

**PUBLICACIONES DERIVADAS DE LAS TESIS DEFENDIDAS EN EL PROGRAMA DE
DOCTORADO EN “SISTEMAS ELECTRÓNICOS AVANZADOS. SISTEMAS
INTELIGENTES” EN EL AÑO 2020**

Doctorando	Nieto Capuchino, Rubén
Fecha depósito	18/01/2020
<p>Artículos en revistas internacionales:</p> <p>R. Nieto, R. Mateos, A. Hernández. “HW/SW Architecture for a Broadband Power-Line Communication System With LS Channel Estimator and ASCET Equalizer”. IEEE Trans. on Industrial Informatics, vol. 16(11), pp. 6740-6749, 2020. JCR, Índice de impacto: 10.215. Puesto: 4 de 63 en la categoría Automation and Control Systems.</p> <p>R. Nieto, R. Mateos A. Hernández. “Performance Improvement of PLC Channel Estimator and ASCET Equalizer in a FBMC Transmultiplexer Based on a Multi-Core Solution”. IEEE Access, vol. 8(2020), pp. 188552-188563, 2020. JCR, Índice de impacto: 3.367. Puesto: 105 de 276 en la categoría Electrical and Electronic Engineering.</p> <p>M. C. Pérez-Rubio, A. Hernández, D. Gualda-Gómez, S. Murano, J. Vicente-Ranera, F. Ciudad-Fernández, J. M. Villadangos, R. Nieto. “Simulation Tool and Online Demonstrator for CDMA-Based Ultrasonic Indoor Localization Systems”. Sensors, vol. 22(1038), pp. 1-25, 2022. JCR, Índice de impacto: 3.847. Puesto: 19 de 64 en la categoría Instruments & Instrumentation.</p> <p>E. Alcaín, P. R. Fernández, R. Nieto, A. S. Montemayor, J. Vilas, A. Galiana-Bordera, P. M. Martínez-Girones, C. Prieto-de-la-Lastra, B. Rodríguez-Vila, M. Bonet, “Hardware Architectures for Real-Time Medical Imaging”. Electronics, vol. 10, pp. 3118, 2021.</p> <p>E. Díaz, R. Mateos, E. J. Bueno, R. Nieto, “Enabling Parallelized-QEMU for Hardware/Software Co-Simulation Virtual Platforms”. Electronics, vol. 10, pp. 759, 2021.</p> <p>M. Martínez-Rey, C. Santos, R. Nieto, C. Losada, F. Espinosa, “Online evaluation of the process noise covariance matrix for event-based state estimators”. Int J Num. Methods Eng., v. 120 (195-208), 2019.</p> <p>M. C. Pérez-Rubio, C. Losada-Gutiérrez, F. Espinosa, J. Macias-Guarasa, J. Tiemann, F. Eckermann, C. Wietfeld, M. Katkov, S. Huba, J. Ureña, J. M. Villadangos, D. Gualda, E. Díaz, R. Nieto, E. Santiso, P. del Portillo, M. Martínez, “A realistic evaluation of indoor robot position tracking systems: The IPIN 2016 competition experience”, Measurement, vol. 135, pp. 151-162, 2019.</p>	

Patentes:

E. García, J. Ureña, **F. Nombela**, D. Gualda, A. Hernández.

Título: Procedimiento de transmisión y de estimación del tiempo de llegada en sistemas de localización acústicos basados en modulación DFT-S-DMT. N. de solicitud: P201500540 País de prioridad: España.

Fecha de prioridad: 22/07/2015 (concesión 26/04/2017 con examen previo). Entidad titular:

Universidad de Alcalá.

Congresos internacionales:

R. Nieto, R. Mateos, A. Hernández. "Finite Precision Analysis of FPGA-based Architecture for FBMC Transmultiplexers in Broadband PLC". Proc. of XXXIII Conference on Design of Circuits and Integrated Systems (DCIS 2018), pp. 1-6. (ISBN: 978-1-7281-0171-2), Lyon (France), 2018.

F. Membibre, **R. Nieto**, A. Hernández. "Design of FPGA-based Architecture for an Analog Front-End in Broadband PLC". Proc. of 2019 24th IEEE International Conference on Emerging Technologies and Factory Automation (ETFA 2019), pp. 1333-1337. (ISBN: 978-1-7281-0302-0), Zaragoza (Spain), 2019.

