

LMA

INA, Universidad de Zaragoza

Publicaciones 2018

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**1. Nanotubes from the Misfit Compound Alloy LaS-NbxTa(1-x)S2**

Stolovas, D., Serra, M., Popovitz-Biro, R., Pinkas, I., Houben, L., Calvino, J.J., Joselevich, E., Tenne, R., Arenal, R., Lajaunie, L.

2018 *Chemistry of Materials* 30 (24), pp8829-8842

DOI: [10.1021/acs.chemmater.8b03632](https://doi.org/10.1021/acs.chemmater.8b03632)

**2. Reversible magnetic switching of high-spin molecules on a giant Rashba surface**

Kügel, J., Karolak, M., Krönlein, A., Serrate, D., Bode, M., Sangiovanni, G.

2018 *npj Quantum Materials* 3 (1) 53

DOI: [10.1038/s41535-018-0126-z](https://doi.org/10.1038/s41535-018-0126-z)

**3. Jahn-Teller Splitting in Single Adsorbed Molecules Revealed by Isospin-Flip Excitations**

Kügel, J., Hsu, P.-J., Böhme, M., Schneider, K., Senkpiel, J., Serrate, D., Bode, M., Lorente, N.

2018 *Physical Review Letters* 121 (22) 226402

DOI: [10.1103/PhysRevLett.121.226402](https://doi.org/10.1103/PhysRevLett.121.226402)

**4. Interfacing Transition Metal Dichalcogenides with Carbon Nanodots for Managing Photoinduced Energy and Charge-Transfer Processes**

Vallan, L., Canton-Vitoria, R., Gobeze, H.B., Jang, Y., Arenal, R., Benito, A.M., Maser, W.K., D'Souza, F., Tagmatarchis, N.

2018 *Journal of the American Chemical Society* 140 (41), pp 13488-13496

DOI: [10.1021/jacs.8b09204](https://doi.org/10.1021/jacs.8b09204)

**5. Three-Dimensional Branched and Faceted Gold–Ruthenium Nanoparticles: Using Nanostructure to Improve Stability in Oxygen Evolution Electrocatalysis**

Gloag, L., Benedetti, T.M., Cheong, S., Li, Y., Chan, X.-H., Lacroix, L.-M., Chang, S.L.Y., Arenal, R., Florea, I., Barron, H., Barnard, A.S., Henning, A.M., Zhao, C., Schuhmann, W., Gooding, J.J., Tilley, R.D.

2018 *Angewandte Chemie - International Edition* 57 (32), pp 10241-10245

DOI: [10.1002/anie.201806300](https://doi.org/10.1002/anie.201806300)

**6. Optoelectronic properties of calcium cobalt oxide misfit nanotubes**

Lajaunie, L., Ramasubramaniam, A., Panchakarla, L.S., Arenal, R.

2018 *Applied Physics Letters* 113 (3) 31102

DOI: [10.1063/1.5043544](https://doi.org/10.1063/1.5043544)

**7. Functional Hybrid Nanopaper by Assembling Nanofibers of Cellulose and Sepiolite**

González del Campo, M.M., Darder, M., Aranda, P., Akkari, M., Huttel, Y., Mayoral, A., Bettini, J., Ruiz-Hitzky, E.

2018 *Advanced Functional Materials* 2 (27) 1703048

DOI: [10.1002/adfm.201703048](https://doi.org/10.1002/adfm.201703048)

**8. Quantifying the leading role of the surface state in the Kondo effect of Co/Ag(111)**

Moro-Lagares, M., Fernández, J., Roura-Bas, P., Ibarra, M.R., Aligia, A.A., Serrate, D.  
2018 *Physical Review B* 97 (23) 235442  
DOI: [10.1103/PhysRevB.97.235442](https://doi.org/10.1103/PhysRevB.97.235442)

**9. Enhanced thermo-spin effects in iron-oxide/metal multilayers**

Ramos, R., Lucas, I., Algarabel, P.A., Morellón, L., Uchida, K., Saitoh, E., Ibarra, M.R.  
2018 *Journal of Physics D: Applied Physics* 51 (22) 224003  
DOI: [10.1088/1361-6463/aabedb](https://doi.org/10.1088/1361-6463/aabedb)

