

Tesis leídas en el curso 2017-2018

Doctorando	Título	Directores	Calificación
HELENA GAVILÁN RUBIO	SYNTHESIS STRATEGIES OF SINGLE-CORE AND MULTI-CORE IRON OXIDE MAGNETIC NANOPARTICLES FOR BIOMEDICAL APPLICATIONS / ESTRATEGIAS DE SÍNTESIS DE NANOPARTÍCULAS MAGNÉTICAS DE ÓXIDOS DE HIERRO MONO-NÚCLEO Y MULTI-NÚCLEO PARA APLICACIONES EN BIOMEDICINA.	MARÍA DEL PUERTO MORALES HERRERO / LUCIA GUTIERREZ MARRUEDO (ICMM-CSIC, UNIZAR)	Sobresaliente cum laude
Gavilán, H. e al. How shape and internal structure affect the magnetic properties of anisometric magnetite nanoparticles, Acta Materialia 2017, 125, 416-424.			

Doctorando	Título	Directores	Calificación
DANIEL MARTÍN FERNÁNDEZ	ESTUDIO EXPERIMENTAL Y TEÓRICO DE SUSTANCIAS CON INTERÉS BIOLÓGICO Y NUTRICIONAL: ESPECTROSCOPIA RAMAN E INFRARROJA	ANGEL GONZALEZ UREÑA / ALICIA GONZALEZ GONZALVEZ	Sobresaliente cum laude
Martin D, et al. Modeling Tomato Ripening Based on Carotenoid Raman Spectroscopy: Experimental Versus Kinetic Model. Applied Spectroscopy. 2017;71(6):1310-1320.			

Doctorando	Título	Directores	Calificación
VICTOR ZEPEDA ALVAREZ	BIOLIXIVIACIÓN DE MINERALES SULFURADOS DE COBRE DE BAJA LEY	MARIA LUISA BLAZQUEZ IZQUIERDO / ANTONIO BALLESTER PEREZ	Sobresaliente cum laude
V. Zepeda, C. Demergasso, M.L. Blázquez, J.A. Muñoz, F. González and A. Ballester. The effect of chloride on the electrochemical potential during the bioleaching of pure chalcopyrite and low grade copper sulfide ores. 19th International Biohydrometallurgy Symposium (IBS'2011), Changsha, Hunan province, China, 18-22 September 2011			

Doctorando	Título	Directores	Calificación
JORGE REÑE ESPINOSA	NUCLEACIÓN DE SÓLIDOS CRISTALINOS POR SIMULACIÓN	EDUARDO SANTIAGO SANZ GARCIA / CARLOS VEGA DE LAS HERAS	Sobresaliente cum laude
Espinosa, Jorge & Sanz, Eduardo & Valeriani, Chantal & Vega, Carlos. (2013). On fluid-solid direct coexistence simulations: The pseudo-hard sphere model. The Journal of chemical physics. 139. 144502. doi: 10.1063/1.4823499 .			
Espinosa, J & Vega, Carlos & Sanz, Eduardo. (2014). The mold integration method for the calculation of the crystal-fluid interfacial free energy from simulations. The Journal of chemical physics. 141. 134709. doi: 10.1063/1.4896621 .			

Espinosa, J & Sanz, Eduardo & Valeriani, Chantal & Vega, Carlos. (2014). Homogeneous ice nucleation evaluated for several water models. The Journal of chemical physics. 141. 18C529. [doi: 10.1063/1.4897524](https://doi.org/10.1063/1.4897524).

Espinosa, Jorge & Vega, Carlos & Valeriani, Chantal & Sanz, Eduardo. (2015). The crystal-fluid interfacial free energy and nucleation rate of NaCl from different simulation methods. The Journal of chemical physics. 142. 194709. [doi: 10.1063/1.4921185](https://doi.org/10.1063/1.4921185).

Espinosa, Jorge & Vega, Carlos & Valeriani, Chantal & Sanz, Eduardo. (2016). Seeding approach to crystal nucleation. The Journal of Chemical Physics. 144. 034501. [doi: 10.1063/1.4939641](https://doi.org/10.1063/1.4939641).

