

Publications of the Unit "Electronics and Microelectronics"

2025

Scientific journals/Article

- Jridi, A., Belwafi, K., Djemal, R., Valderrama, C. A., & Bachir Mejri, S. (2025). Explainable AI-Driven EEG Channel Selection for Accurate and Interpretable Epilepsy Diagnosis. "IEEE Access, 13". doi:10.1109/access.2025.3608083
Full Text : [Explainable_AI_Driven_EEG_Channel_Selection_for_Accurate_and_Interpretable_Epilepsy_Diagnosis.pdf](#) (Open Access)

Scientific congresses and symposiums/Paper published in a book

- Trabes, E., Dellel, K., & Valderrama, C. A. (2025). A Hardware-Aware DNAS Approach with On-Device Sampling for FPGA Resource Estimation. In "A Hardware-Aware DNAS Approach with On-Device Sampling for FPGA Resource Estimation". ICCAD. doi:10.1109/iccad64771.2025.11099189
Full Text : [HWDNAS-2.pdf](#) (Open Access)
- Dellel, K., Trabes, E., Fredj, H. B., Valderrama, C. A., & Faiedh, H. (2025). Low-Power Quantized Convolutional Neural Network for Early Breast Cancer Detection in Remote Communities. In "22nd IEEE International Multi-Conference on Systems, Signals and Devices, SSD 2025". Institute of Electrical and Electronics Engineers Inc. doi:10.1109/SSD64182.2025.10989970
Full Text : [KIDNEY_FINN_SSD25-1.pdf](#) (Open Access)
- Trabes, E., Zayed, A., Valderrama, C. A., & Tarrillo, J. (2025). Design Exploration of DWT-Based Feature Extraction Using FPGA for High-Performance Signal Processing. In "2025 IEEE 16th Latin American Symposium on Circuits and Systems, LASCAS 2025 - Proceedings". Institute of Electrical and Electronics Engineers Inc. doi:10.1109/LASCAS64004.2025.10966312
Full Text : [HW_SW_DWT_Pynq.pdf](#) (Open Access)

Scientific conferences in universities or research centers/Scientific conference in universities or research centers

- Gader, M. A., Karmani, S., & Djemal, R. (23 June 2025). "Detection and Classification of Cardiovascular Arrhythmias From ECG Signals Using Deep Learning Algorithms (CNN1D)" [Paper presentation]. International Conference on Emerging Technologies and Computing - ICETC 2025, Brest, France. doi:10.1109/ic_etc65981.2025.11141069
Full Text : [Gader2025239306 \(1\).pdf](#) (Open Access)

2024

Scientific journals/Article

- Kieslich, L.* , Verscheuren, J.* , Travassos Junior, X. L.* , Valderrama, C. A.* , & Bezerra, E. A.*. (2024). Advancements in GNSS Radio Occultation Techniques: Opportunities and Challenges in CubeSat Platforms. "LACW".
Full Text : [RO_State_of_art_paper_Shorter_for_conference_with_comparaison_table_.pdf](#) (Open Access)
- Zayed, A., Belhadj, N., Ben Khalifa, K., Bedoui, M. H., & VALDERRAMA SAKUYAMA, C. A. (30 June 2024). Efficient Generalized Electroencephalography-Based Drowsiness Detection Approach with Minimal Electrodes. "Sensors, 24" (13), 4256. doi:10.3390/s24134256
Full Text : [sensors-24-04256-1-Aymen-2024-MDPI.pdf](#) (Open Access)

Dissertations and theses/Doctoral thesis

- Ramos Gomes Da Silva, V. (2024). "Energy-optimal configurations for High-Performance Computing applications: automated low-impact characterization and performance optimization of shared-memory applications" [Doctoral thesis, UMONS - Université de Mons]. ORBi UMONS-University of Mons.
https://orbi.umons.ac.be/handle/20.500.12907/52916
Full Text : [dissertation.pdf](#) (Open Access)

2023

Scientific journals/Article

- Nel, H. P., Dualibe, F., & Stander, T. (02 March 2023). Influence of PVT Variation and Threshold Selection on OBT and OBIST Fault Detection in RFCMOS Amplifiers. "IEEE Open Journal of Circuits and Systems, 4", 70-84.
doi:10.1109/ojcas.2022.3232638
Full Text :
[Influence_of_PVT_Variation_and_Threshold_Selection_on_OBT_and_OBIST_Fault_Detection_in_RFCMOS_Amplifiers.pdf](#) (Open Access)

