

**PUBLICACIONES DERIVADAS DE LAS TESIS DEFENDIDAS EN EL PROGRAMA DE  
DOCTORADO EN “SISTEMAS ELECTRÓNICOS AVANZADOS. SISTEMAS  
INTELIGENTES” EN EL AÑO 2019**

Doctorando	Ortiz del Castillo, Miguel
Fecha depósito	30/04/2019
<p><b>Artículos en revistas internacionales:</b></p> <p>Sánchez-Morla, Eva M.; Fuentes, Juan L.; Miguel-Jiménez, Juan M.; Boquete, Luciano; <b>Ortiz, Miguel</b>; Orduna, Elvira; Satue, María; *García-Martín, Elena. <i>Automatic Diagnosis of Bipolar Disorder Using Optical Coherence Tomography Data and Artificial Intelligence</i>. JOURNAL OF PERSONALIZED MEDICINE. 11 - 8, MDPI, 01/08/2021. ISSN 2075-4426 Factor de impacto año 2021: 3,508. Q2, posición 42/109 en HEALTH CARE SCIENCES &amp; SERVICES.</p> <p>Miguel, J. M.; Roldán, M.; Pérez-Rico, C.; <b>Ortiz, M.</b>; Boquete, L.; Blanco, R. <i>Using advanced analysis of multifocal visual-evoked potentials to evaluate the risk of clinical progression in patients with radiologically isolated syndrome</i>. SCIENTIFIC REPORTS. 11 - 1, NATURE PORTFOLIO, 21/01/2021. Factor de impacto año 2021: 4,997. Revista en Q2, posición 19/74 en MULTIDISCIPLINARY SCIENCES</p> <p><b>del Castillo, M. Ortiz</b>; Cordon, B.; Sánchez Morla, E. M.; Vilades, E.; Rodrigo, M. J.; Cavaliere, C.; Boquete, L.; Garcia-Martin, E. <i>Identification of clusters in multifocal electrophysiology recordings to maximize discriminant capacity (patients vs. control subjects)</i>. DOCUMENTA OPHTHALMOLOGICA. 140 - 1, pp. 43 - 53. SPRINGER, 01/02/2020. ISSN 0012-4486, ISSN 1573-2622 Factor de impacto año 2020: 2,379. Revista en Q3, posición 37/62 en OPHTHALMOLOGY.</p> <p>Boquete, L.; López-Guillén, E.; Vilades, E.; Miguel-Jiménez, J. M.; Pablo, L. E.; De Santiago, L.; <b>Ortiz del Castillo, M.</b>; Alonso-Rodríguez, M. C.; Sánchez Morla, E. M.; López-Dorado, A.; García-Martín, E. <i>Diagnostic ability of multifocal electroretinogram in early multiple sclerosis using a new signal analysis method</i>. PLOS ONE. 14 - 11, PUBLIC LIBRARY SCIENCE, 08/11/2019. ISSN 1932-6203 Factor impacto año 2019: 2,740. Revista en Q2, posición 27/71 en MULTIDISCIPLINARY SCIENCES.</p> <p>de Santiago, Luis; Sánchez Morla, E. M.; <b>Ortiz, Miguel</b>; López Guillén, Elena; Amo Usanos, Carlos; Alonso-Rodríguez, M. C.; Barea, R.; Cavaliere-Ballesta, Carlo; Fernández, Alfredo; Boquete, Luciano. <i>A computer-aided diagnosis of multiple sclerosis based on mfVEP recordings</i>. PLOS ONE. 14 - 4, PUBLIC LIBRARY SCIENCE, 04/04/2019. ISSN 1932-6203 Factor impacto año 2019: 2,740. Revista en Q2, posición 27/71 en MULTIDISCIPLINARY SCIENCES.</p> <p>De Santiago, Luis; Sánchez-Morla, Eva; Blanco, Román; Manuel Miguel, Juan; Amo, Carlos; <b>Ortiz del Castillo, Miguel</b>; López, Almudena; Boquete, Luciano. <i>Empirical mode decomposition processing to improve multifocal-visual-evoked-potential signal analysis in multiple sclerosis</i>. PLOS ONE. 13 - 4, PUBLIC LIBRARY SCIENCE, 20/04/2018. ISSN 1932-6203 Factor impacto año 2018: 2,776. Revista en Q2, posición 24/69 en MULTIDISCIPLINARY SCIENCES.</p>	

