

DEPARTAMENTO DE CIENCIA E
INGENIERIA DE MATERIALES E
INGENIERIA QUIMICA

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MATERIALES E INGENIERIA QUIMICA**

Actividades de investigación

Tesis Doctorales

- A novel antibacterial sol-gel coating for prosthetic devices
Autor: GARCIA, A.
Director/Codirectores: JIMENEZ, A.
Universidad: UNIVERSIDAD CARLOS III DE MADRID
Año: 2018

- Aerogeles de grafeno y nanotubos de carbono. Nuevos materiales para el apantallamiento electromagnético
Autor: GONZALEZ, M.
Director/Codirectores: BASELGA, J.; POZUELO DE, J.
Universidad: UNIVERSIDAD CARLOS III DE MADRID
Año: 2018

- Design of high temperature cobalt-based alloys processed by powder metallurgy route
Autor: R. Casas
Director/Codirectores: CAMPOS, M.; GALVEZ, F.R.
Universidad: UNIVERSIDAD CARLOS III DE MADRID
Año: 2018

- Design and characterization of modified powder metallurgy titanium surfaces obtained by β -Stabilizing elements diffusion treatments for biomedical applications.
Autor: UREÑA, J.M.
Director/Codirectores: JIMENEZ, A.; GORDO, E.
Universidad: UNIVERSIDAD CARLOS III DE MADRID
Año: 2018

- Diseño y utilización de electrolitos gel para estudios electroquímicos de corrosión en superficies metálicas de geometría compleja
Autor: MONRRABAL, G.
Director/Codirectores: GUZMAN, S.; BAUTISTA, M. A.
Universidad: UNIVERSIDAD CARLOS III DE MADRID
Año: 2018

- Durabilidad y biodeterioro de materiales compuestos de matriz polimérica reforzados con fibras naturales: Efecto de tratamientos de plasma
Autor: ENCISO, M.B.

Director/Codirectores: MARTINEZ, M.A.; ABENOJAR, J.

Universidad: UNIVERSIDAD CARLOS III DE MADRID

Año: 2018

- Geolocalización posnewtoniana, mediante TDOA-FDOA, de radiotransmisores pasivos situados en el entorno de la tierra.
Autor: CLARES, F. J.
Director/Codirectores: GAMBI, J. M.; MING-SHA TUNG, M.
Universidad: UNIVERSIDAD CARLOS III DE MADRID
Año: 2018

- Nuevos recubrimientos sol-gel para la protección activa de aleaciones de magnesio
Autor: GARCIA, F.R.
Director/Codirectores: JIMENEZ, A.; GALVAN SIERRA, J.C.
Universidad: UNIVERSIDAD CARLOS III DE MADRID
Año: 2018

- Preparación y caracterización de nuevos materiales nanocompuestos termoplásticos
Autor: TENO, J.
Director/Codirectores: GONZALEZ, F.J.
Universidad: UNIVERSIDAD CARLOS III DE MADRID
Año: 2018

- Preparación de nanocomposite ZnO/MWCNT's mediante Spray pirolisis
Autor: DÍAZ, N.
Director/Codirectores: RABANAL, M.E.; MARTÍNEZ, J.; ROBLES, M.J.
Centro donde se presentó: Benemérita Autónoma de Puebla - BUAP
Año: 2018

- Procesamiento y caracterización de materiales porosos de fases MAX.
Autor: VELASCO, B.
Director/Codirectores: TSIPAS, S.A.
Universidad: UNIVERSIDAD CARLOS III DE MADRID
Año: 2018

- Towards general relativity through parametrized theories
Autor: MARGALEF, J.
Director/Codirectores: VILLASEÑOR, E. J. S.; BARBERO, J.F.
Universidad: UNIVERSIDAD CARLOS III DE MADRID
Año: 2018

Publicaciones y actividades de difusión de resultados

Publicaciones en revistas científicas nacionales

- ENCISO, M.B.; LOPEZ DE ARMENTIA, S.; ABENOJAR, J.; MARTINEZ, M.A.
Influencia del tratamiento superficial en la resistencia y adhesión entre fibras naturales de lino y una matriz termoplástica, *MATERIALES COMPUESTOS: REVISTA DE LA ASOCIACIÓN ESPAÑOLA DE MATERIALES COMPUESTOS*, Vol. 2, Núm. 3, 2018, pp. 40-43, ESPAÑA.

