



FACULTAD DE
CIENCIAS



Cincuenta
Aniversario

UAM Universidad Autónoma
de Madrid



Biblioteca de Ciencias

UAM Biblioteca Universidad Autónoma de Madrid



FMC

Department of Condensed Matter Physics

**DEPARTAMENTO DE FÍSICA DE LA MATERIA
CONDENSADA**

**MEMORIA DE PUBLICACIONES
2017**

MEMORIA DE PUBLICACIONES DEL DEPARTAMENTO DE FÍSICA DE LA MATERIA CONDENSADA 2017

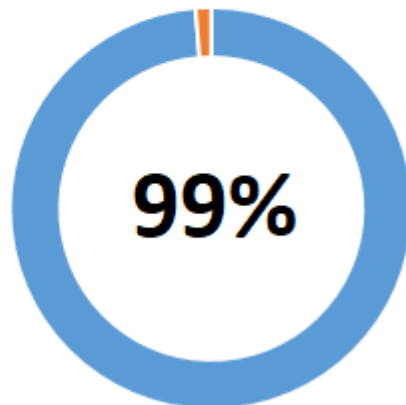
La presente Memoria de Publicaciones 2017, elaborada por la Biblioteca de Ciencias, viene a dar cuenta de los resultados de la investigación realizada a lo largo de 2017 por los profesores e investigadores del Departamento de Física de la Materia Condensada



El Departamento de Física de la Materia Condensada, ha generado 84 publicaciones, de las que 80 son artículos científicos. De éstos, un total de 71 se han publicado en revistas del primer cuartil. Alcanzando el 88,75%, que supone un pequeño aumento con respecto al año anterior.

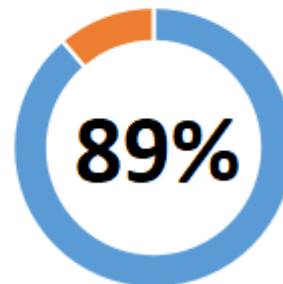
Física de la Materia Condensada

Artículos en revistas con FI



Física de la Materia condensada

% artículos en Q1



Departamento de Física de la Materia Condensada						
	Total publicaciones	Nº Artículos	Q1	Porcentaje Q1	Otras publicaciones	Ratio Pub. /PDI PERMANENTE
DPTO 2017	84	80	71	88,75%	4	2,90
DPTO 2016	89	87	76	87,36%	2	3,07
Facultad 2017	1.267	1.104	807	73,10%	163	2,51
Facultad 2016	1.598	1.403	1.025	73,06%	195	3,12
Evolución publicaciones en Departamento						-5,62%
Evolución publicaciones de la facultad						-20,71%

Hemos comprobado una importante modificación en los indicadores de calidad 2017 de muchas revistas, en la mayoría de los casos la modificación en el cuartil ha sido a la baja.

Dónde publica el Departamento

Se ha publicado en un total de 43 revistas. Siendo éstas las que han recibido un mayor número de artículos:

PHYSICAL REVIEW B (12)

NUCLEAR INSTRUMENTS AND METHODS IN PHYSICS RESEARCH, SECTION B (4)

CARBON (4)

METODOLOGÍA

La presente Memoria de Publicaciones, extrae la información del Portal de Producción Científica de la UAM.

Tras un proceso de verificación y depuración se generó una primera versión y el 12 de marzo se remitió a los directores de los 16 departamentos para su revisión.

Se reciben propuestas de modificación de 12 de los 16 departamentos que, una vez validadas, se incorporan a la versión final, junto con las nuevas incorporaciones detectadas por la biblioteca.

Una vez finalizada la revisión, se analizan los datos relativos a indicios de calidad de las publicaciones incorporándose al presente documento.

Se incluyen tablas comparativas (2016-2017) de cada Departamento, tanto con sus resultados como con la media de la Facultad, en lo referente a: investigadores, publicaciones, artículos con factor de impacto, porcentaje de artículos publicados en revistas del primer cuartil y ratios de publicación.

FUENTES UTILIZADAS

- Para las publicaciones
 - Portal de Producción Científica de la UAM
 - Revisión facilitada por los Departamentos
 - Bases de datos: WoS, Scopus y Pubmed.
- Para los investigadores
 - Cifra de PDI permanente en la Facultad en octubre de 2017, desglosado por Departamentos, facilitada por la Vicedecana de Investigación y por el Vicedecano de Personal Docente e Investigador.
 - Portal de Producción Científica de la UAM, con datos procedentes de la base de datos HOMINIS
- Para los indicios de calidad.
 - Se utilizan los indicadores de factor de impacto de las publicaciones JCR y SJR (Scimago). Se acuerda utilizar el indicador del año anterior (2016) al de la memoria analizada, ya que los indicadores del año 2017 se publicarán a lo largo del verano 2018.