Doctorando	Perpetuo Correa, Tomás
Fecha lectura	16/02/2019
<p><b>Artículos en revistas internacionales:</b></p> <p>Autores: T. Correa, F.J. Rodríguez, E.J. Bueno  Título: "Model-Based Latency Compensation for Network Controlled Modular Multilevel Converters"  Revista: Electronics, 2019, 8(1), 22, pp. 1-16.  Indicios de calidad: Índice de impacto 2.110 (JCR 2017). Puesto: 113 de 260 en la categoría ENGINEERING, ELECTRICAL &amp; ELECTRONIC. Tercil: T2. Cuartil: Q2.</p> <p><b>Congresos internacionales</b></p> <p>T. P. Corrêa, L. Almeida, and E. B. Peña, "Hardware/Software Implementation Factors Influencing Ethernet Latency," in IEEE Int. Conf. Ind. Informatics (INDIN), 2018.</p> <p>T. P. Corrêa, L. Almeida, and F. J. Rodriguez, "Communication aspects in the distributed control architecture of a modular multilevel converter," in IEEE Int. Conf. Ind. Technology (ICIT), 2018.</p> <p>T. P. Corrêa., E. J. Bueno, and F. J. Rodriguez, "Communication network latency compensation in a modular multilevel converter," in IEEE Energy Conversion Congress and Exposition (ECCE). IEEE, 2017.</p> <p>T. P. Corrêa and L. Almeida, "Ultra short cycle protocol for partly decentralized control applications," in IEEE Int. Conf. Emerging Technologies &amp; Factory Automation (ETFAs), 2017.</p> <p>T. P. Corrêa, O. König, and R. Greul, "Multisampling in interleaved converters and modular multilevel converters," in Ann. Conf. IEEE Industrial Electronics Society (IECON), 2016.</p>	

Doctorando	Moriano Martín, Javier
Fecha lectura	27/09/2018
<p><b>Artículos en revistas internacionales</b></p> <p><b>Autores:</b> J. Moriano, M. Rizo, E.J. Bueno, R. Martín, F.J. Rodríguez  <b>Título:</b> "A Novel Multifrequency Current Reference Calculation to Mitigate Active Power Fluctuations"  <b>Revista:</b> IEEE Trans. on Industrial Electronics, January 2018, vol. 65, no. 1, pp. 810-818.  <b>Indicios de calidad:</b> Índice de impacto 7.050 (JCR 2017). Puesto: 2 de 61 en la categoría AUTOMATION &amp; CONTROL SYSTEMS. Tercil: T1. Cuartil: Q1.</p> <p><b>Autores:</b> J. Moriano, M. Ordonez, M. Rizo, E. Bueno  <b>Título:</b> "Harmonic Compensation Optimization for Multiple Parallel Distributed Generators"  <b>Revista:</b> IEEE Trans. on Power Electronics, July 2019, vol. 34, no. 7, pp. 7103-7112.  <b>Indicios de calidad:</b> Índice de impacto 6.812 (JCR 2017). Puesto: 12 de 260 en la categoría ENGINEERING, ELECTRICAL &amp; ELECTRONIC. Tercil: T1. Cuartil: Q1.</p> <p><b>Autores:</b> J. Moriano, M. Rizo, E. Bueno, J.R. Sendra, R. Mateos  <b>Título:</b> "Distortion-Free Instantaneous Multifrequency Saturator for THD Current Reduction"  <b>Revista:</b> IEEE Trans. on Industrial Electronics, July 2019, vol. 66, no. 7, pp. 5310-5320.  <b>Indicios de calidad:</b> Índice de impacto 7.050 (JCR 2017). Puesto: 2 de 61 en la categoría AUTOMATION &amp; CONTROL SYSTEMS. Tercil: T1. Cuartil: Q1.</p>	

Doctorando	Nombela Blanco, Francisco José
Fecha lectura	24/10/2018
<p><b>Artículos en revistas internacionales:</b></p> <p><b>F. Nombela</b>, E. García, R. Mateos, A. Hernández. "Efficient Implementation of a Symbol Timing Estimator for Broadband PLC". <i>Sensors</i>, vol. 15(8), pp. 20825-20844, 2015. JCR, Índice de impacto: 2.033. Puesto: 12 de 56 en la categoría Instruments &amp; Instrumentation.</p> <p>A. Hernández, E. García, D. Gualda, J. M. Villadangos, <b>F. Nombela</b>, J. Ureña. "FPGA-based SoC Architecture for Managing Ultrasonic Beacons in a Local Positioning System". <i>IEEE Transactions on Instrumentation &amp; Measurement</i>, vol. 66(8), pp. 1954-1964, 2017. JCR, Índice de impacto: 2.794. Puesto: 11 de 61 en la categoría Instruments &amp; Instrumentation.</p> <p><b>F. Nombela</b>, E. García, R. Mateos, A. Hernández. "Real-time architecture for channel estimation and equalization in broadband PLC". <i>Microprocessors and Microsystems</i>, vol. 65, pp. 121-135, 2019. JCR, Índice de impacto: 1.161. Puesto: 68 de 108 en la categoría Computer Science, Theory &amp; Methods</p> <p><b>Patentes:</b></p> <p>E. García, J. Ureña, <b>F. Nombela</b>, 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.</p> <p><b>Congresos internacionales:</b></p> <p><b>F. Nombela</b>, E. García, J. Ureña, A. Hernández, P. Poudereux. "Robust Synchronization Algorithm for Broadband PLC based on Wavelet-OFDM". <i>Proc. of 2015 IEEE Conference on Emerging Technologies &amp; Factory Automation (ETFA 2015)</i>, pp. 1-7. (ISBN: 978-1-4673-7928-1), Luxembourg, 2015.</p> <p>A. Hernández, E. García, D. Gualda, J. M. Villadangos, S. Gutiérrez, <b>F. Nombela</b>, M. C. Pérez, J. Ureña. "Flexible Ultrasonic Beacon Unit Based on SoC for Local Positioning Systems". <i>Proc. of 2015 International Conference on Indoor Positioning and Indoor Navigation (IPIN 2015)</i>, pp. 1-5. (ISBN: 978-1-4673-8401-8), Banff (Canada), 2015.</p> <p><b>F. Nombela</b>, E. García, A. Hernández. "Preliminary Study between Frequency-Domain Equalizer and O-ASCET for PLC". <i>Proc. of IEEE International Conference on Ubiquitous Wireless Broadband (ICUWB 2017)</i>, pp. 1-5. (ISBN: 978-1-5090-5007-9), Salamanca (Spain), 2017.</p>	