Publicaciones en revistas científicas internacionales

- ABENOJAR, J.; DEL REAL, J.C.; BALLESTEROS, Y.; MARTINEZ, M.A.
Kinetics of curing process in carbon/epoxy nano-composites, *IOP Conference Series: Materials Science and Engineering*, Vol. 369, 2018, pp. 012011-1-012011-7.
- ALCANTARA, A.; GARCIA, A.; JIMENEZ, A.
Electrochemical study of the synergic effect of phosphorus and cerium additions on a sol-gel coating for Titanium manufactured by powder metallurgy, *PROGRESS IN ORGANIC COATINGS*, Vol. 124, 2018, pp. 267-274, SUIZA.
- ALCANTARA, A.; GARCIA, A.; JIMENEZ, A.
Electrochemical study of the synergic effect of phosphorus and cerium additions on a sol-gel coating for Titanium manufactured by powder metallurgy, *PROGRESS IN ORGANIC COATINGS*, Vol. 124, 2018, pp. 267-274, SUIZA.
- ALVAREDO, P.; ESCRIBANO, F.J.; FERRARI, B.; SÁNCHEZ-HERENCIA, A.J.; GORDO, E.
Steel binder cermets processed by combination of colloidal processing and powder metallurgy, *INTERNATIONAL JOURNAL OF REFRactory METALS & HARD MATERIALS*, Vol. 74, 2018, pp. 1-6, REINO UNIDO.
- ALVAREDO, P.; GORDO, E.; BRUNA, P.; CRESPO, D.
Influence of carbon content on microstructure and properties of a steel matrix cermet, *INTERNATIONAL JOURNAL OF REFRactory METALS & HARD MATERIALS*, Vol. 75, 2018, pp. 78-84, REINO UNIDO.
- AVILES, I.; FERNANDEZ, P.; ELISABETH, S.A.; SGOBBA, S.; LUNT, A.; BOYER, C.; RUIZ, E.M.
Secondary Phases Quantification and Fracture Toughness at Cryogenic Temperature of Austenitic Stainless Steel Welds for High-Field Superconducting Magnets, *IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY*, Vol. 28, 2018, ESTADOS UNIDOS DE AMERICA.
- BARBERO, F.; FERREIRO, A.; NAVARRO, J.; VILLASEÑOR, E. J. S.
Adiabatic expansions for Dirac fields, renormalization, and anomalies, *PHYSICAL REVIEW D*, Vol. 98, 2018, ESTADOS UNIDOS DE AMERICA.
- BARBERO, J.F.; MARGALEF, J.; VILLASEÑOR, E. J. S.
On the distribution of the eigenvalues of the area operator in loop quantum gravity, *CLASSICAL AND QUANTUM GRAVITY*, Vol. 35, Núm. 6, 2018, REINO UNIDO.
- BOLZONI, L.; RUIZ, E.M.; GORDO, E.
Joint Effect of Steel Addition and Press-and-Sinter on the Properties of Low-Cost PM Ti Alloys, *Key engineering materials*, Vol. 770, 2018, pp. 248-254, SUIZA.
- BONILLA, L.L.; TRENADO, C.
Crossover between parabolic and hyperbolic scaling, oscillatory modes, and resonances near flocking, *PHYSICAL REVIEW E*, Vol. 98, Núm. 6, 2018, ESTADOS UNIDOS DE AMERICA.
- CAMPOS, A.; SAN MIGUEL, V.; BASELGA, J.

Magneto-Mechanical Surfaces Design, *CHEMICAL RECORD*, 2018, ALEMANIA.

