

2019

1. Abatal, M., Ruiz-Salvador, A. R., & Hernández, N. C. (2019). A DFT-based simulated annealing method for the optimization of global energy in zeolite framework systems: Application to natrolite, chabazite and clinoptilolite. *Microporous and Mesoporous Materials*, doi:10.1016/j.micromeso.2019.109885
2. Agüero, F. N., Beltrán, A. M., Fernández, M. A., & Cadús, L. E. (2019). Surface nickel particles generated by exsolution from a perovskite structure. *Journal of Solid State Chemistry*, 273, 75-80. doi:10.1016/j.jssc.2019.02.036
3. Aguilar, J. M., Cordobés, F., Bengoechea, C., & Guerrero, A. (2019). Heat-induced gelation of egg yolk as a function of pH. does the type of acid make any difference? *Food Hydrocolloids*, 87, 142-148. doi:10.1016/j.foodhyd.2018.07.045
4. Aguilar-Pérez, F. J., Vargas-Coronado, R. F., Cervantes-Uc, J. M., Cauch-Rodríguez, J. V., Rosales-Ibañez, R., Rodríguez-Ortiz, J. A., & Torres-Hernández, Y. (2019). Titanium - castor oil based polyurethane composite foams for bone tissue engineering. *Journal of Biomaterials Science, Polymer Edition*, 30(15), 1415-1432. doi:10.1080/09205063.2019.1636352
5. Alvarez, R., Garcia-Valenzuela, A., Rico, V., Garcia-Martin, J. M., Cotrino, J., Gonzalez-Elipe, A. R., & Palmero, A. (2019). Kinetic energy-induced growth regimes of nanocolumnar ti thin films deposited by evaporation and magnetron sputtering. *Nanotechnology*, 30(47) doi:10.1088/1361-6528/ab3cb2
6. Alvarez, R., Muñoz-Piña, S., González, M. U., Izquierdo-Barba, I., Fernández-Martínez, I., Rico, V., García-Martín, J. M. (2019). Antibacterial nanostructured ti coatings by magnetron sputtering: From laboratory scales to industrial reactors. *Nanomaterials*, 9(9) doi:10.3390/nano9091217
7. Álvarez-Castillo, E., Bengoechea, C., & Guerrero, A. (2019). Effect of concentration on plasma protein-based superabsorbent materials. [Desenvolupament de materials superabsorbents a partir de plasma porcí. Influència de la formulació] *Afinidad*, 76(586), 103-110.
8. Álvarez-Castillo, E., Bengoechea, C., Rodríguez, N., & Guerrero, A. (2019). Development of green superabsorbent materials from a by-product of the meat industry. *Journal of Cleaner Production*, 223, 651-661. doi:10.1016/j.jclepro.2019.03.055
9. Álvarez-Castillo, E., Del Toro, A. J., Aguilar, J. M., Guerrero, A., & Bengoechea, C. (2019). Formation of soy protein-based superabsorbent materials through optimization o f a thermal processing. [Producción de materiales superabsorbentes basados en proteína de soja mediante optimización del procesado térmico] *Afinidad*, 76(585), 23-29.
10. Arévalo, C., Beltrán, A. M., Montealegre-Meléndez, I., Pérez-Soriano, E. M., Kitzmantel, M., & Neubauer, E. (2019). Electron microscopy characterization of the reaction layer in titanium composites reinforced with B4C particles and the effect of the presence of aluminium. *Materials Research Express*, 6(11) doi:10.1088/2053-1591/ab450e
11. Astacio, R., Gallardo, J. M., Cintas, J., Montes, J. M., Cuevas, F. G., Prakash, L., & Torres, Y. (2019). *Fracture toughness of cemented carbides obtained by electrical resistance sintering*. International Journal of Refractory Metals & Hard Materials 80 (2019) 259–269. doi.org/10.1016/j.ijrmhm.2019.02.002
12. Ávila-Gutiérrez, M. J., Martín-Gómez, A., Aguayo-González, F., & Córdoba-Roldán, A. (2019). Standardization framework for sustainability from circular economy 4.0. *Sustainability (Switzerland)*, 11(22) doi:10.3390/su11226490
13. Barroso, P. J., Martín, J., Santos, J. L., Aparicio, I., & Alonso, E. (2019). Evaluation of the airborne pollution by emerging contaminants using bitter orange (*citrus aurantium*) tree leaves as biosamplers. *Science of the Total Environment*, 677, 484-492. doi:10.1016/j.scitotenv.2019.04.391

14. Barroso, P. J., Santos, J. L., Martín, J., Aparicio, I., & Alonso, E. (2019). Emerging contaminants in the atmosphere: Analysis, occurrence and future challenges. *Critical Reviews in Environmental Science and Technology*, 49(2), 104-171. doi:10.1080/10643389.2018.1540761
15. Beltrán, A. M., Civantos, A., Dominguez-Trujillo, C., Moriche, R., Rodríguez-Ortiz, J. A., García-Moreno, F., Torres, Y. (2019). Porous titanium surfaces to control bacteria growth: Mechanical properties and sulfonated polyetheretherketone coatings as antibiofouling approaches. *Metals*, 9(9) doi:10.3390/met9090995
16. Beltrán, A. M., Martin-Santana, Y., González, J. E., Montealegre-Meléndez, I., González, E., Peón-Avés, E., Torres, Y. (2019). Effect of heat treatment on apatite coatings deposited on pre-calcified titanium substrates. *Zeitschrift Fuer Metallkunde/Materials Research and Advanced Techniques*, 110(4), 351-358. doi:10.3139/146.111746
17. Bravo-Rodríguez, J. C., Del-Pino-López, J. C., & Cruz-Romero, P. (2019). A survey on optimization techniques applied to magnetic field mitigation in power systems. *Energies*, 12(7) doi:10.3390/en12071332
18. Carvajal-Piñero, J. M., Ramos, M., Jiménez-Rosado, M., Perez-Puyana, V., & Romero, A. (2019). Development of pea protein bioplastics by a thermomoulding process: Effect of the mixing stage. *Journal of Polymers and the Environment*, 27(5), 968-978. doi:10.1007/s10924-019-01404-3
19. Cermeño, M., Felix, M., Connolly, A., Brennan, E., Coffey, B., Ryan, E., & FitzGerald, R. J. (2019). Role of carbohydrate conjugation on the emulsification and antioxidant properties of intact and hydrolysed whey protein concentrate. *Food Hydrocolloids*, 88, 170-179. doi:10.1016/j.foodhyd.2018.09.030
20. Chamizo, E., & López-Lora, M. (2019). Accelerator mass spectrometry of 236U with he stripping at the centro nacional de aceleradores. *Nuclear Instruments and Methods in Physics Research, Section B: Beam Interactions with Materials and Atoms*, 438, 198-206. doi:10.1016/j.nimb.2018.04.020
21. Chicardi, E., García-Garrido, C., Beltrán, A. M., Sayagués, M. J., & Gotor, F. J. (2019). Synthesis of a cubic Ti(BCN) advanced ceramic by a solid-gas mechanochemical reaction. *Ceramics International*, 45(3), 3878-3885. doi:10.1016/j.ceramint.2018.11.060
22. Cintas, J., Astacio, R., Cuevas, F. G., Montes, J. M., Weissgaerber, T., Lagos, M. Á., . . . Gallardo, J. M. (2019). Production of ultrafine grained hardmetals by electrical resistance sintering. *Metals*, 9(2), 159-167 doi:10.3390/met9020159
23. Civantos, A., Beltrán, A. M., Domínguez-Trujillo, C., Garvi, M. D., Lebrato, J., Rodríguez-Ortiz, J. A., Torres, Y. (2019). Balancing porosity and mechanical properties of titanium samples to favor cellular growth against bacteria. *Metals*, 9(10) doi:10.3390/met9101039
24. Civantos, A., Domínguez, C. Pino, R.J., Setti,G., Pavón, J.J., Martínez-Campos,E., Garcia Garcia, F.J., Rodríguez, J.A., Allain,J.P., Torres, Y. *Designing bioactive porous titanium interfaces to balance mechanical properties and in vitro cells behavior towards increased osseointegration*. Surface and Coatings Technology, Volume 368, 2019, Pages 162-174, ISSN 0257-8972, <https://doi.org/10.1016/j.surfcoat.2019.03.001>.
25. Cuevas, F. G., Andreouli, D., Gallardo, J. M., Oikonomou, V., Cintas, J., Torres, Y., & Montes, J. M. (2019). Ceramic dies selection for electrical resistance sintering of metallic materials. *Ceramics International*, 45(12), 14555-14561. doi:10.1016/j.ceramint.2019.04.172
26. Cuevas-Maraver, J., Kevrekidis, P. G., Malomed, B. A., & Guo, L. (2019). Solitary waves in the Ablowitz–Ladik equation with power-law nonlinearity. *Journal of Physics A: Mathematical and Theoretical*, 52(6) doi:10.1088/1751-8121/aaf755
27. Cuevas-Maraver, J., Kevrekidis, P. G., Mertens, F. G., & Saxena, A. (2019). Speed-of-light pulses in a massless nonlinear dirac equation. *Physical Review E*, 100(2) doi:10.1103/PhysRevE.100.022210

28. Díaz, E., Soria, L., & Gallardo, J. M. (2019). Post-failure life evaluation: A corrosion-fatigue case history. *Engineering Failure Analysis*, 105, 828-836. doi:10.1016/j.engfailanal.2019.07.022
29. Dittler, M. L., Unalan, I., Grünwald, A., Beltrán, A. M., Grillo, C. A., Destch, R., Boccaccini, A. R. (2019). Bioactive glass (45S5)-based 3D scaffolds coated with magnesium and zinc-loaded hydroxyapatite nanoparticles for tissue engineering applications. *Colloids and Surfaces B: Biointerfaces*, 182 doi:10.1016/j.colsurfb.2019.110346
30. Dominguez-Trujillo Cristina; Beltrán Custodio Ana María; Garvi Higueras María Dolores; Salazar-Moya Alba; Lebrato Martinez Julian; Hickey, Daniel. J.; Rodriguez Ortiz Jose Antonio; Kamm Paul. H; Clara Lebrato, Francisco Garcia-Moreno, Webster Tom, Torres Hernández Yadir. Bacterial behavior on coated porous titanium substrates for biomedical applications. *Surface and Coatings Technology*, 357 (2019) 896-902. doi:10.1016/j.surfcoat.2018.10.098.
31. Felix, M., Cermeño, M., & FitzGerald, R. J. (2019). Assessment of the microstructural characteristics and the in vitro bioactive properties of sunflower oil-based emulsions stabilized by fava bean (*vicia faba*) protein. *Food Hydrocolloids*, 97 doi:10.1016/j.foodhyd.2019.105220
32. Felix, M., Cermeño, M., Romero, A., & FitzGerald, R. J. (2019). Characterisation of the bioactive properties and microstructure of chickpea protein-based oil in water emulsions. *Food Research International*, 121, 577-585. doi:10.1016/j.foodres.2018.12.022
33. Felix, M., Perez-Puyana, V., Paúl, A., & Sepúlveda, R. (2019). Camphene/polystyrene solutions: A rheological approach for material processing industry. *Journal of Applied Polymer Science*, 136(37) doi:10.1002/app.47953
34. Felix, M., Romero, A., Carrera-Sánchez, C., & Guerrero, A. (2019). Assessment of interfacial viscoelastic properties of faba bean (*vicia faba*) protein-adsorbed O/W layers as a function of pH. *Food Hydrocolloids*, 90, 353-359. doi:10.1016/j.foodhyd.2018.12.036
35. Félix, M., Romero, A., Carrera-Sánchez, C., & Guerrero, A. (2019). A comprehensive approach from interfacial to bulk properties of legume protein-stabilized emulsions. *Fluids*, 4(2) doi:10.3390/fluids4020065
36. Felix, M., Romero, A., Sanchez, C. C., & Guerrero, A. (2019). Modelling the non-linear interfacial shear rheology behaviour of chickpea protein-adsorbed complex oil/water layers. *Applied Surface Science*, 469, 792-803. doi:10.1016/j.apsusc.2018.11.074
37. Felix, M., Yang, J., Guerrero, A., & Sagis, L. M. C. (2019). Effect of cinnamaldehyde on interfacial rheological properties of proteins adsorbed at O/W interfaces. *Food Hydrocolloids*, 97 doi:10.1016/j.foodhyd.2019.105235
38. Fernández-Espada, L., Bengoechea, C., Sandía, J. A., Cordobés, F., & Guerrero, A. (2019). Development of novel soy-protein-based superabsorbent matrixes through the addition of salts. *Journal of Applied Polymer Science*, 136(5) doi:10.1002/app.47012
39. Gallardo, J. M., Agote, I., Astacio, R., Schubert, T., Cintas, J., Montes, J. M., . . . Cuevas, F. G. (2019). Hard metal production by ERS: Processing parameter roles in final properties. *Metals*, 9(2), 172-185 doi:10.3390/met9020172
40. Gallardo, J. M., & Jiménez-Losada, A. (2019). A characterization of the shapley value for cooperative games with fuzzy characteristic function. *Fuzzy Sets and Systems*, doi:10.1016/j.fss.2019.10.001
41. Gamero, S., Jiménez-Rosado, M., Romero, A., Bengoechea, C., & Guerrero, A. (2019). Reinforcement of soy protein-based bioplastics through addition of lignocellulose and injection molding processing conditions. *Journal of Polymers and the Environment*, doi:10.1007/s10924-019-01430-1
42. García-Garrido, C., Gutiérrez-González, C., Torrecillas, R., Pérez-Pozo, L., Salvo, C., & Chicardi, E. (2019). Manufacturing optimisation of an original nanostructured (beta + gamma)-TiNbTa material. *Journal of Materials Research and Technology*, 8(3), 2573-2585. doi:10.1016/j.jmrt.2019.03.004

43. Garcia-Morato, L. B., Macias, E. F., Nuñez, E. P., & Peral, F. T. (2019). Bifurcation patterns in homogeneous area-preserving piecewise-linear maps. *Qualitative Theory of Dynamical Systems*, 18(2), 547-582. doi:10.1007/s12346-018-0299-7
44. García-Valenzuela, A., Alvarez, R., Espinós, J. P., Rico, V., Gil-Rostra, J., Palmero, A., & Gonzalez-Elipe, A. R. (2019). SiO_x by magnetron sputtered revisited: Tailoring the photonic properties of multilayers. *Applied Surface Science*, 488, 791-800. doi:10.1016/j.apsusc.2019.05.273
45. García-Valenzuela, A., Alvarez, R., Rico, V., Espinos, J. P., López-Santos, M. C., Solís, J., . . . González-Elipe, A. R. (2019). 2D compositional self-patterning in magnetron sputtered thin films. *Applied Surface Science*, 480, 115-121. doi:10.1016/j.apsusc.2019.02.206
46. García-Valenzuela, A., López-Santos, C., Rico, V., Alvarez, R., Palmero, A., & González-Elipe, A. R. (2019). Environmentally tight TiO₂ –SiO₂ porous 1D-photonic structures. *Advanced Materials Interfaces*, 6(4) doi:10.1002/admi.201801212
47. Garcia-Valenzuela, A., Muñoz-Piña, S., Alcala, G., Alvarez, R., Lacroix, B., Santos, A. J., . . . Palmero, A. (2019). Growth of nanocolumnar thin films on patterned substrates at oblique angles. *Plasma Processes and Polymers*, 16(2) doi:10.1002/ppap.201800135
48. Guerrero, J. I., Personal, E., García, A., Parejo, A., Pérez, F., & León, C. (2019). Distributed charging prioritization methodology based on evolutionary computation and virtual power plants to integrate electric vehicle fleets on smart grids. *Energies*, 12(12) doi:10.3390/en12122402
49. Hernández-Saz, J., Herrera, M., Pizarro, J., Gonzalez, M., Abell, J., Walters, R., . . . Molina, S. I. (2019). Effect of the thermal annealing and the nominal composition in the elemental distribution of In_xAl_{1-x}As_ySb_{1-y} for triple junction solar cells. *Journal of Alloys and Compounds*, 792, 1021-1027. doi:10.1016/j.jallcom.2019.04.119
50. Hortigón, B., Gallardo, J. M., Nieto-García, E. J., & López, J. A. (2019). Strain hardening exponent and strain at maximum stress: Steel rebar case. *Construction and Building Materials*, 196, 175-184. doi:10.1016/j.conbuildmat.2018.11.082
51. Hurtado-Bermúdez, S., Jurado-González, J. A., Santos, J. L., Díaz-Amigo, C. F., Aparicio, I., Más, J. L., & Alonso, E. (2019). Geographical origin of bivalve molluscs in coastal areas using natural radioactivity fingerprinting and multivariate statistical analyses: Andalusian coast as case of study. *Journal of Hazardous Materials*, 367, 706-714. doi:10.1016/j.jhazmat.2019.01.027
52. Hurtado-Bermúdez, S., Valencia, J. M., Rivera-Silva, J., Mas, J. L., Aparicio, I., Santos, J. L., & Alonso, E. (2019). Levels of radionuclide concentrations in benthic invertebrate species from the balearic islands, western mediterranean, during 2012–2018. *Marine Pollution Bulletin*, 149. doi:10.1016/j.marpolbul.2019.110519
53. Jiménez-Rosado, M., Perez-Puyana, V., Cordobés, F., Romero, A., & Guerrero, A. (2019). Development of superabsorbent soy protein-based bioplastic matrices with incorporated zinc for horticulture. *Journal of the Science of Food and Agriculture*, 99(10), 4825-4832. doi:10.1002/jsfa.9738
54. Jiménez-Rosado, M., Zarate-Ramírez, L. S., Romero, A., Bengoechea, C., Partal, P., & Guerrero, A. (2019). Bioplastics based on wheat gluten processed by extrusion. *Journal of Cleaner Production*, 239 doi:10.1016/j.jclepro.2019.117994
55. Kominis, Y., Cuevas-Maraver, J., Kevrekidis, P. G., Frantzeskakis, D. J., & Bountis, A. (2019). Continuous families of solitary waves in non-symmetric complex potentials: A melnikov theory approach. *Chaos, Solitons and Fractals*, 118, 222-233. doi:10.1016/j.chaos.2018.11.021
56. Križnar, A., Ager, F. J., Caliri, C., Romano, F. P., Respaldiza, M. Á., Gómez-Morón, M. A., . . . Magdaleno, R. (2019). Study of two large-dimension murillo's paintings by means of macro X-ray fluorescence imaging, point X-ray fluorescence analysis, and stratigraphic studies. *X-Ray Spectrometry*, 48(5), 482-489. doi:10.1002/xrs.2990

57. Larios, D. F., Barbancho, J., Biscarri, F., & Monedero, I. (2019). A research study for the design of a portable and configurable ground test system for the A400M aircraft. *International Journal of Aerospace Engineering*, 2019 doi:10.1155/2019/5167575
58. Lascano, S., Arévalo, C., Montealegre-Melendez, I., Muñoz, S., Rodriguez-Ortiz, J. A., Trueba, P., & Torres, Y. (2019). Porous titanium for biomedical applications: Evaluation of the conventional powder metallurgy frontier and space-holder technique. *Applied Sciences (Switzerland)*, 9(5) doi:10.3390/app9050982
59. López-Castejón, M. L., Bengoechea, C., Espinosa, S., & Carrera, C. (2019). Characterization of prebiotic emulsions stabilized by inulin and β -lactoglobulin. *Food Hydrocolloids*, 87, 382-393. doi:10.1016/j.foodhyd.2018.08.024
60. López-Castejón, M. L., Bengoechea, C., Espinosa, S., & Carrera, C. (2019). Inulin and β -lactoglobulin as stabilizers of prebiotic emulsions. [Caracterización de emulsiones prebióticas estabilizadas con inulina y β -lactoglobulina] *Afinidad*, 76(585), 12-22.
61. López-Lora, M., & Chamizo, E. (2019). Accelerator mass spectrometry of 237Np, 239Pu and 240Pu for environmental studies at the centro nacional de aceleradores. *Nuclear Instruments and Methods in Physics Research, Section B: Beam Interactions with Materials and Atoms*, 455, 39-51. doi:10.1016/j.nimb.2019.06.018
62. López-Lora, M., Chamizo, E., Rožmarić, M., & Louw, D. C. (2019). Presence of 236U and 237Np in a marine ecosystem: The northern Benguela upwelling system, a case study. *Science of the Total Environment*, doi:10.1016/j.scitotenv.2019.135222
63. López-Lora, M., Levy, I., & Chamizo, E. (2019). Simple and fast method for the analysis of 236U, 237Np, 239Pu and 240Pu from seawater samples by accelerator mass spectrometry. *Talanta*, 200, 22-30. doi:10.1016/j.talanta.2019.03.036
64. Lungwitz, F., Escobar-Galindo, R., Janke, D.,(...), Gemming, S., Krause, M. Transparent conductive tantalum doped tin oxide as selectively solar-transmitting coating for high temperature solar thermal applications. *Solar Energy Materials and Solar Cells*, Volume 196, 2019, Pages 84-93, ISSN 0927-0248, <https://doi.org/10.1016/j.solmat.2019.03.012>.
65. Luque, A., Carrasco, A., Martín, A., & de las Heras, A. (2019). The impact of class imbalance in classification performance metrics based on the binary confusion matrix. *Pattern Recognition*, 91, 216-231. doi:10.1016/j.patcog.2019.02.023
66. Luque, A., Carrasco, A., Martín, A., & Lama, J. R. (2019). Exploring symmetry of binary classification performance metrics. *Symmetry*, 11(1) doi:10.3390/sym11010047
67. Luque, A., Gómez-Bellido, J., Carrasco, A., & Barbancho, J. (2019). Exploiting the symmetry of integral transforms for featuring anuran calls. *Symmetry*, 11(3) doi:10.3390/sym11030405
68. Malvar, J. L., Santos, J. L., Martín, J., Aparicio, I., & Alonso, E. (2019). Routine analytical method for monitoring the main metabolites for a recurrent group of parabens and pharmaceuticals in wastewater and tap water. *Analytical and Bioanalytical Chemistry*, 411(25), 6625-6635. doi:10.1007/s00216-019-02035-2
69. Martín, J., Orta,M.M., Medina-Carrasco, S., Santos, J.L., Aparicio, I., Alonso, E., *Evaluation of a modified mica and montmorillonite for the adsorption of ibuprofen from aqueous media*. Applied Clay Science, Volume 171, 2019, Pages 29-37, ISSN 0169-1317, <https://doi.org/10.1016/j.clay.2019.02.002>.
70. Martín, J., Santos, J. L., Aparicio, I., & Alonso, E. (2019). Exposure assessment to parabens, bisphenol A and perfluoroalkyl compounds in children, women and men by hair analysis. *Science of the Total Environment*, 695 doi:10.1016/j.scitotenv.2019.133864
71. Martín-Gómez, A., Aguayo-González, F., & Luque, A. (2019). A holonic framework for managing the sustainable supply chain in emerging economies with smart connected metabolism. *Resources, Conservation and Recycling*, 141, 219-232. doi:10.1016/j.resconrec.2018.10.035