Espinosa, Jorge & Vega, Carlos & Sanz, Eduardo. (2016). Ice-Water Interfacial Free Energy for the TIP4P, TIP4P/2005, TIP4P/Ice, and mW Models As Obtained from the Mold Integration Technique. The Journal of Physical Chemistry C. 120. 8068-8075. [doi: 10.1021/acs.jpcc.5b11221](https://doi.org/10.1021/acs.jpcc.5b11221).

Espinosa, Jorge & Zaragoza, Alberto & Rosales-Pelaez, Pablo & Navarro, Caridad & Valeriani, Chantal & Vega, Carlos & Sanz, Eduardo. (2016). Interfacial Free Energy as the Key to the Pressure-Induced Deceleration of Ice Nucleation. Physical Review Letters. 117. [doi: 10.1103/PhysRevLett.117.135702](https://doi.org/10.1103/PhysRevLett.117.135702).

Espinosa, Jorge & Sampedro, Pablo & Valeriani, Chantal & Vega, Carlos & Sanz, Eduardo. (2016). Lattice mold technique for the calculation of crystal nucleation rates. Faraday Discuss. 195. [doi: 10.1039/C6FD00141F](https://doi.org/10.1039/C6FD00141F).

Espinosa, J. & Navarro, C. & Sanz, Eduardo & Valeriani, Chantal & Vega, Carlos. (2016). On the time required to freeze water. The Journal of Chemical Physics. 145. 211922. [doi: 10.1063/1.4965427](https://doi.org/10.1063/1.4965427).

Espinosa, Jorge & Vega, Carlos & Sanz, Eduardo. (2018). Homogeneous Ice Nucleation Rate in Water Droplets. The Journal of Physical Chemistry C. 122. [doi: 10.1021/acs.jpcc.8b04788](https://doi.org/10.1021/acs.jpcc.8b04788).

Doctorando	Titulo	Directores	Calificación
JONE MIREN ELORRIETA BAIGORRI	ESPECTROSCOPIA RAMAN: UNA HERRAMIENTA VERSÁTIL EN LA CARACTERIZACIÓN MULTIANALÍTICA DEL COMBUSTIBLE NUCLEAR	VALENTIN GARCIA BAONZA / JOAQUIN COBOS SABATE (UCM, CSIC)	Sobresaliente cum laude

J. M. Elorrieta, L. J. Bonales, N. Rodríguez-Villagra, V. G. Baonza and J. Cobos, "A detailed Raman and X-ray study of UO_{2+x} oxides and related structure transitions", Phys. Chem. Chem. Phys., 18, 28209-28216 (2016). [doi: 10.1039/c6cp03800j](https://doi.org/10.1039/c6cp03800j).

L. J. Bonales, J. M. Elorrieta, C. Menor-Salvan and J. Cobos, "The behavior of unirradiated UO_2 and uraninite under repository conditions characterized by Raman", MRS Advances, 1 (62), 4157-4162 (2016). [doi: 10.1557/adv.2017.203](https://doi.org/10.1557/adv.2017.203).

L. J. Bonales, J. M. Elorrieta, A. Lobato and J. Cobos, "Raman Spectroscopy, a Useful Tool to Study Nuclear Materials", Applications of Molecular Spectroscopy to Current Research in the Chemical and Biological Sciences, Dr. Mark Stauffer (Ed.), InTech (2016). ISBN 978-953-512681-2. [doi: 10.5772/64436](https://doi.org/10.5772/64436).

J. M. Elorrieta, L. J. Bonales, N. Rodríguez-Villagra, V. G. Baonza and J. Cobos, "Spent fuel matrix oxidation studies under dry storage conditions", MRS Advances, 2 (12), 675-680 (2017). [doi: 10.1557/adv.2017.3](https://doi.org/10.1557/adv.2017.3).