Scientific congresses and symposiums/Paper published in a book

- Petrashin, P., Lancioni, W., Laprovitta, A., Dualibe, F., & Castagnola, J. (2023). Effect of Vth shifting in CMOS Transistors under radiation conditions when applying OBT: A case study. In "2023 IEEE 24th Latin American Test Symposium, LATS 2023" (pp. 1-4). Institute of Electrical and Electronics Engineers Inc.
doi:10.1109/LATS58125.2023.10154481
Full Text : [Effect of Vth shifting in CMOS Transistors \(002\).pdf](#) (Open Access)

Scientific congresses and symposiums/Paper published in a journal

- Chelkha, M.* , Valderrama, C. A., & Ahaitouf, A. (2023). FPGA-Accelerated Convolutional Neural Network. "Proceedings SPL2023 XI SOUTHERN PROGRAMMABLE LOGIC CONFERENCE".
Full Text : [SPL23_paper_4350-1.pdf](#) (Open Access)

Scientific congresses and symposiums/Paper published on a website

- Zayed, A., Ben Khalifa, K., Belhadj, N., Bedoui, M. H., & Valderrama, C. A. (04 November 2023). "Discrete Wavelet Transform Coefficients for Drowsiness Detection from EEG Signals" [Paper presentation]. IEEE International Conference on Design, Test and Technology of Integrated Systems DTTIS 2023, Gammarth, Tunisia.
doi:10.1109/DTTIS59576.2023
Full Text : [Ayemen_Zayed_dttis23_final_version_1.pdf](#) (Open Access)
- Zayed, A., Ben Khalifa, K., Belhadj, N., Bedoui, M. H., & Valderrama, C. A. (01 November 2023). "Discrete Wavelet Transform Coefficients for Drowsiness Detection from EEG Signals" [Paper presentation]. 2023 IEEE International Conference on Design, Test and Technology of Integrated Systems (DTTIS), Gammarth, Tunisia.
doi:10.1109/dttis59576.2023.10348377
Full Text : [Ayemen_Zayed_dttis23_final_version_1.pdf](#) (Open Access)
- Chelkha, M., Ahaitouf, A., & Valderrama, C. A. (30 March 2023). "FPGA-Accelerated Convolutional Neural Network" [Paper presentation]. XI Southern Programmable Logic Conference SPL 2023, San Luis, Argentina.
doi:10.1155/2011/714761
Full Text : [SPL23_paper_4350-1.pdf](#) (Open Access)

Dissertations and theses/Doctoral thesis

- Quenon, A. (2023). "Powering Sensors by Harvesting Energy from Ionizing Radiation: A Feasibility Analysis" [Doctoral thesis, UMONS - Université de Mons]. ORBi UMONS-University of Mons.
<https://orbi.umons.ac.be/handle/20.500.12907/46587>

Computer developments/Software

- Ramos Gomes Da Silva, V.* , Braulio, A., Furtunato, A., Jales, M., Xavier, S., & Valderrama, C.*. (2023). "PascalAnalyzer: Tool for automatization of sensors data gathering while controlling diverse CPU parameters".

2022

Scientific journals/Article

- Abidi, A., Ben Khalifa, K., Ben Cheikh, R., Valderrama, C. A., & Hedi Bedoui, M. (2022). Automatic detection of drowsiness in EEG records based on machine learning approaches. "Neural Processing Letters".
Full Text : [NEPL-D-21-00441-11063_2022_10858-print2.pdf](#) (Open Access)
- Ramos Gomes Da Silva, V., Braulio, A., Valderrama, C., Manneback, P., & De Souza, S. X. (23 February 2022). A Minimally Intrusive Approach for Automatic Assessment of Parallel Performance Scalability of Shared-Memory HPC Applications. "Electronics, 11" (5).
Full Text : [electronics-11-00689-v2.pdf](#) (Open Access)
- Ramos Gomes Da Silva, V., Valderrama, C., Manneback, P., & De Souza, S. X. (2022). Analytical Energy Model Parametrized by Workload, Clock Frequency and Number of Active Cores for Share-Memory High-Performance Computing Applications. "Energies".
Full Text : [energies-15-01213-v3.pdf](#) (Open Access)
- QUENON, A., Demarbaix, A., Daubie, E., Moeyaert, V., & Dualibe, F. (2022). An Experimental Setup Based on a Printable System for the Acquisition of the Real-Time Electrical Response of Irradiated Semiconductor Devices. "IEEE Transactions on Instrumentation and Measurement, 72", 1-8. doi:10.1109/tim.2022.3228260
Full Text : [patent_related_article___final.pdf](#) (Open Access)