72. Montes, J. M., de la Viña, F. J., Agote, I., Schubert, T., Cuevas, F. G., Torres, Y., Cintas, J. (2019). Simulation of the electrical resistance sintering of hardmetal powders. *Metals and Materials International*, doi:10.1007/s12540-019-00409-w
73. Morón, M. C., Pozo-Morales, L., Benito Mora, C., Garvi, D., & Lebrato, J. (2019). OMW spillage control tool based on tracking p-coumaric acid degradation by HPLC. *Environmental Technology (United Kingdom)*, 40(16), 2157-2172. doi:10.1080/09593330.2018.1439108
74. Morón, M. C., Pozo-Morales, L., Garvi, D., Alonso-Contreras, A. J., & Lebrato, J. (2019). Bioparticles consisting of olive mill wastewater (OMW)-adapted bacteria and OMW-polluted soil as carrier—an application in an anaerobic fluidized bed bioreactor. *Journal of Water Process Engineering*, 32 doi:10.1016/j.jwpe.2019.100976
75. Orta, M.M., Martín, J., Medina-Carrasco, S., Santos, J. L., Aparicio, I., & Alonso, E. (2019). Adsorption of propranolol onto montmorillonite: Kinetic, isotherm and pH studies. *Applied Clay Science*, 173, 107-114. doi:10.1016/j.clay.2019.03.015
76. Padilla, S., López-Gutiérrez, J. M., Manjón, G., García-Tenorio, R., Galván, J. A., & García-León, M. (2019). Meteoric ¹⁰Be in aerosol filters in the city of seville. *Journal of Environmental Radioactivity*, 196, 15-21. doi:10.1016/j.jenvrad.2018.10.009
77. Palmero, F., Cuevas-Maraver, J., English, L. Q., Li, W., & Chacón, R. (2019). Induced localized nonlinear modes in an electrical lattice. *Physica Scripta*, 94(6) doi:10.1088/1402-4896/ab0244
78. Palmero, F., English, L. Q., Chen, X. -, Li, W., Cuevas-Maraver, J., & Kevrekidis, P. G. (2019). Experimental and numerical observation of dark and bright breathers in the band gap of a diatomic electrical lattice. *Physical Review E*, 99(3) doi:10.1103/PhysRevE.99.032206
79. Pavón, Juan, Diana López, Fanor Mondragón, Jaime Gallego, Sandra L. Arias, Kara Luitjohan, Brandon Holybee, Yadir Torres, José A. Rodríguez, Mónica Echeverry-Rendón, Ana Civantos, Jean Paul Allain. *Balancing Biofunctional and Biomechanical Properties with Porous Titanium Reinforced by Carbon Nanotubes*. Journal of Biomedical Materials Research: Part A, 107A (2019) 719–731. DOI: 10.1002/jbm.a.36586.
80. Perez-Puyana, V., Felix, M., Cabrera, L., Romero, A., & Guerrero, A. (2019). Development of gelatin/chitosan membranes with controlled microstructure by electrospinning. *Iranian Polymer Journal (English Edition)*, 28(11), 921-931. doi:10.1007/s13726-019-00755-x
81. Perez-Puyana, V., Felix, M., Romero, A., & Guerrero, A. (2019). Influence of the processing variables on the microstructure and properties of gelatin-based scaffolds by freeze-drying. *Journal of Applied Polymer Science*, 136(25) doi:10.1002/app.47671
82. Perez-Puyana, V., Jiménez-Rosado, M., Romero, A., & Guerrero, A. (2019). Crosslinking of hybrid scaffolds produced from collagen and chitosan. *International Journal of Biological Macromolecules*, 139, 262-269. doi:10.1016/j.ijbiomac.2019.07.198
83. Perez-Puyana, V., Jiménez-Rosado, M., Rubio-Valle, J. F., Guerrero, A., & Romero, A. (2019). Gelatin vs collagen-based sponges: Evaluation of concentration, additives and biocomposites. *Journal of Polymer Research*, 26(8) doi:10.1007/s10965-019-1863-9
84. Perez-Puyana, V., Ostos, F. J., López-Cornejo, P., Romero, A., & Guerrero, A. (2019). Assessment of the denaturation of collagen protein concentrates using different techniques. *Biological Chemistry*, doi:10.1515/hsz-2019-0206
85. Perez-Puyana, V. M., Jiménez-Rosado, M., Romero, A., & Guerrero, A. (2019). Highly porous protein-based 3D scaffolds with different collagen concentrates for potential application in tissue engineering. *Journal of Applied Polymer Science*, 136(37) doi:10.1002/app.47954
86. Picardo, Alberto., Soltero, Victor M. ,Peralta, M. Estela., Chacartegui, Ricardo . *District heating based on biogas from wastewater treatment plant*. Energy, Volume 180, 2019, Pages 649-664, ISSN 0360-5442, <https://doi.org/10.1016/j.energy.2019.05.123>.

- 87.** Quintero, N. R., & Sánchez-Rey, B. (2019). Exact stationary solutions of the parametrically driven and damped nonlinear dirac equation. *Chaos*, 29(9) doi:10.1063/1.5115505
- 88.** Sánchez-De-Armas, R., Cruz Hernández, N., & Calzado, C. J. (2019). Copper-nitroxide based breathing crystals: A unified mechanism of gradual magnetostructural transition supported by quantum chemistry calculations. *Inorganic Chemistry Frontiers*, 6(5), 1228-1237. doi:10.1039/c9qi00129h
- 89.** Urban, P., Ternero, F., Caballero, E. S., Nandyala, S., Montes, J. M., & Cuevas, F. G. (2019). Amorphous al-ti powders prepared by mechanical alloying and consolidated by electrical resistance sintering. *Metals*, 9(11) doi:10.3390/met9111140
- 90.** Villa-Alfageme, M., Chamizo, E., Kenna, T. C., López-Lora, M., Casacuberta, N., Chang, C., Christl, M. (2019). Distribution of ^{236}U in the U.S. GEOTRACES eastern pacific zonal transect and its use as a water mass tracer. *Chemical Geology*, 517, 44-57. doi:10.1016/j.chemgeo.2019.04.003
- 91.** Vivo-Vilches, C., López-Gutiérrez, J. M., García-León, M., & Vockenhuber, C. (2019). Factors related to ^{41}K interference on ^{41}Ca AMS measurements. *Nuclear Instruments and Methods in Physics Research, Section B: Beam Interactions with Materials and Atoms*, 438, 193-197. doi:10.1016/j.nimb.2018.04.031
- 92.** Wang, Y., Wu, K., & Cubero, D. (2019). An excess electron at polyethylene/vacuum interfaces using a reaction-field technique. *Physical Chemistry Chemical Physics*, 21(5), 2533-2539. doi:10.1039/c8cp06897f
- 93.** Yuste, M., Escobar-Galindo, R., Benito, N., (...), Albella, J.M., Sánchez, O. Effect of the Incorporation of Titanium on the Optical Properties of ZnO Thin Films: From Doping to Mixed Oxide Formation. *Coatings* 2019, 9(3), 180; <https://doi.org/10.3390/coatings9030180>
- 94.** Zamora-Polo, F., Luque-Sendra, A., Aguayo-González, F., & Sánchez-Martín, J. (2019). Conceptual framework for the use of building information modeling in engineering education. *International Journal of Engineering Education*, 35(3), 744-755. Retrieved from www.scopus.com
- 95.** Zamora-Polo, F., Sánchez-Cortés, M. M., Reyes-Rodríguez, A. M., & Sanz-Calcedo, J. G. (2019). Developing project managers' transversal competences using building information modeling. *Applied Sciences (Switzerland)*, 9(19) doi:10.3390/app9194006
- 96.** Zamora-Polo, F., & Sánchez-Martín, J. (2019). Teaching for a better world. Sustainability and sustainable development goals in the construction of a change-maker university. *Sustainability (Switzerland)*, 11(15) doi:10.3390/su11154224
- 97.** Zamora-Polo, F., Sánchez-Martín, J., Corrales-Serrano, M., & Espejo-Antúnez, L. (2019). What do university students know about sustainable development goals? A realistic approach to the reception of this UN program amongst the youth population. *Sustainability (Switzerland)*, 11(13) doi:10.3390/su11133533
- 98.** Fereiro, J. A., Kayser, B., Romero-Muñiz, C., Vilan, A., Dolgikh, D. A., Chertkova, R. V., . . . Cahen, D. (2019). A solid-state protein junction serves as a bias-induced current switch. *Angewandte Chemie - International Edition*, 58(34), 11852-11859. doi:10.1002/anie.201906032
- 99.** Ortega, M., Vilhena, J. G., Zotti, L. A., Díez-Pérez, I., Cuevas, J. C., & Pérez, R. (2019). Tuning structure and dynamics of blue copper azurin junctions via single amino-acid mutations. *Biomolecules*, 9(10) doi:10.3390/biom9100611
- 100.** Romero-Muñiz, C., Ortega, M., Vilhena, J. G., Díez-Pérez, I., Cuevas, J. C., Pérez, R., & Zotti, L. A. (2019). Mechanical deformation and electronic structure of a blue copper azurin in a solid-state junction. *Biomolecules*, 9(9) doi:10.3390/biom9090506
- 101.** Schosser, W. M., Zotti, L. A., Cuevas, J. C., & Pauly, F. (2019). Doping hepta-alanine with tryptophan: A theoretical study of its effect on the electrical conductance of peptide-based single-molecule junctions. *Journal of Chemical Physics*, 150(17) doi:10.1063/1.5090457

- 102.** Zotti, L. A., Bednarz, B., Hurtado-Gallego, J., Cabosart, D., Rubio-Bollinger, G., Agrait, N., & van der Zant, H. S. J. (2019). Can one define the conductance of amino acids? *Biomolecules*, 9(10) doi:10.3390/biom9100580
- 103.** Delgado, M., Molina-Becerra, M., Santos Júnior, J. R., & Suárez, A. (2019). A non-local perturbation of the logistic equation in R^N . *Nonlinear Analysis, Theory, Methods and Applications*, 187, 147-158. doi:10.1016/j.na.2019.04.005.
- 104.** Cornetti, Pietro; Muñoz-Reja, Mar; Sapora, Alberto; Carpinteri, Alberto. 2019. Finite fracture mechanics and cohesive crack model: weight functions vs. cohesive laws. *International Journal of Solids and Structures* 156-157: 123-136.
- 105.** Abril, C., Santos, J. L., Martín, J., Aparicio, I., & Alonso, E. (2019). Occurrence, fate and environmental risk of anionic surfactants, bisphenol A, perfluorinated compounds and personal care products in sludge stabilization treatments. *Science of the Total Environment*, doi:10.1016/j.scitotenv.2019.135048
- 106.** Civantos, A., Allain, J.P., Pavón, J.J., (...), Chen, M., Torres, Y. Directed irradiation synthesis as an advanced plasma technology for surface modification to activate porous and “as-received” titanium surfaces. *Metals*, 9(12) doi:10.3390/met9121349
- 107.** García, F. J., González, H., Gómez-Aguilar, F. J., Castrejón-Pita, A. A., & Castrejón-Pita, J. R. (2019). Evolution of gaussian wave packets in capillary jets. *Physical Review E*, 100(5) doi:10.1103/PhysRevE.100.053111
- 108.** Peralta, M.E., Luna, P., Soltero, V. M. (2019) Towards standards-based of circular economy: knowledge available and sufficient for transition?, *International Journal of Sustainable Development & World Ecology*, DOI: 10.1080/13504509.2019.1701581
- 109.** Villena Manzanares, F. (2019) Export Performance of SMEs: An Empirical Analysis of the Mediating Role of Corporate Image. *Journal of Small Business Management*, Volume 57, Issue 2, 271-694. Doi: <https://doi.org/10.1111/jsbm.12337>
- 110.** Casado-Pascual,J., Sánchez-Rey, B., Quintero, N. R., (2019). Soliton ratchet induced by random transitions among symmetric sine-Gordon potentials, *Chaos* 29(5):053119
- 111.** Quintero, N. R., Sánchez-Rey, B., Cooper, F., Mertens F.G. (2019). Length-scale competition in the parametrically driven nonlinear Dirac equation with a spatially periodic force, *Journal of Physics A Mathematical and Theoretical* 52(28), DOI:10.1088/1751-8121/ab2469
- 112.** Cooper, F., Khare A., Quintero, N. R., Sánchez-Rey, B., Mertens F.G., Saxena A. B. (2019). Parametrically driven nonlinear Dirac equation with arbitrary nonlinearity, *Journal of Physics A Mathematical and Theoretical*, DOI: 10.1088/1751-8121/ab60e7.
- 113.** Távara L., Reinoso J., Blázquez A., Mantič V., (2019) On the 3D extension of failure models for adhesive joints under mixed-mode fracture conditions: LEBIM and CZM. *Theoretical and Applied Fracture Mechanics* 100, 362–376.
- 114.** Távara L., Moreno L., Paloma E., Mantič V., (2019) Accurate modelling of instabilities caused by multi-site interface-crack onset and propagation in composites using the sequentially linear analysis and Abaqus. *Composite Structures* 225, 110993.
- 115.** García-Guzmán L., Távara L., Reinoso J., París F., (2019) Fracture energy characterisation of a structured interface by means of a novel J-Integral procedure. *Journal of Strain Analysis for Engineering Design*. DOI: 10.1177/0309324719861825.
- 116.** Beltrán, A.M. Structural and compositional analysis of Co-based coatings after catalytic tests for the sodium borohydride hydrolysis. *Materials Research Express*, Volume 6, Number 8, <https://doi.org/10.1088/2053-1591/ab1e27>.
- 117.** Boccardi, E., Liverani, L., Beltrán, A.M. Mesoporous silica submicron particles (MCM-41) incorporating nanoscale Ag: synthesis, characterization and application as drug delivery coatings. *Journal of Porous*

- 118.** Martín, J., Hidalgo,F., García-Corcoles ,M.T., Ibañez-Yuste,A.J., Alonso,E., Vilchez, J.L. , Zafra-Gómez,A. Bioaccumulation of perfluoroalkyl substances in marine echinoderms: Results of laboratory-scale experiments with *Holothuria tubulosa* Gmelin, 1791 Chemosphere 215 (2019) 261-271. <https://doi.org/10.1016/j.chemosphere.2018.10.037>
- 119.** Martín, J., Asuero, A.G.(2019) High hydrostatic pressure for recovery of anthocyanins: effects, performance, and applications, Separation & Purification Reviews, DOI: 10.1080/15422119.2019.1632897
- 120.** Martin-Piñero,M.J., Ramirez, P., Muñoz, J., Alfaro, M.C., Development of rosemary essential oil nanoemulsions using a wheat biomass-derived surfactant,Colloids and Surfaces B: Biointerfaces,Volume 173,2019, Pages 486-492, ISSN 0927-7765, <https://doi.org/10.1016/j.colsurfb.2018.10.024>.
- 121.** Parejo, A.; Personal, E.; Larios, D.F.; Guerrero, J.I.; García, A.; León, C. Monitoring and Fault Location Sensor Network for Underground Distribution Lines. Sensors 2019, 19, 576.
- 122.** Rosales Martínez, A, Castro Rodríguez, M, Jaraíz, M, et al. Reduction of furfural by Mn/2,4,6-Coll.HCl/H₂O: Mechanistic aspects of this reaction. Appl Organometal Chem. 2019; 33:e4948. <https://doi.org/10.1002/aoc.4948>
- 123.** Petrie, B., Camacho Muñoz, M.D., Martín,J.,Stereoselective LC–MS/MS methodologies for environmental analysis of chiral pesticides,TrAC Trends in Analytical Chemistry,Volume 110, 2019, Pages 249-258,ISSN 0165-9936, <https://doi.org/10.1016/j.trac.2018.11.010>.

2018

1. Barroso, P.J.; Martín, J.; Santos, J.L.; Aparicio, I.; Alonso, E. Analytical method for the evaluation of the outdoor air contamination by emerging pollutants using tree leaves as bioindicators. Analytical and Bioanalytical Chemistry, Vol. 410, 417-428 (2018)
2. Aparicio, I.; Martín, J.; Abril, C.; Santos, J.L.; Alonso, E. Determination of household and industrial chemicals, personal care products and hormones in leafy and root vegetables by liquid chromatography-tandem mass spectrometry. Journal of Chromatography A, Vol. 1533, 49-56 (2018)
3. Orta, M.D.M., Martín, J., Medina-Carrasco, S., Santos, J.L., Aparicio, I., Alonso, E. Novel synthetic clays for the adsorption of surfactants from aqueous media. Journal of Environmental Management, Vol. 206, 357-363 (2018)
4. J.M. Tarragó, D. Coureaux, Y. Torres, E. Jiménez-Piquéa, L. Schneider, J. Fair, L. Llanes. Strength and reliability of WC-Co cemented carbides: Understanding microstructural effects on the basis of R-curve behavior and fractography. International journal of refractory metals & hard material, Vol. 71, 221-226 (2018)
5. Cristina Domínguez-Trujillo, Fátima Terner, José Antonio Rodríguez-Ortiz, Juan José Pavón, Isabel Montealegre-Meléndez, Cristina Arévalo, Francisco García-Moreno, Yadir Torres. Improvement of the balance between a reduced stress shielding and bone ingrowth by bioactive coatings on porous titanium substrates. Surface and coating technology, 338, 32-37 (2018)
6. E. Boccardi, A. Philippart, A.M. Beltrán, J. Schmidt, L. Liverani, W. Peukert, A.R. Boccaccini. Biodegradability of spherical mesoporous silica particles (MCM-41) in simulated body fluid (SBF). American mineralogist, Vol. 103 (3), 350-354 (2018)
7. E. Chicardi, C. García-Garrido, M.J. Sayagués, Y. Torres, V. Amigó, C. Aguilar. Development of a novel fcc structure for an amorphous-nanocrystalline Ti-33Nb-4Mn (at. %) ternary alloy. Materials characterization, Vol. 135, 46-56 (2018)
8. E. Chicardi, R. Bermejo, F.J. Gotor, L. Llanes, Y. Torres. Influence of temperature on the biaxial strength of cemented carbides with different microstructures. International journal of refractory metals & hard material, Vol. 71, 82-91 (2018)