R. Nieto, R. Mateos, A. Hernández, E. Díaz. "Dual-Core Architecture for PLC Channel Estimator and ASCET Equalizer in a FBMC Transmultiplexer". Proc. of 2019 24th IEEE International Conference on Emerging Technologies and Factory Automation (ETFA 2019), pp. 1342-1345. (ISBN: 978-1-7281-0302-0), Zaragoza (Spain), 2019.

R. Nieto, R. Mateos, A. Hernández. "Heterogeneous SoC Architecture for a FBMC Receiver with Channel Estimator and Channel Equalizer in PLC". Proc. IEEE International Symposium on Power Line Communications and its Applications (ISPLC20), pp. 1-6, Málaga (Spain), 2020.

A. Hernández, **R. Nieto**, D. Fuentes, J. Ureña. "Design of a SoC Architecture for the Edge Computing of NILM Techniques". Proc. XXXV Conference on Design of Circuits and Integrated Systems (DCIS 2020), pp. 232-237. (ISBN: 978-1-7281-9132-4), Segovia (Spain), 2020.

R. Nieto, L. de Diego-Otón, A. Hernández, J. Ureña. "Finite Precision Analysis for an FPGA-based NILM Event-Detector". Proc. 5th International Workshop on Non-Intrusive Load Monitoring (NILM'20), pp. 30-33. (ISBN: 978-1-4503-8191-8/20/11), 2020.

R. Nieto, L. de Diego-Otón, A. Hernández, J. Ureña. "Data Collection and Cloud Processing Architecture Applied to NILM Techniques for Independent Living". Proc. Int. Instrum. & Measurement Technology Conference (I2MTC 2021), pp. 1-6. (ISBN: 978-1-7281-9539-1), Glasgow (United Kingdom), 2021.

Doctorando	Bousdar Ahmed, Dina
Fecha lectura	21/10/2019
<p>Artículos en revistas internacionales:</p> <p>Jurado Romero, F.; Munoz Diaz, E.; Bousdar Ahmed, D. Smartphone-Based Localization for Passengers Commuting in Traffic Hubs. <i>Sensors</i> 2022, 22, 7199. https://doi.org/10.3390/s22197199 JCR: 3.476, Q2, Posición 105/276, Categoría ENGINEERING, ELECTRICAL & ELECTRONIC</p> <p>D. B. Ahmed and E. M. Diaz, "Survey of Machine Learning Methods Applied to Urban Mobility," in <i>IEEE Access</i>, vol. 10, pp. 30349-30366, 2022, doi: 10.1109/ACCESS.2022.3159668. JCR: 3.476, Q2, Posición 105/276, Categoría ENGINEERING, ELECTRICAL & ELECTRONIC</p> <p>D. Bousdar Ahmed, L. E. Díez, E. M. Diaz and J. J. García Domínguez, "A Survey on Test and Evaluation Methodologies of Pedestrian Localization Systems," in <i>IEEE Sensors Journal</i>, vol. 20, no. 1, pp. 479-491, 1 Jan.1, 2020, doi: 10.1109/JSEN.2019.2939592. JCR: 3.745, Q1, Posición 61/266, Categoría ENGINEERING, ELECTRICAL & ELECTRONIC</p> <p>Bousdar Ahmed, D.; Diaz, E.M.; García Domínguez, J.J. Automatic Calibration of the Step Length Model of a Pocket INS by Means of a Foot Inertial Sensor. <i>Sensors</i> 2020, 20, 2083. https://doi.org/10.3390/s20072083 JCR: 3.576, Q1, Posición 14/64, Categoría INSTRUMENTS & INSTRUMENTATION</p> <p>Bousdar Ahmed, D.; Munoz Diaz, E.; García Domínguez, J.J. Novel Multi-IMU Tight Coupling Pedestrian Localization Exploiting Biomechanical Motion Constraints. <i>Sensors</i> 2020, 20, 5364. https://doi.org/10.3390/s20185364 JCR: 3.576, Q1, Posición 14/64, Categoría INSTRUMENTS & INSTRUMENTATION</p> <p>Munoz Diaz, E.; Kaiser, S.; Bousdar Ahmed, D. Height Error Correction for Shoe-Mounted Inertial Sensors Exploiting Foot Dynamics. <i>Sensors</i> 2018, 18, 888. https://doi.org/10.3390/s18030888 JCR: 4.098, Q1, Posición 52/266, Categoría ENGINEERING, ELECTRICAL & ELECTRONIC</p> <p>Bousdar Ahmed, D.; Munoz Diaz, E. Loose Coupling of Wearable-Based INSs with Automatic Heading Evaluation. <i>Sensors</i> 2017, 17, 2534. https://doi.org/10.3390/s17112534. JCR: 3.557, Q1, Posición 48/260, Categoría ENGINEERING, ELECTRICAL & ELECTRONIC</p>	