Doctorando	Prieto Honorato, José Carlos
Fecha lectura	22/10/2018
<p><b>Artículos en revistas internacionales:</b></p> <p>J. C. Prieto, C. Croux, and A. R. Jiménez, "RoPEUS: A new robust algorithm for static positioning in ultrasonic systems," <i>Sensors</i>, vol. 9, no. 6, pp. 4211–4229, June 2009. [230]. Factor de impacto (2009): 1.821. Número de citas en Google Scholar (marzo 2018): 11</p> <p>J. C. Prieto, A. R. Jiménez, J. Guevara, J. L. Ealo, F. Seco, J. O. Roa, and F. Ramos, "Performance evaluation of 3D-LOCUS advanced acoustic LPS," <i>IEEE Transactions on Instrumentation and Measurement</i>, vol. 58, no. 8, pp. 2385–2395, August 2009. [107]. Factor de impacto (2009): 1.025 Número de citas en Google Scholar (marzo 2018): 74</p> <p>A. R. Jiménez Ruiz, J. Guevara Rosas, F. Seco Granja, J. C. Prieto Honorato, J. J. Esteve Taboada, V. Mico Serrano, and T. Molina Jimenez, "A real-time tool positioning sensor for machine-tools," <i>Sensors</i>, vol. 9, no. 10, pp. 7622–7647, 2009. [32]. Factor de impacto (2009): 1.821 Número de citas en Google Scholar (marzo 2018): 12</p> <p>A. R. Jiménez, J. C. Prieto, J. L. Ealo, J. Guevara, and F. Seco, "A computerized system to determine the provenance of finds in archaeological sites using acoustic signals," <i>Journal of Archaeological Science</i>, vol. 36, no. 10, pp. 2415–2426, 2009. [106]. Factor de impacto (2009): 1.847 Número de citas en Google Scholar (marzo 2018): 8</p> <p>J. L. Ealo, J. C. Prieto, and F. Seco, "Airborne ultrasonic vortex generation using flexible ferroelectrets," <i>IEEE Transactions on Ultrasonics, Ferroelectrics and Frequency Control</i>, vol. 58, no. 8, pp. 1651–1657, August 2011. [55]. Factor de impacto (2011): 1.694. Número de citas en Google Scholar (marzo 2018): 23</p> <p>A. R. Jiménez, F. Seco, F. Zampella, J. C. Prieto, and J. Guevara, "PDR with a foot-mounted IMU and ramp detection," <i>Sensors</i>, vol. 11, no. 10, pp. 9393–9410, 2011. [22]. Factor de impacto (2011): 1.739. Número de citas en Google Scholar (marzo 2018): 33.</p> <p>A. R. Jiménez Ruiz, F. Seco Granja, J. C. Prieto Honorato, and J. I. Guevara Rosas, "Accurate pedestrian indoor navigation by tightly coupling foot-mounted IMU and RFID measurements," <i>IEEE Transactions on Instrumentation and Measurement</i>, vol. 61, no. 1, pp. 178–189, 2012. [20]. Factor de impacto (2011): 1.214. Número de citas en Google Scholar (marzo 2018): 258.</p> <p>J. Guevara, A. R. Jiménez, J. C. Prieto, and F. Seco, "Error estimation for the linearized autolocalization algorithm," <i>Sensors</i>, vol. 12, no. 3, pp. 2561–2581, 2012. [112]. 8.3 Principales resultados de la tesis 195. Factor de impacto (2011): 1.739. Número de citas en Google Scholar (marzo 2018): 3</p>	