9. C. Domínguez-Trujillo, E. Peón, E. Chicardi, H. Pérez, J.A. Rodríguez-Ortiz, J.J. Pavón, J. García-Couce, J.C. Galván, F. García-Moreno, Y. Torres. Sol-gel deposition of hydroxyapatite coatings on porous titanium for biomedical applications. *Surface and coating technology*, Vol. 333, 158-162 (2018)
10. Felix M., Martínez I., Romero A., Partal P., Guerrero A. Effect of pH and nanoclay content on the morphology and physicochemical properties of soy protein/montmorillonite nanocomposite obtained by extrusion. *Composites Part B-Engineering*, Vol. 140, 197-203 (2018)
11. Cuadri A., Romero A., Bengoechea C., Guerrero A. The effect of carboxyl group content on water uptake capacity and tensile properties of functionalized soy protein-based superabsorbent plastics. *Journal of Polymers and the Environment*, (2018)
12. M.C. Morón, L. Pozo-Morales, C. Benito Mora, D. Garvi, J. Lebrato. OMW spillage control tool based on tracking p-Coumaric acid degradation by HPLC. *Environmental Technology*, (2018)
13. C. Vivo-Vilches, J.M. López-Gutiérrez, R. Periáñez, C. Marcinko, F. Le Moigne E, P. McGinnity, J.I. Peruchena, M. Villa-Alfageme. Recent evolution of ^{129}I Levels in the Nordic Seas and the North Atlantic Ocean. *Science of the Total Environment*, Vol. 621, 376-386 (2018)
14. H. Xu, J. Cuevas-Maraver, P.G. Kevrekidis y A. Vainchtein. An energy-based stability criterion for solitary traveling waves in Hamiltonian lattices. *Phil. Trans. R. Soc. A*, 20170192 (2018)
15. E.G. Charalampidis, J. Cuevas-Maraver, D.J. Frantzeskakis y P.G. Kevrekidis. Rogue waves in ultracold bosonic seas. *Rom. Rep. Phys* (2018)
16. J. Cuevas-Maraver, B. A. Malomed, P.G. Kevrekidis y D.J. Frantzeskakis. Stabilization of the Peregrine soliton and Kuznetsov-Ma breathers by means of nonlinearity and dispersion management. *Phys. Lett. A* (2018)
17. M. López-Lora, E. Chamizo, M. Villa-Alfageme, S. Hurtado-Bermúdez, N. Casacuberta, M. García-León. Isolation of ^{236}U and $^{239},\text{ }^{240}\text{Pu}$ from seawater samples and its determination by Accelerator Mass Spectrometry. *Talanta*, 178, 202-210 (2018)
18. Molina Cantero, Alberto Jesús, Castro García, Juan Antonio, Lebrato Vázquez, Clara, Gómez González, Isabel María, Merino Monge, Manuel. Real-Time Processing Library for Open-Source Hardware Biomedical Sensors. *Sensors*, 18 (1033), 1-34 (2018)
19. S. Muñoz, S.M. Castillo, Y. Torres. Different models for simulation of mechanical behaviour of porous materials. *Journal of the Mechanical Behavior of Biomedical Materials*, Vol. 80, 88-96 (2018)
20. Svenja Heise, Tobias Wirth, Michael Höhlinger, Yadir Torres Hernández, José Antonio Rodríguez Ortiz, Victoria Wagener, Sannakaisa Virtanen, Aldo R. Boccaccini. Electrophoretic deposition of chitosan/bioactive glass/silica coatings on stainless steel and WE43 Mg alloy. *Surface and Coatings Technology*, 344, 553-563 (2018)
21. Fernando Javier Aguilar-Perez, Rossana Vargas-Coronado, J. Manuel Cervantes-Uc, Juan Cauich-Rodríguez, Raúl Rosales Ibáñez, Juan José Pavón Palacio, Yadir Torres Hernández and José Antonio Rodríguez Ortiz. Preparation and characterization of titanium-Segmented polyurethane composites for bone tissue engineering. *Journal of Biomaterials Applications*, 33(1) (2018) 11–22
22. J.A. Sanz-Herrera, L. Soria, E. Reina-Romo, Y. Torres, A.R. Boccaccini, Model of dissolution in the framework of tissue engineering and drug delivery. *Biomechanics and Modeling in Mechanobiology*, 17(5) (2018) 1331-1341
23. Yadir Torres, Perla Sarria, Francisco José Gotor, Eiel Gutiérrez, Eduardo Peón, Ana María Beltrán and Jesús E. González. Surface modification of Ti-6Al-4V alloys manufactured by selective laser melting: Microstructural and tribo-mechanical characterization. *Surface & Coatings Technology* 348 (2018) 31–40
24. M.A. García, L. Elbaile, Y. Torres, R.D. Crespo, J. Carrizo and J.A. García. Microstructure and Room-Temperature Mechanical Properties of Crystalline and Amorphous FeAl based Melt Spun Ribbons. *Journal of Non-Crystalline Solids* 497 (2018) 1–6
25. Santiago Hurtado-Bermúdez, José Antonio Jurado-González , Juan Luis Santos , Carlos Francisco Díaz-Amigo , Irene Aparicio , José Luis Masa, Esteban Alonso, Baseline activity concentration of ^{210}Po and ^{210}Pb and dose assessment in bivalve molluscs at the Andalusian coast, *Marine Pollution Bulletin* 133 (2018) 711–716
26. Concepción Abril, Julia Martín, José Luis Malvar, Juan Luis Santos, Irene Aparicio, Esteban Alonso, Dispersive liquid–liquid microextraction as a new clean-up procedure for the determination of

- parabens, perfluorinated compounds, UV filters, biocides, surfactants, and plasticizers in root vegetables, *Analytical and Bioanalytical Chemistry*, 410 (2018) 5155–5163
27. Julia Martín, María del Mar Orta, Santiago Medina-Carrasco, Juan Luis Santos, Irene Aparicio , Esteban Alonso, Removal of priority and emerging pollutants from aqueous media by adsorption onto synthetic organo-funtionalized high-charge swelling micas, *Enviromental Research* 164 (2018) 488-494
28. J.M. Mánuel, J.J. Jiménez, F.M. Morales, B. Lacroix, A.J. Santos, R. Garcia, E. Blanco, M. Domínguez, M. Ramírez, A.M. Beltrán, D. Alexandrov, J. Tot, R. Dubreuil, V. Videkov, S. Andreev, B. Tzaneva, H. Bartsch, J. Breiling, J. Pezoldt, M. Fischer, J. Mueller, Engineering of III-Nitride Semiconductors on Low Temperature Co-fired Ceramics, *Scientifc Reports* 8 (2018) 6879, 1-14
29. Q. Nawaz, M.A.U. Rehman, A. Burkowski, J. Schmidt, A.M. Beltrán, S. Ameen, N.K. Alber, W. Peukert, A.R. Boccaccini, Synthesis and characterization of manganese containing mesoporous bioactive glass nanoparticles for biomedical applications, *Journal of Materials Science: Materials in Medicine* 29 (2018) 64, 1-13
30. G. Arzac, M. Paladini, V. Godihno, A.M. Beltrán, M.C. Jimenez de Haro, A. Fernandez, A. Agar Monclova, Activation effect on a Co-Ru-C thin film catalyst for the hydrolysis of sodium, *Scientifc Reports* 8 (2018) 9755, 1-11
31. C. Domínguez-Trujillo, F. Ternero, J.A. Rodríguez-Ortiz, S. Heise, A.R. Boccaccini, J. Lebrato, Y. Torres, Bioactive coatings on porous titanium for biomedical applications, *Surface & Coatings Technology* 349 (2018) 584–592
32. Fernández-Espada L., Bengoechea C., Sandía J.A., Cordobés F., Guerrero A., Development of novel soy-protein-based superabsorbent matrixes through the addition of salts, *Journal of Applied Polymer Science*, 135, 47012 (2018)
33. Félix M., Martínez I., Aguilar J.M., Guerrero A., Development of Biocomposite Superabsorbent Nanomaterials: Effect of Processing Technique, *Journal of Polymers and the Environment*, 26 (9): 4013–4018 (2018)
34. Pérez-Puyana V., Félix M., Romero A., Guerrero A., Development of eco-friendly biodegradable superabsorbent materials obtained by injection moulding, *Journal of Cleaner Production*, 198, 312-319 (2018)
35. Jiménez-Rosado M., Pérez-Puyana V., Romero A., Guerrero A., Development of soy protein-based matrices containing zinc as micronutrient for horticulture, *Industrial Crops and Products*, 121, 345-351 (2018)
36. Felix M., López-Osorio A., Romero A., Guerrero A., Faba bean protein flour obtained by densification: A sustainable method to develop protein concentrates with food applications, *LWT-Food Science and Technology*, 93, 563-569 (2018)
37. Pérez-Puyana V., Jiménez-Rosado M., Romero A., Guerrero A., Development of PVA/gelatin nanofibrous scaffolds for Tissue Engineering via electrospinning, *Materials Research Express* 5, 035401 (<https://doi.org/10.1088/2053-1591/aab164>) (2018)
38. Felix M., Isaurralde N. C., Romero A., Guerrero A., Influence of pH value on microstructure of O/W emulsions stabilized by chickpea protein flour, *Food Science and Technology International*. DOI: 10.1177/1082013218774707 (2018)
39. Felix M., Martínez I., Romero A., Partal P., Guerrero A., Effect of pH and nanoclay content on the morphology and physicochemical properties of soy protein/ montmorillonite nanocomposite obtained by extrusion, *Composites Part B-Engineering*, 140: 197-203 (2018)
40. Vázquez, T. V., Sendra, A. L., & Abril, L. G. (2018). Proyecto de industria turística conectada 4.0. a velocidad de crucero. *DYNA Ingenieria e Industria*, 93(5), 470
41. Luque, A., Romero-Lemos, J., Carrasco, A., & Barbancho, J. (2018). Improving Classification Algorithms by Considering Score Series in Wireless Acoustic Sensor Networks. *Sensors*, 18(8), 2465
42. Luque, A., Gómez-Bellido, J., Carrasco, A., & Barbancho, J. (2018). Optimal Representation of Anuran Call Spectrum in Environmental Monitoring Systems Using Wireless Sensor Networks. *Sensors*, 18(6), 1803
43. Luque, A., Romero-Lemos, J., Carrasco, A., & Gonzalez-Abril, L. (2018). Temporally-aware algorithms for the classification of anuran sounds. *PeerJ*, 6, e4732

44. Luque, A., Romero-Lemos, J., Carrasco, A., & Barbancho, J. (2018). Non-sequential automatic classification of anuran sounds for the estimation of climate-change indicators. *Expert Systems with Applications*, 95, 248-260
45. F. Ancio, A.J. Gamez, M. Marcos. Superficial alterations in the generation of a 3D surface. The case of machining by turning. Application of Principal Component Analysis to the study of the various factors involved. *International Journal of Surface Science and Engineering*. 12 (2). 77-98. (2018)
46. Fernández García, Julio Rodrigo, Gallego Sánchez, Inés Magdalena, Jiménez Losada, Andrés, Ordoñez Sanchez, Manuel, Soft cooperation systems and games. En: *International Journal of General Systems*. 2018. Vol. 47. Núm. 3. Pag. 244-262. <https://doi.org/10.1080/03081079.2017.141309>.
47. Gallardo Morilla, José Manuel, Jiménez Jiménez, María de las Nieves, Jiménez Losada, Andrés, A Shapley distance in graphs, *Information Sciences*. 2018. Vol. 432. Pag. 269-277. <https://doi.org/10.1016/j.ins.2017.10.054>
48. Gallardo Morilla, José Manuel, Jiménez Jiménez, María de las Nieves, Jiménez Losada, Andrés, The Harsanyi value for nontransferable utility games with restricted cooperation, *Optimization*. 2018. Vol. 67. Núm. 6. Pag. 943-956. <https://doi.org/10.1080/02331934.2018.1426580>
49. Ponce, Enrique; Ros, Javier; Vela, Elísabet, The boundary focus-saddle bifurcation in planar piecewise linear systems. Application to the analysis of memristor oscillators, *Nonlinear Anal. Real World Appl.* 43 (2018), 495–514
50. Abril Concepción, Santos Juan Luis, Malvar José Luis, Martín, Aparicio Irene, Alonso Esteban, Determination of perfluorinated compounds, bisphenol A, anionicsurfactants and personal care products in digested sludge, compost and soil by liquid-chromatography-tandem mass spectrometry, *Journal of Chromatography A*, 1576 (2018) 34–41
51. Martín Julia, Díaz-Montaña Enrique Jacobo, Asuero Agustín G., Recovery of Anthocyanins Using Membrane Technologies: A Review, *Critical Reviews in Analytical Chemistry*, 48:3, (2018) 143-175, DOI: 10.1080/10408347.2017.1411249
52. Martín Gómez Alejandro M., Aguayo González Francisco, Bárcena Mariano Marcos, Smart eco-industrial parks: A circular economy implementation based on industrial metabolism, *Resources, Conservation & Recycling* 135 (2018) 58–69
53. Soltero Victor M., Chacartegui Ricardo, Ortiz Carlos, Velazquez R., Potential of biomass district heating systems in rural areas, *Energy* 156 (2018) 132-143
54. Soltero Victor M., Chacartegui Ricardo, Ortiz Carlos, Quirosa Gonzalo, Techno-Economic Analysis of Rural 4th Generation Biomass District Heating, *Energies* 2018, 11, 3287; doi:10.3390/en11123287
55. Delgado M., M. Felix M., Bengoechea Carlos, Development of bioplastic materials: From rapeseed oil industry by products to added-value biodegradable biocomposite materials, *Industrial Crops & Products* 125 (2018) 401–407
56. Morales R.T., Linares-Barranco A., Jimenez-Fernandez A., Moreno G. J., Neuromorphic LIF Row-by-Row Multi-convolution Processor for FPGA, *IEEE transactions on biomedical circuits and systems*
57. Aimar A., Mostafa H, Calabrese E., Rios-Navarro A., Tapiador-Morales R., Lungu Iulia-Alexandra, Milde Moritz B, Corradi Federico, Linares-Barranco Alejandro, Liu Shih-Chii, Delbruck Tobi, Nullhop: A flexible convolutional neural network accelerator based on sparse representations of feature maps, *IEEE transactions on neural networks and learning systems*, 1-13
58. Linares-Barranco A., Liu H., Rios-Navarro A., Gomez-Rodriguez F., Moeys Diederik, Delbruck Tobi, Approaching Retinal Ganglion Cell Modeling and FPGA Implementation for Robotics, *Entropy* 20 (6), 475
59. Camuñas-Mesa L. A. , Domínguez-Cordero Y. L., Linares-Barranco A., Serrano-Gotarredona Teresa, Linares-Barranco Bernabé, A Configurable Event-Driven Convolutional Node with Rate Saturation Mechanism for Modular ConvNet Systems Implementation, *Frontiers in Neuroscience* 12, 63
60. Gutierrez-Galan D., Dominguez-Morales J. P., Cerezuela-Escudero E., Rios-Navarro Antonio, Tapiador-Morales Ricardo, Rivas-Perez M., Dominguez-Morales M., Jimenez-Fernandez, Angel, Linares-Barranco, Alejandro, Embedded neural network for real-time animal behavior classification, *Neurocomputing* 272, 17-26
61. Escudero E. C., Peña F. P., Vicente R. P., Jimenez-Fernandez A., Moreno G. J., Morgado-Estevez Arturo, Real-time neuro-inspired sound source localization and tracking architecture applied to a robotic platform, , *Neurocomputing*, 283, 129-139

62. García-Calvo R., Guisado J. L., Diaz-del-Rio F., Córdoba A., Jiménez-Morales Francisco, Graphics Processing Unit-Enhanced Genetic Algorithms for Solving the Temporal Dynamics of Gene Regulatory Networks, *Evolutionary Bioinformatics* 14, 1176934318767889
63. Montealegre-Meléndez, I.; Arévalo, C.; Perez-Soriano, E.M.; Kitzmantel, M.; Neubauer, E. Microstructural and XRD Analysis and Study of the Properties of the System Ti-TiAl-B4C Processed under Different Operational Conditions. *Metals*, Vol. 8(5), 367 (2018)
64. Montealegre-Meléndez, I.; Neubauer, E.; Arévalo, C.; Perez-Soriano, E.M.; Kitzmantel, M. Powder-materials impact on nanoparticle-reinforced Ti-6Al-4V matrix composites produced via inductive hot pressing. *International Journal of Materials and Product Technology*, Vol. 56(3), 207-219 (2018)
65. Távara L., Reinoso J., Castillo D., Mantič V., (2018) Mixed-mode failure of interfaces studied by the 2D linear elastic–brittle interface model: Macro- and micro-mechanical finite-element applications in composites. *The Journal of Adhesion*, 94:8, 627-656.
66. Justo J. Távara L., García-Guzmán L., París F., (2018) Characterization of 3D printed long fibre reinforced composites. *Composite Structures* 185, 537–548.
67. García-Guzmán L., Távara L., Reinoso J., Justo J. París F., (2018) Fracture resistance of 3D printed adhesively bonded DCB composite specimens using structured interfaces: Experimental and theoretical study. *Composite Structures* 188, 173–184.
68. Velasco M.L., Graciani E., Távara L., Correa E., París F., (2018) BEM multiscale modelling involving micromechanical damage in fibrous composites. *Engineering Analysis with Boundary Elements* 93, 1–9.
69. Cañas J., Távara L., Blázquez A., Estefani A., Santacruz G., (2018) A new in situ peeling test for the characterisation of composite bonded joints. *Composites Part A* 113, 298–310.

2017

1. Luque-Sendra, Amalia; Peralta-Álvarez, María Estela; Lama-Ruiz, Juan Ramón; Aguayo-González, Francisco. Low cost multimedia sensor networks for obtaining lighting maps. *Multimedia Tools and Applications*, 1-28 (2017)
2. Luque-Sendra, Amalia; Aguayo-González, Francisco; Lama-Ruiz, Juan Ramón. Distributed lightning monitoring: an affordable proposal. *Multimedia Tools and Applications*, Vol. 76, 19825-19841 (2017)
3. Lizana, Jesús; Soltero-Sánchez, Víctor Manuel; Chacartegui Ramírez, Ricardo. District heating systems based on low-carbon energy technologies in Mediterranean areas. *Energy*, Vol. 120, 397-416 (2017)
4. Marcos-Bárcena, Mariano; Aguayo-González, Francisco; Peralta-Álvarez, María Estela. On the sustainability of machining processes. Proposal for a unified framework through the triple bottom-line from an understanding review. *Journal of Cleaner Production*, Vol. 142, 3890-3904 (2017)
5. Luque-Sendra, Amalia; Gómez-bellido, Jesús; Carrasco, Alejandro; Personal, Enrique; León-De Mora, Carlos. Evaluation of the Processing Times in Anuran Sound Classification. *Wireless Communications and Mobile Computing*, Vol. 2017 (ID 8079846), 1-15 (2017)
6. Aparicio, I.; Martín, J.; Santos, J.L.; Malvar, J.L.; Alonso, E. Stir bar sorptive extraction and liquid chromatography–tandem mass spectrometry determination of polar and non-polar emerging and priority pollutants in environmental waters. *Journal of Chromatography A*, Vol 1500, 43-52 (2017)
7. Domínguez-Moñino, I.; Díaz-Herraiz, M.; Jurado, V.; Laiz, L.; Miller, A.; Santos, J.L.; Alonso, E.; Saiz-Jiménez, C. Nature and origin of the violet stains on the walls of a Roman tomb. *Science of the Total Environment*, Vol. 598, 889-899 (2017)
8. Martín, J.; Zafra-Gómez, A.; Hidalgo, F.; Ibáñez-Yuste, A.J.; Alonso, E.; Vílchez, J.L. Multi-residue analysis of 36 priority and emerging pollutants in marine echinoderms (*Holothuria tubulosa*) and marine sediments by solid-liquid extraction followed by dispersive solid phase extraction and liquid chromatography–tandem mass spectrometry analysis. *Talanta*, Vol 166, 336-348 (2017)
9. Rodríguez-Gómez, R.; Martín, J.; Zafra-Gómez, A.; Alonso, E.; Vílchez, J.L.; Navalón, A. Biomonitoring of 21 endocrine disrupting chemicals in human hairsamples using ultra-high performance liquid chromatography-tandem mass spectrometry. *Chemosphere*, Vol. 168, 676-684 (2017)
10. L.C. Gontard, J. Cintas, R.E.D. Borkowski. The benefit of thresholding carbon layers in electron tomographic tilt series by intensity downshifting. *Journal of microscopy*, Vol. 265 (3), 298-306 (2017)

11. E.S. Caballero, J. Cintas, F.G. Cuevas, J.M. Montes, F. Ternero, F.J.V. Reina. Synthesis and characterization of in situ-reinforced Al-AlN composites produced by mechanical alloying. *Journal of alloys and compounds*, Vol. 728, 640-644 (2017)
12. J.M. Montes, F.G. Cuevas, F. Ternero, R. Astacio, E.S. Caballero, J. Cintas. A method to determine the Electrical Resistance of a Metallic Powder Mass under Compression. *Metals*, Vol. 7, 11 (2017)
13. J.M. Montes. On limiting velocity with Weber-like potentials. *Canadian journal of physics*, Vol. 95 (8), 770-776 (2017)
14. J.M. Montes, F.G. Cuevas, J. Cintas, F. Ternero, E.S. Caballero. Phenomenological equation for the thermal dependence of the activation energy of creep. *Materials letters*, Vol. 196, 273-275 (2017)
15. L. Liverani, E. Boccardi, A.M. Beltrán, A.R. Boccaccini. Incorporation of Calcium containing Mesoporous (MCM-41_Type) particles in electrospun PCL Fibers by using benign solvents. *Polymers*, Vol. 9 (487), 1-16 (2017)
16. F.J. García-García, A.M. Beltrán, F. Yubero, A.R. Gonzalez-Elipe, R.M. Lambert. High Performance Novel Gadolinium Doped Ceria/Yttria Stabilized Zirconia/Nickel Layered and Hybrid Thin Film Anodes for Application in Solid Oxide Fuel Cells. *Journal of power sources*, Vol. 363, 251-259 (2017)
17. M. Paladini, G.M. Arzac, V. Godinho, D. Hufschmidt, M.C. Jiménez de Haro, A.M. Beltrán, A. Fernández. The role of cobalt hydroxide in deactivation of thin film co-based catalysts for sodium borohydride hydrolysis. *Applied catalysis B: Environmental*, Vol. 210, 342-351 (2017)
18. S. Scrivano, B. Gómez Tubío, I. Ortega-Feliu, F. J. Ager, A. Paúl, M. A. Respaldiza. Compositional and microstructural study of joining methods in archaeological gold objects. *X-Ray spectrometry*, Vol. 46, 123-130 (2017)
19. E. Chicardi, F.J. Gotor, M.D. Alcalá, J.M. Córdoba. Influence of milling parameters on the solid-gas synthesis of TiCxN1-x by mechanically induced self-sustaining reaction. *Powder technology*, Vol. 319, 12-18 (2017)
20. A.G. de la Obra, F.J. Gotor, E. Chicardi. Effect of the impact energy on the chemical homogeneity of a (Ti,Ta,Nb) (C,N) solid solution obtained via a mechanically induced self-sustaining reaction. *Journal of alloys and compounds*, Vol. 708, 1008-1017 (2017)
21. Montealegre-Meléndez, I., Arévalo, C., Perez-Soriano, E.M., Neubauer, E., Rubio-Escudero, C. and Kitzmantel, M. Analysis of the Influence of Starting Materials and Processing Conditions on the Properties of W/Cu Alloys. *Materials*, Vol. 10 (142), 2-11 (2017)
22. Torres, Y., García-Ostos, C., Arévalo, C., Gotor, F.J., Pavón, J.J., Trueba, P., Rodríguez-Ortiz, J.A. Processing and characterization of surrogate nuclear materials with controlled radial porosity. *Journal of nuclear science and technology*, Vol. 54 (2), 167-173 (2017)
23. De la Obra, A.G., Avilés, M.A., Torres, Y., Chicardi, E., Gotor, F.J. A new family of cermets: Chemically complex but microstructurally simple. *Int. J. Ref. Metals & Hard Mater.*, Vol. 63, 17-25 (2017)
24. Heise, S., Höhlinger, M., Torres, Y., Pavón Palacio, J.J., Rodriguez Ortiz, J.A., Wagener, V., Virtanen, S., Boccaccini, A.R. Electrophoretic deposition and characterization of chitosan/bioactive glass composite coatings on Mg alloy substrates. *Electrochimica Acta*, Vol. 232, 456-464 (2017)
25. Felix M., Pérez-Puyana V., Romero A., Guerrero A. Development of thermally processed bioactive pea protein gels: Evaluation of mechanical and antioxidant properties. *Food and Bioproducts Processing*, Vol. 101, 74-83 (2017)
26. Felix M., Romero A., Rustad T., Guerrero A. Physicochemical, microstructure and bioactive characterization of gels made from crayfish protein. *Food Hydrocolloids*, Vol. 63, 429-436 (2017)
27. Felix M., Romero A., Guerrero A. Viscoelastic properties, microstructure and stability of high-oleic O/W emulsions stabilized by crayfish protein concentrate and xanthan gum. *Food Hydrocolloids*, Vol. 64, 9-17 (2017)
28. Romero A., Pérez-Puyana V., Marshal P., Choplín L., Guerrero A. Emulsification process controlled by a mixer type rheometer in O/W protein-based emulsions. *LWT-Food Science and Technology*, Vol. 76, 26-32 (2017)