Doctorando	Pina Cardim, Guilherme
Fecha lectura	12/07/2019
<p>Artículos en revistas internacionales:</p> <p>Guilherme Pina, Erivaldo Silvia, Mauricio Araújo, Ignacio Bravo y Alfredo Gardel Título: Statistical Evaluation and Analysis of Road Extraction Methodologies Using a Unique Dataset from Remote Sensing. Remote Sensing (Molecular Diversity Preservation International (MDPI)) Abril 2018 vol. 10, no 620 doi: 10.3390/rs10040620 Calidad: JCR, Impact Factor: 3.406, Position 7/30 (Q1) en Remote Sensing</p> <p>Guilherme Pina, Erivaldo Silvia, Mauricio Araújo, Ignacio Bravo y Alfredo Gardel Título: A Nonrecursive GR Algorithm to Extract Road Networks in High-Resolution Images from Remote Sensing. Earth Science Informatics Agosto 2020. SPRINGER HEIDELBERG. https://doi.org/10.1007/s12145-020-00501-5 Calidad: JCR, Impact Factor: 2.878, Position 90/199 (Q2) en Geosciences, Multidisciplinary.</p>	

Doctorando	García Ruiz, Andrés
Fecha lectura	26/06/2019
<p>Artículos en revistas internacionales:</p> <p>Juan Pastor-Graells, Hugo F. Martins, Andres Garcia-Ruiz, Sonia Martin-Lopez, and Miguel Gonzalez-Herraez, "Single-shot distributed temperature and strain tracking using direct detection phase-sensitive OTDR with chirped pulses," Optics Express, vol.24,no. 12, pp.13121-13133, 2016. JCR Impact Factor: 3.307 Área: OPTICS Cuartil: Q1 Posición en el área: 17/92 .</p> <p>A. Garcia-Ruiz, J. Pastor-Graells, H. F. Martins, S. Martin-Lopez, and M. Gonzalez-Herraez. "Speckle Analysis Method for Distributed Detection of Temperature Gradients with ΦOTDR," IEEE Photonics Technology Letters, ISSN: 1041-1135. Año de publicación: 2016 28(18): 2000–2003,. Impact Factor: 2.375 Área: ENGINEERING, ELECTRICAL & ELECTRONIC Cuartil: Q2 Posición en el área: 95/262</p> <p>A. Garcia-Ruiz, J. Pastor-Graells, H. F. Martins, K. H. Tow, L. Thévenaz, S. Martin-Lopez, and M. Gonzalez-Herraez. "Distributed photothermal spectroscopy in microstructured optical fibers: towards high-resolution mapping of gas presence over long distances," Optics Express, 2017 Vol. 25 Número: 3 Páginas: 1789-1805. JCR Impact Factor: 3.356 Área: OPTICS Cuartil: Q1 Posición en el área: 19/94</p> <p>J. Pastor-Graells, J. Nuño, M. R. Fernandez-Ruiz, A. Garcia-Ruiz, H. F. Martins, S. Martin-Lopez, and M. Gonzalez-Herraez. "Chirped-pulse Phase-sensitive Reflectometer Assisted by First Order Raman Amplification," Journal of Lightwave Technology ISSN: 0733-8724, 2017, Vol.: 35 (21) Páginas: 4677-4683. JCR Impact Factor: 3.7 ENG, ELECT. & ELECTRONIC Cuartil: Q1 Posición en el área: 44/260.</p> <p>M. R. Fernandez-Ruiz, J. Pastor-Graells, H. F. Martins, A. Garcia-Ruiz, S. Martin-Lopez, and M. Gonzalez-Herraez. "Laser Phase-noise Cancellation in Chirped pulse Distributed Acoustic Sensors" Journal of Lightwave Technology ISSN: 1558-2213 Año de publicación:2018. Volumen: 36 Número: 4 Páginas: 979-985 DOI: 10.1109/JLT.2017.2766688. JCR Impact Factor: 4.162 Área: OPTICS Cuartil: Q1 Posición: 13/95.</p> <p>A. Garcia-Ruiz, A. Dominguez-Lopez, J. Pastor-Graells, H. F. Martins, S. Martin-Lopez, and M. Gonzalez-Herraez. "Long-range distributed optical fiber hot-wire anemometer based on chirped-pulse ΦOTDR," Optics Express ISSN: 1094-4087 Año de publicación: 2018. Volumen: 26 Número: 1 Páginas: 463-476 doi:10.1364/OE.26.000463. JCR Impact Factor: 3.561 Área: OPTICS Cuartil: Q1 -20/95</p> <p>R. Magalhães, A. Garcia-Ruiz, H. F. Martins, J. Pereira, W. Margulis, S. Martin-Lopez, and M. Gonzalez-Herraez. "Fiber-based distributed bolometry". Optics Express ISSN: 1094-4087 Año de publicación: 2019 Volumen: 27 Número: 4 Páginas: 4317-4328. JCR Impact Factor: 3.669 Área: OPTICS Cuartil: Q1 -19/97</p> <p>A. Garcia-Ruiz, H. F. Martins, R. Magalhães, J. Pereira, O. Tarasenko, L. Norin, W. Margulis, S. Martin-Lopez, and M. Gonzalez-Herraez. "Hermetic Carbon Coatings for Electro-Thermal All-Fiber Phase Modulators" Journal of Lightwave Technology ISSN: 1558-2213 Año de publicación: 2019. Volumen: 37 Número: 18 Páginas: 4567-4572; JCR Impact Factor: 3.97 OPTICS Cuartil: Q1 - 14/97.</p>	