Artículos (80)

1. Abellán G, Ares P, Wild S, Nuin E, Neiss C, Miguel D, Segovia P, Gibaja C, Michel E, Görling A, Hauke F, Gómez-Herrero J, Hirsch A, Zamora F (2017). Noncovalent Functionalization and Charge Transfer in Antimonene. *ANGEWANDTE CHEMIE - INTERNATIONAL EDITION*, 56(46), 14389-14394. DOI: 10.1002/anie.201702983
2. Agullo-Rueda F; Gordillo N; Ynsa M; Maira A; Cañas J; Ramos MA (2017). Lattice damage in 9-MeV-carbon irradiated diamond and its recovery after annealing. *CARBON*, 123, 334-343. DOI: 10.1016/j.carbon.2017.07.076
3. Agullo-Rueda F; Ynsa M; Gordillo N; Maira A; Moreno-Cerrada D; Ramos MA (2017). Micro-Raman spectroscopy of near-surface damage in diamond irradiated with 9-MeV boron ions. *DIAMOND AND RELATED MATERIALS*, 72, 94-98. DOI: 10.1016/j.diamond.2017.01.010
4. Aires A, Cadenas JF, Guantes R, Cortajarena AL (2017). An experimental and computational framework for engineering multifunctional nanoparticles: designing selective anticancer therapies. *NANOSCALE*, 9(36), 13760-13771. DOI: 10.1039/c7nr04475e
5. Al Taleb, Amjad; Anemone, Gloria; Hayes, W. W.; Manson, J. R.; Farias, Daniel (2017). Multiphonon excitation and quantum decoherence in neon scattering from solid surfaces. *PHYSICAL REVIEW B*, 95(7), 075414. DOI: 10.1103/PhysRevB.95.075414
6. Álvarez-Ney, C.; Labarga, J.; Moratalla, M.; Castilla, J. M.; Ramos, M. A. (2017). Calorimetric Measurements at Low Temperatures in Toluene Glass and Crystal. *JOURNAL OF LOW TEMPERATURE PHYSICS*, 187(1-2), 182-191. DOI: 10.1007/s10909-017-1760-8
7. Anemone G, Weingarten C, Al Taleb A, Prieto C, Farías D (2017). Ultrasoother metal thin films on curved fused silica by laser polishing. *APPLIED PHYSICS LETTERS*, 111(18), ARTN 181602. DOI: 10.1063/1.4999917
8. Anemone G; Al Taleb A; Hayes W; Manson J; Farías D (2017). Quantum Decoherence Behavior in Neon Scattering from Ru(0001) and Graphene/Ru(0001) Surfaces: Experiment and Comparison with Calculations. *JOURNAL OF PHYSICAL CHEMISTRY C*, 121(41), 22815-22825. DOI: 10.1021/acs.jpcc.7b07042
9. Anemone G; Taleb A; Eder S; Holst B; Farías D (2017). Flexible thin metal crystals as focusing mirrors for neutral atomic beams. *PHYSICAL REVIEW B*, 95(20), 205428. DOI: 10.1103/PhysRevB.95.205428
10. Ares P; Zamora F; Gómez-Herrero J (2017). Optical Identification of Few-Layer Antimonene Crystals. *ACS PHOTONICS*, 4(3), 600-605. DOI: 10.1021/acsp Photonics.6b00941
11. Atodiresei, N.; Klar, D.; Huttmann, F.; Martínez-Galera, A (2017). Magnetism in a graphene- 4f-3d hybrid system. *PHYSICAL REVIEW B*, 95(7), 075427. DOI: 10.1103/PhysRevB.95.075427
12. Castellanos-Gómez, Andrés; Palacios, J. J.; Ferrer, Isabel J.; van der Zant, Herre S. J.; Rubio-Bollinger, Gabino; Agrait, Nicolás; Sánchez, Carlos; Leardini, Fabrice; Flores, Eduardo; Ares, José Ramón; Clamagirand, José Manuel; Paz, Wendel S.;

