

**DEPARTAMENTO DE**  
**TECNOLOGIA ELECTRONICA**

## **DEPARTAMENTO DE TECNOLOGIA ELECTRONICA**

### **Actividades de investigación**

#### **Tesis Doctorales**

- Contribución a la ecualización de señal en sensores basados en modulación SIGMA-DELTA.  
*Autor:* CONESA-PERALEJA, L.  
*Director/Codirectores:* PATON, S.  
*Universidad:* UNIVERSIDAD CARLOS III DE MADRID  
*Año:* 2018
  
- Contribution to time domain readout circuits design for multi-standard sensing system for low voltage supply and high-resolution applications  
*Autor:* PEREZ, J.  
*Director/Codirectores:* PREFASI, E.  
*Universidad:* UNIVERSIDAD CARLOS III DE MADRID  
*Año:* 2018
  
- Data acquisition techniques based on frequency - encoding applied to capacitive MEMS microphones.  
*Autor:* CARDENAS, F.  
*Director/Codirectores:* HERNANDEZ, L.  
*Universidad:* UNIVERSIDAD CARLOS III DE MADRID  
*Año:* 2018
  
- Identificación y localización de múltiples fuentes de descarga parcial usando análisis de componentes independientes  
*Autor:* BOYA, C.A.  
*Director/Codirectores:* RUIZ-LLATA, M.  
*Universidad:* UNIVERSIDAD CARLOS III DE MADRID  
*Año:* 2018
  
- Novel Fault Tolerant Multi-Bit Upset (MBU) Error-Detection and Correction (EDAC) architecture  
*Autor:* JIMENEZ, A.  
*Director/Codirectores:* PLEITE, J.  
*Universidad:* UNIVERSIDAD CARLOS III DE MADRID  
*Año:* 2018
  
- Novel fault tolerant Multi-Bit Upset (MBU) Error-Detection and Correction (EDAC) architecture  
*Autor:* JIMENEZ, A.  
*Director/Codirectores:* PLEITE, J.  
*Universidad:* UNIVERSIDAD CARLOS III DE MADRID  
*Centro donde se presentó:* ESCUELA POLITECNICA SUPERIOR  
*Año:* 2018

- Photonic integrated circuits signal sources for millimeter-wave wireless links

*Autor:* LO, M.C.

*Director/Codirectores:* CARPINTERO DEL, G.; PhD Robinson Cruzoe Guzmán Martínez

*Universidad:* UNIVERSIDAD CARLOS III DE MADRID

*Año:* 2018

## **Publicaciones y actividades de difusión de resultados**

### **Publicaciones en revistas científicas internacionales**

- ALGORRI, J.F.; ZOGRAFOPOULOS, D.; FERRARO, A.; GARCIA, B.; VERGAZ, R.; BECCHERELLI, R.; SANCHEZ, J.M.  
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Infiltrated Photonic Crystal Fibers for Sensing Applications, *SENSORS*, Vol. 18, Núm. 12, 2018, SUIZA.
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Photonic Integrated Fully Tunable Comb Generator Cascading Optical Modulators, *JOURNAL OF LIGHTWAVE TECHNOLOGY*, Vol. 36, Núm. 23, 2018, pp. 5685-5689, ESTADOS UNIDOS DE AMERICA.
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ECG-RNG: a random number generator based on ECG signals and suitable for securing wireless sensor networks, *SENSORS*, Vol. 18, Núm. 9 (2747), 2018, pp. 1-15, SUIZA.

- CARPINTERO DEL, G.; HISATAKE, S.; FELIPE, D.D.; PhD Robinson Cruzoe Guzmán Martínez; NAGATSUMA, T.; KEIL, N.  
Wireless Data Transmission at Terahertz Carrier Waves Generated from a Hybrid InP-Polymer Dual Tunable DBR Laser Photonic Integrated Circuit, *Scientific Reports*, Vol. 8, 2018, REINO UNIDO.
- DE VARGAS, I.M.; ERENAS, M.M.; CAPITAN, L.F.; FERNANDEZ, M.D.; N. Lopez-Ruiz; COLEMAN, S.; DIAMOND, D.  
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- GARCIA, M.; ELOY-GARCIA, J.; ALONSO-MARTINEZ, J.; PEÑA, A.  
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## **Ponencias y Comunicaciones a congresos**

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## **Propiedad Industrial/intelectual**

- *Inventores:* PUENTE, L.A.; RUIZ, M.B.; SANCHEZ, J.M.; GONZALEZ, I.  
*AccEvent*  
*Tipo:* PROTECCIÓN DE SOFTWARE  
*Titular:* UNIVERSIDAD CARLOS III DE MADRID  
*Número Registro:* 16/2018/3327  
*Fecha Solicitud:* 15/01/2018
- *Inventores:* SAN SEGUNDO, R.; SAINZ DE BARANDA, C.; MARIAN BLANCO-RUIZ; LARRABEITI, D.; URUEÑA, M.; ROBREDO, J.C.; PELAEZ, C.; GALLARDO-ANTOLÍN, A.; MINGUEZ, A.; MIRANDA, J.A.; CANABAL, M.F.; PORTELA-GARCIA, M.; PEREZ, A. I.; GARCIA SOUTO, J.A.; LOPEZ, C.; OLIAS, E.; GARCIA-VALDERAS, M.; RIESGO, T.; LANZA, J.M.; MARINO, R.  
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*Tipo:* PATENTE  
*Titular:* UNIVERSIDAD CARLOS III DE MADRID  
*Número Solicitud:* P201831130  
*Fecha Solicitud:* 21/11/2018  
*Países:* ESPAÑA

## **Actividades de formación y movilidad de personal investigador**

### **Estancias en otros centros**

- HONORIO MARTIN GONZALEZ  
*Título:* Diseño e implementación de un PUF robusto ante cambios en las condiciones de operación  
*Centro Externo:* TU Delft  
*País:* HOLANDA - PAISES BAJOS  
*Duración:* 01/07/2018 a 21/12/2018.
- ROBINSON CRUZOE GUZMAN MARTINEZ  
*Título:* Estancia de investigación en el Instituto Fraunhofer Heinrich Hertz HHI  
*Centro Externo:* Heinrich Hertz Institute HHI

*País: ALEMANIA*

*Duración: 01/08/2018 a 30/09/2018.*