H. D. Bhatta, L. Costa, **A. Garcia-Ruiz**, M. R. Fernandez-Ruiz, H. F. Martins, M. Tur, and M. Gonzalez-Herraez. "Dynamic Measurements of 1000 Microstrains Using Chirped-Pulse Phase-Sensitive Optical Time-Domain Reflectometry" JOURNAL OF LIGHTWAVE TECHNOLOGY, VOL. 37, NO. 18, SEPT. 15, 2019 DOI: 10.1109/JLT.2019.2928621. JCR Impact Factor: 9.37 OPTICS Cuartil: Q1 Posición en el área: 14/97

Congresos internacionales:

- 1- **A. Garcia-Ruiz**, J. Pastor-Graells, H. F. Martins, S. Martin-Lopez, and M. Gonzalez-Herraez. "Distributed detection of temperature gradients with single-wavelength phase-sensitive OTDR and speckle analysis methods," Proc.SPIE9916, Sixth European Workshop on Optical Fibre Sensors. doi:10.1117/12.2236206; isbn:978-151060219-9
- 2- **A.Garcia-Ruiz**, H.F.Martins, J.Pastor-Graells, S.Martin-Lopez, and M.Gonzalez-Herraez. "Single-shot true distributed strain variation measurements over>10km using phase-sensitive OTDR with chirped pulses," Asia-Pacific Optical Sensors Conference (APOS, Shanghai), Optical Society of America. doi:10.1364/APOS.2016.Th3A.2; isbn:978-0-9600380-5-3 Awarded a sBest Student Paper.
- 3- M.Gonzalez-Herraez, **A.Garcia-Ruiz**, P.Corredera, J.Pastor-Graells, M.R.Fernandez-Ruiz, H.F.Martins, and S.Martin-Lopez. "Chirped-pulse phase-sensitive optical time-domain reflectometry," Asia Communications and Photonics Conference(ACP, Wuhan), Optical Society of America,[Invited] doi:10.1364/ACPC.2016.AF1A.1;isbn:978-0-9600380-0-8–
- 4- H.F.Martins, J.Pastor-Graells, **A.Garcia-Ruiz**, S.Martin-Lopez, and M.Gonzalez-Herraez. "Quantitative high sensitivity distributed fiber measurements using Φ OTDR with chirped pulses," SPIE Commercial and Scientific Sensing and Imaging (DCS, Anaheim) SPIE,
- 5- H.F.Martins, J.Pastor-Graells, **A.Garcia-Ruiz**, S.Martin-Lopez, and M.Gonzalez-Herraez. " Φ OTDR with chirped pulses: a new technique for quantitative high sensitivity distributed fiber measurements," Applications of Optics and Photonics (AOP,Faro), SPIE.[Invited]
- 6- M.R.Fernandez-Ruiz, **A.Garcia-Ruiz**, H.F.Martins, J.Pastor-Graells, S.Martin-Lopez, and M.Gonzalez-Herraez. "Monitoring and Early Threat Detection of Fiber-optic Links using Phase-Sensitive Optical Time-domain Reflectometry," 19th Photonics North Conference (Ottawa), IEEE,[Invited]
- 7- **A.Garcia-Ruiz**, J.Pastor-Graells, H.F.Martins, K.H.Tow, L.Thévenaz, S.Martin-Lopez, and M.Gonzalez-Herraez. "Distributed photothermal measurements of gas presence along holey opticalfibers," Optical Fiber Sensors Conference(OFS-25),IEEE,. doi:10.1117/12.2263210; isbn:978-1-5090-4850-2
- 8- M.R.Fernandez-Ruiz, **A.Garcia-Ruiz**, H.F.Martins, J.Pastor-Graells, S.Martin-Lopez, and M.Gonzalez-Herraez. "Protecting fiber-optic links from thirdparty intrusion using distributed acoustic sensors," 19th International Conference on Transparent Optical Networks (ICTON),IEEE.[Invited] doi:10.1109/ICTON.2017.8025041;isbn:9781538608609