- CARTON, M.; CAMPOS, M.; FREUND, L.P.; KOLB, M.; NEUMEIER, S.; GOEKEN, M.; TORRALBA, J.M.
Microstructure and compression strength of Co-based superalloys hardened by gamma' and carbide precipitation, *MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING (MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROST)*, Vol. 734, 2018, pp. 437-444, SUIZA.
- DIOS, M.D.; KRALEVA, I.; GONZÁLEZ, Z.; ALVAREDO, P.; FERRARI, B.; GORDO, E.; BERMEJO, R.
Mechanical characterization of Ti(C,N)-based cermets fabricated through different colloidal processing routes, *JOURNAL OF ALLOYS AND COMPOUNDS*, Vol. 732, 2018, pp. 806-817, SUIZA.
- EGAÑA, A.M.D.; TARDIO, M. M.; MUÑOZ SANTIUSTE, J. E.; TORRE, C.; VAREZ, A.; CANTELAR, E.
Spectroscopy and Judd-Ofelt analysis of Er³⁺ ions in Li₅La₃Nb₂O₁₂ garnet-type ceramic powder, *JOURNAL OF LUMINESCENCE*, Vol. 202, 2018, pp. 232-238, HOLANDA - PAISES BAJOS.
- EGAÑA, A.M.D.; TORRE, C.; TARDIO, M. M.; VAREZ, A.; MUÑOZ SANTIUSTE, J. E.
Structural, morphology and luminescence study of Er³⁺-doped garnet-type Li₅La₃Nb₂O₁₂ electrolytes as a potential new phosphor, *CERAMICS INTERNATIONAL*, 2018, pp. 18969-18977, REINO UNIDO.
- ESSEN, J.; RUIZ, M.; JENKINS, L.; CARRETERO, M.; BIMIR, B.
Parameter dependence of high-frequency nonlinear oscillations and intrinsic chaos in short GaAs/(Al, Ga)As superlattices, *CHAOS*, Vol. 28, Núm. 4, 2018, ESTADOS UNIDOS DE AMERICA.
- FERNANDEZ, M.; VELASCO, F.J.; BAUTISTA, M. A.
Effect on wear resistance of nanoparticles addition to a powder polyester coating through ball milling, *Journal of Coatings Technology and Research*, Vol. 15, 2018, pp. 771-779, ESTADOS UNIDOS DE AMERICA.
- GOMEZ, L.S.; SIERRA, A.; QUINTANA, P.; RABANAL, M.E.; FORT, R.
Correlation between microstructure and cathodoluminescence properties of Mg(OH)₂ (brucite) nanoparticles: effect of synthesis method, *CRYSTENGCOMM*, Vol. 20, 2018, pp. 5632-5640.
- GONZALEZ, M.; POZUELO DE, J.; BASELGA, J.
Electromagnetic Shielding Materials in GHz Range, *CHEMICAL RECORD*, 2018, ALEMANIA.
- GONZALEZ, V.; VEGA, S.M.; MORELOS-GOMEZ, A.; FUJISAWA, K.; MORINOBU, E.; MARTIN, O.; BASELGA, J.; TERRONES, M.
H₂O₂/UV layer-by-layer oxidation of multiwall carbon nanotubes: The "onion effect" and the control of the degree of surface crystallinity and diameter, *CARBON*, Vol. 139, 2018, pp. 1027-1034, ESTADOS UNIDOS DE AMERICA.
- IORIO, M.; SANTARELLI, M.L.; GONZALEZ, G.; GONZALEZ, F.J.
Surface modification and characterization of basalt fibers as potential reinforcement of concretes, *APPLIED SURFACE SCIENCE*, Vol. 417, Part A, 2018, pp. 1248-1256, HOLANDA - PAISES BAJOS.