A. R. Jiménez, F. Seco, F. Zampella, J. C. Prieto, and J. Guevara, "Improved heuristic drift elimination with magnetically-aided dominant directions (MiHDE) for pedestrian navigation in complex buildings," *Journal of location based services*, vol. 6, no. 3, pp. 186–210, 2012. [16]. Número de citas en Google Scholar (marzo 2018): 24

J. Guevara, A. R. Jiménez, J. C. Prieto, and F. Seco, "Auto-localization algorithm for local positioning systems," *Ad Hoc Networks*, vol. 10, no. 6, pp. 1090–1100, 2012. [110]. Factor de impacto (2011): 2.110. Número de citas en Google Scholar (marzo 2018): 21.

F. Seco, J. C. Prieto, A. R. Jiménez Ruiz, and J. Guevara, "Compensation of multiple access interference effects in CDMA-based acoustic positioning systems," *IEEE Transactions on Instrumentation and Measurement*, vol. 63, no. 10, pp. 2368–2378, October 2014. [105] Factor de impacto (2014): 1.790. Número de citas en Google Scholar (marzo 2018): 20

#### **Congresos internacionales:**

J. C. Prieto, A. R. Jiménez, J. I. Guevara, J. L. Ealo, F. A. Seco, J. O. Roa, and F. X. Ramos, "Subcentimeter-accuracy localization through broadband acoustic transducers," *IEEE International Symposium on Intelligent Signal Processing*, pp. 929–934, 3-5th October, Alcalá de Henares, Spain 2007. [108]. Número de citas en Google Scholar (marzo 2018): 36

J. C. Prieto, A. R. Jiménez, J. I. Guevara, J. L. Ealo, F. A. Seco, J. O. Roa, and A. D. Koutsou, "Robust regression applied to ultrasound location systems," in *Proceedings of IEEE/ION PLANS 2008*, May 2008, pp. 671–678. [234] Número de citas en Google Scholar (marzo 2018): 5

A. R. Jiménez, F. Seco, C. Prieto, and J. Guevara, "A comparison of pedestrian dead-reckoning algorithms using a low-cost MEMS IMU," in *2009 IEEE International Symposium on Intelligent Signal Processing*, August 2009, pp. 37–42. [14]. Número de citas en Google Scholar (marzo 2018): 365

J. L. Ealo, J. C. Prieto, and F. Seco, "Dynamic response estimation of multilayer ferroelectret-based transducers using lumped-element electromechanical models," in *2009 IEEE International Ultrasonics Symposium*, Sept. 2009, pp. 2754–2757. [54]. Número de citas en Google Scholar (marzo 2018): 8

J. L. Ealo, J. C. Prieto, and F. Seco, "Easy generation of airborne ultrasonic helical wavefronts," in *2011 IEEE International Ultrasonics Symposium*, October 2011, pp. 1735–1738. [56] Número de citas en Google Scholar (marzo 2018): 23

Doctorando	Medina Valdés, Luis
Fecha lectura	19/10/2018
<p><b>Artículos en revistas internacionales:</b></p> <p>Medina, Luis, Jorge Camacho, and Carlos Fritsch. "A Characterization of Ultrasonic Full Angle Spatial Compounding as a Possible Alternative for Breast Cancer Screening." <i>Archives of Acoustics</i> 40.3 (2015): 301-310.</p> <p>N González-Salido, L Medina, JF Cruza, J Camacho. Implementation and evaluation of elastographic techniques. <i>Physics Procedia</i> 63, 97-102 2 2015</p> <p>L Medina-Valdes, J Camacho, N González-Salido, JF Cruza. Resolution of image compounding with a ring array transducer. <i>Physics Procedia</i> 63, 141-146 3 2015.</p> <p>L Medina-Valdés, M Pérez-Liva, J Camacho, JM Udías, JL Herraiz, Multi-modal ultrasound imaging for breast cancer detection. <i>Physics Procedia</i> 63, 134-140</p> <p>Nuria González-Salido, Luis Medina, Jorge Camacho. Full Angle Spatial Compound of ARFI images for breast cancer detection. <i>Ultrasonics</i>, Ed. Elsevier, vol. 71, 2016, pp. 161-171. <a href="http://doi.org/10.1016/j.ultras.2016.06.003">http://doi.org/10.1016/j.ultras.2016.06.003</a>.</p> <p><b>Congresos internacionales:</b></p> <p>L. Medina, N. González-Salido, J. Camacho, M. Pérez-Liva, J.L. Herraiz, J. M. Udías. Refraction Correction in Full Angle Spatial Image Compounding. 2016 Global Medical Engineering Physics Exchanges / Pan American Health Care Exchanges (GMEPE /PAHCE). IEEE Catalog number: CFP1618G-DVD. <a href="https://doi.org/10.1109/GMEPE-PAHCE.2016.7504650">https://doi.org/10.1109/GMEPE-PAHCE.2016.7504650</a></p> <p>M. Pérez-Liva, J. L. Herraiz, N. González-Salido, L. Medina-Valdés, J. Camacho, C. Fritch, J.M. Udías. Ultrasound Computed Tomography for Quantitative Breast Imaging. 2016 Global Medical Engineering Physics Exchanges / Pan American Health Care Exchanges (GMEPE /PAHCE). IEEE Catalog number: CFP1618G-DVD. <a href="https://doi.org/10.1109/GMEPE-PAHCE.2016.7504651">https://doi.org/10.1109/GMEPE-PAHCE.2016.7504651</a>.</p> <p>N. González-Salido, L. Medina, J. Camacho, M. Pérez-Liva, J.L. Herraiz, J. M. Udías. Non Contact Elastographic Techniques. 2016 Global Medical Engineering Physics Exchanges / Pan American Health Care Exchanges (GMEPE /PAHCE). IEEE Catalog number: CFP1618G-DVD. <a href="http://dx.doi.org/10.1109/GMEPE-PAHCE.2016.7504649">http://dx.doi.org/10.1109/GMEPE-PAHCE.2016.7504649</a></p>	