J. M. Elorrieta, D. Manara, L. J. Bonales, J. F. Vigier, O. Dieste, M. Naji, R. C. Belin, V. G. Baonza, R. J. M. Konings and J. Cobos, "Raman study of the oxidation in (U, Pu) O_2 as a function of Pu content", J. Nucl. Mater., 495, 484-491 (2017). [doi: 10.1016/j.jnucmat.2017.08.043](https://doi.org/10.1016/j.jnucmat.2017.08.043).

D. Manara, M. Naji, S. Mastromarino, J. M. Elorrieta, N. Magnani, L. Martel and J. -Y. Colle, "The Raman fingerprint of plutonium dioxide: Some example applications for the detection of PuO₂ in host matrices", J. Nucl. Mater., 499, 268-271 (2018). [doi: 10.1016/j.jnucmat.2017.11.042](https://doi.org/10.1016/j.jnucmat.2017.11.042).

J. M. Elorrieta, L. J. Bonales, M. Naji, D. Manara, V. G. Baonza and J. Cobos, "Laser-induced oxidation of UO₂: A Raman study", J. Raman Spectrosc., 49, 878-884 (2018). [doi: 10.1002/jrs.5347](https://doi.org/10.1002/jrs.5347).

J. M. Elorrieta, L. J. Bonales, V. G. Baonza and J. Cobos, "Temperature dependence of the Raman spectrum of UO₂", J. Nucl. Mater., 503, 191-194 (2018). [doi: 10.1016/j.jnucmat.2018.03.015](https://doi.org/10.1016/j.jnucmat.2018.03.015).

J. M. Elorrieta, L. J. Bonales, S. Fernández, N. Rodríguez-Villagra, L. Gutiérrez-Nebot, V. G. Baonza and J. Cobos, "Pre- and post-oxidation Raman analysis of (U, Ce)O₂ oxides", J. Nucl. Mater. 508, 116-122 (2018). [doi: 10.1016/j.jnucmat.2018.05.042](https://doi.org/10.1016/j.jnucmat.2018.05.042)

Doctorando	Título	Directores	Calificación
MOISÉS MARTÍN GARRIDO	MODIFICACIONES ESTRUCTURALES DEL GEL C-S-H IRRADIADO CON LÁSER CONTINUO DE CO ₂ .	MARÍA DEL SAGRARIO MARTÍNEZ RAMÍREZ (IEM-CSIC)	Sobresaliente cum laude
Martín-Garrido, Moisés & Martínez-Ramírez, Sagrario & Perez, Gloria & Guerrero, Ana. (2020). Study of C-S-H dehydration due to temperature increase during fires. Journal of Raman Spectroscopy. 51. doi: 10.1002/jrs.5977 .			
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Moisés Martín-Garrido, M. Teresa Molina-Delgado, Sagrario Martínez-Ramírez, A comparison between experimental and theoretical Ca/Si ratios in C-S-H and C-S(A)-H gels, Journal of Sol-Gel Science Technology 2020, 94, 11-21. doi: 10.1007/s1097-1-019-05097-x .			
Sagrario Martínez-Ramírez, Laura R Higuera, Ignacio Cascales, Moisés Martín-Garrido, M. Teresa Blanco-Varela, New approach to nanolime synthesis at ambient temperature, SN Applied Sciences, 2019, 1, 105. doi: 10.1007/s42452-018-0122-8 .			
Sagrario Martínez-Ramírez; Luis Diaz; Moisés Martín-Garrido; Lucia Fernández-Carrasco; David Torrens, In situ chemical modification of C-S-H induced by CO ₂ laser irradiation. Materials and Structures, 2018, 51, 24. doi: 10.1617/s11527-018-1150-y			

Doctorando	Título	Directores	Calificación
ADRIAN ANDRADA CHACON	ESTRUCTURA, PROPIEDADES ELECTRÓNICAS Y ESPECTROSCOPÍA DEL HFSE ₂ EN CONDICIONES EXTREMAS.	VALENTIN GARCIA BAONZA / FRANCISCO JAVIER SANCHEZ BENITEZ	Sobresaliente cum laude
A Andrada-Chacon et al. INORGANIC CHEMISTRY 60 (3), 1746-1754, 2021. doi: 10.1021/acs.inorgchem.0c03223 .			
JA Sans, A Andrada-Chacon, INORGANIC CHEMISTRY 59 (14), 9900-9918, 2020. doi: 10.1021/acs.inorgchem.0c01086 .			
J.M. Bermúdez-García, A. Andrada-Chacón, Inorg. Chem. Front., 2019, 6, 2379-2386. doi: 10.1039/c9qi00749k .			