- 29.** Cuadri A., Romero A., Bengoechea C., Guerrero A. Natural superabsorbent plastic materials based on a functionalized soy protein. *Polymer Testing*, Vol. 58, 126-134 (2017)
- 30.** Aguilar J.M., Cordobés F., Raymundo, A., Guerrero A. Thermal gelation of mixed egg yolk/kappa-carrageenan dispersions. *Carbohydrate Polymers*, Vol. 161, 172-180 (2017)
- 31.** Bigne F., Romero A., Ferrero C., Puppo M.C., Guerrero A. Rheological and microstructural study of wheat doughs partially replaced with mesquite flour (*Prosopis alba*) and added with transglutaminase. *Food and Bioprocess Technology*, Vol. 10, 819-830 (2017)
- 32.** Pérez-Puyana V., Felix M., Romero A., Guerrero A. Development of pea protein-based bioplastics with antimicrobial properties. *Journal of the Science of Food and Agriculture*, Vol. 97, 2671-2674 (2017)
- 33.** Felix M., Romero A., Guerrero A. Emulsification process controlled by a mixer type rheometer in O/W protein-based emulsions. *Food Hydrocolloids*, Vol. 76, 26-32 (2017)
- 34.** Romero A., Felix M., Pérez-Puyana V., Choplin L., Guerrero A. Use of a mixer-type rheometer for predicting the stability of O/W protein-based emulsions. *LWT-Food Science and Technology*, Vol. 85, 75-81 (2017)
- 35.** Felix M., Pérez-Puyana V., Romero A., Guerrero A. Production and characterization of bioplastics obtained by injection moulding of various protein systems. *Journal of Polymers and the Environment*, Vol. 25, 91-100 (2017)
- 36.** Felix M., Romero A., Rustad T., Guerrero A. Rheological properties and antioxidant activity of protein gels-like systems made from crayfish concentrate and hydrolysates. *Food and Bioproducts Processing*, Vol. 102, 167- 176 (2017)
- 37.** Felix M., Romero A., Rustad T., Guerrero A. Influence of Transglutaminase (TGase) enzyme on mechanical and bioactive properties of crayfish protein gels. *Food Biophysics*, Vol. 12, 348-355 (2017)
- 38.** Felix M., Pérez-Puyana V., Romero A., Guerrero A. Development of protein-based bioplastics modified with different additives. *Journal of Applied Polymer Science*, Vol. 134, 45430 (2017)
- 39.** Bengoechea C., Molina S.E., Guerrero A., Puppo M.C. Effect of pH on the thermal gelation of carob protein isolate. *Journal of Food Science and Technology-Mysore*, Vol. 54, 153-163 (2017)
- 40.** Boury V., Pérez-Puyana V., Felix M., Romero A., Guerrero A. Evaluation of the injection moulding conditions in soy/nanoclay based composites. *European Polymer Journal*, Vol. 95, 539-546 (2017)
- 41.** Isaurralde, N. C., Felix M., Romero A., Guerrero A. Chickpea protein-stabilized emulsions: from interfacial to bulk rheology. *Annual Transactions of the Nordic Rheology Society*, Vol. 25, 85-91 (2017)
- 42.** Cuadri A., Bengoechea C., Romero A., Guerrero A. Development of bio-based superabsorbent polymeric matrices based on functionalized soy protein. *Annual Transactions of the Nordic Rheology Society*, Vol. 25, 315-319 (2017)
- 43.** Felix M., Martínez I., Romero A., Partal P., Guerrero A. Effect of pH and nanoclay content on the morphology and physicochemical properties of soy protein/ montmorillonite nanocomposite obtained by extrusion. *Composites Part B-Engineering*, Vol. 140, 197-203 (2017)
- 44.** Felix M., Romero A., Guerrero A. Valorization of wastes and by-products from Red-Crayfish Industry based on their protein content. *The Ibero-American Journal of Rheology*, Vol. 2, 1-10 (2017)
- 45.** I. Zaghbib, M. Félix, S. Arafa, M. Mnasser, A. Romero. Effects of whitening agents and frozen storage on the quality of sardine (*Sardina pilchardus*) surimi: Physicochemical and mechanical properties. *Revista de Aquatic Food Product Technology*, Vol. 26 (1), 29-42 (2017)
- 46.** C. Vivo-Vilches, J.M. López-Gutiérrez, M. García-León, C. Vockenhuber, T. Walczuk. ^{41}Ca measurements on the 1 MV AMS facility at the Centro Nacional de Aceleradores (CAN, Spain). *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms*, Vol. 413, 13-18 (2017)
- 47.** J. Martín Vaquero, J. Cuevas-Maraver y A. Peralta Conde. Propagation studies for the construction of atomic macro-coherence in dense media as a tool to investigate neutrino physics. *Eur. Phys. J. D*, Vol. 71 (61), 1-7 (2017)

- 48.** J. Cuevas-Maraver, P.G. Kevrekidis, D.J. Frantzeskakis, N.I. Karachalios, M. Haragus y G. James. Floquet Analysis of Kuznetsov-Ma breathers: A Path Towards Spectral Stability of Rogue Waves. *Phys. Rev. E*, Vol. 96 (012202), (2017)
- 49.** J. Cuevas-Maraver, P.G. Kevrekidis, A. Vainchtein y H. Xu. Unifying Perspective: Solitary traveling waves as discrete breathers in Hamiltonian lattices and energy criteria for their stability. *Phys. Rev. E*, Vol. 96 (032214), (2017)
- 50.** J. Cuevas-Maraver, P.G. Kevrekidis, A.B. Aceves y A. Saxena. Solitary waves in a two-dimensional nonlinear Dirac equation: from discrete to continuum. *J. Phys. A: Math. Theor.*, Vol. 50 (495207), (2017)
- 51.** R. Carretero-González, J. Cuevas-Maraver, D.J. Frantzeskakis, T.P. Horikis, P.G. Kevrekidis y A.S. Rodrigues. A Korteweg-de Vries description of dark solitons in polariton superfluids. *Phys. Lett. A*, Vol. 381, 3805-3811 (2017)
- 52.** Antonio Sánchez-Coronilla, Javier Navas, Juan Jesús Gallardo, Elisa I. Martín, Desireé De los Santos, Norge Cruz Hernández, Rodrigo Alcántara, José Hidalgo Toledo and Concha Fernández-Lorenzo. Hybrid perovskite, CH₃NH₃PbI₃, for solar applications: an experimental and theoretical analysis of substitution in A and B sites. *Journal of Nanomaterials*, Vol. 2017 (9768918), 1-10(2017)
- 53.** Javier Navas, Antonio Sánchez-Coronilla, Juan Jesús Gallardo, Jose Carlos Piñero, Desiré De los Santos, Elisa I. Martín, Norge Cruz Hernández, Rodrigo Alcántara, Concha Fernández-Lorenzo, Joaquín Martín-Calleja. The impact of Pd on the light harvesting in hybrid organic-inorganic perovskite for solar cells. *Nano Energy*, Vol. 34 (141), (2017)
- 54.** Alex Aziz, A. Rabdel Ruiz-Salvador, Norge Cruz Hernández, Sofia Calero, Said Hamad, and Ricardo Grau-Crespo. Porphyrin-based metal-organic frameworks for solar fuel synthesis photocatalysis: band gap tuning via iron substitutions. *J. Mat. Chem. A*, Vol. 5 (11894), (2017)
- 55.** Joshua O. Olowoyo, Norge Cruz Hernández, Manoj Kumar, Suman L. Jain, Jonathan O. Babalola and Umesh Kumar. Insight of diversified reactivity and theoretical study of mixed phase titanium dioxide for the activation of small molecules under UVA and Sunlight irradiation. *Applied Catalysis B: Environmental*, submitted for publication, (2017)
- 56.** Carmen Jiménez Calzado, Barbara Rodríguez-García, José Ramón Galán Mascarós and Norge Cruz Hernández. Electronic structure and magnetic interactions in the radical salt [BEDT-TTF]2[CuCl₄]. *Inorganic Chemistry*, submitted for publication, (2017)
- 57.** Vivo, Carlos, Lopez Gutierrez, Jose Maria, Periañez Rodriguez, Raul, Marcinko, Charlotte. Le Moigne, Frederic, et. al.: Recent evolution of ¹²⁹I levels in the Arctic and North Atlantic Oceans. *Science of the Total Environment*, Vol. 621, 376-386 (2017)
- 58.** Gómez Guzmán, Jose Manuel, Lopez Gutierrez, Jose Maria, Garcia-Tenorio Garcia-Balmaseda, Rafael, Agulló García, Lidia, Peruchena Fernández, Juan Ignacio, et. al.: Estimating the impact from Fukushima in Southern Spain by ¹³¹I and Accelerator Mass Spectrometry detection of ¹²⁹I. *Journal of Environmental Radioactivity*, Vol. 166 (1), 36-44 (2017)
- 59.** Niurka R. Quintero, Franz G. Mertens, Fred Cooper, Avadh Saxena y A. R. Bishop. Speed-of-light pulses in the massless nonlinear Dirac equation with a potential. *Physical Review E*, Vol. 96 (052219), (2017)
- 60.** Fred Cooper, John F. Dawson, Franz G. Mertens, Edward Arevalo, Niurka R. Quintero, Bogdan Mihaila, Avinash Khare y Avadh Saxena. Response of exact solutions of the nonlinear Schrödinger equation to small perturbations in a class of complex external potentials having supersymmetry and parity-time symmetry. *J. Phys. A Math. Theor.*, Vol. 50, (485205), 1-30 (2017)
- 61.** Franz G. Mertens, Fred Cooper, Niurka R. Quintero, Sihong Shao, Avadh Saxena and A. R. Bishop. Nonlinear Dirac equation solitary waves under a spinor force with different components. *J. Phys. A Math. Theor.*, Vol.50 (145201), 1-20 (2017)
- 62.** Molina Cantero, Alberto Jesús, Guerrero Cubero, Jaime, Gómez González, Isabel María, Merino Monge, Manuel. A New Multisensor Software Architecture for Movement Detection: Preliminary Study with People with Cerebral Palsy. *International Journal of Human-Computer Studies*, Vol. 97, 45-57 (2017)

63. Molina Cantero, Alberto Jesús, Guerrero Cubero, Jaime, Gómez González, Isabel María, Merino Monge, Manuel, Silva Silva, Juan. Characterizing Computer Access Using a One-Channel EEG Wireless Sensor. *Sensors*, Vol. 17 (1525), 1-23 (2017)
64. Molina Cantero, Alberto Jesús, Guerrero Cubero, Jaime, Gómez González, Isabel María, Merino Monge, Manuel, Silva Silva, Juan. Kinect as an access device for people with cerebral palsy: A preliminary study. *International Journal of Human-Computer Studies*, Vol. 108, 62-69 (2017)
65. Rivas Marchena, David, Olmo Fernández, Alberto, Miguel, José Ángel, Martínez, Mar, Huertas Sánchez, Gloria. Real-Time Electrical Bioimpedance Characterization of Neointimal Tissue for Stent Applications. *Sensors*, Vol. 17 (8), 1-11 (2017)
66. Mora Gutiérrez, José Miguel, Jiménez Fernández, Carlos Jesús, Valencia Barrero, Manuel. Trivium hardware implementations for power reduction. *International Journal of Circuit Theory and Applications*, Vol. 45 (2), 188-198 (2017)
67. Mora Gutiérrez, José Miguel, Jiménez Fernández, Carlos Jesús, Valencia Barrero, Manuel. Multiradix Trivium Implementations for Low-Power IoT Hardware. *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, Vol. 25 (12), 3401-3405 (2017)
68. Potestad, Francisco Eugenio, Jiménez Fernández, Carlos Jesús, Valencia Barrero, Manuel. Vulnerability Analysis of Trivium FPGA Implementations. *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, Vol. 25 (12), 3380-3389 (2017)
69. Biscarri Triviño, Félix, Monedero Goicoechea, Íñigo Luis, García Delgado, Antonio, Guerrero, J.I., León de Mora, Carlos. Electricity clustering framework for automatic classification of customer loads. *Expert systems with applications*, Vol. 86, 54-63 (2017)
70. Martin Montes, Antonio, Burbano, Mauricio, León de Mora, Carlos. An Intelligent Methodology for Modeling Semantic Knowledge in Industrial Networks. *WSEAS Transactions on Computers*, Vol. 16, 177-188 (2017)
71. Martin Montes, Antonio, Burbano, Mauricio, León de Mora, Carlos. An Intelligent Agents to Efficient Management Industrial Services and Resource. *International Journal on Advances in Intelligent Systems*, Vol. 10 (3 y 4), 167-178 (2017)
72. Guerrero, J.I., Monedero Goicoechea, Íñigo Luis, Biscarri Triviño, Félix, Biscarri Triviño, Jesús, León de Mora, Carlos. Non-Technical Losses Reduction by Improving the Inspections Accuracy in a Power Utility. *IEEE Transactions on Power Systems*, Vol. 33 (2), 1209-1218 (2017)
73. Guerrero, J.I., Parejo, Antonio, Personal, Enrique, Monedero Goicoechea, Íñigo Luis, Biscarri Triviño, Félix. From Rule Based Expert System to High-Performance Data Analysis for Reduction of Non-Technical Losses on Power Grids. *International Journal on Advances in Intelligent Systems*, Vol. 10 (182), 136-146 (2017)
74. Guerrero, J.I., García Delgado, Antonio, Personal, Enrique, Luque Rodríguez, Joaquín, León de Mora, Carlos. Heterogeneous data source integration for smart grid ecosystems based on metadata mining. *Expert systems with applications*, Vol. 79, 254-268 (2017)
75. Ruiz de Clavijo Vázquez, Paulino, Ostua Aranguena, Enrique, Bellido Diaz, Manuel Jesús, Juan, J., Viejo Cortés, Julián. Minimalistic SDHC-SPI hardware reader module for boot loader applications. *Microelectronics Journal*, Vol. 67, 32-37 (2017)
76. Luque, A., Barbancho, J., Cañete, J. F., & Córdoba, A. (2017). Phase Shadows: An Enhanced Representation of Nonlinear Dynamic Systems. *International Journal of Bifurcation and Chaos*, 27(14), 1730051
77. Carmona Centeno, Victoriano, Fernández Sánchez, Fernando, García Medina, Elisabeth, Including homoclinic connections and T-point heteroclinic cycles in the same global problem for a reversible family of piecewise linear systems, *Applied Mathematics and Computation*. 2017. Vol. 296. Pag. 33-41. <https://doi.org/10.1016/j.amc.2016.10.008>
78. Castro Smirnova, Mirta María, Grünbaum, F. A., Time-and-band limiting for matrix orthogonal polynomials of Jacobi type, *Random matrices: Theory and Applications*, Vol 6, No. 3 (2017), 174001, 12 pages

- 79.** Fernández García, Julio Rodrigo, Gallego Sánchez, Inés Magdalena, Jiménez Losada, Andrés, Ordoñez Sanchez, Manuel, A Banzhaf value for games with a proximity relation among the agents, International Journal of Approximate Reasoning. 2017. Vol. 88. Núm. September 2017. Pag. 192-208. 10.1016/j.ijar.2017.05.010
- 80.** Fernández García, Julio Rodrigo, Gallego Sánchez, Inés Magdalena, Jiménez Losada, Andrés, Ordoñez Sanchez, Manuel, The cg-position value for games on fuzzy communication structures. Fuzzy Sets And Systems. 2017. <https://doi.org/10.1016/j.fss.2017.04.014>
- 81.** Gallardo Morilla, José Manuel, Jiménez Jiménez, María de las Nieves, Jiménez Losada, Andrés, Nontransferable utility games with fuzzy coalition restrictions, Fuzzy Sets And Systems. 2017. <https://doi.org/10.1016/j.fss.2017.08.004>
- 82.** Gallardo Morilla, José Manuel, Jiménez Losada, Andrés, Jiménez Jiménez, María de las Nieves, Fuzzy restrictions and an application to cooperative games with restricted cooperation, International Journal of General Systems. 2017. Vol. 46. Núm. 7. Pag. 772-790. 10.1080/03081079.2017.1324855
- 83.** Benadero, Luis, Ponce Nuñez, Enrique, El Aroudi, Abdelali, Torres Peral, Francisco, Limit cycle bifurcations in resonant LC power inverters under zero current strategy, Nonlinear Dynamics: an international journal of nonlinear dynamics and chaos in engineering systems. 2017. Pag. 1-17. DOI 10.1007/s11071-017-3936-9
- 84.** Esteban, Marina, Torres Peral, Francisco, Ponce Nuñez, Enrique, Bifurcation Analysis of Hysteretic Systems with Saddle Dynamics, Applied Mathematics and Nonlinear Sciences. 2017. Vol. 2. Núm. 2. Pag. 449-464. 10.21042/Amns.2017.2.00036
- 85.** Freire Macias, Emilio, Ponce Nuñez, Enrique, Torres Peral, Francisco, On the critical crossing cycle bifurcation in planar Filippov systems, Journal of Differential Equations. 2015. Vol. 259. Pag. 7086-7107. <http://dx.doi.org/10.1016/j.jde.2015.08.013>
- 86.** Diaz Bañez, Jose Miguel, Fabila Monroy, Ruy, Pérez Lantero, Pablo, Ventura Molina, Inmaculada, New results on the coarseness of bicolored point sets, Information Processing Letters. 2017. Vol. 123. Pag. 1-7. <https://doi.org/10.1016/j.ipl.2017.02.007>
- 87.** Yousefzadeh A., Jabłoński M., Iakymchuk T., Linares-Barranco A., Rosado A, Plana Luis A., Temple Steve, Serrano-Gotarredona Teresa, Furber Steve B., Linares-Barranco Bernabé, On multiple aer handshaking channels over high-speed bit-serial bidirectional lvds links with flow-control and clock-correction on commercial fpgas for scalable neuromorphic, IEEE transactions on biomedical circuits and systems 11 (5), 1133-1147
- 88.** Jiménez-Fernández A., Cerezuela-Escudero E., Miró-Amarante L., Domínguez-Morales Manuel Jesus, Gómez-Rodríguez Francisco de Asís, Linares-Barranco Alejandro, Jiménez-Moreno Gabriel, A binaural neuromorphic auditory sensor for FPGA: a spike signal processing approach, IEEE transactions on neural networks and learning systems 28 (4), 804-818
- 89.** Dominguez-Morales J. P., Rios-Navarro A., Dominguez-Morales M., Tapiador-Morales Ricardo, Gutierrez-Galan Daniel, Cascado-Caballero Daniel, Jimenez-Fernandez Angel, Linares-Barranco Alejandro, Wireless sensor network for wildlife tracking and behavior classification of animals in Doñana, IEEE Communications Letters 20 (12), 2534-2537
- 90.** Montealegre-Meléndez, I.; Arévalo, C.; Ariza, E.; Perez-Soriano, E.M.; Rubio-Escudero, C.; Kitzmantel, M.; Neubauer, E. Analysis of the Microstructure and Mechanical Properties of Titanium-Based Composites Reinforced by Secondary Phases and B4C Particles Produced via Direct Hot Pressing. Materials, Vol. 10(11), 1240 (2017)
- 91.** Arévalo, C.; Montealegre-Meléndez, I.; Pérez-Soriano, E.M.; Ariza, E.; Kitzmantel, M.; Neubauer, E. Study of the Influence of TiB Content and Temperature in the Properties of In Situ Titanium Matrix Composites. Metals, Vol. 7(11), 457 (2017)
- 92.** Távara L., Mantič V., (2017) Crack paths formed by multiple debonds in LFRP composites. Mechanics Research Communications 84, 148–154.