Doctorando	Jiménez Rodríguez, Marco
Fecha lectura	20/07/2018
<p><b>Artículos en revistas internacionales:</b></p> <p><b>M. Jimenez-Rodriguez</b>, E. Monroy, M. Gonzalez-Herraez, F.B. Naranjo Title: “ Ultrafast Fiber Laser Using InN as Saturable Absorber Mirror ” Journal of Lightwave Technology 36 (2175) 2018, Calidad: Índice de impacto: 4.162 Puesto: 13 de 95 en la categoría de Optics</p> <p>L. Monteagudo-Lerma, F.B. Naranjo, S. Valdueza-Felip, <b>M. Jimenez-Rodriguez</b>, E. Monroy, P.A. Postigo, P. Corredera, M. Gonzalez-Herráez Title: “III-nitride-based waveguides for ultrafast all-optical signal processing at 1.55 um”, Physica Status Solidi A-Applications And Materials Science 213 (1269) 2016</p> <p>A. Nunez-Cascajero, <b>M. Jimenez-Rodriguez</b>, E. Monroy, M. Gonzalez-Herráez, F.B. Naranjo Title: “Development of AllInN photoconductors deposited by sputtering” Physica Status Solidi A-Applications And Materials Science 214 (16007) 2017</p> <p><b>M. Jimenez-Rodriguez</b>, L. Monteagudo-Lerma, E. Monroy, M. Gonzalez-Herráez, F.B. Naranjo Title: “Widely power-tunable polarization-independent ultrafast mode-locked fiber laser using bulk InN as saturable absorber” Optics Express 25 (5366) 2017</p> <p>R. Blasco, A. Nuñez-Cascajero, <b>M. Jimenez-Rodriguez</b>, D. Montero, L. Grenet, J Olea, F.B. Naranjo, S. Valdueza-Felip, Title: “Influence of the AllnN Thickness on the Photovoltaic Characteristics of AllnN on Si Solar Cells Deposited by RF Sputtering” Physica status solidi (a). 216 (1800494) 2019</p> <p>L. Monroy, <b>M. Jiménez-Rodríguez</b>, P. Ruterana, E. Monroy, M. González-Herráez and F.B. Naranjo Title: “ Effect of the residual doping on the performance of InN epilayers as saturable absorbers for ultrafast lasers at 1.55µm” Optical Materials Express. 9 (2785) 2019</p> <p>L. Monroy, <b>M. Jiménez-Rodríguez</b>; M. González-Herráez and F.B. Naranjo Title : “High-Quality, InN-Based, Saturable Absorbers for Ultrafast Laser Development” . American Journal of Applied Sciences 10 (7832) 2020</p> <p>F. Gallazzi, <b>F Jimenez-Rodriguez</b>, E. Monroy, P. Corredera, M. González Herráez, F.B. Naranjo, J. D. Ania-Castañón. Title : Sub-250 fs passively mode-locked ultralong ring fibre oscillators. Optics and Laser Technology. 138 (106848) 2021.</p>	



**Congresos internacionales:**

A. Núñez-Cascajero; **M. Jiménez-Rodríguez**; E. Monroy; M. González-Herráez; F. B. Naranjo  
Title: Development of AlInN photoconductors deposited by sputtering Emrs Fall Meeting 2016 Varsovia (Polonia) 19/09/2016 - 22/09/2016