Scientific congresses and symposiums/Paper published on a website

- Zayed, A., Belhadj, N., Ben Khalifa, K., Bedoui, M. H., & Valderrama, C. A. (2022). "Compatibility of video compression standards with Driver Drowsiness Detection acquisition systems: HEVC and VVC comparative study" [Paper presentation]. Applications Médicales de l'Informatique:Nouvelles Approches AMINA 2022, Monastir, Tunisia.
Full Text : [08-AMINA2022_423966\[731\]_corrigée.pdf](#) (Open Access)

Reports/Internal report

- DENIS, P., Facchin, F., MEURISSE, E., & Dualibe, F. (2022). "Analog Electronics 2022 Project : Battery Charger".
<https://orbi.umons.ac.be/handle/20.500.12907/44733>
Full Text : [MA1___Analog_Electronics___Project_Denis.pdf](#) (Open Access)

Patents/Patent

- Quenon, A., Demarbaix, A., & Demaret, B. (14 June 2022). "Analyzing Apparatus".
Full Text : [11b LU501011B1.pdf](#) (Open Access)

2021

Scientific journals/Book review

- BOUGUEZZI, S., BEN FREDJ, H., Belabed, T., Valderrama, C., Faiedh, H., & SOUANI, C. (16 September 2021). An Efficient FPGA-Based Convolutional Neural Network for Classification: Ad-MobileNet. "Electronics, 10" (18), 2272. doi:10.3390/electronics10182272
Full Text : [An_Efficient_FPGA-Based_Convolutional_Neural_Network_for_Classification_Ad-MobileNet_Enhanced_Reader.pdf](#) (Open Access)

Parts of books/Contribution to collective works

- Aileni, R. M., Suci, G., Valderrama, C., & Pasca, S. (2021). IoT Performability for Medical Wearable Device by Data Privacy and Fault Tolerance. In "Smart Systems for E-Health, Advanced Information and Knowledge Processing" (pp. 113-133). Springer. doi:10.1007/978-3-030-14939-0

Scientific journals/Article

- Patel, M., Valderrama, C., & YADAV, A. (06 August 2021). Metaheuristic enabled deep convolutional neural network for traffic flow prediction: Impact of improved lion algorithm. "International Journal of Intelligent Transportation Systems Research, 25" (5). doi:10.1080/15472450.2021.1974857
Full Text : [Metaheuristic_enabled_deep_convolutional_neural_network_for_traffic_flow_prediction_Impact_of_improved_lion_algorithm.pdf](#) (Open Access)
- Belabed, T., Maria Gracielly, F. C., FERNANDES, M. A. C., Valderrama, C., & SOUANI, C. (2021). User Driven FPGA-Based Design Automated Framework of Deep Neural Networks for Low-Power Low-Cost Edge Computing. "IEEE Access". doi:10.1109/ACCESS.2021.3090196
Full Text : [User_Driven_FPGA-Based_Design_AutomatedFramework_of_Deep_Neural_Networks_forLow-Power_Low-Cost_Edge_Computing.pdf](#) (Open Access)
- Patel, M., YADAV, A., & Valderrama, C. (11 June 2021). Image Enhancement and Object Recognition for Night Vision Traffic Surveillance. "Soft Computing for Security Applications, 1397" (2022), 906.
Full Text : [SPRINGER.pdf](#) (Open Access)
- Abidi, A.*, Nour, I., Assali, I., Saafi, M. A., Bedoui, M. H., & Valderrama, C. A. (2021). Hybrid Multi-Channel EEG Filtering Method for Ocular and Muscular Artifact Removal Based on the 3D Spline Interpolation Technique. "Computer Journal". doi:10.1093/comjnl/bxaa175
Full Text : [Article 1 - afef.pdf](#) (Open Access)