- IORIO, M.; TENO, J.; NICOLAS, M.D.; GARCIA, R.; PELAEZ, V.H.; GONZALEZ, G.; GONZALEZ, F.J.
Conformational changes on PMMA induced by the presence of TiO₂ nanoparticles and the processing by Solution Blow Spinning, *COLLOID AND POLYMER SCIENCE*, Vol. 296, Núm. 3, 2018, pp. 461-469, ALEMANIA.
- LOPEZ DE ARMENTIA, S.; PANTOJA, M.; ABENOJAR, J.; MARTINEZ, M.A.
Development of Silane-Based Coatings with Zirconia Nanoparticles Combining Wetting, Tribological, and Aesthetical Properties, *Coatings*, Vol. 8, Núm. 10, 2018, SUIZA.
- LOPEZ, L.F.; CARPIO, A.; CARRETERO, M.; DURO, G.; NEGREANU, M.; TERRAGNI, F.
A convergent numerical scheme for integrodifferential kinetic models of angiogenesis, *JOURNAL OF COMPUTATIONAL PHYSICS*, Vol. 375, 2018, pp. 1270-1294, ESTADOS UNIDOS DE AMERICA.
- LOPEZ, L.F.; MOMPO, E.G.; RUIZ, M.; CARRETERO, M.; ZHANG, Y.
Coherence Resonance and Stochastic Resonance in an Excitable Semiconductor Superlattice, *PHYSICAL REVIEW LETTERS*, Vol. 121, 2018, ESTADOS UNIDOS DE AMERICA.
- LV, J.P.; DENG, Y.; JESPER, L.; SALAS, J.
The three-state Potts antiferromagnet on plane quadrangulations, *Journal of Physics A-Mathematical and Theoretical*, 2018, REINO UNIDO.
- LV, J.P.; DENG, Y.; SALAS, J.; JACOBSEN, L.; SOKAL, A.
Duality and the universality class of the three-state Potts antiferromagnet on plane quadrangulations, *PHYSICAL REVIEW E*, Vol. 97, 2018, ESTADOS UNIDOS DE AMERICA.
- MARTINEZ, C.S.; ALONSO, J.; VALDÉS, F.; SEABRA, A.
Highly integrated autonomous lab-on-a-chip device for on-line and in situ determination of environmental chemical parameters, *LAB ON A CHIP*, 2018, pp. 1884-1890, REINO UNIDO.
- MARTINEZ, M.A.; ABENOJAR, J.; ENCISO, M.B.; LOPEZ DE ARMENTIA, S.
Infiltration behaviour of liquids over fibres or woven, *IOP Conference Series: Materials Science and Engineering*, Vol. 369, 2018, pp. 012012-1-012012-7.
- MARTINEZ, M.A.; ABENOJAR, J.; LOPEZ DE ARMENTIA, S.
Environmentally Friendly Plasma Activation of Acrylonitrile-Butadiene-Styrene and Polydimethylsiloxane Surfaces to Improve Paint Adhesion, *Coatings*, Vol. 8, Núm. 12, 2018, SUIZA.
- MATULA, G.; TOMICZEK, B.; KROL, M.; SZATKOWSKA, A.; SOTOMAYOR, M.E.
Application of thermal analysis in the selection of polymer components used as a binder for metal injection moulding of Co-Cr-Mo alloy powder, *JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY*, Vol. 134, 2018, pp. 391-399, HUNGRÍA.
- MENDOZA, C.; GONZÁLEZ, Z.; GORDO, E.; FERRARI, B.; CASTRO, Y.
Protective nature of nano-TiN coatings shaped by EPD on Ti substrates, *JOURNAL OF THE EUROPEAN CERAMIC SOCIETY*, Vol. 38, Núm. 2, 2018, pp. 495-500, REINO UNIDO.
- MOMPO, E.G.; RUIZ, M.; CARRETERO, M.; GRAHN, H.T.; ZHANG, Y.; LOPEZ, L.F.

Coherence Resonance and Stochastic Resonance in an Excitable Semiconductor Superlattice, *PHYSICAL REVIEW LETTERS*, Núm. 8, 2018, pp. 086805-1-086805-6, ESTADOS UNIDOS DE AMERICA.