A. Núñez-Cascajero; **M. Jiménez-Rodríguez**; F.J. Sánchez; S. Fernández; M. González-Herráez; F.B. Naranjo  
“Effect of AlN Buffer Layer on the Properties of AlInN Layers Grown on Si(111) by RF-Sputtering”. Int. Workshop on Nitrides (IWN2016) Orlando (Florida) (Estados Unidos) 02/10/2016 - 07/10/2016

**M. Jiménez-Rodríguez**; E. Monroy; P. Corredera, M. González-Herráez; F. B. Naranjo  
Title: Nonlinear optical measurements at telecom wavelength of InN thin films grown by MBE. International Workshop on Nitrides (IWN2016), Orlando (Florida) (Estados Unidos) 02/10/2016 - 07/10/2016

R. Blasco; A. Núñez-Cascajero; **M. Jiménez-Rodríguez**; E. Monroy; F. B. Naranjo; S. Valdueza-Felip.  
“Electrical Simulations of AlInN on Silicon Heterojunctions for Photovoltaic Applications. International Workshop on Nitrides (IWN2016). Orlando (Florida) (Estados Unidos) 02/10/2016 - 07/10/2016

**M. Jiménez-Rodríguez**; L. Monteagudo-Lerma; E. Monroy; M. González-Herráez; F. B. Naranjo, “First Ultrafast Mode-locked Fiber Laser using InN Saturable Absorber at Telecom Wavelength. International Workshop on Nitrides (IWN2016). Orlando (Florida) (Estados Unidos) 02/10/2016 - 07/10/2016

**M. Jiménez-Rodríguez**; L. Monteagudo-Lerma; E. Monroy; F.B. Naranjo; M. González-Herráez  
Title: A New Ultrafast and High Peak Power Fiber Laser operating at 1.5  $\mu\text{m}$  using InN as Saturable Absorber. The Optical Networking and Communication Conference & Exhibition (OFC2017). Los Angeles (Estados Unidos) 19/03/2017 - 23/03/2017

**M. Jiménez-Rodríguez**; F. Gallazzi; J. D. Ania-Castañón; E. Monroy; M. González-Herráez; F. B. Naranjo  
Title: Sub-200 fs mode-locked fiber laser with InN-based SESAM. Conference on Lasers and Electro-Optics/Europe and the European Quantum Electronics Conference (ECLEO 2017). Munich (Alemania) 25/06/2017 - 29/06/2017

F. Gallazzi; **M. Jimenez-Rodriguez**; E. Monroy; P. Corredera; M. González-Herráez; F. B. Naranjo; J. D. Ania-Castañón “Sub-250 fs, 650 kW Peak Power Harmonic ModeLocked Fiber Laser with InN-based SESAM”. 43rd European Conference on Optical Communication. Gotemburgo (Suecia) 17/09/2017 - 21/09/2017

**M. Jimenez-Rodriguez**, L. Monroy, A. Núñez-Cascajero, E. Monroy, M. González-Herráez, F. B. Naranjo  
Title: Study of Absorption Saturation in InN Thin Films through the Z-Scan Technique at 1.55  $\mu\text{m}$ . OSA Advanced Photonics Congress. Zúrich (Suiza) 02/07/2018 - 05/07/2018

F. Gallazzi, **M. Jimenez-Rodriguez**, E. Monroy, P. Corredera, M. González-Herráez, F.B. Naranjo, J.D. Ania-Castañón, “Megawattpeak-power femtosecond ultralong ring fibre laser with InN SESAM. Conference on Lasers and Electro-Optics/Europe and the European Quantum Electronics Conference (ECLEO 2019) Munich (Alemania) 23/06/2019 - 27/06/2019