- 9-** Miguel Gonzalez-Herraez, Juan Pastor-Graells, **Andres Garcia-Ruiz**, María R. Fernández Ruiz, Hugo F. Martins, Sonia Martin-Lopez, “Chirped-pulse phase-sensitive reflectometry: hearing behind the walls with high fidelity,” Proc.ofSPIE10323, 25th InternationalConferenceonOpticalFiberSensors,1032302(April23,2017).
- 10-** Juan Pastor-Graells, María R. Fernández-Ruiz, Hugo F. Martins, **Andres Garcia-Ruiz**, Sonia Martin-Lopez, Miguel Gonzalez-Herraez, “Impact of the laser phase noise on chirped pulse phase-sensitive OTDR,” Proc. Of SPIE10323 ,25th International Conference on Optical Fiber Sensors, 103238T (April23,2017).
- 11-** Miguel Gonzalez-Herraez, **Andres Garcia-Ruiz**, Pedro Corredera, Juan Pastor-Graells, María R. Fernández-Ruiz, Hugo F. Martins, and S. Martin-Lopez, “Chirped-pulse phase sensitive optical time-domain reflectometry, ” Proc. of OSA Technical Digest (online) (Optical Society of America, 2016),A F1A.1, 2016.
- 12-** Juan Pastor Graells, Hugo F. Martins, **Andres Garcia-Ruiz**, Sonia Martin-Lopez, and Miguel Gonzalez-Herraez, “Truly Linear and Dynamic Distributed Strain Sensor using intensity-only measurements,” Proc. Of OSA Technical Digest (online) (Optical Society of America,2016), SeM3D.5, 2016.
- 13-** Juan Pastor-Graells, Hugo F. Martins, **Andres Garcia-Ruiz**, S. Martin-Lopez, and Miguel Gonzalez-Herraez, “Dynamic distributed measurement of temperature changes using phase-sensitive OTDR with chirped pulses,” Proc. of SPIE9916, Sixth European Workshop on Optical Fibre Sensors, 99162Q (May30,2016).

