vitória, Brazil, 2006.
170. **J. P. C. L. da Costa**, R. Zelenovsky, and G. A. Borges, "Estudo de Técnicas de Estimação da Frequência e Direção de Chegada de Sinal aplicadas em Antenas Inteligentes," in VII Simpósio Brasileiro de Automação Inteligente / II IEEE Latin-American Robotics Symposium - SBAI, São Luis, Brazil, 2006

Patents

171. J. P. C. L. da Costa, L. Weichenberger and Z. A. Khan, "Transfer function based framework for the estimation of the state of charge and of the state of health," Deutsche Patent- und Markenamt (DPMA), submitted, 13.06.2019
172. J. P. C. L. da Costa, A. Oberbauer and L. Weichenberger "Adaptive framework based on physical-chemical models for the estimation of the state of charge and the state of health," Deutsche Patent- und Markenamt (DPMA), submitted, 13.06.2019
173. L. Weichenberger, J. P. C. L. da Costa and A. Arancibia "Current sensing method via direct MOSFET drain-to-source voltage measurements in case of saturated source current," Deutsche Patent- und Markenamt (DPMA), submitted, 13.06.2019
174. L. Weichenberger, J. P. C. L. da Costa and A. Arancibia "Current sensing circuitry with adjustable MOSFET channel length modulation," Deutsche Patent- und Markenamt (DPMA), submitted, 13.06.2019
175. J. P. C. L. da Costa and L. Weichenberger, "Reliable intra-system communication for wireless battery management systems," Deutsche Patent- und Markenamt (DPMA), submitted, 17.04.2019

176. J. P. C. L. da Costa and L. Weichenberger, "Intra-system communications based on RFID tags with sensor, actuator and energy harvesting capabilities," Deutsche Patent- und Markenamt (DPMA), submitted, 17.04.2019
177. J. P. C. L. da Costa and L. Weichenberger, "Methods and apparatuses for the automatic identification of the distribution of controllers," Deutsche Patent- und Markenamt (DPMA), submitted, 17.04.2019
178. J. P. C. L. da Costa, L. Weichenberger and G. Hofstetter, "Optical intra-system communication for dense networks in critical safety applications," Deutsche Patent- und Markenamt (DPMA), submitted, 17.04.2019
179. "Antenna Array Based Radio Altimeter," BR 10 2013 003266 2, National Institute for Industrial Property (INPI), 2013
180. "Predictive Analytics in Business Intelligence Systems via Extraction, Transform, Adaptive Prediction and Load (ETAPL)," BR 10 2013 011211 9, National Institute for Industrial Property (INPI), 2013
181. "Method for electric generation via electric eels," BR 10 2013 011210 0, National Institute for Industrial Property (INPI), 2013

Scholarly book

182. J. P. C. L. da Costa, "Parameter Estimation Techniques for Multi-Dimensional Array Signal Processing," Shaker Publisher, Aachen, Germany, Mar. 2010

Scholarly book chapters

183. A. L. F. de Almeida, G. Favier, **J. P. C. L. da Costa** and J. C. M. Mota, "Overview of Tensor Decompositions with Applications to Communications", R. F. Coelho, V. H. Nascimento, R. L. de Queiroz, J. M.T. Romano and C. C. Cavalcante, "Signals and Images: Advances and Results in Speech, Estimation, Compression, Recognition, Filtering, and Processing", CRC Press publisher, 2015
184. W. Freitas Jr., A. L. F. de Almeida, **J. P. C. L. da Costa**, K. Liu and H. C. So, "Multiantenna Multicarrier Transceiver Architectures," F. R. P. Cavalcanti, "Resource Allocation and MIMO for 4G and Beyond," Springer publisher, 2014
185. M. A. M. Marinho, E. P. de Freitas, **J. P. C. L. da Costa**, and R. T. de Sousa Jr., "Synchronization for Cooperative MIMO in Wireless Sensor Networks," NEW2AN/ruSMART 2013, Lecture Notes in Computer Science 8121, pp. 298–311, 2013
186. E. P. de Freitas, **J. P. C. L. da Costa**, A. L. F. de Almeida, and Marco Marinho, "Applying MIMO Techniques to Minimize Energy Consumption for Long Distances Communications in Wireless Sensor Networks," S. Andreev et al., Eds.,: NEW2AN/ruSMART 2012, Lecture Notes in Computer Science 7469, pp 379–390, 2012