**10.**

**11. Evidence of the spin Seebeck effect in Ni-Zn ferrites polycrystalline slabs**

Arboleda, J.D., Arnache, O., Aguirre, M.H., Ramos, R., Anadón, A., Ibarra, M.R.  
2018 *Solid State Communications* 270 (140) 146  
DOI: [10.1016/j.ssc.2017.12.002](https://doi.org/10.1016/j.ssc.2017.12.002)

**12. Purified and Crystalline Three-Dimensional Electron-Beam-Induced Deposits: The Successful Case of Cobalt for High-Performance Magnetic Nanowires**

Pablo-Navarro, J., Magén, C., De Teresa, J.M.  
2018 *ACS Applied Nano Materials* 1 (1), pp 38-46  
DOI: [10.1021/acsanm.7b00016](https://doi.org/10.1021/acsanm.7b00016)

**13. Quaternary Chalcogenide-Based Misfit Nanotubes LnS(Se)-TaS(Se)<sub>2</sub> (Ln = La, Ce, Nd, and Ho): Synthesis and Atomic Structural Studies**

Lajaunie, L., Radovsky, G., Tenne, R., Arenal, R.  
2018 *Inorganic Chemistry* 57 (2), pp 747-753  
DOI: [10.1021/acs.inorgchem.7b02680](https://doi.org/10.1021/acs.inorgchem.7b02680)

**14. Tuning the interfacial charge, orbital, and spin polarization properties in La<sub>0.67</sub>Sr<sub>0.33</sub>MnO<sub>3</sub>/La<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub> bilayers**

Carreira, S.J., Aguirre, M.H., Briatico, J., Weschke, E., Steren, L.B.  
2018 *Applied Physics Letters* 112 (3) 32401  
DOI: [10.1063/1.5011172](https://doi.org/10.1063/1.5011172)

**15. Molecular basis for the integration of environmental signals by furb from anabaena sp. PCC 7120**

Sein-Echaluze, V.C., Pallarés, M.C., Lostao, A., Yruela, I., Velázquez-Campoy, A., Luisa Peleato, M., Fillat, M.F.  
2018 *Biochemical Journal* 475 (1), pp 151-168  
DOI: [10.1042/BCJ20170692](https://doi.org/10.1042/BCJ20170692)

**16. Growth and structural characterization of strained epitaxial Hf<sub>0.5</sub>Zr<sub>0.5</sub>O<sub>2</sub> thin films**

Torrejón, L., Langenberg, E., Magén, C., Larrea, Á., Blasco, J., Santiso, J., Algarabel, P.A., Pardo, J.A.  
2018 *Physical Review Materials* 2 (1) 13401  
DOI: [10.1103/PhysRevMaterials.2.013401](https://doi.org/10.1103/PhysRevMaterials.2.013401)

**17. Effect of the paramagnetic to spin-glass phase transition on the fundamental absorption edge of MnIn<sub>2</sub>Se<sub>4</sub> magnetic semiconducting compound**

Sagredo, V., Torres, T.E., Delgado, G.E., Rincón, C.  
2018 *Revista Mexicana de Física* 65 (1), pp 14-19  
DOI: [10.31349/REVMEXFIS.65.14](https://doi.org/10.31349/REVMEXFIS.65.14)