- MONREAL, P.; ISASI, J.R.; GONZALEZ, F.J.; OLMOS, D.; GONZALEZ, G. Cyclodextrin-Grafted TiO₂ Nanoparticles: Synthesis, Complexation Capacity, and Dispersion in Polymeric Matrices, *Nanomaterials*, Vol. 8, Núm. 9, 2018, SUIZA.
- MONRRABAL, G.; BAUTISTA, M. A.; VELASCO, F.J.; RAMIREZ, B.; CANO, E. Non-Destructive Electrochemical Testing for Stainless-Steel Components with Complex Geometry Using Innovative Gel Electrolytes, *Metals*, Vol. 8, 2018.
- MONRRABAL, G.; RAMIREZ, C.; BAUTISTA, M. A.; VELASCO, F.J.; CANO, E. Non-Destructive Electrochemical Testing for Stainless-Steel Components with Complex Geometry Using Innovative Gel Electrolytes, *Metals*, Vol. 8, Núm. 7, 2018.
- MORALES, L.; DIEDERICHS, S.; BOEHME, L.; GORDO, E.; HEBESTREIT, A.; KERSCHER, E. Method for the Detection of Grain Boundaries in alpha Ti-Based Alloys by means of Polarized Light Microscopy and Image Processing in MATLAB, *PRAKTISCHE METALLOGRAPHIE-PRACTICAL METALLOGRAPHY*, Vol. 55, Núm. 10, 2018, pp. 678-692, ALEMANIA.
- NADERIKALALI, E.; MONTES, A.; WANG, X.; ZHANG, L.; ENTEZAR, M.; LI, Z.; WANG, D.Y. Effect of phytic acid-modified layered double hydroxide on flammability and mechanical properties of intumescent flame retardant polypropylene system, *FIRE AND MATERIALS*, Vol. 42, Núm. 2, 2018, pp. 213-220, REINO UNIDO.
- OLMOS, D.; PONTES, G.M.; CORRAL, A.; GONZALEZ, G.; GONZALEZ, F.J. Preparation and Characterization of Antimicrobial Films Based on LDPE/Ag Nanoparticles with Potential Uses in Food and Health Industries, *Nanomaterials*, Vol. 8, Núm. 2, 2018, SUIZA.
- PAINULY, D.; MOGHA, N.K.; SINGHAL, R.; KANDWAL, P.; MASRAM, D.T.; RABANAL, M.E.; NAGPURE, I.M. The modification in the photo-physical properties via transformation of synthetic dihydrated Znq(2) to anhydrous (Znq(2))(4) tetramer by sublimation process, *OPTICAL MATERIALS*, Vol. 82, 2018, pp. 175-189, HOLANDA - PAISES BAJOS.
- PEÑA, J.; SAN MIGUEL, V.; CABANELAS, J. C.; RODRIGUES, D.F. Biological Degradation and Biostability of Nanocomposites Based on Polysulfone with Different Concentrations of Reduced Graphene Oxide, *MACROMOLECULAR MATERIALS AND ENGINEERING*, Vol. 303, Núm. 2, 2018, ALEMANIA.
- PRIETO, E.M.; CALDERON, R.O.; KONEGGER, T.; GORDO, E.; GIERL-MAYER, C.; SHELK, S.; GUO, S.; DANNINGER, H.; MILENKOVIC, S.; ALVAREDO, P. Processing of a new high entropy alloy: AlCrFeMoNiTi, *POWDER METALLURGY*, Vol. 61, Núm. 3, 2018, pp. 258-265, REINO UNIDO.
- R. Casas; GALVEZ, M.; CAMPOS, M. Microstructural development of Powder Metallurgy Cobalt-based superalloys processed by Field Assisted Sintering Techniques (FAST), *MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING (MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROST)*, Vol. 724, 2018, pp. 461-468,

SUIZA.