2016

1. Ávila-Gutiérrez, María Jesús; Marcos-Bárcena, Mariano; Aguayo-González, Francisco; Peralta-Álvarez, María Estela. Arquitectura holónica de referencia para empresas de fabricación sostenibles distribuidas. DYNA Medellín, Vol. 84 (200), 160-168 (2016)
2. Peralta-Álvarez, María Estela; Aguayo-González, Francisco; Lama-Ruiz, Juan Ramón; Ávila-Gutiérrez, María Jesús. Sustainable manufacturing engineering and innovative projects of teaching, research and entrepreneurship. Materials Science Forum, Vol. 853, 73-78 (2016)
3. Peralta-Álvarez, María Estela; Marcos-Bárcena, Mariano; Aguayo-González, Francisco. On the sustainability of machining processes. Proposal for a unified framework through the triple bottom-line from an understanding review. Journal of Cleaner Production, (2016)
4. Soltero-Sánchez, Víctor Manuel; Chacartegui Ramírez, Ricardo; Velázquez-Vila, Ramón. Evaluation of the potential of natural gas district heating cogeneration in Spain as a tool for decarbonisation of the economy. Energy, Vol. 115, 1513-1532 (2016)
5. Peralta-Álvarez, María Estela; Marcos-Bárcena, Mariano; Aguayo-González, Francisco. A review of sustainable machining engineering: optimization process through triple bottom line. Journal of Manufacturing Science and Engineering, Vol. 138 (ID 100801), 1-16 (2016)
6. Peralta-Álvarez, María-Estela; Marcos-Bárcena, Mariano; Aguayo-González, Francisco; Lama-Ruiz, Juan Ramón. Advanced fractal manufacturing: multi-level and multi-scale proposal for sustainable manufacturing processes. International Journal of Mechatronics and Manufacturing Systems, (2016)
7. Garrido, E.; Camacho-Muñoz, D.; Martín, J.; Santos, A.; Santos, J.L.; Aparicio, I.; Alonso, E. Monitoring of emerging pollutants in Guadiamar River basin (South of Spain): analytical method, spatial distribution and environmental risk assessment. Environmental Science and Pollution Research, Vol. 23, 25127-25144 (2016)
8. Martín, J.; Santos, J.L.; Aparicio, I.; Alonso, E. Analytical method for biomonitoring of endocrine-disrupting compounds (bisphenol A, parabens, perfluoroalkyl compounds and abrominated flame retardant) in human hair by liquid chromatography-tandem mass spectrometry. Analytica Chimica Acta, Vol. 945, 95-101 (2016)
9. Fasani, D.; Fermo, P.; Barroso, P.J.; Martín, J.; Santos, J.L.; Aparicio, I.; Alonso, E. Analytical method for biomonitoring of PAH using leaves of bitter orange trees (*Citrus aurantium*): a case study in South Spain. Water Air and Soil Pollution, Vol. 227, 360-370 (2016)
10. Martín, J.; Rodríguez-Gómez, R.; Zafra-Gómez, A.; Alonso, E.; Vílchez, J.L.; Navalón, A. Polar stir-bars for isolation and preconcentration of PFCs from human milk samples prior to UHPLC-MS/MS analysis. Bioanalysis, Vol. 8, 633-647 (2016)
11. Díaz-Herraiz, M; Laiz, L.; Jurado, V.; Miller, A.; González-Pérez, J.A; Santos, J.L.; Alonso, E.; Saiz-Jiménez, C. Analytical pyrolysis evidences the presence of granaticins in the violet stains of a Roman tomb. Journal of Analytical and Applied Pyrolysis, Vol. 117, 357-362 (2016)
12. Martín, J.; Rodríguez-Gómez, R.; Zafra-Gómez, A.; Alonso, E.; Vílchez, J.L.; Navalón, A. Validated method for the determination of perfluorinated compounds in placental tissue samples based on a simple extraction procedure followed by ultra-high performance liquid chromatography-tandem mass spectrometry analysis. Talanta, Vol. 150, 169-176 (2016)
13. Caballero, E.S., Cintas, J., Cuevas, F.G., Montes, J.M., Gallardo, J.M. A new method for synthetizing nanocrystalline aluminium nitride via a solid-gas direct reaction. Powder technology, Vol. 287, 341-345 (2016)
14. Montes, J.M., Cuevas, F.G., Cintas, J. and Gallardo, J.M. Electrical conductivity of metal powder aggregates and sintered compacts. Journal of materials science, Vol. 51 (2), 822-835 (2016)
15. Tarragó, M., Coureaux, D., Torres, Y., Casellas, D., Al-Dawery, I., Schneider, L., Llanes, L. Microstructural effects on the R-curve behavior of WC-Co cemented carbides. Materials & design, Vol. 97, 492-501 (2016)
16. García-Ostos, C., Rodríguez-Ortiz, J.A., Arévalo, C., Cobos, J., Gotor, F.J., Torres, Y. Fabrication and characterization of CeO₂ pellets for simulation of nuclear fuel. Nuclear engineering and design, Vol. 298, 160-167 (2016)

17. Tarragó, J.M., Coureaux, D., Torres, Y., Wu, F., Al-Dawery, I., Llanes, L. Implementation of an effective time-saving two-stage methodology for microstructural characterization of cemented carbides. *Int. J. Ref. Metals & Hard Mater.*, Vol. 55, 80-86 (2016)
18. Ager, F.J., Gómez-Tubío, B., Paúl, A., Gómez-Morón, A., Scrivano, S., Ortega-Feliu, I., Respaldiza, M.A. Combining XRF and GRT for the analysis of ancient silver coins. *Microchemical journal*, Vol. 126, 149-154 (2016)
19. Torres, Y., Trueba, P., Pavón, J.J., Chicardi, E., Kamm, P., Gracia-Moreno, F., Rodríguez-Ortiz, J.A. Design, processing and characterization of titanium with radial graded porosity for bone implants. *Materials & design*, Vol. 110, 179-187 (2016)
20. Aranda, B., Cuevas, F.G., Cintas, J., Herrera-García, M., Urban, P. Effect of copper addition on pitting corrosion of MA-Al. *Acta physica polonica A*, Vol. 129 (4), 788-791 (2016)
21. Caballero, E.S., Cintas, J., Cuevas, F.G., Montes, J.M., Herrera-García, M. Improvement in the Mechanical Behavior of Mechanically Alloyed Aluminum Using Short-Time NH₃ Flow. *Metallurgical and materials transactions A: physical metallurgy and materials science*, Vol. 47 (12), 6481-6486 (2016)
22. Caballero, E.S., Cintas, J., Cuevas, F.G., Montes, J.M., Ternero, F. Influence of milling atmosphere on the controlled formation of ultrafine dispersoids in Al-Based MMCs. *Metals*, Vol. 6 (9), 224 (2016)
23. Durán, P., Lachén, J., Plou, J., Sepúlveda, R., Herguido, J., Peña, J.A. Behaviour of freeze-casting iron oxide for purifying hydrogen streams by steam-iron process. *International journal of hydrogen energy*, 19518-19524 (2016)
24. Zheng, K., Taccardi, N., Beltrán, A.M., Sui, B., Zhou, T., Marthala, V.R.R., Hartmann M., Boccaccini, A.R. Timing of calcium nitrate addition affects morphology, dispersity and composition of bioactive glass nanoparticles. *RSC Advances*, Vol. 6, 95101-95111 (2016)
25. Paladini, M., Godinho, V., Arzac G.M., Jiménez de Haro, M.C., Beltrán, A.M., Fernández, A. A comparative study of Co-C, Co-B, and Co supported catalysts prepared by magnetron sputtering deposition: Microstructural and chemical composition effects in the catalyzed NaBH₄ hydrolysis. *RSC Advances*, Vol. 6, 108611-108620 (2016)
26. Chicardi, E., Córdoba, J.M., and Gotor, F.J. A kinetic study of the high temperature oxidation of (Ti,Ta)(C,N)-based cermets. *Corrosion science*, Vol. 102, 168-177 (2016)
27. Chicardi, E., Córdoba, J.M., and Gotor, F.J. High temperature oxidation resistance of (Ti,Ta)(C,N)-based cermets. *Corrosion science*, Vol. 102, 125-136 (2016)
28. Chicardi, E., Gotor, F.J., Medri, V., et al. Hot-pressing of (Ti, Mt) (C, N)-Co-Mo₂C (Mt = Ta, Nb) powdered cermets synthesized by a mechanically induced self-sustaining reaction. *Chemical engineering journal*, Vol. 292, 51-61 (2016)
29. Fides, M., Hvizdoš, P., Balko, J., Chicardi, E., Gotor, F.J. TiTaCN-Co Cermets Prepared by Mechanochemical Technique: Microstructure and Mechanical Properties. *Procedia engineering*, Vol. 149, 87-93 (2016)
30. Arévalo, C., Montealegre-Meléndez, I., Ariza, E., Kitzmantel, M., Rubio-Escudero, C., Neubauer, E. Influence of Sintering Temperature on the Microstructure and Mechanical Properties of In Situ Reinforced Titanium Composites by Inductive Hot Pressing. *Materials*, Vol. 9 (919), 1-13 (2016)
31. Trueba, P., Chicardi, E., Rodríguez-Ortiz, J.A., Pavón, J.J., Cobos, J., Torres, Y. Design, Processing and Characterization of Materials with Controlled Radial Porosity for Biomedical and Nuclear Applications. *Key engineering materials*, Vol. 704, 325-333 (2016)
32. Sarria, P., Torres, Y., Gotor, F.J., Gutiérrez, E., Rodríguez, M., González, R., Hernández, L., Peon, E., Guerra, H., González, J.E. Processing and characterization of Ti-6Al-4V samples manufactured by selective laser melting. *Key engineering materials*, Vol. 704, 260-268 (2016)
33. Torres, Y., Romero, C., Chen, Q., Pérez, G., Rodríguez-Ortiz, J.A., Pavón, J.J., Álvarez, L., Arévalo, C., Boccaccini, A. Electrophoretic deposition of PEEK/45S5 bioactive glass coating on porous titanium substrate: influence of processing conditions and porosity parameters. *Key engineering materials*, Vol. 704 (2016)

34. Arévalo, C., Kitzmantel, M., Neubauer, E., Montealegre-Meléndez. I. Development of Ti-MMCs by the use of different reinforcements via conventional Hot-Pressing. *Key engineering materials*, Vol. 704, 400 (2016)
35. Neubauer, E., Vály, L., Kitzmantel, M., Grech, D., Rovira Ortega, A., Montealegre-Meléndez, I., Arévalo, C. Titanium Matrix Composites with High Specific Stiffness. *Key engineering materials*, Vol. 704, 38 (2016)
36. Montealegre-Meléndez, I., Neubauer, E., Arévalo, C., Rovira, A., Kitzmantel, M. Study of Titanium Metal Matrix Composites Reinforced by Boron Carbides and Amorphous Boron Particles Produced via Direct Hot Pressing. *Key engineering materials*, Vol. 704, 85 (2016)
37. Pavón, J.J., Pino, R., Rodríguez, J.A., Torres, Y. Titanium scaffolds with multi-scale porosity obtained by controlled chemical and electrochemical treatments of porous solids from PM space holder technique. *Frontiers in bioengineering and biotechnology* 4, (2016)
38. Pavón, J.J., Trueba, P., Rodríguez, J.A., Torres, Y., Alonso, E., Hurtado, A., Dunand, D. Advanced titanium scaffolds obtained by directional freeze-drying: on the influence of processing conditions. *Frontiers in bioengineering and biotechnology* 4, (2016)
39. Del Castillo Granados, J.M. Slash distributions of the sum of independent logistic random variables. *Statistics & Probability letters*, Vol. 110, 111-118 (2016)
40. Valdes, C., Monzón, A., Benitez, F.G. Sustainable urban transportation strategies: Searching for synergies. *KSCE Journal of civil engineering*, Vol. 20 (3), 1066-1075 (2016)
41. Del Castillo Granados, J.M. A class of RUM choice models that includes the model in which the utility has logistic distributed errors. *Transportation research part B: methodological*, Vol. 91, 1-20 (2016)
42. Kanchwala, H., Wideberg, J. Pitch reduction and traction enhancement of an EV by real-time brake biasing and in-wheel motor torque control. *International journal of vehicle systems modelling and testing*, (2016)
43. I. Zaghbib, S. Arafa,. Félix, M. Hassouna, A. Romero. Enhancement of the gelling properties of sardine surimi with transglutaminase and optimization of its activity using response surface methodology. *Revista of Food Processing & Technology*, Vol. 7 (6), 594 (2016)
44. Y. Ladjal-Ettoumi, M. Chibane, A. Romero. Emulsifying properties of legume proteins at acidic conditions: Effect of protein concentration and ionic strength. *LWT-Food Science and Technology*, Vol. 66, 260-266 (2016)
45. Y. Ladjal-Ettoumi, H. Boudries, M. Chibane, A. Romero. Pea, chickpea and lentil protein isolates: Physicochemical characterization and emulsifyin properties. *Food Biophysics*, Vol. 11, 43-51 (2016)
46. M.L. López-Castejón, C. Bengoechea, M. García-Morales, I Martínez. Influence of tragacanth gum in egg white based bioplastics: Thermomechanical and water uptake properties. *Carbohydrate Polymers*, Vol. 152, 62-69 (2016)
47. Fernández-Espada L., Bengoechea C., Cordobés F., Guerrero A. Thermo-mechanical properties and water uptake of soy protein-based bioplastics processed by injection molding. *Journal of Biomedical Materials Research Part A*, Vol. 104, 1462-1468 (2016)
48. Pérez-Puyana V., Romero A., Guerrero A. Influence of collagen concentration and glutaraldehyde on collagen-based scaffold properties. *Journal of Biomedical Materials Research Part A*, Vol. 104, 1462-1468 (2016)
49. Pérez-Puyana V., Felix M., Romero A., Guerrero A. Characterization of pea protein-based bioplastics processed by injection moulding. *Food and Bioproducts Processing*, Vol. 97, 100-108 (2016)
50. Pérez-Puyana V., Felix M., Romero A., Guerrero A. Effect of the injection moulding processing conditions on the development of pea protein-based bioplastics. *Journal of Applied Polymer Science*, Vol. 133, 43306 (2016)
51. Fernández-Espada L., Bengoechea C., Cordobés F., Guerrero A. Protein/glycerol blends and injection-molded bioplastic matrices: Soybean versus egg albumen. *Journal of Applied Polymer Science*, Vol. 133, 42980 (2016)

52. Felix M., Lucio-Villegas A., Romero A., Guerrero A. Development of rice protein bio-based plastic materials processed by injection molding. *Industrial Crops and Products*, Vol. 79, 152-159 (2016)
53. Gómez-Heincke D., Martínez I., Partal P., Guerrero A. Development of antimicrobial active packaging materials based on gluten proteins. *Journal of the Science of Food and Agriculture*, Vol. 96, 3432-3438 (2016)
54. Felix M., Romero A., Guerrero A. Development and evaluation of rheological and bioactive properties of rice protein-based gels. *Journal of Cereal Science*, Vol. 72, 91-100 (2016)
55. Felix M., Romero A., Vermant J., Guerrero A. Interfacial properties of highly soluble crayfish protein derivatives. *Colloids and Surface A-Physicochemical and Engineering Aspects*, Vol. 499, 10-17 (2016)
56. Piermaría J., Bengoechea C., Abraham, G.A., Guerrero A. Shear and extensional properties of kefiran. *Carbohydrate Polymers*, Vol. 152, 97-104 (2016)
57. Felix M., Carpintero V., Romero A., Guerrero A. Influence of sorbitol on mechanical and physico-chemical properties of soy protein-based bioplastics processed by injection molding. *Polimeros-Ciencia e Tecnologia*, Vol. 26 (4), 277-281 (2016)
58. De la Portilla F., Pereira S., Molero M., De Marco F., Pérez-Puyana V., Guerrero A., Romero A. Microstructural, mechanical and histological evaluation of modified alginate-based scaffolds. *Journal of Biomedical Materials Research Part A*, Vol. 104, 3107-3114 (2016)
59. Cuadri A., Bengoechea C., Romero A., Guerrero A. A natural-based polymeric hydrogel based on functionalized soy protein. *European Polymer Journal*, Vol. 85, 164-174 (2016)
60. Felix M., Jiménez C., Romero A., Guerrero A. PVA-based electrospun nanofiber mats of potential use in active packaging. *International Journal of Environmental & Agriculture Research*, Vol. 2 (8), 7-14 (2016)
61. Borrás-Talavera, M^a Dolores; Bravo-Rodriguez, Juan Carlos; Montaño-Asquerino, Juan Carlos. Disturbance ratio for optimal multi-event classification in power distribution networks. *IEEE Transactions on Industrial Electronics*, Vol. 63 (5), 3117-3124 (2016)
62. Bravo-Rodriguez, Juan Carlos. Energy conservation law in industrial architecture: an approach through geometric algebra. *Symmetry*, Vol. 8 (92), 1-13 (2016)
63. G. Scognamiglio, E. Chamizo, J.M. López-Gutiérrez, A.M. Müller, S. Padilla, F.J. Santos, M. López-Lora, C. Vivo-Vilches, M. García-León. Recent developments of the 1 MV AMS facility at the Centro Nacional de Aceleradores. *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms*, Vol. 375, 17-25 (2016)
64. Guerrero Millán, Josefa; González García, Heliodoro; García García, Fco. Javier. Spatial modes in one-dimensional models for capillary jets. *Physical Review E*, Vol. 93, 033102_1-033102_9 (2016)
65. J. Cuevas-Maraver, P.G. Kevrekidis, A. Saxena, F. Cooper, A. Khare, A. Comech y C.M. Bender. Solitary waves of a PT-symmetric Nonlinear Dirac equation. *IEEE J. Sel. Top. Quantum Electron*, Vol. 22 (5000109), 1-9 (2016)
66. J. Cuevas-Maraver, P.G. Kevrekidis y D.E. Pelinovsky. Nonlinear instabilities of multi-site breathers in Klein-Gordon lattices. *Stud. Appl. Math.*, Vol. 137, 214-237 (2016)
67. J. Cuevas-Maraver, P.G. Kevrekidis, A. Saxena, A. Comech y R. Lan. Stability of solitary waves and vortices in a 2D nonlinear Dirac model. *Phys. Rev. Lett.*, Vol. 116 (214101), (2016)
68. P.G. Kevrekidis, J. Cuevas-Maraver y D.E. Pelinovsky. Energy Criterion for the Spectral Stability of Discrete Breathers. *Phys. Rev. Lett.*, Vol. 117 (094101), (2016)
69. J. Cuevas-Maraver, P.G. Kevrekidis y B.A. Malomed. A PT-symmetric dual-core system with the sine-Gordon nonlinearity and derivative coupling. *Symmetry*, Vol. 8 (39), (2016)
70. R. Chacón, F. Palmero y J. Cuevas-Maraver. Impulse-induced localized control of chaos in starlike networks. *Phys. Rev. E*, Vol. 93 (0622109), (2016)
71. E.G. Charalampidis, W.Wang, P.G. Kevrekidis, D.J. Frantzeskakis and J. Cuevas-Maraver. SO (2)-induced breathing patterns in multicomponent Bose-Einstein condensates. *Phys. Rev. A*, Vol. 93 (063623), (2016)
72. J. Cuevas-Maraver, R. Chacón y F. Palmero. Impulse-induced generation of stationary and moving discrete breathers in nonlinear oscillator networks. *Phys. Rev. E*, Vol. 94 (062206), (2016)