- 18. Electric polarization switching in an atomically thin binary rock salt structure**  
Martinez-Castro, J., Piantek, M., Schubert, S., Persson, M., Serrate, D., Hirjibehedin, C.F.  
2018 *Nature Nanotechnology* 13 (1), pp 19-23  
DOI: [10.1038/s41565-017-0001-2](https://doi.org/10.1038/s41565-017-0001-2)
- 19. Plasmonic properties of an Ag@Ag<sub>2</sub>Mo<sub>2</sub>O<sub>7</sub> hybrid nanostructure easily designed by solid-state photodeposition from very thin Ag<sub>2</sub>Mo<sub>2</sub>O<sub>7</sub> nanowires**  
Hakouk, K., Lajaunie, L., El Bekkachi, H., Serier-Brault, H., Humbert, B., Arenal, R., Dessapt, R.  
2018 *Journal of Materials Chemistry C* 6 (41), pp 11086-11095  
DOI: [10.1039/c8tc03170c](https://doi.org/10.1039/c8tc03170c)
- 20. Epitaxial La 0.7 Sr 0.3 MnO 3 thin films on silicon with excellent magnetic and electric properties by combining physical and chemical methods**  
Vila-Fungueiriño J.M., Gázquez J., Magén C., Saint-Girons G., Bachelet R., Carretero-Genevriér A.  
2018 *Science and Technology of Advanced Materials* 19 (1). pp 702-710  
DOI: [10.1080/14686996.2018.1520590](https://doi.org/10.1080/14686996.2018.1520590)
- 21. NanoSQUID Magnetometry on Individual As-grown and Annealed Co Nanowires at Variable Temperature**  
Martínez-Pérez M.J., Pablo-Navarro J., Müller B., Kleiner R., Magén C., Koelle D., De Teresa J.M., Sesé J.  
2018 *Nano Letters* 18 (12), pp 7674-7682  
DOI: [10.1021/acs.nanolett.8b03329](https://doi.org/10.1021/acs.nanolett.8b03329)
- 22. Magnetic Shape Memory Turns to Nano: Microstructure Controlled Actuation of Free-Standing Nanodisks**  
Campanini M., Nasi L., Fabbrici S., Casoli F., Celegato F., Barrera G., Chiesi V., Bedogni E., Magén C., Grillo V., Bertoni G., Righi L., Tiberto P., Albertini F.  
2018 *Small* 14 (49), 1803027  
DOI: [10.1002/sml.201803027](https://doi.org/10.1002/sml.201803027)
- 23. Complex behavior of nano-scale tribo-ceramic films in adaptive PVD coatings under extreme tribological conditions**  
Fox-Rabinovich G., Kovalev A., Gershman I., Wainstein D., Aguirre M.H., Covelli D., Paiva J., Yamamoto K., Veldhuis S  
2018 *Entropy* 20 (12), 989  
DOI: [10.3390/e20120989](https://doi.org/10.3390/e20120989)
- 24. Direct and converse piezoelectric responses at the nanoscale from epitaxial BiFeO 3 thin films grown by polymer assisted deposition**  
Vila-Fungueiriño J.M., Gómez A., Antoja-Lleonart J., Gázquez J., Magén C., Noheda B., Carretero-Genevriér A.  
2018 *Nanoscale* 10 (43), pp 20155-20161  
DOI: [10.1039/c8nr05737k](https://doi.org/10.1039/c8nr05737k)
- 25. Stabilization of Nanoparticles Produced by Hydrogenation of Palladium-N-Heterocyclic Carbene Complexes on the Surface of Graphene and Implications in Catalysis**  
Mollar-Cuni A., Ventura-Espinosa D., Martín S., Mayoral Á., Borja P., Mata J.A.  
2018 *ACS Omega* 3 (811), pp 15217-15228  
DOI: [10.1021/acsomega.8b02193](https://doi.org/10.1021/acsomega.8b02193)

**26. Zeolite framework functionalisation by tuneable incorporation of various metals into the IPC-2 zeolite**

Mazur M., Kasneryk V., Přeč J., Brivio F., Ochoa-Hernández C., Mayoral A., Kubu M., Čejka J.  
2018 *Inorganic Chemistry Frontiers* 5 (11), pp 2746-2755  
DOI: [10.1039/c8qi00732b](https://doi.org/10.1039/c8qi00732b)

**27. Crystal structure and local ordering in epitaxial Fe<sub>100-x</sub>Gax/MgO(001) films**

Ciria M., Proietti M.G., Corredor E.C., Coffey D., Begué A., Fuente C.D.L., Arnaud J.I., Ibarra A.  
2018 *Journal of Alloys and Compounds* 767, pp 905-914  
DOI: [10.1039/c8qi00732b](https://doi.org/10.1039/c8qi00732b)