Scientific congresses and symposiums/Unpublished conference/Abstract

- Quenon, A. (25 February 2021). "On the Possibility to Use Energy Harvesting on Beta Radiation in Nuclear Environments" [Paper presentation]. 12th IEEE Latin America Symposium on Circuits and System, Arequipa, Peru.
Full Text : [S21B-2-QUENON.pdf](#) (Open Access)[S21B-2-QUENON.mp4](#) (Open Access)

Scientific congresses and symposiums/Paper published in a book

- Belabed, T., Quenon, A., Ramos Gomes Da Silva, V., Valderrama, C., & SOUANI, C. (2021). Full Python Interface Control: Auto Generation And Adaptation of Deep Neural Networks For Edge Computing and IoT Applications FPGA-Based Acceleration. In "Proceedings of 2021 International Conference on INnovations in Intelligent SysTems and Applications (INISTA)". IEEE. doi:10.1109/INISTA52262.2021.9548521
Full Text : [Full_Python_Interface_Control__Auto_Generation__SUBMITTED.pdf](#) (Open Access)[Second_Best_Paper_Award.pdf](#) (Open Access)

Scientific congresses and symposiums/Paper published on a website

- Quenon, A., & Ramos Gomes Da Silva, V. (15 April 2021). "Towards Higher-Level Synthesis and Co-design with Python" [Paper presentation]. Workshop on Languages, Tools, and Techniques for Accelerator Design.
Full Text : [LATTE_21_paper_v_2_accepted.pdf](#) (Open Access)

Learning materials/Other

- BETHEUTALLA, J., Ramos Gomes Da Silva, V., & Valderrama, C. (2021). "Automated classification and dataset creation based on yolo neural network topologies: Co-superviseur dans les travaux de Julio BETHEUTALLA".

2020

Parts of books/Contribution to collective works

- Aileni, R. M., Suci, G., & Valderrama, C. (2020). Cybersecurity Technologies for the Internet of Medical Wearable Devices (IoMWD). In "Advances in Cyber Security Analytics and Decision Systems - EAISICC EAI/Springer Innovations in Communication and Computing book series" (pp. 117-140). Springer. doi:10.1007/978-3-030-19353-9
- Aileni, R. M., Suci, G., Valderrama, C., & Pasca, S. (2020). Internet of Things and Communication Technology Synergy for Remote Services in Healthcare. In "IoT and ICT for Healthcare Applications - EAI/Springer Innovations in Communication and Computing" (pp. 59-82). Springer. doi:10.1007/978-3-030-42934-8
- Aileni, R. M., Suci, G., Pasca, S., & Valderrama, C. (2020). Data Fusion-Based AI Algorithms in the Context of IIoTS. In "Internet of Things for Industry 4.0 - EAI/Springer Innovations in Communication and Computing". Springer. doi:10.1007/978-3-030-32530-5
- Aileni, R. M., Suci, G., Valderrama, C., & Pasca, S. (2020). Data Privacy and Security for IoMWT (Internet of Medical Wearable Things) Cloud. In "IoT and ICT for Healthcare Applications - EAI/Springer Innovations in Communication and Computing" (pp. 191-215). Springer. doi:10.1007/978-3-030-42934-8_11

Scientific journals/Article

- Castagnola, J. L., Dualibe, F., Laprovitta, A., & GARCIA-VAZQUEZ, H. (2020). A Novel Design and Optimization Approach for Low Noise Amplifiers (LNA) Based on MOST Scattering Parameters and the gm/ID Ratio. "Electronics".
Full Text : [electronics-09-00785.pdf](#) (Open Access)
- Silva, S. N., Lopes, F. F., Valderrama, C., & Fernandes, M. A. C. (14 April 2020). Proposal of Takagi-Sugeno Fuzzy-PI Controller Hardware. "Sensors, 20" (7). doi:10.3390/sxx010005
Full Text : [sensors-20-01996-v2.pdf](#) (Open Access)
- Yvanoff-Frenchin, C., Ramos Gomes Da Silva, V., Belabed, T., & Valderrama, C. (29 February 2020). Edge Computing Robot Interface for Automatic Elderly Mental Health Care Based on Voice. "Proceedings, 9" (3), 419. doi:10.3390/electronics9030419
Full Text : [electronics-09-00419-v2.pdf](#) (Open Access)

Books/Collective work published as editor or director

- Valderrama, C., & Valderrama, C. (Ed.). (2020). "Electronics (ISSN 2079-9292) Special issue: Energy Aware HPC Revisited: AI Concerns, Architectures and Optimization Strategies". MDPI.