- ROBLES-AGUILA, M.J.; LUNA-LOPEZ, J.A.; HERNÁNDEZ DE LA LUZ, A.D.; RABANAL, M.E.
Synthesis and Characterization of Nanocrystalline ZnO Doped with Al³⁺ and Ni²⁺ by a Sol-Gel Method Coupled with Ultrasound Irradiation, *Crystals*, Vol. 8, Núm. 11, 2018, SUIZA.
- SEGURA, E.A.; OLMOS, D.; LORENTE, M.A.; VÉLAZ, I.; GONZALEZ, F.J.
Preparation and Characterization of Polymer Composite Materials Based on PLA/TiO₂ for Antibacterial Packaging, *Polymers*, Vol. 10, Núm. 12, 2018, SUIZA.
- SEGURA, E.A.; OLMOS, D.; LORENTE, M.A.; VÉLAZ, I.; GONZALEZ, F.J.
Preparation and Characterization of Polymer Composite Materials Based on PLA/TiO₂ for Antibacterial Packaging, *Polymers*, Vol. 10, Núm. 12, 2018, SUIZA.
- SHAO, Z.; LI, X.; ZHU, J.; ZHANG, Y.; LOPEZ, L.F.
Fast Detection of a Weak Signal by a Stochastic Resonance Induced by a Coherence Resonance in an Excitable GaAs/Al_{0.45}Ga_{0.55}As Superlattice, *PHYSICAL REVIEW LETTERS*, 2018, ESTADOS UNIDOS DE AMERICA.
- SOTOMAYOR, M.E.; BUCHELI, W.O.; LEVENFELD, B.; VAREZ, A.; SANCHEZ, J.Y.; AMARILLA, J.M.
Additive-free Li₄Ti₅O₁₂ thick electrodes for Li-ion batteries with high electrochemical performance, *Journal of Materials Chemistry A*, Vol. 14, 2018, pp. 5952-5961, REINO UNIDO.
- TORRE, C.; VAREZ, A.; APPETECCHI, G.; ULISSI, U.; VARZI, A.; PASSERINE, S.
Na₃Si₂Y_{0.16}Zr_{1.84}PO₁₂-ionic liquid hybrid electrolytes: An approach for realizing solid-state sodium-ion batteries?, *JOURNAL OF POWER SOURCES*, 2018, pp. 157-163, HOLANDA - PAISES BAJOS.
- UREÑA, J.M.; TEJADO, E.; PASTOR, J.Y.; VELASCO, F.J.; TSIPAS, S.A.; JIMENEZ, A.; GORDO, E.
Role of beta-stabilizing elements on the microstructure and mechanical properties evolution of modified PM Ti surfaces designed for biomedical applications, *POWDER METALLURGY*, Vol. 61, Núm. 2, 2018, pp. 90-99, REINO UNIDO.
- UREÑA, J.M.; TSIPAS, S.A.; JIMENEZ, A.; GORDO, E.; DETSCH, R.; BOCCACCINI, A.R.
In-vitro study of the bioactivity and cytotoxicity response of Ti surfaces modified by Nb and Mo diffusion treatments, *SURFACE & COATINGS TECHNOLOGY*, Vol. 335, 2018, pp. 148-158, SUIZA.
- UREÑA, J.M.; TSIPAS, S.A.; JIMENEZ, A.; GORDO, E.; DETSCH, R.; BOCCACCINI, A.R.
Cellular behaviour of bone marrow stromal cells on modified Ti-Nb surfaces, *MATERIALS & DESIGN*, Vol. 140, 2018, pp. 452-459, REINO UNIDO.
- UREÑA, J.M.; TSIPAS, S.A.; PIRES, A.M.; TOPTAN, F.; GORDO, E.; JIMENEZ, A.
Corrosion and tribocorrosion behaviour of beta-type Ti-Nb and Ti-Mo surfaces designed by diffusion treatments for biomedical applications, *CORROSION SCIENCE*, Vol. 140, 2018, pp. 51-60, REINO UNIDO.
- VELASCO, B.; GORDO, E.; HU, L.; RADOVIC, M.; TSIPAS, S.A.

Influence of porosity on elastic properties of Ti₂AlC and Ti₃SiC₂ MAX phase foams, *JOURNAL OF ALLOYS AND COMPOUNDS*, Vol. 764, 2018, pp. 24-35, SUIZA.