V. Blanco-Gutiérrez, Adrian Andrada-Chacón, J. Phys. Chem. C 2019, 123, 6973–16981. [doi: 10.1021/acs.jpcc.9b01898](https://doi.org/10.1021/acs.jpcc.9b01898).

A. Andrada-Chacón et al.. Journal of Alloys and Compounds 729, 914-920 (2017). [doi: 10.1016/j.jallcom.2017.09.245](https://doi.org/10.1016/j.jallcom.2017.09.245).

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M. Virumbrales, Adrian Andrada-Chacón,.Phys. Chem. Chem. Phys. 19, 8363-8372 (2017). [doi: 10.1039/C6CP08743D](https://doi.org/10.1039/C6CP08743D).

A. Andrada-Chacón, V.G. Baonza, J. Sánchez-Benítez. Carbon 113, 205–211 (2017). [doi: 10.1016/j.carbon.2016.11.058](https://doi.org/10.1016/j.carbon.2016.11.058).

R. Vilaplana,.A. Andrada-Chacón, Journal of Alloys and Compounds 685 (2016) 962-970. [doi: 10.1016/j.jallcom.2016.06.170](https://doi.org/10.1016/j.jallcom.2016.06.170).

A. Gomez-Perez,.A. Andrada-Chacon, RSC Advances 5 (2015) 85229-85241. [doi: 10.1039/c5ra07796f](https://doi.org/10.1039/c5ra07796f).

Doctorando	Titulo	Directores	Calificación
ANA MARIA VICO OCÓN	METODOLOGÍA PARA LA DESCLASIFICACIÓN RADIOLÓGICA DE INSTALACIONES DEL CICLO DEL COMBUSTIBLE NUCLEAR	JAVIER QUIÑONES DIEZ / ALICIA ÁLVAREZ GARCÍA (CIEMAT)	Sobresaliente cum laude
<p>Ana Mario Vico, Alicia Álvarez García, Javier Quiñones Díez, <i>MARSSIM aplicado a la desclasificación de instalaciones nucleares o radiactivas en el CIEMAT. Edificio 20, Colección documentos CIEMAT. Madrid (España): CIEMAT, 2018.</i></p> <p>Vico, A.M. & Nogueras, M.C. & Rodríguez, L. & Alvarez, Alicia. (2021). Clearance of building of a former uranium concentrates plant. Annals of Nuclear Energy. 159. 108313. doi: 10.1016/j.anucene.2021.108313.</p>			

Doctorando	Titulo	Directores	Calificación
GONZALO MARTINEZ GARCIA	DESARROLLO DE BIOSENSORES PARA LA DETERMINACIÓN DE REGULADORES DEL APETITO EN MUESTRAS BIOLÓGICAS.	JOSE MANUEL PINGARRON CARRAZON / MARIA LOURDES AGUI CHICHARRO / PALOMA YAÑEZ-SEDEÑO ORIVE	Sobresaliente cum laude
<p>G. Martínez-García, V. Serafín, L. Agüí, P. Yáñez-Sedeño, J.M.Pingarrón. Electrochemical immunosensor for the determination of total ghrelin hormone in saliva. ELECTROANALYSIS 27, 1119-1126 (2015), doi: 10.1002/elan.201400662.</p> <p>S. Guerrero, G. Martínez-García, V. Serafín, L. Agüí, P. Yáñez-Sedeño, J.M.Pingarrón, Electrochemical immunosensor for sensitive determination of the anorexigen peptide YY at grafted reduced graphene oxide electrode platforms. ANALYST (portada del volumen), 140, 7527-7533 (2015) doi: 10.1039/C5AN01185J.</p> <p>F. H. Cincotto, G. Martínez-García, P.Yáñez-Sedeño, T. C. Canevari, S. A. S. Machado, J. M. Pingarrón. Electrochemical immunosensor for ethinylestradiol using diazonium salt grafting onto silver nanoparticles-silica-graphene oxide hybrids. TALANTA, 147, 328-334 (2016) doi: 10.1016/j.talanta.2015.09.061.</p> <p>G. Martínez-García, L. Agüí, P. Yáñez-Sedeño, J. M. Pingarrón. Multiplexed electrochemical immunosensing of obesity-related hormones at grafted graphene-modified electrodes. ELECTROCHIMICA ACTA, 202, 209-215 (2016) doi: 10.1016/j.electacta.2016.03.140.</p>			