Scientific congresses and symposiums/Unpublished conference/Abstract

- Belabed, T., Maria Gracielly, F. C., Fernandes, M. A. C., Valderrama, C., & SOUANI, C. (20 October 2020). "Low Cost and Low Power Stacked Sparse Autoencoder Hardware Acceleration for Deep Learning Edge Computing

Applications" [Paper presentation]. 6th International Conference on Advanced Technologies for Signal and Image Processing (ATSIP), Sousse, Tunisia.

Scientific congresses and symposiums/Paper published in a book

- Abidi, A., BEN KHALIFA, K., Valderrama, C., & BEDOUI, M. H. (2020). Drowsiness detection system based on EEG and ECG signal. In "10ième Édition du Workshop AMINA Le 17, 18 & 19 Décembre 2020 À l'Hôtel Regency & Spa Monastir - Tunisie". 10ième Édition du Workshop AMINA Le 17, 18 & 19 Décembre 2020 À l'Hôtel Regency & Spa Monastir - Tunisie.

Dissertations and theses/Master's dissertation

- MEDNOUN, A., Bueno Martinez, A., Dualibe, F., Debliqy, M., Lahem, D., & Caucheteur, C. (2020). "Contrôle de température à boucle fermée d'un capteur de gaz à semiconducteur" [Master's dissertation, Université de Mons]. ORBi UMONS-University of Mons. <https://orbi.umons.ac.be/handle/20.500.12907/42350>
- SIMO, J., Ramos Gomes Da Silva, V., & Valderrama, C. (2020). "Identification of horse's paces: Co-superviseur dans les travaux de Jean SIMO" [Master's dissertation, Université de Mons]. ORBi UMONS-University of Mons. <https://orbi.umons.ac.be/handle/20.500.12907/42353>
Full Text : [simon.pdf](#) (Open Access)

Learning materials/Other

- LAURENT, T., Ramos Gomes Da Silva, V., & Valderrama, C. (2020). "Database generation : Conseiller dans le travail de Thomas LAURENT".
Full Text : [Initiation___la_recherche_rapport.pdf](#) (Open Access)

Patents/Patent

- Quenon, A., Demarbaix, A., & Demaret, B. (14 December 2020). "Analyzing apparatus".

Computer developments/Software

- Ramos Gomes Da Silva, V., & Valderrama, C. (2020). "Performance Counters Profiler: Performance Counters api for python".

Computer developments/Other

- Ramos Gomes Da Silva, V. (2020). "Energy model vizualiation: vitorramos.github.io/energyplot".

2019

Scientific journals/Book review

- BLAIECH, A. G., BEN KHALIFA, K., Valderrama, C., FERNANDES, M. A. C., & BEDOUI, M. H. (2019). Taxonomy of FPGA-Based Topologies for Future Deep Learning Architectures. "Journal of Systems Architecture". doi:10.1016/j.sysarc.2019.01.007
Full Text : [Ahmed Ghazi BLAIECH_accepted_paper.pdf](#) (Open Access)

Parts of books/Contribution to collective works

- Raluca, M. A., Suci, G., Balaceanu, C., Beceanu, C., Petrache, A., Nadrag, C., Sever, P., & Valderrama, C. (2019). Body Area Network Challenges and Solutions. In M. A. Raluca, G. Suci, C. Balaceanu, C. Beceanu, A. Petrache, C.

Nadrag, P. Sever, C. Valderrama, R. Maheswar (Ed.), R. G. Kanagachidambaresan (Ed.), R. Jayaparavathy (Ed.), ... S. M. Thampi (Ed.), "Body Area Network Challenges and Solutions" (pp. 21). Springer International Publishing.