Doctorando	Blasco Chicano, Rodrigo
Fecha lectura	9/03/2020
<p>Artículos en revistas internacionales:</p> <p>S. Valdueza-Felip, A. Núñez-Cascajero, <u>R. Blasco</u>, D. Montero, L. Grenet, M. de la Mata, S. Fernández, L. Rodríguez-De Marcos, S. I. Molina, J. Olea, F. B. Naranjo; Influence of the AlN interlayer thickness on the photovoltaic properties of in-rich AlInN on Si heterojunctions deposited by RF sputtering. <i>AIP Advances</i> 1 November 2018; 8 (11): 115315. https://doi.org/10.1063/1.5041924</p> <p>A. Núñez-Cascajero, S. Valdueza-Felip, <u>R. Blasco</u>, M. de la Mata, S.I. Molina, M. González-Herráez, E. Monroy, F.B. Naranjo, Quality improvement of AlInN/p-Si heterojunctions with AlN buffer layer deposited by RF-sputtering, <i>Journal of Alloys and Compounds</i> 769, 824-830, 2018, ISSN 0925-8388, https://doi.org/10.1016/j.jallcom.2018.08.059.</p> <p><u>Blasco, R.</u>, Núñez-Cascajero, A., Jiménez-Rodríguez, M., Montero, D., Grenet, L., Olea, J., Naranjo, F.B. and Valdueza-Felip, S. (2019), Influence of the AlInN Thickness on the Photovoltaic Characteristics of AlInN on Si Solar Cells Deposited by RF Sputtering. <i>Phys. Status Solidi A</i>, 216: 1800494. https://doi.org/10.1002/pssa.201800494</p> <p>A. Núñez-Cascajero, <u>R. Blasco</u>, S. Valdueza-Felip, D. Montero, J. Olea, F.B. Naranjo, High quality Al_{0.37}In_{0.63}N layers grown at low temperature (<300 °C) by radio-frequency sputtering, <i>Materials Science in Semiconductor Processing</i> 100, 8-14, 2019, ISSN 1369-8001, https://doi.org/10.1016/j.mssp.2019.04.029</p> <p><u>Blasco, R.</u>, Valdueza-Felip, S., Montero, D., Sun, M., Olea, J. and Naranjo, F.B. (2020), Low-to-Mid Al Content (x = 0–0.56) Al_xIn_{1-x}N Layers Deposited on Si(100) by Radio-Frequency Sputtering. <i>Phys. Status Solidi B</i>, 257: 1900575. https://doi.org/10.1002/pssb.201900575</p> <p>Valdueza-Felip, S.; <u>Blasco, R.</u>; Olea, J.; Díaz-Lobo, A.; Braña, A.F.; Naranjo, F.B. Al_xIn_{1-x}N on Si (100) Solar Cells (x = 0–0.56) Deposited by RF Sputtering. <i>Materials</i> 2020, 13, 2336. https://doi.org/10.3390/ma13102336</p> <p><u>R. Blasco</u>, F.B. Naranjo, S. Valdueza-Felip, Design of AlInN on silicon heterojunctions grown by sputtering for solar devices, <i>Current Applied Physics</i> 20 (11), 1244-1252, 2020, ISSN 1567-1739, https://doi.org/10.1016/j.cap.2020.07.018</p> <p>Sun, M.; <u>Blasco, R.</u>; Nwodo, J.; de la Mata, M.; Molina, S.I.; Ajay, A.; Monroy, E.; Valdueza-Felip, S.; Naranjo, F.B. Comparison of the Material Quality of Al_xIn_{1-x}N (x—0–0.50) Films Deposited on Si(100) and Si(111) at Low Temperature by Reactive RF Sputtering. <i>Materials</i> 2022, 15, 7373. https://doi.org/10.3390/ma15207373</p>	

Doctorando	Wei , Xiaoyuan
Fecha lectura	27/05/2020
<p>Artículos en revistas internacionales:</p> <ol style="list-style-type: none"> 1. Xiaoyuan Wei, Yuan Yang, Wenqing Yao, et al. An automatic optimal excitation frequency tracking method based on digital tracking filters for sandwiched piezoelectric transducers used in broken rail detection [J]. Measurement, 2019, 135:294-305. (SCI index: 000468747300030, Q1) 2. Xiaoyuan Wei, Yuan Yang, Wenqing Yao, et al. Design of full bridge high voltage pulser for sandwiched piezoelectric ultrasonic transducers used in long rail detection [J]. Applied acoustics, 2019, 149:15-24. (SCI index: 000462108100002, Q1) 3. Xiaoyuan Wei, Yuan Yang, Jesús Ureña Ureña, et al. An adaptive peak detection method for inspection of breakages in long rails by using barker coded UGW [J]. IEEE Access, 2020, 8(1):48529-48542. (SCI index: 000524719700007, Q1) 4. Xiaoyuan Wei, Yuan Yang, Lei Yuan, et al. The effect of acoustical load on the electromechanical characteristics of sandwiched piezoelectric ultrasonic transducers used in broken rail detection [J]. Applied acoustics, 2020. (SCI, Q1, Under review) 5. Xiaoyuan Wei, Yuan Yang, Yang Wang. Design of Driving Circuit in Ultrasonic Transducer for Long Rail Detection [J]. Chinese Journal: Piezoelectrics & Acousto-optic, 2017, 39(6):939-944. <p>Congresos internacionales:</p> <ol style="list-style-type: none"> 1. Xiaoyuan Wei, Yang Yuan, Yu Ningmei. Research on broken rail real-time detection system for ultrasonic guided wave [C]. Proceedings of the 2017 19th International Conference on Electromagnetics in Advanced Applications, ICEAA 2017, Verona, Italy, Sep. 11-15, 906-909, 2017. (EI index: 20174804472128) 2. Xiaoyuan Wei, Yuan Yang. Study the effect of acoustic load on the performance for sandwiched piezoelectric ultrasonic transducers [C]. 2018 Far East NDT Forum New Technology&Application, Xiamen, China, Jul. 5-8, 2018. (EI index: 20191806846001) 3. Xiaoyuan Wei, Yuan Yang, Jesús Ureña Ureña. A novel real-time detection system of breakages in the rail based on ultrasonic guided waves [C]. 2020 IEEE International Instrumentation & Measurement Technology Conference, Dubrovnic, Croatia, May 25-28, 2020. 	