E. Sánchez-Tirado, G. Martínez-García, A. González-Cortés, P. Yáñez-Sedeño, J. M. Pingarrón. Electrochemical immunosensor for sensitive determination of transforming growth factor (TGF)- β 1 in urine. *BIOSENSORS AND BIOELECTRONICS*, 88, 9-14 (2017) [doi: 10.1016/j.bios.2016.05.093](https://doi.org/10.1016/j.bios.2016.05.093).

G. Martínez-García, L. Agüí, P. Yáñez-Sedeño, J.M. Pingarrón. Multiplexed electrochemical immunosensor for obesity-related hormones using grafted graphene-modified electrodes as platforms for antibodies immobilization. *PROCEDIA TECHNOLOGY*, 27, 187-189 (2017) [doi: 10.1016/j.protcy.2017.04.080](https://doi.org/10.1016/j.protcy.2017.04.080).

G. Martínez-García, E. Pérez-Julián, L. Agüí, N. Cabré, J. Camps, P. Yáñez-Sedeño, J. M. Pingarrón. An electrochemical enzyme biosensor for 3-hydroxybutyrate detection based on screen-printed electrodes modified by reduced graphene oxide and thionine. *BIOSENSORS* (portada del volumen), 7, 50 (2017) [doi: 10.3390/bios7040050](https://doi.org/10.3390/bios7040050).

Doctorando	Titulo	Directores	Calificación
SANDRA MONTALVO QUIRÓS	DISEÑO, SÍNTESIS Y EVALUACIÓN DE NUEVOS NANOSISTEMAS PARA SU APLICACIÓN EN BIOMEDICINA	BLANCA GONZALEZ ORTIZ / JOSE LUIS LUQUE GARCIA / RAFAEL CARLOS PRADOS ROSALES (UCM, UAM)	Sobresaliente cum laude

Sandra Montalvo-Quirós, Guillermo Aragonese-Cazorla, Laura García-Alcalde, María Vallet-Regí, Blanca González, Jose L. Luque-García. Cancer cell targeting and therapeutic delivery of silver nanoparticles by transferrin decorated mesoporous silica nanocarriers: insights into the action mechanisms using quantitative proteomics. *Nanoscale*, 2019, 11, 4531. [doi: 10.1039/C8NR07667G](https://doi.org/10.1039/C8NR07667G)

Sandra Montalvo-Quirós, Jose L. Luque-García. Combination of bioanalytical approaches and quantitative proteomics for the elucidation of the toxicity mechanisms associated to TiO₂ nanoparticles exposure in human keratinocytes. *Food and Chemical Toxicology*, 2019, 127,197-205. [doi: 10.1016/j.fct.2019.03.036](https://doi.org/10.1016/j.fct.2019.03.036)

Sandra Montalvo-Quirós, María Vallet-Regí, Ainhoa Palacios, Juan Anguita, Rafael C. Prados-Rosales, Blanca González, Jose L. Luque-García. Mesoporous Silica Nanoparticles as a Potential Platform for Vaccine Development against Tuberculosis. *Pharmaceutics*, 2020, 1, 1-15. [doi: 10.3390/pharmaceutics12121218](https://doi.org/10.3390/pharmaceutics12121218)