Scientific journals/Article

- Costa Silva, F., Alves De Albuquerque, G. L., SILVEIRA, L. F. Q., Valderrama, C., & Xavier De Souza, S. (27 June 2019). Variance-Triggered Two-Step GPS Acquisition. "Sensors, 19" (13), 1-19.
Full Text : [FABRICIO__Variation_triggered_two_steps_GPS_acquisition-1.pdf](#) (Open Access)
- Patel, W. D., Patel, C., & Valderrama, C. (16 January 2019). IoT based Efficient Vital Signs Monitoring System for Elderly Healthcare Using Neural Network. "International Journal of Research, VIII" (I), 239-244.
Full Text : [IoT based Efficient Vital Signs Monitoring System_IJR Journal_Scopus Index_UGC Recognized.pdf](#) (Open Access)

Scientific congresses and symposiums/Unpublished conference/Abstract

- Valderrama, C. (02 December 2019). "6th Reconfigurable Market Workshop" [Paper presentation]. MUSICS-FNRS doctoral school 6th Reconfigurable Market Workshop, Mons, Belgium.
- Valderrama, C. (16 July 2019). "UFRN PPGECC/CT Winter School: Artificial Intelligence platforms and tools" [Paper presentation]. UFRN PPGECC/CT Winter School : Artificial Intelligence platforms and tools, UFRN Natal, Brazil.
- Dualibe, F. (17 April 2019). "Public disertation : An Ultra-Low Power and Ultra-Low Voltage RF-Powered CMOS Front-End for Low-Rate Autonomous Sensors for WSN nodes" [Paper presentation]. IEEE student branch Workshop, University of Pretoria, Pretoria, South Africa.
- Ramos Gomes Da Silva, V., & Valderrama, C. (07 January 2019). "Energy-Optimal Configurations for Single-Node HPC Applications" [Paper presentation]. Séminaires inforTech/Numédiart, Mons, Belgium.

Scientific congresses and symposiums/Paper published in a book

- Abidi, A.* , Nouria, I., Bedoui, M. H., & Valderrama, C. A. (2019). Parallel Implementation on GPU for EEG Artifact Rejection by Combining FastICA and TQWT. In "2018 IEEE/ACS 15th International Conference on Computer Systems and Applications (AICCSA)". IEEE. doi:10.1109/AICCSA.2018.8612838
Full Text : [AICCSA.2018.8612838 \(1\).pdf](#) (Open Access)

Scientific congresses and symposiums/Paper published in a journal

- Yvanoff-Frenchin, C., Ramos Gomes Da Silva, V., Belabed, T., & Valderrama, C. (2019). "An Edge Computing Robot Experience for Automatic Elderly Mental Health Care Based on Voice" [Paper presentation]. ICT Innovations, Ohrid, North Macedonia.
- Patel, M., YADAV, A., & Valderrama, C. (2019). "YOLO-based Method for Indian Car License Plate Detection" [Paper presentation]. ISER ICABMIS International Conference on Advances in Business Management and Information Science, Sydney, Australia.
Full Text : [2019_Monal_Patel_ISER_ICABMIS_AU_\(PUB_SEMI\)_IS-ABMISSYDNY-05099-12914_63-67.pdf](#) (Open Access)
- Ramos Gomes Da Silva, V., Furtunato, A., Georgiou, K., Kerstin, E., Valderrama, C., & De Souza, S. X. (2019). "Energy-Optimal Configurations for Single-Node HPC Applications" [Paper presentation]. International Conference on High Performance Computing & Simulation, Dublin, Ireland.
Full Text : [Energy_Optimal_Configurations_for_Single_Node_HPC_Applications__Copy_.pdf](#) (Open Access)
- Ramos Gomes Da Silva, V., Valderrama, C., De Souza, S. X., & Manneback, P. (2019). "An Accurate Tool for Modeling, Fingerprinting, Comparison, and Clustering of Parallel Applications Based on Performance Counters" [Paper presentation]. IEEE International Parallel and Distributed Processing Symposium, Rio de Janeiro, Brazil.
Full Text : [Novel_HPC_Clustering_and_Accurate_Application_Analysis_Tool_Based_on_Performance_Counters \(1\).pdf](#) (Open Access)

- Stander, T., Petrashin, P., Toledo, L., Lancioni, W., Vazquez, C., & Dualibe, F. (2019). "Influence of Oscillator Topology on Fault Sensitivity in Oscillation Based Testing (OBT) of OTAs" [Paper presentation]. Argentine Conference on Electronics, CAE, Mar del Plata, Argentina.
- De Lima, J., & Dualibe, F. (2019). "A 13-nW Voltage Reference with Orthogonal Trimming of Absolute Value and Temperature Coefficient" [Paper presentation]. IEEE LASCAS Latin American Symposium on Circuits and Systems, Armenia, Colombia.
- Lancioni, W., Petrashin, P., Toledo, L., Castagnola, J., & Dualibe, F. (2019). "OBT applied to a 2nd order continuous time feedforward sigma delta modulator" [Paper presentation]. IEEE Latin American Test Symposium, LATS, Santiago, Chile.