- Island, Joshua O.; Molina Mendoza, Aday José (2017). High Current Density Electrical Breakdown of TiS₃ Nanoribbon-Based Field-Effect Transistors. *ADVANCED FUNCTIONAL MATERIALS*, 27(13), 1605647. DOI: 10.1002/adfm.201605647
13. Cayao J, San-José P, Black-Schaffer A, Aguado R, Prada E (2017). Majorana splitting from critical currents in Josephson junctions. *PHYSICAL REVIEW B*, 96(20), 205425. DOI: 10.1103/PhysRevB.96.205425
 14. Cepeda-Jimenez, C. M.; Beltran, J. I.; Hernando, A.; Garcia, M. A.; Yndurain, F.; Zhilyaev, A.; Perez-Prado, M. T. (2017). Tuning the magnetic properties of pure hafnium by high pressure torsion. *ACTA MATERIALIA*, 123, 206-213. DOI: 10.1016/j.actamat.2016.10.052
 15. Céspedes, E.; Villanueva, M.; Navio, C.; Mompean, F. J.; García-Hernández, M.; Inchausti, A.; Pedraz, P.; Osorio, M. R.; Camarero, J.; Bollero, A. (2017). High coercive LTP-MnBi for high temperature applications: From isolated particles to film-like structures. *JOURNAL OF ALLOYS AND COMPOUNDS*, 729(6), 1156-1164. DOI: 10.1016/j.jallcom.2017.09.234
 16. Cho K; Fente A; Teknowijoyo S; Tanatar M; Joshi K; Nusran N; Kong T; Meier W; Kaluarachchi U; Guillamon I; Suderow H; Bud'ko S; Canfield P; Prozorov R (2017). Nodeless multiband superconductivity in stoichiometric single-crystalline CaKFe₄As₄. *PHYSICAL REVIEW B - CONDENSED MATTER AND MATERIALS PHYSICS*, 95(10), 100502. DOI: 10.1103/PhysRevB.95.100502
 17. Cirera B; Trukhina O; Björk J; Bottari G; Rodríguez-Fernández J; Martín-Jiménez A; Islyaikin M; Otero R; Gallego J; Miranda R; Torres T; Ecija D (2017). Long-Range Orientational Self-Assembly, Spatially Controlled Deprotonation, and Off-Centered Metalation of an Expanded Porphyrin. *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*, 139(40), 14129-14136. DOI: 10.1021/jacs.7b06406
 18. Cirera, B.; Bjork, J.; Otero, R.; Gallego, J. M.; Miranda, R.; Ecija, D. (2017). Efficient Lanthanide Catalyzed Debromination and Oligomeric Length-Controlled Ullmann Coupling of Aryl Halides. *JOURNAL OF PHYSICAL CHEMISTRY C*, 121(14), 8033-8041. DOI: 10.1021/acs.jpcc.7b02172
 19. Cirera, B.; Matarrubia, J.; Kaposi, T.; Giménez-Agullo, N.; Paszkiewicz, M.; Klappenberger, F.; Otero, R.; Gallego, J. M.; Ballester, P.; Barth, J. V.; Miranda, R.; Galan-Mascaros, J. R.; Auwaerter, W.; Ecija, D. (2017). Preservation of electronic properties of double-decker complexes on metallic supports. *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*, 19(12), 8282-8287. DOI: 10.1039/c6cp08239d
 20. Corzo-Martínez, Marta; Moreno, F. Javier; Villamiel, Mar; Rodríguez Patino, Juan M.; Carrera Sánchez, Cecilio (2017). Effect of glycation and limited hydrolysis on interfacial and foaming properties of bovine beta-lactoglobulin. *FOOD HYDROCOLLOIDS*, 66, 16-26. DOI: 10.1016/j.foodhyd.2016.12.008
 21. Cui, Longji; Jeong, Wonho; Fernández-Hurtado, Ctor; Feist, Johannes; García-Vidal, Francisco J.; Carlos Cuevas, Juan; Meyhofer, Edgar; Reddy, Pramod (2017). Study of radiative heat transfer in Angström- and nanometre-sized gaps. *NATURE COMMUNICATIONS*, 8. DOI: 10.1038/ncomms14479