Ponencias y Comunicaciones a congresos

- EGAÑA, A.M.D.; TORMO-MARQUEZ, V.; TORRENTE, E. A.; MUÑOZ SANTIUSTE, J. E.; OLIVARES, J.; TARDIO, M. M.
Swift heavy ion irradiation induces enhancement in electrical conductivity of LiTaO₃ and LiNbO₃ crystals; en: Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms (International Conference on Radiation Effects in Insulators (REI-17), July 2-7, 2017 in Versailles, France), ELSEVIER, B.V, HOLANDA - PAISES BAJOS, 2018.
- FERNANDEZ, M.; VELASCO, F.J.; BAUTISTA, M. A.
Effect on wear resistance of nanoparticles addition to a powder polyester coating through ball milling; en: Journal of Coatings Technology and Research (13th Coatings Science International Conference, COSI 2017), SPRINGER, ESTADOS UNIDOS DE AMERICA, 2018.
- GALLEGUERO CABO, D.; SANCHEZ, M.; GALERA, A.; BASELGA, J.; ORAEVSKY, A.A.; LAMELA, H.
Laser generated ultrasound by using high power diode lasers and PDMS composite films for ultrasound imaging, Laser Ultrasonics 2018, Nottingham, REINO UNIDO, 2018.
- GONZALEZ, F.J.
Preparación y Caracterización de Materiales Compuestos e Interfases: Una Humilde Mirada desde Madrid, VI Congreso Internacional de Mantenimiento Industrial 2018, Cuitláhuac, MEXICO, 2018.
- GONZALEZ, F.J.; IORIO, M.; OLMOS, D.; SANTARELLI, M.
Fluorescence Study of the Hydrolytic Degradation Process of Polysiloxane Modifiers for Basalt Fibers, 9th International Conference Times of Polymers (TOP) & Composites, Ischia, ITALIA, 2018.
- GONZALEZ, F.J.; OLMOS, D.; IORIO, M.; TENO, J.; RODRIGUEZ, A.
Preparation and Characterization of Submicrometric Fibers of Nanocomposites Based on PVDF filled with CuNp; en: AIP Conference Proceedings vol. 1981, issue 1, 020160 (2018), AMERICAN INSTITUTE OF PHYSICS, ESTADOS UNIDOS DE AMERICA, 2018.
- GONZALEZ, F.J.; TENO, J.; OLMOS, D.; IORIO, M.
Preparation and characterization of Submicrometric Fibers of Nanocomposites Based on PVDF with CuNp, 9th International Conference Times of Polymers (TOP) & Composites, Ischia, ITALIA, 2018.
- GONZALEZ, F.J.; TENO, J.; SORRENTINO, A.; GORRASI, G.
Preparation and Characterization of Thin Fibers of EVA Filled with Ag Nanoparticles, 9th International Conference Times of Polymers (TOP) & Composites, Ischia, ITALIA, 2018.
- GONZALEZ, L.; MUÑOZ, L.; FLORES, G.; SALAS, G.; RABANAL, M.E.
Photocatalyst based on hybrid nanostructures of metal oxides; en: Serbian Ceramic Society Conference: Advanced Ceramics and Application VII: programa and the book of abstracts, SERBIAN CERAMIC SOCIETY, REPUBLICA DE SERBIA, 2018.
- IORIO, M.; OLMOS, D.; SANTARELLI, M.; GONZALEZ, F.J.
Fluorescence Study of the Hydrolytic Degradation Process of Polysiloxane Modifiers for Basalt Fibers;

en: AIP Conference Proceedings, vol. 1981, issue 1, 020054 (2018), AMERICAN INSTITUTE OF PHYSICS, ESTADOS UNIDOS DE AMERICA, 2018.

- JIMENEZ, A.; GARCIA, A.; AGUILERA, J.J.; ESTEBAN, J.; GONZALEZ, Y.
A novel antibacterial sol-gel coating for prosthetic devices; en: BIOMAT'2018: VII Congreso Internacional de Biomateriales: libro de resúmenes, CUBA, 2018.
- LOPEZ, L.F.; CARRETERO, M.; TERRAGNI, F.
Stochastic modeling and analysis of tumor-induced blood vessel formation; en: APS March Meeting 2018, Vol. 63, N.1, March 5?, 2018; Los Ángeles, California, AMERICAN PHYSICAL SOCIETY, ESTADOS UNIDOS DE AMERICA, 2018.
- LOPEZ, L.F.; CARRETERO, M.; TERRAGNI, F.
Stochastic Models of Tumor Induced Angiogenesis; en: Coupled Mathematical Models for Physical and Biological Nanoscale Systems and Their Applications. BIRS-16w5069 2016, SPRINGER, 2018.
- LORENTE, M.A.; TENO, J.; CORRAL, A.; GONZALEZ, F.J.
Preparación Mediante Solution Blow Spinning y Caracterización de Poli-e-caprolactona modificada con Colágeno; en: Actas del XLI Congreso de la Sociedad Ibérica de Biomecánica y Biomateriales: Madrid, 18-19 de Octubre de 2018: programa y libro de resúmenes,, 2018.
- MARTIN, O.
TiO₂-GO, effect Over PVDF Piezoelectricity: Light and Flexible Pressure Sensor, REPUBLICA DE SERBIA, 2018.
- MARTIN, O.; GONZÁLEZ, V.J.; JALON, E.; SHABESTARI, M.E.; BASELGA, J.
To2-Go Effect Over PVDF Piezoelectricity: Light and Flexible Presure Sensors; en: Serbian Ceramic Society Conference: Advanced Ceramics and Application VII: New Frontiers in Multifunctional Material Science and Processing: programa and the book of abstracts, Serbian Ceramic Society, REPUBLICA DE SERBIA, 2018.
- MOMPO, E.G.; RUIZ, M.; CARRETERO, M.; LOPEZ, L.F.
Chaotic Behavior and Coherence Resonance in Semiconductor Superlatticesat Room Temperature; en:, 2018.
- MOMPO, E.G.; RUIZ, M.; CARRETERO, M.; LOPEZ, L.F.
Chaotic behaviour and coherence resonance in semiconductor superlattices at room temperature; en: ECC15 2018: 15th Experimental Chaos and Complexity Conference: 4-7 June 2018, Madrid, Spain: book of abstracts, UNIVERSIDAD REY JUAN CARLOS,, 2018.
- TENO, J.; GORRASE, G.; SORRENTINO, A.; GONZALEZ, F.J.
Preparation and Characterization of Thin Fibers of EVA Filled with Ag Nanoparticles; en:, 2018.
- TENO, J.; GORRASI, G.; SORRENTINO, A.; GONZALEZ, F.J.
Preparation and Characterization of Thin Fibers of EVA Filled with Ag Nanoparticles; en:, 2018.
- TERRAGNI, F.
Stochastic description of angiogenesis, Mini-Course on Modeling Cellular Systems as part of Focus Program on Nanoscale Systems and Coupled Phenomena: Mathematical Analysis, Modeling, and