**28. Ultrathin Gold Nanowires with the Polytetrahedral Structure of Bulk Manganese**

Vargas J.A., Petkov V., Nouh E.S.A., Ramamoorthy R.K., Lacroix L.-M., Poteau R., Viau G., Lecante P., Arenal R.  
2018 *ACS Nano* 12 (9), pp 9521-9531  
DOI: [10.1021/acsnano.8b05036](https://doi.org/10.1021/acsnano.8b05036)

**29. Unconventional Single-Molecule Conductance Behavior for a New Heterocyclic Anchoring Group: Pyrazolyl**

Herrer I.L., Ismael A.K., Milán D.C., Vezzoli A., Martín S., González-Orive A., Grace I., Lambert C., Serrano J.L., Nichols R.J., Cea P.  
2018 *Journal of Physical Chemistry Letters* 9 (1)8, pp5364-5372  
DOI: [10.1021/acs.jpcllett.8b02051](https://doi.org/10.1021/acs.jpcllett.8b02051)

**30. Selective catalytic cracking of n-hexane to olefins over SSZ-54 fabricated by facile and novel dual templating method**

Lateef S.A., Bakare I.A., Mayoral A., Sebastian V., Muraza O.  
2018 *Fuel* 227, pp 48- 58  
DOI: [10.1016/j.fuel.2018.03.161](https://doi.org/10.1016/j.fuel.2018.03.161)

**31. Hybrid TiO<sub>2</sub>-Graphene nanoribbon photoanodes to improve the photoconversion efficiency of dye sensitized solar cells**

Akilimali R., Selopal G.S., Benetti D., Serrano-Esparza I., Algarabel P.A., De Teresa J.M., Wang Z.M., Stansfield B., Zhao H., Rosei F.  
2018 *Journal of Power Sources* 396, pp 566-573  
DOI: [10.1016/j.jpowsour.2018.06.044](https://doi.org/10.1016/j.jpowsour.2018.06.044)

**32. Towards molecular electronic devices based on 'all-carbon' wires**

Moneo A., González-Orive A., Bock S., Fenero M., Herrer I.L., Milan D.C., Lorenzoni M., Nichols R.J., Cea P., Perez-Murano F., Low P.J., Martin S.  
2018 *Nanoscale* 10 (29), pp 14128-14138  
DOI: [10.1039/c8nr02347f](https://doi.org/10.1039/c8nr02347f)

**33. Development and properties of high thermal conductivity molybdenum carbide - graphite composites**

Guardia-Valenzuela J., Bertarelli A., Carra F., Mariani N., Bizzaro S., Arenal R.  
2018 *Carbon* 135, pp 72-84  
DOI: [10.1016/j.carbon.2018.04.010](https://doi.org/10.1016/j.carbon.2018.04.010)

**34. M-SrFe<sub>12</sub>O<sub>19</sub> and ferrihydrite-like ultrathin nanoplatelets as building blocks for permanent magnets: HAADF-STEM study and magnetic properties**

Grindi B., BenAli A., Magen C., Viau G.

2018 *Journal of Solid State Chemistry* (264), pp 124-133  
DOI: [10.1016/j.jssc.2018.05.015](https://doi.org/10.1016/j.jssc.2018.05.015)

**35. Breaking the Nd<sup>3+</sup>-sensitized upconversion nanoparticles myth about the need of onion-layered structures**

Estebanez N., Ferrera-González J., Francés-Soriano L., Arenal R., González-Béjar M., Pérez-Prieto J.

2018 *Nanoscale* 10 (26,) pp 12297-12301  
DOI: [10.1039/c8nr00871j](https://doi.org/10.1039/c8nr00871j)

**36. Fluorescent Polymer—Single-Walled Carbon Nanotube Complexes with Charged and Noncharged Dendronized Perylene Bisimides for Bioimaging Studies**

Huth K., Glaeske M., Achazi K., Gordeev G., Kumar S., Arenal R., Sharma S.K., Adeli M., Setaro A., Reich S., Haag R.