Sandra Montalvo-Quirós, Sergio Gómez-Graña, María Vallet-Regí, Rafael C. Prados-Rosales, Blanca González, Jose L. Luque-García. Mesoporous silica nanoparticles containing silver as novel antimycobacterial agents against *Mycobacterium tuberculosis*. *Colloids and Surfaces B: Biointerfaces*, 2021, 197, 111405. [doi: 10.1016/j.colsurfb.2020.111405](https://doi.org/10.1016/j.colsurfb.2020.111405)

Doctorando	Titulo	Directores	Calificación
ALBERTO RICO YUSTE	DESARROLLO DE MATERIALES POLIMÉRICOS SELECTIVOS PARA EL CONTROL DE LA CALIDAD Y LA SEGURIDAD ALIMENTARIA.	MARIA CRUZ MORENO BONDI / JAVIER LUCAS URRACA RUIZ	Sobresaliente cum laude

E. Benito-Peña, V. González-Vallejo, A. Rico-Yuste, L. Barbosa-Pereira, J. Manuel Cruz, A. Bilbao, Carmen Alvarez-Lorenzo, M. C. Moreno-Bondi. Molecularly imprinted hydrogels as functional active packaging materials. *Food Chemistry* 190 (2016) 487–494. [doi: 10.1016/j.foodchem.2015.05.128](https://doi.org/10.1016/j.foodchem.2015.05.128).

A. Rico-Yuste, V. González-Vallejo, E. Benito-Peña, T. de las Casas Enge, G. Orellana, M. C. Moreno-Bondi. Furfural Determination with Disposable Polymer Films and Smartphone Based Colorimetry for Beer Freshness Assessment. *Anal Chem.* 88 (2016) 3959. [doi: 10.1021/acs.analchem.6b00167](https://doi.org/10.1021/acs.analchem.6b00167)

A. Rico-Yuste, Lidia N. Gómez-Arribas, M. Concepción Pérez-Conde, Javier L. Urraca & María Cruz Moreno-Bondi. Rapid determination of Alternaria mycotoxins in tomato samples by pressurised liquid extraction coupled to liquid chromatography with fluorescence detection. *Food Additives & Contaminants: Part A* 35 (2018) 2175. [doi: 10.1080/19440049.2018.1512759](https://doi.org/10.1080/19440049.2018.1512759)

A. Rico-Yuste, J. Walravens, J.L. Urraca, R.A.G. Abou-Hany, A.B. Descalzo, G. Orellana, M. Rychlik, S. De Saeger, M.C. Moreno-Bondi. Analysis of alternariol and alternariol monomethyl ether in foodstuffs by molecularly imprinted solid-phase extraction and ultra-high-performance liquid chromatography tandem mass spectrometry. *Food Chemistry* 243 (2018) 357. [doi: 10.1016/j.foodchem.2017.09.125](https://doi.org/10.1016/j.foodchem.2017.09.125)

A. Rico-Yuste, R. Abouhany, J. L. Urraca, A. B. Descalzo, G. Orellana, María C. Moreno-Bondi, Eu(III)-Templated molecularly imprinted polymer used as a luminescent sensor for the determination of tenuazonic acid mycotoxin in food samples. *Sensors and Actuators B: Chemical* 329 (2021) 129256. [doi: 10.1016/j.snb.2020.129256](https://doi.org/10.1016/j.snb.2020.129256).

Doctorando	Título	Directores	Calificación
CRISTINA ZEA TOMERO	RECUBRIMIENTOS ANTICORROSIVOS INTELIGENTES Y MEDIOAMBIENTALMENTE ACEPTABLES BASADOS EN NANOPARTICULAS DE SILICE	DANIEL DE LA FUENTE GARCIA (CENIM)	Sobresaliente cum laude

C. Zea, R. Barranco-García, B. Chico, I. Díaz, M. Morcillo, D. de la Fuente, Smart Mesoporous Silica Nanocapsules as Environmentally Friendly Anticorrosive Pigments, *International Journal of Corrosion*, Volume 2015, Article ID 426397, [doi: 10.1155/2015/426397](https://doi.org/10.1155/2015/426397)