Doctorando	Romera Carmena, Eduardo
Fecha lectura	21/09/2018
<p><b>Artículos en revistas internacionales:</b></p> <p><b>E. Romera</b>, J.M. Álvarez, L.M. Bergasa, R. Arroyo, “ERFNet: Efficient Residual Factorized ConvNet for Real-time Semantic Segmentation”, in <b>IEEE Transactions on Intelligent Transportation Systems</b>. Vol 19, Issue 1, 263-272, January 2018. doi: 10.1109/TITS.2017.2750080</p> <p>Calidad: <u>2014-2020 George N. Saridis Best Transactions Paper Award</u>. <u>Main publication in GSM (2015-2019) (2016-2020) (2017-2021)</u>. JCR, Posición: Transportation Science &amp; Technology (2017): 5 de 35 (1º cuartil)</p> <p>R. Arroyo, P.F. Alcantarilla, L.M. Bergasa, <b>E. Romera</b>, “Are You ABLE to Perform a Life-Long Visual Topological Localization?”, <b>Autonomous Robots</b>, 42 (3), 665-685. March 2018. doi: 10.1007/s10514-017-9664-7</p> <p>Kailun Yang, Kaiwei Wang, Luis M. Bergasa, <b>Eduardo Romera</b>, Weijian Hu, Dongming Sun, Junwei Sun, Ruiqi Cheng, Tianxue Chen, Elena López, “Unifying Terrain Awareness for the Visually Impaired through Real-time Semantic Segmentation”, in <b>Sensors</b>. Vol 18(5), nº1506, 1-32 (2018). doi:10.3390/s18051506</p> <p>Álvaro Sáez, Luis M. Bergasa, Elena López-Guillén, <b>Eduardo Romera</b>, Miguel Tradacete, Carlos Gómez-Huélamo and Javier del Egado, “Real-time Semantic Segmentation for Fisheye Urban Driving Images based on ERFNet”, in <b>Sensors</b>. Vol 19(3), nº503, 1-20. January 2019. <a href="https://doi.org/10.3390/s19030503">https://doi.org/10.3390/s19030503</a></p> <p>Kailun Yang, Luis M. Bergasa, <b>Eduardo Romera</b>, Kaiwei Wang, “Robustifying Semantic Perception of Traversability across Wearable RGB-Depth Cameras”, in <b>Applied Optics</b>. Vol 58, nº12, 3141-3155. April 2019. <u>Editors’ Pick</u>. doi:10.1364/AO.58.003141</p> <p>Kailun Yang, Xinxin Hu, Luis M. Bergasa, <b>Eduardo Romera</b> and Kaiwei Wang, “PASS: Panoramic Annular Semantic Segmentation”, in <b>IEEE Transactions on Intelligent Transportation Systems</b>. Vol 21, Issue 10, 4171-4185. September 2019. doi:10.1109/TITS.2019.2938965</p>	

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**E. Romera**, L. M. Bergasa, R. Arroyo “A Real-time Multi-scale Vehicle Detection and Tracking Approach for Smartphones”, IEEE Conference on Intelligent Transportation Systems (**ITSC**). Las Palmas de Gran Canaria, Canary Islands, Spain (2015).

**E. Romera**, L. M. Bergasa, R. Arroyo, A. Lázaro, “Need Data for Driver Behaviour Analysis? Presenting the public UAH-DriveSet”, in 19th International IEEE Conference on Intelligent Transportation Systems (**ITSC**), Rio de Janeiro, (Brazil), November 2016. Main publication in GSM (2015-2019) (2016-2020).

E. Romera, J.M<sup>a</sup>. Álvarez, L.M. Bergasa, R. Arroyo, “Efficient ConvNet for Real-time Semantic Segmentation”, in IEEE Intelligent Vehicles Symposium (**IV**), California (USA), June 2017. Best Student Paper Award at the IV2017. Main publication in GSM (2015-2019) (2016-2020) (2017-2021)

**Eduardo Romera**, Luis M. Bergasa, José M. Álvarez and Mohan Trivedi, “Train Here, Deploy There: Robust Segmentation in Unseen Domains”, in IEEE Intelligent Vehicles Symposium (**IV**), Changshu, Suzhou, China, June 2018.

**Eduardo Romera**, Luis M. Bergasa, Kailun Yang, Jose M. Alvarez, Rafael Barea, “Bridging the Day and Night Domain Gap for Semantic Segmentation”, in IEEE Intelligent Vehicles Symposium (**IV**), Paris, France, June 2019.

Doctorando	Yuan, Lei
Fecha lectura	16/10/2018
<p><b>Artículos en revistas internacionales:</b></p> <p><b>L. Yuan</b>, Y. Yang, A. Hernández, L. Shi. “Novel Adaptive Peak Detection Method for Track Circuits Based on Encoded Transmissions”. IEEE Sensors Journal, vol. 18(15), pp. 6224-6234, 2018. JCR, Índice de impacto: 3.076. Puesto: 13 de 61 en la categoría Instruments &amp; Instrumentation.</p> <p><b>L. Yuan</b>, Y. Yang, A. Hernández, L. Shi. “Feature extraction for track section status classification based on UGW signals”. Sensors, vol. 18(4), 1225, pp. 1-22, 2018. JCR, Índice de impacto: 3.031. Puesto: 15 de 61 en la categoría Instruments &amp; Instrumentation.</p> <p><b>L. Yuan</b>, Y. Yang, A. Hernández. “Improvement of High-Voltage Impulses in Track Circuits with Kasami and LS Codes”. International Journal of Circuit Theory &amp; Applications, vol. 46(4), pp. 926-941, 2018. JCR, Índice de impacto: 1.554. Puesto: 172 de 266 en la categoría Electrical and Electronic Engineering.</p> <p><b>Congresos internacionales:</b></p> <p><b>Lei Yuan</b>, Yuan Yang, Á. Hernández. “Track Circuit Improvement with High-Voltage Impulse Encoding”. Proc. of 21th IEEE International Conference on Emeryg Technologies and Factory (ETFA 2016), pp. 1-4. (ISBN:978-1-5090-1314-2), Berlin (Germany), 2016.</p> <p><b>L. Yuan</b>, Y. Yang, A. Hernández. “Improvement of an UGW-based Track Circuit for Operation on Repaired Railway Sections”. Proc. of IEEE International Conference on Ubiquitous Wireless Broadband (ICUWB 2017), pp. 1-5. (ISBN: 978-1-5090-5007-9), Salamanca (Spain), 2017.</p> <p><b>L. Yuan</b>, Y. Yang, A. Hernández, S. Li. “Application of VMD Algorithm in UGW-based Rail Breakage Detection System”. Proc. of 2018 IEEE International Conference on Vehicular Electronics and Safety (ICVES 2018), pp. 41-46. (ISBN: 978-1-5386-3542-1), Madrid (Spain), 2018.</p>	