2018 *Small* 14 (28), 1800796  
DOI: [10.1002/sml.201800796](https://doi.org/10.1002/sml.201800796)

**37. Gold nanoclusters prepared from an eighteenth century two-phases procedure supported on thiol-containing SBA-15 for liquid phase oxidation of cyclohexene with molecular oxygen**

Agundez J., Martin L., Mayoral A., Pérez-Pariente J.

2018 *Catalysis Today* 304, pp 172-180  
DOI: [10.1016/j.cattod.2017.09.045](https://doi.org/10.1016/j.cattod.2017.09.045)

**38. Chemical and structural analysis of sub-20 nm graphene patterns generated by scanning probe lithography**

Dago A.I., Sangiao S., Fernández-Pacheco R., De Teresa J.M., Garcia R.

2018 *Carbon* 129, pp 281-285  
DOI: [10.1016/j.carbon.2017.12.033](https://doi.org/10.1016/j.carbon.2017.12.033)

**39. Understanding the role of Ti-rich domains in the stabilization of gold nanoparticles on mesoporous silica-based catalysts**

Moragues A., Puértolas B., Mayoral Á., Arenal R., Hungría A.B., Murcia-Mascarós S., Taylor S.H., Solsona B., García T., Amorós P.

2018 *Journal of Catalysis* 360, pp 187-200  
DOI: [10.1016/j.jcat.2018.02.003](https://doi.org/10.1016/j.jcat.2018.02.003)

**40. Block copolymer based novel magnetic mixed matrix membranes-magnetic modulation of water permeation by irreversible structural changes**

Upadhyaya L., Semsarilar M., Quémener D., Fernández-Pacheco R., Martinez G., Mallada R., Coelho I.M., Portugal C.A.M., Crespo J.G.

2018 *Journal of Membrane Science* 551, pp273-282  
DOI: [10.1016/j.memsci.2018.01.032](https://doi.org/10.1016/j.memsci.2018.01.032)

**41. Air-Stable Anisotropic Monocrystalline Nickel Nanowires Characterized Using Electron Holography**

Drisko G.L., Gatel C., Fazzini P.-F., Ibarra A., Mourdikoudis S., Bley V., Fajerweg K., Fau P., Kahn M.

2018 *Nano Letters* 18 (3), pp 1733-1738  
DOI: [10.1021/acs.nanolett.7b04791](https://doi.org/10.1021/acs.nanolett.7b04791)

**42. Vertical Growth of Superconducting Crystalline Hollow Nanowires by He<sup>+</sup> Focused Ion Beam Induced Deposition**

Córdoba R., Ibarra A., Maily D., De Teresa J.M.

2018 *Nano Letters* 18 (2), pp 1379-13869

DOI: [10.1021/acs.nanolett.7b05103](https://doi.org/10.1021/acs.nanolett.7b05103)

**43. Improvement of wear performance of nano-multilayer PVD coatings under dry hard end milling conditions based on their architectural development**

Chowdhury S., Beake B.D., Yamamoto K., Bose B., Aguirre M., Fox-Rabinovich G.S., Veldhuis S.C.

2018 *Coatings* 8 (2) 59

DOI: [10.3390/coatings8020059](https://doi.org/10.3390/coatings8020059)

**44. Synthesis of hybrid magneto-plasmonic nanoparticles with potential use in photoacoustic detection of circulating tumor cells**

Ovejero J.G., Yoon S.J., Li J., Mayoral A., Gao X., O'Donnell M., García M.A., Herrasti P., Hernando A.

2018 *Microchimica Acta* 185 (2) 130

DOI: [10.1007/s00604-017-2637-x](https://doi.org/10.1007/s00604-017-2637-x)

**45. Transmission XMCD-PEEM imaging of an engineered vertical FEBID cobalt nanowire with a domain wall**

Wartelle A., Pablo-Navarro J., Staño M., Bochmann S., Pairis S., Rioult M., Thirion C., Belkhou R., Teresa J.M.D., Magén C., Fruchart O.

2018 *Nanotechnology* 29 (4) 45704

DOI: [10.1088/1361-6528/aa9eff](https://doi.org/10.1088/1361-6528/aa9eff)

**46. 2D magnetic domain wall ratchet: The limit of submicrometric holes**

Herrero-Albillos J., Castán-Guerrero C., Valdés-Bango F., Bartolomé J., Bartolomé F., Kronast F., Hierro-Rodríguez A., Álvarez Prado L.M., Martín J.I., Vélez M., Alameda J.M., Sesé J., García L.M.