C. Zea, R. Barranco-García, J. Alcántara, B. Chico, M. Morcillo, D. de la Fuente, Hollow mesoporous silica nanoparticles loaded with phosphomolybdate as smart anticorrosive pigment, *J. Coat. Technol. Res.*, 2017, 14 (4) 869–878. [doi: 10.1007/s11998-017-9924-7](https://doi.org/10.1007/s11998-017-9924-7)

C. Zea, J. Alcántara, R. Barranco-García, J. Simancas, M. Morcillo, D. de la Fuente, Anticorrosive behavior study by localized electrochemical techniques of sol-gel coatings loaded with smart nanocontainers, *J. Coat. Technol. Res.*, 2017, 14 (4) 841–850. [doi: 10.1007/s11998-017-9936-3](https://doi.org/10.1007/s11998-017-9936-3)

C. Zea, R. Barranco-García, J. Alcántara, J. Simancas, M. Morcillo, D. de la Fuente, pH-dependent release of environmentally friendly corrosion inhibitor from mesoporous silica nanoreservoirs, *Microporous and Mesoporous Materials*, 2018, 255, 166-173. [doi: 10.1016/j.micromeso.2017.07.035](https://doi.org/10.1016/j.micromeso.2017.07.035)

Cristina Zea, Jenifer Alcántara, Rosa Barranco-García, Manuel Morcillo, Daniel de la Fuente, Synthesis and Characterization of Hollow Mesoporous Silica Nanoparticles for Smart Corrosion Protection, *Nanomaterials*, 2018, 8, 478. [doi: 10.3390/nano8070478](https://doi.org/10.3390/nano8070478)

Doctorando	Titulo	Directores	Calificación
JENIFER ALCÁNTARA GONZÁLEZ	CORROSIÓN ATMOSFÉRICA MARINA DE ACEROS AL CARBONO	MANUEL MORCILLO LINARES / BELEN CHICO GONZALEZ (CENIM)	Sobresaliente cum laude
<p>Lopesino, Patricia & Alcántara, Jenifer & Fuente, Daniel & Chico, Belén & Jiménez, J. & Morcillo, M. (2018). Corrosion of Copper in Unpolluted Chloride-Rich Atmospheres. <i>Metals</i>. 8. 866. doi: 10.3390/met8110866.</p> <p>Jenifer Alcántara, Daniel de la Fuente, Belén Chico, Joaquín Simancas, Iván Díaz, Manuel Morcillo, Marine atmospheric corrosion of carbon steel. A review, <i>Materials</i>, 2017, 10(4), 406. 2017. doi: 10.3390/ma10040406</p> <p>Jenifer Alcántara, Belén Chico, Joaquín Simancas, Iván Díaz, Daniel de la Fuente, Manuel Morcillo. An attempt to classify the morphologies presented by different rust phases formed during the exposure of carbon steel to marine atmospheres, <i>Mater.Charact.</i>, 2016, 118, 65-78. doi: 10.1016/j.matchar.2016.04.027</p> <p>Daniel de la Fuente, Iván Díaz, Jenifer Alcántara, Belén Chico, Joaquín Simancas, Irene Llorente, Alfonso García- Delgado, José Antonio Jiménez, Paloma Adeva, Manuel Morcillo, Corrosion mechanisms of mild steel in chloride-rich atmospheres, <i>Mater. Corros.</i>, 2016, 67 (3) 227-238. doi: 10.1002/maco.201508488</p> <p>Manuel Morcillo, Belén Chico, Jenifer Alcántara, Iván Díaz, R. Wolthuis, Daniel de la Fuente, SEM/Micro-Raman characterization of the morphologies of marine atmospheric corrosion products formed on mild steel. <i>J. Electrochem. Soc.</i>, 2016, 163(8), C426-C439. doi: 10.1149/2.0411608jes</p> <p>Jenifer Alcántara, Belén Chico, Iván Díaz, Daniel de la Fuente, Manuel Morcillo, Airborne chloride deposit and its effect on marine atmospheric corrosion of mild steel, <i>Corros. Sci.</i>, 2015, 97, 74 – 88. doi: 10.1016/j.corsci.2015.04.015</p> <p>Manuel Morcillo, Belén Chico, Jenifer Alcántara, Iván Díaz, Joaquín Simancas, Daniel de la Fuente, Atmospheric corrosion of mild steel in chloride-rich environments. Questions to be answered, <i>Mater. Corros.</i>, 2015, 66, 882 – 892. doi: 10.1002/maco.201407940</p> <p>Manuel Morcillo, José M^a González-Calbet, José A. Jiménez, Iván Díaz, Jenifer Alcántara, Belén Chico, A. Mazarío-Fernández, A. Gómez-Herrero, Irene Llorente, Daniel de la Fuente, Environmental conditions for akaganeite formation in marine atmosphere mild steel corrosion products and its characterisation. <i>Corrosion-US.</i>, 2015, 71, 872 – 886. doi: 10.5006/1672.</p> <p>Belén Chico, Jenifer Alcántara, Elisabete Pino, Iván Díaz, Joaquín Simancas; A. Torres-Pardo; Daniel de la Fuente; José A. Jiménez; J.F. Marco; José M^a González-Calbet, Manuel Morcillo, Rust exfoliation on carbon steels in chloride-rich atmospheres, <i>Corros. Rev.</i>, 2015, 33, 263 - 282. doi: 10.1515/corrrev-2015-0025</p>			