73. E. Chamizo, M. López-Lora, M. Bressac, I. Levy, M.K. Pham. Excess of ^{236}U in the northwestern Mediterranean Sea. *Science of the Total Environment*, Vol. 565, 767-776 (2016)
74. G. Scognamiglio, E. Chamizo, J.M. López-Gutiérrez, A.M. Müller, S. Padilla, F.J. Santos, M. López-Lora, C. Vivo, M. García-León. Recent developments of the 1MV AMS facility at the Centro Nacional de Aceleradores. *Nuclear Instruments and Methods in Physics Research Section B*, Vol. 375, 17-25 (2016)
75. Ricardo Grau-Crespo, Alex Aziz, Angus W. Collins, Rachel Crespo-Otero, Norge Cruz Hernández, L. Marleny Rodriguez-Albelo, A. Rabdel Ruiz-Salvador, Sofia Calero, and Said Hamad. Modelling a Linker Mix-and-Match Approach for Controlling the Optical Excitation Gaps and Band Alignment of Zeolitic Imidazolate Frameworks. *Angewandte Chemie*, Vol. 55, 16012-16016 (2016)
76. Niurka R. Quintero, Franz G. Mertens, Anatoly Efimov y Alan R. Bishop. Soliton dynamics in optical fibers using the generalized traveling-wave method. *Physical Review E*, Vol. 93, 042214_1-042214_8 (2016)
77. Franz G. Mertens, Niurka R. Quintero, Fred Cooper, Avinash Khare, Avadh Saxena. Erratum: Nonlinear Dirac equation solitary waves in external fields. *Physical Review E*, Vol. 93 (059903), (2016)
78. Franz G. Mertens, Fred Cooper, Niurka R. Quintero, Sihong Shao, Avinash Khare, Avadh Saxena. Solitary waves in the nonlinear Dirac equation in the presence of external driving forces. *J. Phys. A Math. Theor.*, Vol. 49 (065402), 1-23 (2016)
79. B. Sánchez-Rey, J Casado-Pascual and NR Quintero. Kink ratchet induced by a time-dependent symmetric field potential. *Phys. Rev E*, Vol. 94, 012221_1-012221_7 (2016)
80. Dorronzoro Zubiete, Enrique, Gómez González, Isabel María. Evaluation of a Home Biomonitoring Autonomous Mobile Robot. *Computational Intelligence and Neuroscience*, (2016)
81. Castro García, Juan Antonio, Olmo Fernández, Alberto, Pérez, Pablo, Yufera García, Alberto. Microcontroller-Based Sinusoidal Voltage Generation for Electrical Bio-Impedance Spectroscopy Applications. *Journal of Computer and Communications*, Vol. 4 (17), 51-58 (2016)
82. Pérez, Pablo, Maldonado, Andrés, Yufera García, Alberto, Huertas Sánchez, Gloria, Rueda Rueda, Adoración. Towards Bio-impedance Based Labs: A Review. *Journal of electrical engineering*, Vol. 4 (3), 116-127 (2016)
83. Peña Muñoz, Manuel, Biscarri Triviño, Félix, Guerrero, J.I., Monedero Goicoechea, Íñigo Luis, León de Mora, Carlos. Rule-based system to detect energy efficiency anomalies in smart buildings, a data mining approach. *Expert systems with applications*, Vol. 56, 242-255 (2016)
84. Personal, Enrique, García Delgado, Antonio, Parejo, Antonio, Larios Marín, Diego Francisco, Biscarri Triviño, Félix. A Comparison of Impedance-Based Fault Location Methods for Power Underground Distribution Systems. *Energies*, Vol. 9 (12), 1-30 (2016)
85. Luque J, Larios DF, Personal E, Barbancho J, León C. Evaluation of MPEG-7-Based Audio Descriptors for Animal Voice Recognition over Wireless Acoustic Sensor Networks. *Sensors*, Vol. 16 (717), 1-22 (2016)
86. F. Ancio, A.J. Gamez, M. Marcos. Study of turned surfaces by Principal Component Analysis Precision Engineering. 43. 418-428. 2016
87. Fernández García, Julio Rodrigo, Gallego Sánchez, Inés Magdalena, Jiménez Losada, Andrés, Ordoñez Sanchez, Manuel, Cooperation among agents with a proximity relation. En: European Journal Of Operational Research. 2016. Vol. 250. Núm. 2. Pag. 555-565. <https://doi.org/10.1016/j.ejor.2015.09.029>
88. Gallardo Morilla, José Manuel, Jiménez Jiménez, María de las Nieves, Jiménez Losada, Andrés, A Shapley Measure of Power in Hierarchies, *Information Sciences*. 2016. Vol. 372. Pag. 98-110. <http://dx.doi.org/10.1016/j.ins.2016.08.025>
89. Faigle, Ulrich, Grabisch, Michel, Jiménez Losada, Andrés, Ordoñez Sanchez, Manuel, Games on concept lattice: Shapley value and core. *Discrete Applied Mathematics*. 2016. Vol. 198. Pag. 29-47. <https://doi.org/10.1016/j.dam.2015.08.004>
90. Díaz-Báñez, José Miguel, Heredia, Marco A., Peláez, Canek, Sellarès, J. Antoni, Urrutia, Jorge, Ventura Molina, Inmaculada, Convex blocking and partial orders on the plane, *Computational Geometry Theory and Applications* 2016. Vol. 51. Pag. 55-66. <http://dx.doi.org/10.1016/j.comgeo.2015.08.003>

91. Ventura Molina, Inmaculada; Diaz Bañez, Jose Miguel; Pérez Lantero, Pablo; Korman, Matias. The 1-Center and 1-Highway problem revisited. *Annals of Operation Research*. 2015. Vol. 246. Núm. 1. Pag. 167-179. 10.1007/s10479-015-1790-z
92. Salmerón-García J., Inigo-Blasco P., Diaz F., Cagigas-Muñiz D., A trade off analysis of a cloud-based robot navigation assistant using stereo image processing, *IEEE Transactions on Automation Science and Engineering* 12 (2), 444-454
93. Muñoz-Reja, Mar; Távara-Mendoza, Luis; Mantic-Lescisin, Vladislav; Cornetti, Pietro. 2016. Crack onset and propagation at fibre-matrix elastic interfaces under biaxial loading using finite fracture mechanics. *Composites. Part A: Applied Science and Manufacturing* 82: 267-278.
94. Muñoz-Reja, Mar; Buroni, Federico; Sáez-Pérez, Andrés; García-Sánchez, Felipe. 2016. 3D explicit-BEM fracture analysis for materials with anisotropic multifield coupling. *Applied Mathematical Modelling* 40: 2897-2912.
95. Reinoso J., Blázquez A., Távara L., París F., Arellano C. (2016) Damage tolerance of composite runout panels under tensile loading. *Composites Part B* 96:79-93.
96. Távara L., Mantič V., Graciani E., París F., (2016) Modelling interfacial debonds in unidirectional fibre-reinforced composites under biaxial transverse loads. *Composite Structures* 136: 305–312.

2015

1. Peralta-Álvarez, María Estela; Aguayo-González, Francisco; Lama-Ruiz, Juan Ramón; Ávila- Gutiérrez, María Jesús. MGE2: a framework for Cradle to Cradle Design. *DYNA Medellín*, Vol. 82 (191), 137-146 (2015)
2. Martín-Gómez, Alejandro Manuel; Aguayo-González, Francisco; Lama-Ruiz, Juan Ramón; Marcos-Bárcena, Mariano. Metabolismo industrial inteligente en el proyecto de productos sostenibles. *Dyna Management*. Vol. 3, 1-13 (2015)
3. Álamo-Cantarero, Teodoro; Tempo, Roberto; Luque-Sendra, Amalia; Rodríguez-Ramírez, Daniel. Randomized methods for design of uncertain systems: Sample complexity and sequential algorithms. *Automática*, Vol. 52 (1), 160-172 (2015)
4. Rey-lorenzana, Eloísa; Aguayo-González, Francisco; Peralta-Álvarez, María Estela; Lama-Ruiz, Juan Ramón; Ávila-Gutiérrez, María Jesús. Métodos escalares y vectoriales en la evaluación del riesgo de incendio en el ciclo de vida de una construcción. *Informes de la Construcción*, Vol. 67 (539), (2015)
5. Salguero-Gómez, Jorge; Muñoz-Cauqui, María del Carmen; Batista-Ponce, Moisés; Calvino-Fernández Trujillo, Antonio; Aguayo-González, Francisco; Marcos-Bárcena, Mariano. R&D&i Management System in Distributed Manufacturing Systems. *Science Direct*, Vol. 132, 54-61 (2015)
6. Peralta-Álvarez, María Estela; Marcos-Bárcena, Mariano; Aguayo-González, Francisco; Lama-Ruiz, Juan Ramón; Córdoba-Roldán, Antonio. Sustainable Fractal Manufacturing: A New Approach to Sustainability in Machining Processes. *Procedia Engineering*, Vol. 132, 926-933 (2015)
7. Martín, J.; Möder, M.; Gaudl, A.; Alonso, E.; Reemtsma, T. Multi-class method for biomonitoring of hair samples using gas chromatography-mass spectrometry. *Analytical and Bioanalytical Chemistry*, Vol. 407, 8725-8734 (2015)
8. Martín, J.; Santos, J.L.; Aparicio, I.; Alonso, E. Determination of hormones, a plasticizer, preservatives, per- fluoroalkylated compounds, and a flame retardant in water samples by ultrasound-assisted dispersive liquid–liquid microextraction based on the solidification of a floating organic drop. *Talanta*, Vol. 143, 335-343 (2015)
9. de la Torre, T.; Alonso, E.; Santos, J.L.; Rodríguez, C.; Gómez, M.A.; Malfeito, J.J. Trace organics removal using three membrane bioreactor configurations: MBR, IFAS-MBR and MBMBR. *Water Science & Technology*, Vol. 71.5, 761-768 (2015)
10. Hampel, M.; Alonso, E.; Aparicio, I.; Santos, J.L.; Leaver, M. Hepatic proteome analysis of Atlantic salmon (*Salmo salar*) after exposure to environmental concentrations of human pharmaceuticals. *Molecular and Cellular Proteomics*, Vol. 14, 371-381 (2015)

11. Martín, J.; Santos, J.L.; Aparicio, I.; Alonso, E. Pharmaceutically active compounds in sludge stabilization treatments: anaerobic and aerobic digestion, wastewater stabilization ponds and composting. *Science of the Total Environment*, Vol. 503-504, 97-104 (2015)
12. Chicardi, E., Torres, Y., Sayagués, M. J., Medri, V., Melandri, C., Córdoba, J.M., Gotor, F.J. Toughening of complete solid solution cermets by graphite addition. *Chemical Engineering Journal*, Vol. 267, 297-305 (2015)
13. Montes, J.M., Cuevas, F.G., Cintas, J., Urban, P. A One-Dimensional Model of the Electrical Resistance Sintering Process. *Metallurgical and Materials Transactions A-physical metallurgy and Materials Science*, Vol. 46A (2), 963-980 (2015)
14. Sepúlveda, R., Plunk, A.A., Dunand, D.C. Microstructure of Fe₂O₃ scaffolds created by freeze-casting and sintering. *Materials Letters*, Vol. 142, 56-59 (2015)
15. Pavón, J.J., Trueba, P., Rodríguez-Ortiz, J.A., Torres, Y. Development of new titanium implants with longitudinal gradient porosity by space-holder technique. *Journal of Materials Science*, Vol. 50 (18), 6103-6112 (2015)
16. Tarragó, J.M., Jiménez-Piqué, E., Schneider, L., Casellas, D., Torres, Y., Llanes, L. FIB/FESEM experimental and analytical assessment of R-curve behavior of WC-Co cemented carbides. *Materials Science and Engineering: A*, Vol. 645, 142-149 (2015)
17. Muñoz, S., Pavón, J.J., Rodríguez-Ortiz, J.A., Civantos, A., Allain, J.P., Torres, Y. On the influence of space holder in the development of porous titanium implants: Mechanical, computational and biological evaluation. *Materials Characterization*, Vol. 108, 68-78 (2015)
18. Jiménez-Espadafor, F.J., Palomo Guerrero, D., Carvajal Trujillo, E., Torres García, M., Wideberg, J. Fully optimized energy management for propulsion, thermal cooling and auxiliaries of a serial hybrid electric vehicle. *Applied Thermal Engineering*, Vol. 91, 694-705 (2015)
19. Kanchwala, H., Wideberg, J., Bordons Alba, C., Marcos Rodríguez, D. Control of an independent 4WD electric vehicle by DYC method. *International Journal of Vehicle Systems Modelling and Testing*, Vol. 10, 168-184 (2015)
20. Benitez, F.G., Romero, L.M., Caceres, N., del Castillo, J.M. The bootstrapping approach for inferring confident freight transport matrices. *International Journal of Transport Economics*, XLII, 1 (2015)
21. Borjas, S., Gil, E.J., Cordero, L., Pavón, J.J., Rodriguez-Ortiz, J.A., Boccaccini, A.R., and Torres Y. Electrophoretic deposition of PEEK/45S5 bioactive glass coating on porous titanium substrate: influence of processing conditions and porosity parameters. *Key Engineering*, Vol. 654, 189-194 (2015)
22. Félix M., Romero A., Martín-Alfonso J.E., Guerrero A. Development of crayfish protein-PCL biocomposite material processed by injection moulding. *Compos Part B-Eng*, Vol. 78, 291-297 (2015)
23. Ramírez F., Félix M., Romero A., Guerrero A. Características mecánicas de uñas acrílicas en el toque de guitarra. *Afinidad*, Vol. 72 (572), 249-255 (2015)
24. Santos J., Calero N., Guerrero A. Relationship of rheological and microstructural properties with physical stability of potato protein-based emulsions stabilized by guar gum. *Food Hydrocolloids*, Vol. 44, 109-114 (2015)
25. Félix M., Romero A., Cordobés F., Guerrero A. Development of crayfish bio-based plastic materials processed by small-scale injection molding. *J Sci Food Agric*, Vol. 95, 679-687 (2015)
26. A. Gila, A. Jiménez, G. Beltrán, A. Romero. Correlation of fatty acid composition of virgin olive oil with thermal and physical properties. *European Revista of Lipid Science and Technology*, Vol. 117, 366-376 (2015)
27. M.L. López-Castejón, C. Bengoechea, M. García-Morales, I Martínez. Effect of plasticizer and storage conditions on thermomechanical properties of albumen/tragacanth based bioplastics. *Food and Bioproducts Processing*, Vol.95, 264-271 (2015)
28. J. Cuevas-Maraver, P.G. Kevrekidis y A Saxena. Solitary Waves in a Discrete Nonlinear Dirac equation. *J. Phys. A: Math. Theor.*, Vol. 48 (055204), 1-22 (2015)

29. P.G. Kevrekidis, J. Cuevas-Maraver, A. Saxena, F. Cooper y A. Khare. Interplay between parity-time symmetry, supersymmetry, and nonlinearity: An analytically tractable case example. *Phys. Rev. E*, Vol. 92 (042901), (2015)
30. J. Cuevas-Maraver, A. Khare, P.G. Kevrekidis, H. Xu y A. Saxena. PT-Symmetric dimer in a generalized model of coupled nonlinear oscillators. *Int. J. Theor. Phys.*, Vol. 54 (3960), (2015)
31. Elena Chamizo, Mercedes López-Lora, María Villa, Nuria Casacuberta, José María López-Gutiérrez, Mai Khanh Pham. Analysis of ^{236}U and plutonium isotopes, $^{239,240}\text{Pu}$, on the 1 MV AMS system at the Centro Nacional de Aceleradores, as a potential tool in Oceanography. *Nuclear Instruments and Methods in Physics Research Section B*, Vol. 361, 535-540 (2015)
32. Javier Navas, Antonio Sánchez-Coronilla, Juan Jesús Gallardo, Norge Cruz Hernández, Jose Carlos Piñero, Rodrigo Alcántara, Concha Fernández-Lorenzo, Desireé M. De los Santos, Teresa Aguilar, Joaquín Martín-Calleja. New insights on the organic-inorganic hybrid perovskite $\text{CH}_3\text{NH}_3\text{PbI}_3$ nanoparticles. Experimental and theoretical study of doping in Pb^{2+} sites with Sn^{2+} , Sr^{2+} , Cd^{2+} and Ca^{2+} . *Nanoscale*, Vol. 7 (6216), (2015)
33. Javier Navas, Antonio Sánchez-Coronilla, Juan Jesús Gallardo, Elisa I. Martín, Norge Cruz Hernández, Rodrigo Alcántara, Concha Fernández-Lorenzo and Joaquín Martín-Calleja. Revealing the role of Pb^{2+} in the stability of organic-inorganic hybrid perovskite $\text{CH}_3\text{NH}_3\text{Pb}_{1-x}\text{Cd}_x\text{I}_3$. An experimental and theoretical study. *Phys. Chem. Chem. Phys.*, Vol. 17 (23886), (2015)
34. Said Hamad, Norge Cruz Hernández, Alex G. Aziz, A. Rabdel Ruiz-Salvador, Sofía Calero, and Ricardo Grau-Crespo. Electronic structure of porphyrin-based metal-organic frameworks and their suitability for solar fuel production photocatalysis. *J. Mat. Chem. A*, Vol. 3 (23458), (2015)
35. Juan Jesús Gallardo, Javier Navas, David Zorrilla, Rodrigo Alcántara, Diego Valor, Antonio Sánchez-Coronilla, Norge Cruz Hernández, Concha Fernández-Lorenzo and Joaquín Martín-Calleja. Overheating of thermostatically controlled TiO_2 thin films using Raman spectroscopy. *Chem. Phys. Chem.*, Vol. 16 (3949), (2015)
36. M. Villa, J.M. López-Gutiérrez, Kyung-Suk Suh, Byung-II Min, R. Periéñez. The behaviour of ^{129}I released from nuclear fuel reprocessing factories in the North Atlantic Ocean and transport to the Arctic assessed from numerical modeling. *Marine Pollution Bulletin*, Vol. 90, 15-24 (2015)
37. Chamizo Calvo, Elena, López Lora, Mercedes, Villa Alfageme, María, Casacuberta, Nuria, Lopez Gutierrez, Jose Maria, et. al.: Analysis of ^{236}U and plutonium isotopes, $^{239,240}\text{Pu}$, on the 1 MV AMS system at the Centro Nacional de Aceleradores, as a potential tool in oceanography. *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms*, Vol. 361, 535-540 (2015)
38. Luis Dinis y Niurka R. Quintero. Non-sinusoidal current and current reversals in a gating ratchet. *Physical Review E*, Vol. 91 (032920), (2015).
39. Renato Alvarez-Nodarse, Niurka R. Quintero, Franz G. Mertens, Nebojsa Casic, and Thomas M. Fischer. Paramagnetic colloidal ribbons in a precessing magnetic field. *Physical Review E*, Vol. 91, (032908), (2015)
40. Niurka R. Quintero, Franz G. Mertens, Alan R. Bishop. Soliton stability criterion for generalized nonlinear Schrödinger equations. *Physical Review E*, Vol. 91, 012905_1-012905_9 (2015)
41. Jesús Casado-Pascual, José Cuesta, Niurka R. Quintero, Renato Alvarez-Nodarse. General approach for dealing with dynamical systems with spatiotemporal periodicities. *Physical Review E*, Vol. 91 (022905), (2015)
42. Medina-Rodríguez, Ana Verónica; Gómez-Martín, José Antonio; Ribeiro-limpo, José Antonio; Dorronzoro-Zubiete, Enrique. Indoor Position System Based on a ZigBee Network. *Communications in Computer and Information Science (on-line)*, (2015)
43. Manuel Merino Monge, Isabel Gómez y Alberto Molina. EEG feature variations under stress situations. 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 6700-6703 (2015)

44. Manuel Merino Monge, Isabel Gómez y Alberto Molina. Envelope Filter Sequence to Delete Blinks and Overshoots. BioMedical Engineering Online, Vol. 14 (48), 1-23(2015)
45. Dorronzoro Zubiete, Enrique, Gómez González, Isabel María, Medina Rodríguez, Ana Verónica, Gómez Martín, José Antonio. Design and Implementation of a Prototype with a Standardized Interface for Transducers in Ambient Assisted Living. Sensors, Vol. 15 (2), 2999-3022 (2015)
46. Merino Monge, Manuel, Gómez González, Isabel María, Molina Cantero, Alberto Jesús. Envelopment Filter and K-mean for the detection of QRS waveforms in Electrocardiogram. Medical Engeneering & Physics, Vol. 37, 605-609 (2015)
47. Huertas Sánchez, Gloria, Maldonado Jaccobi, Andrés, Yufera García, Alberto, Rueda Rueda, Adoración, Huertas Diaz, José Luis. The Bio-Oscillator: A Circuit for Cell-Culture Assays. IEEE Transactions on Circuits and Systems. Part 2: Express Briefs, Vol. 62 (2), 164-168 (2015)
48. Huertas Sánchez, Gloria, Maldonado Jaccobi, Andrés, Yúfera García, Alberto, Rueda Rueda, Adoración, Huertas Diaz, José Luis. Electrical Cell-substrate Impedance Spectroscopy (ECIS) measurements based on oscillation-based test techniques. Lecture Notes on Impedance Spectroscopy, Vol. 5, 101-110 (2015)
49. Molina Cantero, Alberto Jesús, Biscarri Triviño, Félix, Leal Díaz, Miguel Ángel, Merino Monge, Manuel. Insertion calorimetric flowmeter for liquids with multiple temperature sensors to improve measurement by redundancy. Flow Measurement and Instrumentation, Vol. 46, 58-65 (2015)
50. Monedero Goicoechea, Íñigo Luis, Biscarri Triviño, Félix, Guerrero Alonso, Juan Ignacio, Peña Muñoz, Manuel, León de Mora, Carlos. Detection of Water Meter Under-Registration Using Statistical Algorithms. Journal of Water Resources Planning and Management – ASCE, 58-65 (2015)
51. Imamoglu, N. , Dorronzoro, E. , Sekine, M., Kita, K., Yu, W. Spatial visual attention for novelty detection: A space-based saliency model in 3D using spatial memory. IPSJ Transactions on Computer Vision and Applications, Vol. 7, 35-40 (2015)
52. Corral, A., Balcerzyk, M., Parrado-Gallego, Á., Fernández-Gómez, I., Lamprea, D.R., Olmo, A., Risco, R. Assessment of the cryoprotectant concentration inside a bulky organ for cryopreservation using X-ray computed tomography. Cryobiology, Vol. 71, 419-431 (2015)
53. S. Borjas, E.J. Gil, L. Cordero, J.J. Pavón, J.A. Rodriguez-Ortiz, A.R. Boccaccini and Y. Torres. Electrophoretic Deposition and Characterization of Chitosan/45S5 Bioactive Glass Composite Coatings on Porous Titanium for Biomedical Applications. Key Engineering Materials, Vol. 654, 189-194 (2015)
54. A.M. Beltrán, S. Duguay, C. Strenger, A. Bauer, F. Cristiano, S. Schamm-Chardon, Atomic scale characterization of SiO₂/4H-SiC interfaces in MOSFETs devices, Solid State Communications 221 (2015) 28-32
55. A.G. Machoke, A.M. Beltrán, A. Inayat, B. Winter, T. Weissenberger, N. Kruse, R. Güttel, E. Spiecker, W. Schwieger, Micro/Macroporous System: MFI-type zeolite crystals with embedded macropores, Advanced Materials 27 (2015) 1066-1070
56. Carmona Centeno, Victoriano, Fernández Sánchez, Fernando, García Medina, Elisabeth, Teruel, Antonio E. Noose Structure and Bifurcations of Periodic Orbits in Reversible Three- Dimensional Piecewise Linear Differential Systems. Journal of Nonlinear Science. 2015. Vol. 25. Núm. 3. Pag. 1209-1224. 10.1007/s00332-015-9251-z
57. Carmona Centeno, Victoriano, Freire Macias, Emilio, Fernández García, Soledad, Periodic orbits and invariant cones in three-dimensional piecewise linear systems, Discrete and Continuous Dynamical Systems. Series A. 2015. Vol. 35. Pag. 59-72
58. Castro Smirnova, Mirta María, Grünbaum, F. Alberto, The Darboux process and time-and-band limiting for matrix orthogonal polynomials, Linear Algebra and Its Applications, 2015, Vol. 487. Pag. 328-341. doi.org/10.1016/j.laa.2015.09.012
59. Gallardo Morilla, José Manuel, Jiménez Jiménez, María de las Nieves, Jiménez Losada, Andrés, Lebrón Rueda, Esperanza Angustias, Games With Fuzzy Authorization Structure: a Shapley Value, Fuzzy Sets And Systems. 2015. Vol. 272. Pag. 115-125. 10.1016/j.fss.2014.09.002
60. Ponce Nuñez, Enrique, Ros Padilla, Francisco Javier, Vela Felardo, Elísabet, Limit Cycle and Boundary Equilibrium Bifurcations in Continuous Planar Piecewise Linear Systems, International Journal of

Bifurcation and Chaos in Applied Sciences and Engineering. 2015. Vol. 25. Núm. 3. <https://doi.org/10.1142/S0218127415300086>

61. Bereg, S; Diaz Bañez, Jose Miguel; Fabila-Monroy, R.; Pérez-Lantero, P.; Ramírez-Vigueras, A.; Sakai, T.; Urrutia, J.; Ventura Molina, Inmaculada, On balanced 4-holes in bichromatic point sets, Computational Geometry: Theory and Applications. 2015. Vol. 48. Núm. 3. Pag. 169-179. 10.1016/j.comgeo.2014.09.004
62. F. Ancio, A.J. Gamez, M. Marcos. Factors influencing the generation of a machined surface. Application to turned pieces. Journal of Materials Processing Technology. 215. 50-61. 2015
63. Pérez-Peña F., Morgado-Estévez A., Linares-Barranco A., Inter-spikes-intervals exponential and gamma distributions study of neuron firing rate for SVITE motor control model on FPGA, Neurocomputing 149, 496-504
64. Garcia-Vargas I., Senhadji-Navarro R., Finite state machines with input multiplexing: a performance study, IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems
65. Mantič V., Távara L., Blázquez A., Graciani E., París F., (2015) A linear elastic-brittle interface model: application for the onset and propagation of a fibre-matrix interface crack under biaxial transverse loads. Int J Fract 195, 15–38.