2018 *Materials and Design* 138, pp 111-118

DOI: [10.1016/j.matdes.2017.09.060](https://doi.org/10.1016/j.matdes.2017.09.060)

**47. Base-free selective oxidation of pectin derived galacturonic acid to galactaric acid using supported gold catalysts**

Pazhavelikkath Purushothaman R.K., Klis F.V.D., Frissen A.E., Haveren J.V., Mayoral A., Van Der Bent A., Van Es D.S.

2018 *Green Chemistry* 20 (12), pp 2763-2774

DOI: [10.1039/c8gc00103k](https://doi.org/10.1039/c8gc00103k)

**48. Luminescent mesoporous nanorods as photocatalytic enzyme-like peroxidase surrogates**

Ortega-Liebana M.C., Hueso J., Fernandez-Pacheco R., Irusta S., Santamaria J.

2018 *Chemical Science* 9 (40), pp 7766-7778

DOI: [10.1039/c8sc03112f](https://doi.org/10.1039/c8sc03112f)

**49. Synthesis of zeolite A using raw kaolin from Ethiopia and its application in removal of Cr(III) from tannery wastewater**

Ayele L., Pérez E., Mayoral Á., Chebude Y., Díaz I.

2018 *Journal of Chemical Technology and Biotechnology* 93 (1), pp 146-154

DOI: [10.1002/jctb.5334](https://doi.org/10.1002/jctb.5334)

**50. Pillaring of layered zeolite precursors with ferrierite topology leading to unusual molecular sieves on the micro/mesoporous border**

Roth W.J., Gil B., Mayoral A., Grzybek J., Korzeniowska A., Kubu M., Makowski W., Čejka J., Olejniczak Z., Mazur M.

2018 *Dalton Transactions* 47 (9), pp 3029-3037

DOI: [10.1039/c7dt03718j](https://doi.org/10.1039/c7dt03718j)

**51. Carbon nanofiber supported Mo<sub>2</sub>C catalysts for hydrodeoxygenation of guaiacol: The importance of the carburization process**

Ochoa, E; Torres, D; Moreira, R; Pinilla, JL; Suelves, I

2018 *Applied Catalysis B-Environmental* 239, pp 463- 474

DOI: [10.1016/j.apcatb.2018.08.043](https://doi.org/10.1016/j.apcatb.2018.08.043)

**52. Hydrogen Separation at High Temperature with Dense and Asymmetric Membranes Based on PIM-EA(H-2)-TB/PBI Blends**

Sanchez-Lainez, J; Zornoza, B; Carta, M; Malpass-Evans, R; McKeown, NB; Tellez, C; Coronas, J

2018 *Industrial & Engineering Chemistry Research* 57 (49), pp 16909-16916

DOI: [10.1021/acs.iecr.8b04209](https://doi.org/10.1021/acs.iecr.8b04209)

**53. Creation of Superhydrophobic and Superhydrophilic Surfaces on ABS Employing a Nanosecond Laser**

Lavieja, C; Oriol, L; Pena, JI

2018 *Materials* 11 (12) 2547

DOI: [10.3390/ma11122547](https://doi.org/10.3390/ma11122547)

**54. Polymeric electrospun scaffolds for bone morphogenetic protein 2 delivery in bone tissue engineering**

Aragon, J; Salerno, S; De Bartolo, L; Irusta, S; Mendoza, G

2018 *Journal Of Colloid And Interface Science* 531, pp 126-137

DOI: [10.1016/j.jcis.2018.07.029](https://doi.org/10.1016/j.jcis.2018.07.029)

**55. Tuning the activity of Cu-containing rare earth oxide catalysts for CO oxidation reaction: Cooling while heating paradigm in microwave-assisted synthesis**

AlKetbi, M; Polychronopoulou, K; Zedan, AF; Sebastian, V; Baker, MA; AlKhoori, A; Jaoude, MA; Alnuaimi, O; Hinder, SS; Tharalekshmy, A; Allaber, AS