Doctorando	Titulo	Directores	Calificación
VICTOR GALILEO ALMENDRO VEDIA	INTERACCIÓN MECÁNICA DE F1F0 ATP SINTASA CON SISTEMAS MODELO DE MEMBRANA: IMPLICACIONES BIOLÓGICAS.	FRANCISCO MONROY MUÑOZ / IVAN LOPEZ MONTERO	Sobresaliente cum laude

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Doctorando	Titulo	Directores	Calificación
ISABEL GOMEZ RECIO	ÓXIDOS MIXTOS DE MANGANESO EN ELEVADO ESTADO DE OXIDACIÓN: ESTRATEGIAS DE SÍNTESIS, ANÁLISIS ESTRUCTURAL Y COMPOSICIONAL Y COMPORTAMIENTO FUNCIONAL.	JOSE MARIA GONZALEZ CALBET / JOSÉ JUAN CALVINO GAMEZ (UCM, UCA)	Sobresaliente cum laude

Gonzalez-Calbet, Jose; Gómez-Recio, Isabel; Azor Lafarga, Alberto; Ruiz-González, M.; Hernando, María; Parras, Marina; Calvino, Jose J; Fernandez-Diaz, Maria; Portehault, David; Sanchez, Clément. (2020). Unambiguous localization of titanium and iron cations in doped manganese hollandite nanowires. *Chemical Communications.* 56. doi:[10.1039/D0CC01888K](https://doi.org/10.1039/D0CC01888K).

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Aurea Varela, Isabel Gómez-Recio, Laura Serrador, María Hernando, Emilio Matesanz, Almudena Torres-Pardo, María Teresa Fernández-Díaz, Jose L. Martínez, Francisco Gonell, Gwenaëlle Rouse, Clément Sanchez, Christel Laberty-Robert, David Portehault, José M. González-Calbet, and Marina Parras. Hydroxyapatites as Versatile Inorganic Hosts of Unusual Pentavalent Manganese Cations. *Chemistry of Materials* 2020 32 (24), 10584-10593 doi:[10.1021/acs.chemmater.0c03673](https://doi.org/10.1021/acs.chemmater.0c03673)

Doctorando	Titulo	Directores	Calificación
ANDREW AKANNO	PROPIEDADES DE MEZCLAS DE POLIELECTROLITOS Y TENSIOACTIVOS EN DISOLUCIÓN E INTERFASE. BULK AND SURFACE PROPERTIES OF POLYELECTROLYTE-SURFACTANT MIXTURES.	FRANCISCO ORTEGA GOMEZ / RAMON GONZALEZ RUBIO	Sobresaliente cum laude

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Behavior of the water/vapor interface of chitosan solutions with an anionic surfactant: Effect of polymer–surfactant interactions A Akanno, E Guzmán, F Ortega, R G Rubio *Physical Chemistry Chemical Physics* 2020, 22 (40), 23360-23373

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