Doctorando	Rodríguez Cabero, Alberto
Fecha lectura	10/02/2020
<p>Artículos en revistas internacionales:</p> <p>Rodríguez-Cabero, A., Roldan-Perez, J., Prodanovic, M. Virtual Impedance Design Considerations for Virtual Synchronous Machines in Weak Grids. (2020) IEEE Journal of Emerging and Selected Topics in Power Electronics, 8 (2), art. no. 8693833, pp. 1477-1489. Cited 35 times. DOI: 10.1109/JESTPE.2019.2912071</p> <p>Rodríguez-Cabero, A., Roldan-Perez, J., Prodanovic, M., Suul, J.A., D'Arco, S. Coupling of AC Grids via VSC-HVDC Interconnections for Oscillation Damping Based on Differential and Common Power Control (2020) IEEE Transactions on Power Electronics, 35 (6), art. no. 8894842, pp. 6548-6558. Cited 14 times. DOI: 10.1109/TPEL.2019.2952656</p> <p>Rodríguez-Cabero, A., Prodanovic, M., Roldán-Pérez, J. Full-State Feedback Control of Back-to-Back Converters Based on Differential and Common Power Concepts (2019) IEEE Transactions on Industrial Electronics, 66 (11), art. no. 8485653, pp. 9045-9055. Cited 18 times. DOI: 10.1109/TIE.2018.2873518</p> <p>Rodríguez-Cabero, A., Prodanovic, M., Roldan-Perez, J. Analysis of dynamic properties of VSCs connected to weak grids including the effects of dead time and time delays. (2019) IEEE Transactions on Sustainable Energy, 10 (3), art. no. 8421082, pp. 1066-1075. Cited 12 times. DOI: 10.1109/TSTE.2018.2860280</p> <p>Roldan-Perez, J., Rodríguez-Cabero, A., Prodanovic, M. Design and Analysis of Virtual Synchronous Machines in Inductive and Resistive Weak Grids (2019) IEEE Transactions on Energy Conversion, 34 (4), art. no. 8769891, pp. 1818-1828. Cited 38 times. DOI: 10.1109/TEC.2019.2930643</p> <p>Roldan-Perez, J., Prodanovic, M., Rodríguez-Cabero, A., Guerrero, J.M., Garcia-Cerrada, A. Finite-Gain Repetitive Controller for Harmonic Sharing Improvement in a VSM Microgrid. (2019) IEEE Transactions on Smart Grid, 10 (6), art. no. 8700267, pp. 6898-6911. Cited 4 times. DOI: 10.1109/TSG.2019.2913632</p>	

Roldan-Perez, J., **Rodríguez-Cabero, A.**, Prodanovic, M.

Harmonic Virtual Impedance Design for Parallel-Connected Grid-Tied Synchronverters

(2019) IEEE Journal of Emerging and Selected Topics in Power Electronics, 7 (1), art. no. 8340812, pp. 493-503. Cited 26 times.

DOI: 10.1109/JESTPE.2018.2828338

Roldán-Pérez, J., **Rodríguez-Cabero, A.**, Ochoa-Giménez, M., García-Cerrada, A., Zamora-Macho, J.L.

Discrete-time resonant controllers design for power conditioning applications

(2018) Electric Power Systems Research, 164, pp. 31-38. Cited 3 times.

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Modeling, Operation, and Analysis of DC Grids: From High Power DC Transmission to DC Microgrids, 2021, pp. 215–244

ISBN 978-012822101-3, 978-012822102-0, DOI: 10.1016/B978-0-12-822101-3.00014-9

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Fecha lectura	31/07/2019
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