2014

1. Ávila-Gutiérrez, María Jesús; Lama-Ruiz, Juan Ramón; Córdoba-Roldán, Antonio; Aguayo-González, Francisco. Estándares Certificables para la Organización de las Empresas de Servicios Profesionales de Ingeniería. SIN REVISTA, Vol. 41, 30-35 (2014)
2. Cala-Díaz, Manuel J.; Aguayo-González, Francisco; Peralta-Álvarez, María Estela. Los olores como factor de desconfort en ambientes laborales interiores. Sevilla Técnica, Vol. 42, 40-48 (2014)
3. García-Salguero, Antonio; Aguayo-González, Francisco; Lama-Ruiz, Juan Ramón; Peralta-Álvarez, María Estela. Modelo MGE2: metodología sostenible para la certificación integral ISO-C2C-LEED. Dyna: Ingeniería e Industria, Vol. 89 (Septiembre), 479 (2014)
4. Lama-Ruiz, Juan Ramón; Martín-Gómez, Alejandro Manuel; Ávila-Gutiérrez, María Jesús; Aguayo-González, Francisco. Review of professionals accreditation systems and their relation to higher education studies in the branch of engineering. Multidisciplinary Journal for Education, Social and Technological Sciences, Vol. 1, 101-120 (2014)
5. Martín-Gómez, Alejandro Manuel; De Las Heras-García De Vinuesa, Ana; Aguayo- González, Francisco. Distritos térmicos urbanos e industriales. Sector emergente de servicios profesionales. Sevilla Técnica, Vol. 42, 36-39 (2014)
6. Michałowska-Kaczmarczyk, A.M.; G. Asuero, A.; Martín, J.; Alonso, E.; Jurado, J.M.; Michałowski, T. A uniform nonlinearity criterion for rational functions applied to calibration curve and standard addition methods. Talanta, Vol. 130, 307-314 (2014)
7. Camacho, M.D.; Martín, J.; Santos, J.L.; Aparicio, I.; Alonso, E. Concentration evolution of pharmaceutically active compounds in raw urban and industrial wastewater. Chemosphere, Vol. 111, 70-79 (2014)
8. Martín, J.; Camacho, M.D.; Santos, J.L.; Aparicio, I.; Alonso, E. Determination of emerging and priority industrial pollutants in surface water and wastewater by liquid chromatography-negative electrospray ionization tandem mass spectrometry. Analytical and Bioanalytical Chemistry, Vol. 406, 3709-3716 (2014)
9. Martín, J.; Camacho, M.D.; Santos, J.L.; Aparicio, I.; Alonso, E. Occurrence and ecotoxicological risk assessment of 14 cytostatic drugs in wastewater. Water, Air and Soil Pollution, Vol. 225, 1896 (2014)
10. Camacho, M.D.; Martín, J.; Santos, J.L.; Aparicio, I.; Alonso, E. Occurrence of surfactants in wastewater: Hourly and seasonal variations in urban and industrial wastewater from Seville (Southern Spain). Science of the Total Environment, Vol. 468-469, 977-984 (2014)
11. Gotor, F.J.; Bermejo, R.; Cordoba, J.M.; Chicardi, E.; Medri, V.; Fabbriche, D.D.; Torres, Y. Processing and characterisation of cermet/hardmetal laminates with strong interfaces. Materials & Design, Vol. 58, 226-233 (2014)

12. Chicardi, E.; Torres, Y.; Cordoba, J. M.; Hvizdos, P.; Gotor, F.J. Effect of tantalum content on the microstructure and mechanical behavior of cermets based on (TixTa1-x) (C0.5N0.5) solid solutions. *Materials & Design*, Vol. 53, 435-444 (2014)
13. Torres, Y.; Bermejo, R.; Gotor, F. J.; Chicardi, E.; Llanes, L. Analysis on the mechanical strength of WC-Co cemented carbides under uniaxial and biaxial bending. *Materials & Design*, Vol. 55, 851-856 (2014)
14. Torres, Y.; Tarrago, J. M.; Coureaux, D.; Tarres, E.; Roebuck, B.; Chan, P.; James, M.; Liang, B.; Tillman, M.; Viswanadham, R.K.; Mingard, K.P.; Mestra, A.; Llanes, L. Fracture and fatigue of rock bit cemented carbides: Mechanics and mechanisms of crack growth resistance under monotonic and cyclic loading. *International Journal of Refractory Metals & Hard Materials*, Vol. 45, 179-188 (2014)
15. Torres, Y.; Lascano, S.; Bris, J.; Pavon, J.; Rodriguez, J.A. Development of porous titanium for biomedical applications: A comparison between loose sintering and space-holder techniques. *Materials Science & Engineering C-Materials for Biological Applications*, Vol. 37, 148-155 (2014)
16. Navarro, C.; Munoz, S.; Dominguez, J. Fracture mechanics approach to fretting fatigue behaviour of coated aluminium alloy components. *Journal of Strain Analysis for Engineering Design*, Vol. 49 (2), 66-75 (2014)
17. Mandi Sotoudehnia, Mohammad; Paul, A. Dispersion of carbon nanotubes in iron by wet processing for the preparation of iron-carbon nanotube composites. *Powder Technology*, Vol. 258, 1-5 (2014)
18. Cintas, J.; Caballero, E.S.; Montes, J.M.; Cuevas, F.G.; Arevalo, C. Nanocrystalline Al Composites from Powder Milled under Ammonia Gas Flow. *Advances in Materials Science and Engineering*, Vol. 617241 (2014)
19. Torres, Y., Trueba, P., Pavón, J.J., Montealegre, I., Rodríguez-Ortiz, J.A. Designing, processing and characterisation of titanium cylinders with graded porosity: An alternative to stress-shielding solutions. *Materials & Design*, Vol. 63, 316-324 (2014)
20. Torres, Y., Pavón, J.J., Trueba, P., Cobos, J., Rodriguez-Ortiz, J.A. Design, Fabrication and Characterization of Titanium with Graded Porosity by using Space-holder Technique. *Procedia Materials Science*, Vol. 4, 115-119 (2014)
21. Benitez F.G, Romero L.M., Caceres N., del Castillo J.M. Estimating of bootstrap confidence intervals for freight transport matrices. *Procedia-Social and Behavioral Sciences*, Vol. 111, 1155-1164 (2014)
22. L.A. Trujillo-Cayado, P. Ramírez, M.C. Alfaro, M. Ruiz, J. Muñoz. Adsorption at the biocompatible α-pinene-water interface and emulsifying properties of two eco-friendly surfactants. *Colloids Surf B: Biointerfaces*, Vol. 44, 109-114 (2014)
23. Zárate-Ramírez L.S., Romero A, Bengoechea C., Guerrero A. Thermo-mechanical and hydrophilic properties of polysaccharide/gluten-based bioplastics. *Carbohydr Polym*, Vol. 112, 24-31 (2014)
24. Martín-Alfonso J.M., Félix F, Romero A., Guerrero A. Development of new albumen based biocomposites formulations by injection moulding using chitosan as physicochemical modifier additive. *Compos Part B-Eng*, Vol. 6 (1) 275-281 (2014)
25. Félix M., Martín-Alfonso J.M., Romero A., Guerrero A. Development of albumen/soy biobased plastic materials processed by injection molding. *J. Food Eng.*, Vol. 125, 7-16 (2014)
26. Zárate-Ramírez L.S., Romero A., Martínez I., Bengoechea C., Partal P., Guerrero A. Effect of aldehydes on thermomechanical properties of gluten-based bioplastics. *Food Bioprod. Proc.*, Vol. 92, 20-29 (2014)
27. Romero A., Cordobés F., Guerrero A., Puppo M.C. Influence of protein concentration in crayfish protein isolated gels. *Int. J. Food Properties*, Vol. 17, 249-260 (2014)
28. Pozo Morales, Laura Concepción, Garvi Higueras, María Dolores, Lebrato Martínez, Julian. Experimental basis for the design of horizontal subsurface-flow treatment wetlands in naturally aerated channels with an anti-clogging stone layout. *Ecological Engineering*, Vol. 70 (2014), 68-81 (2014)
29. García García, Fco. Javier; González García, Heliodoro; Castrejón-Pita, J. Rafael; Castrejón-Pita, Alfonso A. The breakup length of harmonically stimulated capillary jets. *Applied Physics Letters*, Vol. 105, 094104_1-094104_4 (2014)

30. A.S. Rodrigues, P.G.Kevrekidis, R.Carretero-González, J.Cuevas-Maraver,D.J. Frantzeskakis y F. Palmero. From nodeless clouds and vortices to gray rings and symmetry-broken states in two-dimensional polariton condensates. *J. Phys: Cond.Mat.*, Vol. 26 (155801), 1-11 (2014)
31. N. Lu, J. Cuevas-Maraver y P.G. Kevrekidis. P T -symmetric sine-Gordon breathers. *J. Phys. A: Math. Theor.*, Vol. 47 (455101), (2014)
32. Desireé M. de los Santos, Teresa Aguilar, Antonio Sánchez-Coronilla, Javier Navas, Norge Cruz Hernández, Rodrigo Alcántara, Concha Fernández-Lorenzo and Joaquín Martín-Calleja. Electronic and structural properties of Aluminium ion-doped TiO₂ nanoparticles: A combined experimental and theoretical study. *Chem. Phys. Chem.*, Vol. 15 (2267), (2014)
33. Eduardo Menéndez-Proupin, Alexis Amézaga and Norge Cruz Hernández. Electronic structure of CdTe using GGA+Usic. *Physica B*, Vol. 452 (119), (2014)
34. Javier Navas, Antonio Sánchez-Coronilla, Teresa Aguilar, Norge Cruz Hernández, Desireé M. de los Santos, Jesús Sánchez-Márquez, David Zorrilla, Concha Fernández-Lorenzo, Rodrigo Alcántara and Joaquín Martín-Calleja. Experimental and theoretical study of the electronic properties of Cu-doped anatase TiO₂. *Phys. Chem. Chem. Phys.*, Vol. 16 (3835), (2014)
35. Javier Navas, Antonio Sánchez-Coronilla, Teresa Aguilar, Desireé M. de los Santos, Norge Cruz Hernández, Rodrigo Alcántara, Concha Fernández-Lorenzo and Joaquín Martín-Calleja. Thermo-selective TmxTi_{1-x}O_{2-x/2} nanoparticles: from Tm-doped anatase TiO₂ to a rutile/pyrochlore Tm₂Ti₂O₇ mixture. An experimental and theoretical study with a photocatalytic application. *Nanoscale*, Vol. 6 (12740), (2014)
36. J.M. Gómez-Guzmán, P. Cámaras-Mor, T. Suzuki, J.M. López-Gutiérrez, J.L. Mas, P. Masqué, S.B. Moran, J.N. Smith. New insights on the role of sea ice in intercepting atmospheric pollutants using ¹²⁹I. *Marine Pollution Bulletin*, Vol. 89, 180-190 (2014)
37. Niurka R. Quintero. Soliton Ratchets in sine-Gordon-Like Equations. The sine-Gordon Model and its Applications. From Pendula and Josephson Junctions to Gravity and High Energy Physics. Eds. J. Cuevas-Maraver, P.G. Kevrekidis, y F. Williams. Springer-Verlag, Berlin-Heidelberg, (2014)
38. Niurka R. Quintero y Franz G. Mertens. Kink topology control by high-frequency external forces in nonlinear Klein-Gordon models. *Physical Review E*, Vol. 90, 042916_1-042916_9 (2014)
39. Bernardo Sánchez-Rey, Niurka R. Quintero, Jesús Cuevas-Maraver, y Miguel A. Alejo. Collective coordinates theory for discrete soliton ratchets in the sine-Gordon model. *Physical Review E*, Vol. 90, 042922_1-042922_9 (2014)
40. Sihong Shao, Niurka R. Quintero, Franz G. Mertens, Fred Cooper, Avinash Khare, y Avadh Saxena. Stability of solitary waves in the nonlinear Dirac equation with arbitrary nonlinearity. *Physical Review E*, Vol. 90, 032915_1-032915_15 (2014)
41. Guerrero Alonso, Juan Ignacio, Monedero Goicoechea, Íñigo Luis, Biscarri Triviño, Félix, Biscarri Triviño, Jesús, León de Mora, Carlos. Detection of Non-Technical Losses: The Project MIDAS. *Advances in Secure Computing, Internet Services and Applications*, 140-164 (2014)
42. Personal Vázquez, Enrique, Guerrero Alonso, Juan Ignacio, García Delgado, Antonio, Peña Muñoz, Manuel, León de Mora, Carlos. Key performance indicators: A useful tool to assess Smart Grid goals. *Energy* (Elsevier), Vol. 76, 976-988 (2014)
43. Martin Montes, Antonio, León de Mora, Carlos, Biscarri Triviño, Félix. Intelligent Management Experience on Efficient Electric Power System. *Renewable Energy and Power Quality Journal*, Vol. 12 (12), 100-106 (2014)
44. Martin Montes, Antonio, León de Mora, Carlos, Biscarri Triviño, Félix. Knowledge Management and Semantic Retrieval in a Global Digital Library. *La Pensée* (Paris), Vol. 76 (8), 53-63 (2014)
45. Martin Montes, Antonio, León de Mora, Carlos, García Delgado, Antonio. Innovación docente para la integración de autoformación y autoevaluación en la plataforma WebCT. *Pixel-Bit. Revista de Medios y Comunicación*, Vol. 44 (44), 201-214 (2014)

46. Cubells Beltrán, M Dolores, Reig, Candid, De Marcelis, Andrea, Figueras, E., Yúfera Garcia, Alberto. Monolithic integration of Giant Magnetoresistance (GMR) devices onto standard processed CMOS dies. *Microelectronics Journal*, Vol. 45, 702-707 (2014)
47. Gómez González, Isabel, Molina Cantero, Alberto Jesús, Cabrera Cabrera, Rafael, Valenzuela, David, Garrido, Marcelo. The Possibilities of Kinect as an Access Device for People with Cerebral Palsy A Preliminary Study. *Computers Helping People with Special Needs. Lecture Notes in Computer Science* (Springer International Publishing Switzerland), 252-255 (2014)
48. Merino Monge, Manuel, Gómez González, Isabel, Molina Cantero, Alberto Jesús. Stress and heart rate: significant parameters and their variations. *Experimental and Clinical Cardiology*, Vol. 20 (8), 3509-3517 (2014)
49. Carrasco Muñoz, Alejandro, Alcaráz, Francisco, Barbancho Concejero, Julio, Larios Marín, Diego Francisco, Sevillano Ramos, José Luis. Securing a wireless sensor network for human tracking: a review of solutions. *International journal of communication systems (Print)*, Vol. 27 (12), 4384-4406 (2014)
50. Rossi, Francesco, Velázquez Alonso, David, Monedero Goicoechea, Íñigo Luis, Biscarri Triviño, Félix. Artificial neural networks and physical modeling for determination of baseline consumption of CHP plants. *Expert systems with applications*, Vol. 41 (10), 4658-4669 (2014)
51. Sivianes Castillo, Francisco, Romero Ternero, María del Carmen. PeMMAS: A Tool for Studying the Performance of Multi-Agent Systems Developed in JADE. *IEEE Transactions on Human-Machine Systems*, Vol. 44, 180-189 (2014)
52. Sivianes Castillo, Francisco, Oviedo Olmedo, David, Romero Ternero, María del Carmen, Hernández Velázquez, María Dolores. Multiple intelligences in a MultiAgent System applied to Telecontrol. *Expert Systems with Applications*, Vol. 41 (15), 6688-6700 (2014)
53. Martin Montes, Antonio. Arquitecturas Inteligentes para la Gestión de redes de Comunicaciones. Servicio de Publicaciones de la Universidad de Sevilla, (2014)
54. Martin Montes, Antonio. Intelligent network modelling in the electric power grid. *European CIIP Newsletter*, Vol. 8 (3), 23-26 (2014)
55. Medina Rodríguez, Ana Verónica, Gómez Martín, José Antonio, Ribeiro Limpo, Jose, Dorronzoro Zubiete, Enrique. Indoor Position System Based on a ZigBee Network. *Journal of Networks*, Vol. 8 (1), 37-44 (2014)
56. Mora Gutiérrez, J.M. Jiménez Fernández, C.J., Valencia Barrero, M. Low power implementation of Trivium stream cipher. *PATMOS: "Integrated Circuit and System Design. Power and Timing Modeling, Optimization and Simulation"* (Lecture Notes in Computer Science. Springer-Verlag), (2014)
57. J. I. Guerrero, C. León, I. Monedero, F. Biscarri, J. Biscarri. Improving Knowledge-Based Systems with statistical techniques, text mining, and neural networks for non-technical loss detection. *Knowledge-Based Systems*, Vol. 71, 376-388 (2014)
58. D. F. Larios, C. Rodriguez, J. Barbancho, M. Baena, F. Simón, M. Marín, C. León, J. Bustamante. Intelligent monitoring systems for bird behavior study. *Springer Communications in Computer and Information Science*, Vol. 455, 36-51 (2014)
59. Carmona Centeno, Victoriano, Fernández García, Soledad, Fernández Sánchez, Fernando, García Medina, Elisabeth, Teruel, Antonio E., Noose bifurcation and crossing tangency in reversible piecewise linear system, *Nonlinearity*. 2014. Vol. 27. Pag. 585-606. 0.1088/0951-7715/27/3/585
60. Gallardo Morilla, José Manuel, Jiménez Jiménez, María de las Nieves, Jiménez Losada, Andrés, Lebrón Rueda, Esperanza Angustias, Games With Fuzzy Permission Structure: a Conjunctive Approach, *Information Sciences*. 2014. Vol. 278. Pág. 510-519. 10.1016/j.ins.2014.03.068
61. Freire Macias, Emilio, Ponce Nuñez, Enrique, Torres Peral, Francisco, The discontinuous matching of two planar linear foci can have three nested limit cycles, *Publicacions Matemàtiques*. 2014. Vol. Extra 2014. Pag. 255-278. 10.5565/PUBMAT_Extra14_13
62. Freire Macias, Emilio, Ponce Nuñez, Enrique, Torres Peral, Francisco, A general mechanism to generate three limit cycles in planar Filippov systems with two zones. *Nonlinear Dynamics: an international*

- journal of nonlinear dynamics and chaos in engineering systems. 2014. Vol. 78. Pag. 251-263. 10.1007/s11071-014-1437-7
63. Gallego Sánchez, Inés Magdalena, Fernández García, Julio Rodrigo, Jiménez Losada, Andrés, Ordoñez Sanchez, Manuel, A Banzhaf value for games with fuzzy communication structure: Computing the power of the political groups in the European Parliament. Fuzzy Sets And Systems. 2014. Vol. 255. Pag. 128-145. doi:10.1016/j.fss.2013.12.012
 64. Diaz Bañez, Jose Miguel, Korman, Matias, Pérez Lantero, Pablo, Ventura Molina, Inmaculada, Locating a single facility and a high-speed line, European Journal Of Operational Research. 2014. Vol. 236. Núm. 1. Pag. 69-77. <http://dx.doi.org/10.1016/j.ejor.2013.11.019>
 65. Acevedo Bañez, Jose Joaquín, Arrue Ulles, Begoña C., Ventura Molina, Inmaculada, Maza Alcañiz, Jesus Ivan, Ollero Baturone, Anibal, One-to-one coordination algorithm for decentralized area partition in surveillance missions with a team of aerial robots, Journal of Intelligent and Robotic Systems. 2014. Vol. 74. Núm. 1-2. Pag. 269-285. <https://doi.org/10.1007/s10846-013-9938-z>