Doctorando	Pastor Graells, Juan
Fecha lectura	10/07/2018
<p><b>Artículos en revistas internacionales:</b></p> <p>Maria R. Fernandez-Ruiz, <b>Juan Pastor-Graells</b>, HugoF.Martins, AndresGarcia-Ruiz, S.Martin-Lopez, and MiguelGonzalez-Herraez, “Laser Phase-noise Cancelation 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. Calidad: JCR Impact Factor: 4.162 Área: OPTICS Cuartil: Q1 Posición en el área: 13/95</p> <p><b>Juan Pastor-Graells</b>, Javier Nuño, Maria R. Fernández-Ruiz, Andres Garcia-Ruiz, Hugo F. Martins, S. Martin-Lopez, and Miguel Gonzalez-Herraez, “Chirped-pulse Phase-sensitive Reflectometer Assisted by First Order Raman Amplification,” Journal of Lightwave Technology ISSN: 0733-8724 Año de publicación: 2017 Volumen: 35 Número: 21 Páginas: 4677-4683 DOI: 10.1109/JLT.2017.2756558. JCR Impact Factor: 3.652 ENGINEERING, ELECTRICAL &amp; ELECTRONIC Cuartil: Q1 Posición en el área: 44/260</p> <p><b>Juan Pastor-Graells</b>, Luis Romero Cortés, Maria R. Fernández-Ruiz, Hugo F. Martins, José Azaña, S. Martin-Lopez, and Miguel Gonzalez-Herraez “SNR enhancement in high-resolution phase-sensitive OTDR systems using chirped pulse amplification concepts,” Optics Letters, vol.42,no.9,pp.1728-1731,2017. DOI:10.1364/OL.42.001728 . Calidad: JCR Impact Factor: 3.589 Área: OPTICS Cuartil: Q1 Posición en el área: 14/94</p> <p>Maria R. Fernández-Ruiz, Hugo F. Martins, <b>Juan Pastor-Graells</b>, S. Martin-Lopez, and Miguel Gonzalez-Herraez, “Phase-sensitive OTDR probe pulse shapes robust against modulation-instability fading” Optics Letters, vol.41, no.24, pp.5756–5759,2016. DOI: 10.1364/OL.41.005756. Calidad: JCR Impact Factor: 3.416 Área: OPTICS Cuartil: Q1 Posición en el área: 15/92</p> <p><b>Juan Pastor-Graells</b>, 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,” OpticsExpress,vol.24,no. 12, pp.13121-13133, 2016. Calidad: JCR Impact Factor: 3.307 Área: OPTICS Cuartil: Q1 Posición en el área: 17/92</p>	

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- 1- **Juan Pastor-Graells**, Luis Romero Cortés, Hugo F. Martins, María R. Fernández-Ruiz, José Azaña, Sonia Martin-Lopez, Miguel Gonzalez-Herraez, “20 dB SNR enhancement in phase-sensitive OTDR using pulse stretching and recompression”, Proc.ofSPIE10323, 25<sup>th</sup> International Conference on Optical Fiber Sensors, 103230R (April23,2017).
- 2- 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, 25<sup>th</sup> InternationalConferenceonOpticalFiberSensors,1032302(April23,2017).
- 3- **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 ,25<sup>th</sup> International Conference on Optical Fiber Sensors, 103238T (April23,2017).
- 4- María R. Fernández-Ruiz, Hugo F.Martins, **Juan Pastor-Graells**, Sonia Martin-Lopez, Miguel Gonzalez-Herraez, “ Impact of the probe pulse shape on the performance of phase sensitive optical time-domain reflectometry sensors,” Proc.of SPIE10323, 25<sup>th</sup> International Conference on Optical Fiber Sensors, 103236P(April23,2017).
- 5- 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.
- 6- **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.
- 7- **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, SixthEuropean Workshop on Optical Fibre Sensors, 99162Q (May30,2016).