Scientific congresses and symposiums/Poster

- Belabed, T., & Valderrama, C. (02 December 2019). "Autoencoder hardware topologies for Edge Computing" [Poster presentation]. MUSICS-FNRS doctoral school 6th Reconfigurable Market Workshop, Mons, Belgium.
- Ramos Gomes Da Silva, V., & Valderrama, C. (02 December 2019). "Energy aware models for HPC systems" [Poster presentation]. MUSICS-FNRS doctoral school 6th Reconfigurable Market Workshop, Mons, Belgium.

2018

Scientific journals/Book review

- LIMA, A. D. L., Barros, C., De Souza, S. X., SILVEIRA, L. F. Q., & Valderrama, C. (2018). Erratum: Parallel Cyclostationarity-Exploiting Algorithm for Energy-Efficient Spectrum Sensing. "IEICE Transactions on Communications". doi:10.1587/transcom.2018EB0001

Parts of books/Contribution to collective works

- Aileni, R. M., Suci, G., Balaceanu, C., & Valderrama, C. (2018). Body Area Network (BAN) for Healthcare by Wireless Mesh Network (WMN). In "Body Area Network Challenges and Solutions - EAISICC EAI/Springer Innovations in Communication and Computing book series" (pp. 1-17). Springer. doi:10.1007/978-3-030-00865-9

Scientific journals/Article

- Lima, Z., Garcia Vazquez, H., Rodriguez, R., Khemchandani, S. L., Dualibe, F., & del Pino, J. (2018). System for Controlling and Monitoring IoT Applications. "Applied System Innovation".
Full Text : [download_ASI_IOT.pdf](#) (Open Access)

Scientific congresses and symposiums/Unpublished conference/Abstract

- Valderrama, C. (02 October 2018). "5th Reconfigurable Market Seminar" [Paper presentation]. MUSICS-FNRS Reconfigurable Market Seminar, Mons, Belgium.
- Luong, P., Christoffersen, C., Rossi, C., & Dualibe, F. (27 May 2018). "Nanopower, Sub-1V, CMOS Voltage References With Digitally-Trimable Temperature Coefficients" [Paper presentation]. 2018 IEEE International Symposium on Circuits and Systems (ISCAS), Florence, Italy.
Full Text : [iscas2018.pdf](#) (Open Access)
- Dualibe, F. (13 April 2018). "Sizing CMOS Amplifiers by means of the gm/Id Methodology" [Paper presentation]. 2018 Microelectronics Workshop of the Carl and Emily Fuchs Institute of Microelectronics, University of Pretoria, Pretoria, South Africa.
Full Text : [GM_ID_course_pretoria.pdf](#) (Open Access)

Scientific congresses and symposiums/Paper published in a journal

- Jerraya, A. A., Romdhani, M., Le Marrec, P., Hessel, F., Coste, P., Valderrama, C., Daveau, M., & Zergainoh, N.-E. (2018). "Built-In Oscillation-Based Self-Testing of a 2.4 GHz LNA in 0.35 m CMOS" [Paper presentation]. IEEE International Conference on Electronics Circuits and Systmems, Bordeaux, France.
Full Text : [paper_neil_stander_dualibe.pdf](#) (Open Access)
- Aileni, R. M., Pasca, S., Strungaru, R., & Valderrama, C. (2018). "Biomedical Signal Acquisition for Respiration Monitoring by Flexible Analog Wearable Sensors" [Paper presentation]. IEEE EHB E-Health and Bioengineering, Sinaia, Romania.
- Petrashin, P., Toledo, L., Vázquez, C., Stander, T., & Dualibe, F. (2018). "Influence of Passive Oscillator Component Variation on OBT Sensitivity in OTAs" [Paper presentation]. 19th IEEE Latin American Test Symposium 2018, Sao Paulo, Brazil.
Full Text : [lats_2018.pdf](#) (Open Access)
- Lancioni, W., Dualibe, F., Petrashin, P., Toledo, L., & Vazquez, C. (2018). "Continuous Time Full-Feedforward MASH 2-2 Architecture for Sigma-Delta Modulators" [Paper presentation]. IEEE Latin American Syposium on Circuits and Systems, Puerto Vallarta, Mexico.
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