2013

1. Álamo-Cantarero, Teodoro; Tempo, Roberto; Rodríguez-Ramírez, Daniel; Luque-Sendra, Amalia; Fernández-Camacho, Eduardo. Un algoritmo secuencial, aleatorio y óptimo para problemas de factibilidad robusta. Revista Iberoamericana de Automática e Informática Industrial, Vol. 10, 50-61 (2013)
2. García-Salguero, Antonio; Aguayo-González, Francisco; Lama-Ruiz, Juan Ramón; Peralta-Álvarez, María Estela. Diseño de la simbiosis ambiental producto-edificio para la certificación sostenible. Dyna, Vol. 2 (Enero 2013), 1-14 (2013)
3. De Las Heras-García De Vinuesa, Ana; Aguayo-González, Francisco; Lama-Ruiz, Juan Ramón; Córdoba-Roldán, Antonio. Diseño experiencial 'fuzzy' de un producto. Técnica Industrial, 44-64 (2013)
4. Camacho, M.D.; Martín, J.; Santos, J.L.; Aparicio, I.; Alonso, E. Distribution and risk assessment of pharmaceutical compounds in river sediments from Doñana Park (Spain). Water, Air and Soil Pollution, Vol. 224, 1-15 (2013)
5. Martín, J.; Camacho, M.D.; Santos, J.L.; Aparicio, I.; Alonso, E. Determination of priority pollutants in aqueous samples by dispersive liquid-liquid microextraction. Analytica Chimica Acta, Vol. 773, 60-67 (2013)
6. de la Torre, T.; Rodríguez, C.; Gómez, M.A.; Alonso, E.; Malfeito, J.J. The IFAS-MBR Process: a compact combination of biofilm and MBR technology as RO pretreatment. Desalination and Water Treatment, Vol. 51, 1063-1069 (2013)
7. Chicardi, E.; Torres, Y.; Cordoba, J. M.; Sayagues, M.J.; Rodriguez, J.A.; Gotor, F.J. Effect of sintering time on the microstructure and mechanical properties of (Ti,Ta) (C,N)-based cermets. International Journal of Refractory Metals & Hard Materials, Vol. 38, 73-80 (2013)
8. Llanes, L.; Casas, B.; Torres, Y.; Salan, N.; Mestra, A. Fatigue performance improvement of electrical discharge machined hardmetals by means of combined thermal annealing and surface modification routes. International Journal of Refractory Metals & Hard Materials, Vol. 36, 60-65 (2013)
9. Munoz, S.; Anselmi-Tamburini, U. Parametric investigation of temperature distribution in field activated sintering apparatus. International Journal of Advanced Manufacturing Technology, Vol. 65 (1-4), 127-140 (2013)
10. Abalos, C.; Paul, A.; Mendoza, A.; Solano, E.; Palazon, C. Gil, F.J. Influence of Soft Drinks with Low pH on Different Ni-Ti Orthodontic Archwire Surface Patterns. Journal of Materials Engineering and Performance, Vol. 22 (3), 759-766 (2013)
11. Del Castillo J.M, Benitez F. G. Determining a public transport satisfaction index from user surveys. Transportmetrica A: Transport Science, Vol. 9 (8), 713-741 (2013)

12. Cáceres N., Romero L.M., Benitez F. G. Inferring origin–destination trip matrices from aggregate volumes on groups of links: a case study using volumes inferred from mobile phone data. *Journal of Advanced Transportation*, Vol. 47 (7), 650-666 (2013)
13. Benitez, F.G., Romero, L.M.; Caceres, N.; del Castillo, J.M. Adjustment of origin-destination matrices based on traffic counts and bootstrapping confidence intervals. *Transportation Research Record: Journal of the Transportation Research Board*, Vol. 2343, 43-50 (2013)
14. Del Castillo J.M., Benitez F. G. Improving trip forecasting models by means of the Box-Cox transformation. *Transportmetrica A: Transport Science*, Vol. 9 (7), 653-674 (2013)
15. Fernández-Espada L., Bengoechea C., Cordobés F., Guerrero A. Linear viscoelasticity characterisation of egg albumen/glycerol blends with applications in material moulding processes. *Food Bioprod. Proc.*, Vol. 91, 319-326 (2013)
16. Martínez I., Partal P., García-Morales M., Guerrero A., Gallegos C. Development of protein-based bioplastics with antimicrobial activity by thermomechanical processing. *J. Food Eng.*, Vol. 117 (2), 247-254 (2013)
17. Romero A., Verwijlen T., Guerrero A., Vermant J. Interfacial properties of crayfish protein isolate/chitosan mixed films. *Food Hydrocolloids*, Vol. 32 (2), 395-401 (2013)
18. Calero N., Muñoz J., Guerrero A. Efecto del pH en emulsiones o/w formuladas con proteína de patata y quitosano. *Grasas y Aceites*, Vol. 64 (1), 15-21 (2013)
19. Romero A., Verwijlen T., Guerrero A., Vermant J. Interfacial behaviour of crayfish protein isolate. *Food Hydrocolloids*, Vol. 30, 470-476 (2013)
20. Calero N., Muñoz J., W. Cox P., Heuer A., Guerrero A. Influence of chitosan concentration on the stability, microstructure and rheological properties of O/W emulsions formulated with high-oleic sunflower oil and potato protein. *Food Hydrocolloids*, Vol. 30, 152-162 (2013)
21. J.M. Martín-Alfonso, A. Romero, C. Valencia, J. M. Franco. Formulation and processing of virgin and recycled polyolefin/oil blends for the development of lubricating greases. *J. Ind. Eng. Chem.*, Vol. 19, 580-588 (2013)
22. Pozo Morales, Laura Concepción, Franco Tovar, Manuel, Garvi Higuera, María Dolores, Lebrato Martínez, Julian. Influence of the stone organization to avoid clogging in Horizontal subsurface-flow treatment wetlands. *Ecological Engineering*, Vol. 54 (Mayo 2013), 136-144 (2013)
23. V. Koukouloyannis, P.G. Kevrekidis, J. Cuevas y V. Rothos. Multibreathers in Klein-Gordon chains with interactions beyond nearest neighbors. *Physica D*, Vol. 242, 16-29 (2013)
24. V. Achilleos, A. Álvarez, J. Cuevas, D.J. Frantzeskakis, N.I. Karachalios, P.G. Kevrekidis y B Sánchez-Rey. Escape Dynamics in the Discrete Repulsive ϕ^4 -Model. *Physica D*, Vol. 244, 1-43 (2013)
25. A. Álvarez, J. Cuevas, F.R. Romero, C. Hamner, J.J. Chang, P. Engels, P.G. Kevrekidis y D.J. Frantzeskakis. Scattering of atomic dark-bright solitons from narrow impurities. *J. Phys. B: Atom.Mol. and Opt. Phys.*, Vol. 46 (065302), 1-12 (2013)
26. N.I. Karachalios, B. Sánchez-Rey, P.G. Kevrekidis y J. Cuevas. Breathers for the Discrete Nonlinear Schrödinger equation with nonlinear hopping. *J. Nonlinear Sci.*, Vol. 23, 205-239 (2013)
27. G. James, P.G. Kevrekidis y J. Cuevas. Breathers in oscillator chains withHertzian interactions. *Physica D*, Vol. 251, 39-59 (2013)
28. J. Cuevas, P.G. Kevrekidis, B.A. Malomed, P. Dyke y R.G. Hulet. Interactions of solitons with a Gaussian barrier: Splitting and recombination in quasi-1D and 3D. *New J. Phys.*, Vol. 15 (063006), 1-16 (2013)
29. G.P. Veldes, J. Cuevas, P.G. Kevrekidis y D.J. Frantzeskakis. Coupled backward- and forward-propagating solitons in a composite right/left-handed transmission line. *Phys. Rev. E*, Vol. 88 (013203), (2013)
30. L.Q. English, F. Palmero, J.F. Stormes, J. Cuevas, R. Carretero-González y P.G. Kevrekidis. Nonlinear localized modes in two-dimensional electrical lattices. *Phys. Rev. E*, Vol. 88 (022912), (2013)
31. J. Cuevas, P.G. Kevrekidis, A. Saxena y A. Khare. PT-symmetric dimer of coupled nonlinear oscillators. *Phys. Rev. A*, Vol. 88 (032018), (2013)

- 32.** R.L. Horne, J. Cuevas, P.G. Kevrekidis, N. Whitaker, F.Kh. Abdullaev y D.J. Frantzeskakis. PT-symmetry management in oligomer systems. *J. Phys. A: Math. Theor.*, Vol. 46 (485101), (2013)
- 33.** Cristina Sánchez-Porro, Rafael R. de la Haba, Norge Cruz Hernández, Juan M. González, Cristina Reyes-Guirao, Laura Navarro-Sampedro, Modesto Carballo, Antonio Ventosa. Draft Genome of the Marine Gammaproteobacterium Halomonas titanicae. *Genome Announcements*, Vol. 1 (e00083-13), (2013)
- 34.** Lamers Robert-Jan, de Jong Arie, López-Gutiérrez José M, Gómez-Guzmán JM. Iodine-129 microdosing for protein and peptide drug development: erythropoietin as a case study. *Bioanalysis*, Vol. 5 (1), 53–63 (2013)
- 35.** J.M. Gómez-Guzmán, E. Holm, S.M. Enamorado-Báez, J.M. Abril, A.R. Pinto-Gómez, J.M. López-Gutiérrez, M. García-León. Pre- and post-Chernobyl accident levels of ^{129}I and ^{137}Cs in the Southern Baltic Sea by brown seaweed *Fucus vesiculosus*. *Journal of Environmental Radioactivity*, Vol. 115, 134–142 (2013)
- 36.** J.M. López-Gutiérrez, J.M. Gómez-Guzmán, E. Chamizo, J.I. Peruchena, M. García-León. Long-lived radionuclides in residues from operation and decommissioning of nuclear power plants. *Nuclear Instruments and Methods in Physics Research B*, Vol. 294, 647-651 (2013)
- 37.** J.M. Gómez-Guzmán, M. Villa, F. Le Moigne, J.M. López-Gutiérrez, M. García-León. AMS measurements of ^{129}I in seawater around Iceland and the Irmingen Sea. *Nuclear Instruments and Methods in Physics Research Section B*, Vol. 294, 547-551 (2013)
- 38.** Niurka R. Quintero, José Cuesta y Renato Álvarez-Nodarse. Comment on Ratchet universality in the presence of thermal noise. *Physical Review E*, Vol. 88, 066101_1-066101_3 (2013)
- 39.** José Cuesta, Niurka R. Quintero, y Renato Álvarez-Nodarse. Time-shift invariance determines the functional shape of the current in dissipative rocking ratchets. *Physical Review X*, Vol. 3, 041014_1-041014_10 (2013)
- 40.** Nebojsa Casic, Niurka R. Quintero, Renato Álvarez-Nodarse, Franz G. Mertens, Levan Jibuti, Walter Zimmermann, y Thomas M. Fischer. Propulsion Efficiency of a Dynamic Self-Assembled Helical Ribbon. *Physical Review Letters*, Vol. 110, (168302), 1-4 (2013)
- 41.** Franz Mertens, Niurka R. Quintero, y A. R. Bishop. Nonlinear Schrödinger solitons oscillate under a constant external force. Nonlinear Schrödinger solitons oscillate under a constant external force. *Physical Review E*, Vol. 87, 032917_1-032917_8 (2013)
- 42.** B. Sánchez-Rey, G. Chacón-Acosta, L. Dagdug and D. Cubero. “Thermal equilibrium in Einstein’s elevator”, *Phys. Rev. E*, Vol. 87, 052121_1-052121_7 (2013)
- 43.** V. Achilleos, A. Álvarez, J. Cuevas, D. Frantzeskakis, N. Karachalios, P. Kevrekidis, and B. Sánchez-Rey. “Escape dynamics in the discrete repulsive phi-4 model”. *Physica D*, Vol. 244, 1-24 (2013)
- 44.** N. Karachalios, B. Sánchez-Rey, P. Kevrekidis, and J. Cuevas: “Breathe for the discrete nonlinear Schrödinger equation with nonlinear hopping”. *Journal of Nonlinear Science*, Vol. 23, 205-239 (2013)
- 45.** D. F. Larios, C. Rodriguez, J. Barbancho, M. Baena, F. Simón, M. Marín, C. León, J. Bustamante. Wireless Ad Hoc Sensor Networks.
- 46.** Mora-Merchán, Javier María; Larios-Marín, Diego Francisco; Barbancho-Concejero, Julio; Molina-Cantero, Francisco Javier; Sevillano-Ramos, José Luis; León-De Mora, Carlos. mTOSSIM: A simulator that estimates battery lifetime in wireless sensor networks. *Simulation Modelling Practice and Theory*, Vol. 31 (Feb.), 39-51 (2013)
- 47.** Larios Marín, Diego Francisco, Mora Merchán, Javier María, Personal, Enrique, Barbancho Concejero, Julio, León de Mora, Carlos. Implementing a Distributed WSN Based on IPv6 for Ambient Monitoring. *International Journal of Distributed Sensor Networks*, Vol. 2013 (328747), 1-14 (2013)
- 48.** Larios Marín, Diego Francisco, Barbancho Concejero, Julio, Molina Cantero, Francisco Javier, León de Mora, Carlos. Localization Method for Low-power Wireless Sensor Networks. *Journal of Networks*, Vol. 8, 45-58 (2013)
- 49.** Larios-Marín, Diego Francisco; Barbancho-Concejero, Julio; Sevillano-Ramos, José Luis; Rodríguez, Gustavo; Molina-Cantero, Francisco Javier; González-Gasull, Virginia; Mora-Merchán, Javier María;

- León-De Mora, Carlos. Five Years of Designing Wireless Sensor Networks in the Doñana Biological Reserve (Spain): An Applications Approach. *Sensors* 2013, Vol. 13 (9), 12044-12069 (2013)
50. Carmona Calvo, Miguel Ángel, Barbancho Concejero, Julio, Larios Marín, Diego Francisco, León de Mora, Carlos. Applying case based reasoning for Prioritizing Areas of Business Management. *Expert systems with applications*, Vol. 40 (9), 3450-3458 (2013)
51. Larios-Marín, Diego Francisco; Rodríguez-López, Carlos; Barbancho-Concejero, Julio; Baena-Capilla, Manuel; Leal-Díaz, Miguel Ángel; Marín, Jesús; León-De Mora, Carlos; Bustamante-Díaz, Javier María. An Automatic Weighting System for Wild Animals Based in an Artificial Neural Network: How to Weigh Wild Animals without Causing Stress. *Sensors* 2013, Vol. 13 (3), 2862-2883, (2013)
52. Gómez Gutiérrez, Álvaro Ariel, León de Mora, Carlos, Ropero Rodríguez, Jorge, Carrasco, Alejandro, Luque Rodríguez, Joaquín. Soft Agent for Extended Information Retrieval. *Applied artificial intelligence*, Vol. 27 (4), 249-277 (2013)
53. Larios-Marín, Diego Francisco; Barbancho-Concejero, Julio; Molina-Cantero, Francisco Javier; León-De Mora, Carlos. Localization Method for Low-power Wireless Sensor Networks. *Journal of Networks*, Vol. 8, 45-58 (2013)
54. Medina-Rodríguez, Ana Verónica; Gómez-Martín, José Antonio; Ribeiro-limpo, José Antonio; Dorronzoro-Zubiete, Enrique; Martín-Guillén, Sergio. Analysis of the behavior of an Indoor Position System Based on Fingerprints and IEEE. *Communications in Information Science and Management Engineering*, Vol. 3 (9), 431-438 (2013)
55. Medina-Rodríguez, Ana Verónica; Gómez-Martín, José Antonio; Ribeiro-limpo, José Antonio; Dorronzoro-Zubiete, Enrique. Indoor Position System Based on a ZigBee Network. *Communications in Computer and Information Science (on-line)*, Vol. 362, 6-16 (2013)
56. Gómez-Martín, José Antonio; Medina-Rodríguez, Ana Verónica; Dorronzoro-Zubiete, Enrique; Rivera-Romero, Octavio. Fingerprint Indoor Position System Based on Bitcloud and OpenMAC. *Journal of Networks*, Vol. 8, 37-44 (2013)
57. Daza-Navarro, Paula; Olmo-Fernández, Alberto; Cañete, Daniel; Yúfera-García, Alberto. Monitoring living cell assays with bio-impedance sensors. *Sensors and Actuators, B: Chemical*, Vol. 176, 605-610 (2013)
58. Ruiz De Clavijo-Vázquez, Paulino; Ostua-Aranguena, Enrique; Juan-Chico, Jorge; Bellido-Díaz, Manuel Jesús; Viejo-Cortés, Julián; Guerrero-Martos, David. NanoFS: a hardware-oriented file system. *Electronics Letters*, Vol. 49 (19), 1216-1218 (2013)
59. Juan-Chico, Jorge; Viejo-Cortés, Julián; Bellido-Díaz, Manuel Jesús. Network Time Synchronization: A Full Hardware Approach. *Integrated Circuit and System Design. Power and Timing Modeling, Optimization and Simulation Lecture Notes in Computer Science*, Vol. 7606, 225-234 (2013)
60. Brox-Jiménez, Piedad; Castro-Ramírez, Javier; Martínez-Rodríguez, Macarena Cristina; Tena-Sánchez, Erica; Jiménez-Fernández, Carlos Jesús; Baturone-Castillo, Iluminada; Acosta-Jiménez, Antonio José. A Programmable and Configurable ASIC to Generate Piecewise-Affine Functions Defined Over General Partitions. *IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS-I*, Vol. 60 (12), 3182-3194 (2013)
61. F. Ancio, A.J. Gamez, J. Salguero, M. Batista, M. Marcos. Principal Components Based Analysis of Surface Quality of Horizontal Turned Samples. *Advanced Science Letters*. 19 (2). 363-368. 2013
62. Carmona Centeno, Victoriano, Fernández García, Soledad, Freire Macias, Emilio, Torres Peral, Francisco, Melnikov Theory for a class of planar hybrid systems, *Physica D: Nonlinear Phenomena*. 2013. Vol. 248. Pag. 44-54
63. Castro Smirnova, Mirta María, Grünbaum, Alberto, On a Seminal Paper by Karlin and McGregor, Symmetry, Integrability and Geometry: Methods and Applications. 2013. Vol. 9. Núm. 20. Pag. 1-11
64. Jiménez Losada, Andrés, Fernández García, Julio Rodrigo, Ordoñez Sanchez, Manuel, Myerson Values for Games With Fuzzy Communication Structure, *Fuzzy Sets And Systems*. 2013. Vol. 213. Núm. 16. Pag. 74-90. <http://dx.doi.org/10.1016/j.fss.2012.05.013>

- 65.** Ordoñez Sanchez, Manuel, Llibre, Jaume, Ponce, Enrique. On the existence and uniqueness of limit cycles in planar continuous piecewise linear systems without symmetry, Nonlinear Analysis: Real World Applications. 2013
- 66.** Ponce Nuñez, Enrique, Ros Padilla, Francisco Javier, Vela Felardo, Elísabet, Unfolding the fold-Hopf bifurcation in piecewise linear continuous differential systems with symmetry, Physica D: Nonlinear Phenomena. 2013. Vol. 250. Pag. 34-46. <http://dx.doi.org/10.1016/j.physd.2013.01.010>
- 67.** Ponce Nuñez, Enrique, Ros Padilla, Francisco Javier, Vela Felardo, Elísabet, Algebraically Computable Piecewise Linear Nodal Oscillators. Applied Mathematics and Computation. 2013. Vol. 219. Núm. 9. Pag. 4194-4207. <http://dx.doi.org/10.1016/j.amc.2012.11.010>
- 68.** Diaz Bañez, Jose Miguel, Korman, Matías, Pérez Lantero, Pablo, Ventura Molina, Inmaculada, The 1-Median and 1-Highway problema, European Journal Of Operational Research. 2013. Vol. 225. Núm. 3. Pag. 552-557. <http://dx.doi.org/10.1016/j.ejor.2012.09.028>
- 69.** Abellanas, Manuel, Diaz Bañez, Jose Miguel, Pérez Lantero, Pablo, Ventura Molina, Inmaculada, Locating a Communication Path in a Competitive Scenario, The Computer Journal. 2013. Vol. 56. Núm. 7. Pag. 819-826. doi: 10.1093/comjnl/bxs030
- 70.** Perez-Peña F., Morgado-Estevez A., Linares-Barranco A., Jimenez-Fernandez Angel, Gomez-Rodriguez Francisco, Jimenez-Moreno Gabriel, Lopez-Coronado Juan, Neuro-inspired spike-based motion: from dynamic vision sensor to robot motor open-loop control through spike-VITE, Sensors 13 (11), 15805-15832
- 71.** Zamarreño-Ramos C., Linares-Barranco A., Serrano-Gotarredona T., Linares-Barranco Bernabé, Multicasting mesh AER: a scalable assembly approach for reconfigurable neuromorphic structured AER systems. Application to ConvNets, IEEE transactions on biomedical circuits and systems 7 (1), 82-102
- 72.** Garcia-Vargas I., Senhadji-Navarro R., The minimum maximal k-partial-matching problema, Optimization Letters 7 (8), 1959-1968
- 73.** Távara L., Mantič V., Salvadori A., Gray L.J., París F., (2013) Cohesive-zone-model formulation and implementation using the symmetric Galerkin boundary element method for homogeneous solids. Comput Mech 51, 535–551.