Applications, *Toronto, CANADA, 2018.*

- TERRAGNI, F.; LOPEZ, L.F.; CARRETERO, M.
Modeling the growth of blood vessels; en: The 12th AIMS Conference on Dynamical Systems, Differential Equations and Applications: July 5 & July 9, 2018, Taipei, Taiwan: abstracts, 2018.
- VEGA, R.
Cellular dynamics model of angiogenesis, Mini-Course on Modeling Cellular Systems as part of Focus Program on Nanoscale Systems and Coupled Phenomena: Mathematical Analysis, Modeling, and Applications, *Toronto, CANADA, 2018.*
- VEGA, R.
Cellular dynamics model of angiogenesis, Mini-Course on Modeling Cellular Systems as part of Focus Program on Nanoscale Systems and Coupled Phenomena: Mathematical Analysis, Modeling, and Applications, *Toronto, CANADA, 2018.*
- VEGA, R.; CARRETERO, M.; LOPEZ, L.F.
A mathematical model of tumor-induced angiogenesis focused on cellular dynamics; en: PhysBio2018: 4th International Conference on Physics & Biological Systems 2018, October, 22-24, 2018, CNRS campus, Gif-sur-Yvette, France: conference book, 2018.
- VEGA, R.; CARRETERO, M.; LOPEZ, L.F.
Hybrid cellular Potts model for tumor-induced angiogenesis; en: ECC15 2018: 15th Experimental Chaos and Complexity Conference: 4-7 June 2018, Madrid, Spain: book of abstracts, UNIVERSIDAD REY JUAN CARLOS,, 2018.

Actividades de formación y movilidad de personal investigador

Estancias en otros centros

- ANDREA ALCANTARA GARCIA
Título: Estancia pre-doctoral *Supervisor:* Dr. Yaiza González García *Motivo:* Aplicación de técnicas localizadas al estudio electroquímico de materiales base acero con recubrimientos sol-gel
Centro Externo: Delft University of Technology. Department of Materials Science and Engineering.
País: PAISES BAJOS
Duración: 15/01/2018 a 15/03/2018.
- ELENA GORDO ODERIZ
Título: Supervisor: Dr. Andrej Antrens *Motivo de la estancia:* Desarrollo de aleaciones ligeras
Centro Externo: Universidad de Queensland
País: AUSTRALIA
Duración: 02/02/2018 a 31/07/2018.
- ESTELA MARIA PRIETO MUÑOZ
Título: Supervisor: Jesús González-Julián *Título investigación:* Desarrollo de aleaciones de alta entropía por vía pulvimetálgica como matriz metálica en cermets
Centro Externo: Forschungszentrum Jülich GmbH (FZJ)
País: ALEMANIA
Duración: 01/08/2018 a 30/11/2018.

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Título: Estancia pre-doctoral
Supervisor: Dr. Luis Llanes
Estancia bajo tutela de co-director de tesis.
Análisis micro y nanométrico de materiales tipo cermet
Centro Externo: Technical University of Barcelona - CIEFMA
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