2018 *Materials Research Bulletin* 108, pp 142-150

DOI: [10.1016/j.materresbull.2018.08.045](https://doi.org/10.1016/j.materresbull.2018.08.045)

**56. Homogeneous thin coatings of zeolitic imidazolate frameworks prepared on quartz crystal sensors for CO<sub>2</sub> adsorption**

Sarango, L; Benito, J; Gascon, I; Zornoza, B; Coronas, J

2018 *Microporous and Mesoporous Materials* 272, pp 44-52

DOI: [10.1016/j.micromeso.2018.06.018](https://doi.org/10.1016/j.micromeso.2018.06.018)

**57. High-temperature oxidation of CrAlYN coatings: Implications of the presence of Y and type of steel**

Rojas, TC; Dominguez-Meister, S; Brizuela, M; Sanchez-Lopez, JC

2018 *Surface & Coatings Technology* 354, pp 203-213

DOI: [10.1016/j.surfcoat.2018.09.020](https://doi.org/10.1016/j.surfcoat.2018.09.020)



- 58. Enzyme structure and function protection from gastrointestinal degradation using enteric coatings**  
Gracia, R; Yus, C; Abian, O; Mendoza, G; Irusta, S; Sebastian, V; Andreu, V; Arruebo, M  
2018 *International Journal of Biological Macromolecules* 119, pp 413-422  
DOI: [10.1016/j.ijbiomac.2018.07.143](https://doi.org/10.1016/j.ijbiomac.2018.07.143)
- 59. Tailoring the structural and magnetic properties of Co-Zn nanosized ferrites for hyperthermia applications**  
Gomez-Polo, C; Recarte, V; Cervera, L; Beato-Lopez, JJ; Lopez-Garcia, J; Rodriguez-Velamazán, JA; Ugarte, MD; Mendonca, EC; Duque, JGS  
2018 *Journal of Magnetism and Magnetic Materials*, 465, pp 211-219  
DOI: [10.1016/j.jmmm.2018.05.051](https://doi.org/10.1016/j.jmmm.2018.05.051)
- 60. Effect of epitaxial strain and vacancies on the ferroelectric-like response of CaTiO<sub>3</sub> thin films**  
Sarantopoulos, A; Ong, WL; Malen, JA; Rivadulla, F  
2018 *Applied Physics Letters* 113 (18)  
DOI: [10.1063/1.5053857](https://doi.org/10.1063/1.5053857)
- 61. Laser-Assisted Production of Carbon-Encapsulated Pt-Co Alloy Nanoparticles for Preferential Oxidation of Carbon Monoxide**  
Martinez, G; Malumbres, A; Lopez, A; Mallada, R; Hueso, JL; Santamaria, J  
2018 *Frontiers in Chemistry* 6  
DOI: [10.3389/fchem.2018.00487](https://doi.org/10.3389/fchem.2018.00487)
- 62. Unveiling GaN Polytypism in Distributed GaN/InAlN Bragg Reflectors Through HRTEM Image Simulation**  
Lopez-Conesa, L; Perez-Omil, JA; Gacevic, Z; Calleja, E; Estrade, S; Peiro, F  
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- 63. Ultrapermeable Thin Film ZIF-8/Polyamide Membrane for H<sub>2</sub>/CO<sub>2</sub> Separation at High Temperature without Using Sweep Gas**  
Sanchez-Lainez, J; Paseta, L; Navarro, M; Zornoza, B; Tellez, C; Coronas, J  
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Ruiz-Gomez, S; Serrano, A; Guerrero, R; Munoz, M; Lucas, I; Foerster, M; Aballe, L; Marco, JF; Amado, M; McKenzie-Sell, L; di Bernardo, A; Robinson, JWA; Barrio, MAG; Mascaraque, A; Perez, L  
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Sanchez-Lainez, J; Zornoza, B; Tellez, C; Coronas, J

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Mendoza, G; de Solorzano, IO; Pintre, I; Garcia-Salinas, S; Sebastian, V; Andreu, V; Gimeno, M; Arruebo, M

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