22. Cuñado J; Bollero A; Pérez-Castaneda T; Perna P; Ajejas F; Pedrosa J; Gudín A; Maldonado A; Niño M; Guerrero R; Cabrera D; Teran F; Miranda R; Camarero J (2017). Emergence of the Stoner-Wohlfarth astroid in thin films at dynamic regime. SCIENTIFIC REPORTS, 7(1), 13474. DOI: 10.1038/s41598-017-13854-7
23. Cuñado FL, Pedrosa J, Ajejas F, Perna P, Miranda R, Camarero J (2017). Direct observation of temperature-driven magnetic symmetry transitions by vectorial resolved MOKE magnetometry. JOURNAL OF PHYSICS CONDENSED MATTER, 29(40), 405805. DOI: 10.1088/1361-648X/aa7f45
24. De Pablo P (2017). Atomic force microscopy of virus shells. SEMINARS IN CELL AND DEVELOPMENTAL BIOLOGY, 114(6), 467-1120. DOI: 10.1016/j.semcdb.2017.08.039
25. del Valle, J.; Gómez, A.; Luis-Hita, J.; Rollano, V.; González, E. M.; Vicent, J. L. (2017). Different approaches to generate matching effects using arrays in contact with superconducting films. SUPERCONDUCTOR SCIENCE AND TECHNOLOGY, 30(2), 025014. DOI: 10.1088/1361-6668/30/2/025014
26. Domínguez, F; Cayao, J.; San-José, P; Aguado, R.; Levy Yeyati, A.; Prada, E. (2017). Zero-energy pinning from interactions in Majorana nanowires, NPJ QUANTUM MATERIALS 2, 13. DOI: 10.1038/s41535-017-0012-0
27. Farías D; Minniti M; Miranda R (2017). Reactivity of O₂ on Pd/Ru(0001) and PdRu/Ru(0001) surface alloys. JOURNAL OF CHEMICAL PHYSICS, 146(20), 204701. DOI: 10.1063/1.4983994
28. Frisenda R, Island J, Lado J, Giovanelli E, Gant P, Nagler P, Bange S, Lupton J, Schüller C, Molina-Mendoza A, Aballe L, Foerster M, Korn T, Angel Niño M, De Lara D, Pérez E, Fernández-Rossier J, Castellanos-Gómez A (2017). Characterization of highly crystalline lead iodide nanosheets prepared by room-temperature solution processing. NANOTECHNOLOGY, 28(45), 455703. DOI: 10.1088/1361-6528/aa8e5c
29. Frisenda R; Niu Y; Gant P; Molina-Mendoza A; Schmidt R; Bratschitsch R; Liu J; Fu L; Dumcenco D; Kis A; de Lara D; Castellanos-Gómez A (2017). Micro-reflectance and transmittance spectroscopy: A versatile and powerful tool to characterize 2D materials. JOURNAL OF PHYSICS D - APPLIED PHYSICS, 50(7), 074002. DOI: 10.1088/1361-6463/aa5256
30. Galvis J; Herrera E; Guillamon I; Vieira S; Suderow H (2017). Vortex cores and vortex motion in superconductors with anisotropic Fermi surfaces. PHYSICA C: SUPERCONDUCTIVITY AND ITS APPLICATIONS, 533, 2-8. DOI: 10.1016/j.physc.2016.07.023
31. Gebbia, J. F.; Ramos, M. A.; Szewczyk, D.; Jezowski, A.; Krivchikov, A. I.; Horbatenko, Y. V.; Guidi, T.; Bermejo, F. J.; Tamarit, J. Ll. (2017). Glassy Anomalies in the Low-Temperature Thermal Properties of a Minimally Disordered Crystalline Solid. PHYSICAL REVIEW LETTERS, 119(21), ARTN 215506. DOI: 10.1103/PhysRevLett.119.215506
32. Goiriena-Goikoetxea M; Guslienko K; Rouco M; Orue I; Berganza E; Jaafar M; Asenjo A; Fernández-Gubieda M; Fernández Barquín L; García-Arribas A (2017).

- Magnetization reversal in circular vortex dots of small radius. *NANOSCALE*, 9(31), 11269-11278. DOI: 10.1039/c7nr02389h
33. Gómez C; Pisarra M; Gravina M; Sindona A (2017). Tunable plasmons in regular planar arrays of graphene nanoribbons with armchair and zigzag-shaped edges. *BEILSTEIN J NANOTECH*, 8(1), 172-182. DOI: 10.3762/bjnano.8.18
 34. González, C.; Dappe, Y. J. (2017). Molecular detection on a defective MoS₂ monolayer by simultaneous conductance and force simulations. *PHYSICAL REVIEW B*, 95(21), 214105. DOI: 10.1103/PhysRevB.95.214105
 35. Herrera E, Guillamón I, Galvis J, Correa A, Fente A, Vieira S, Suderow H, Martynovich A, Kogan V (2017). Subsurface bending and reorientation of tilted vortex lattices in bulk isotropic superconductors due to Coulomb-like repulsion at the surface. *PHYSICAL REVIEW B*, 96(18), 184502. DOI: 10.1103/PhysRevB.96.184502
 36. Herrera E; Benito-Llorens J; Kaluarachchi U; Bud'Ko S; Canfield P; Guillamon I; Suderow H (2017). Vortex creep at very low temperatures in single crystals of the extreme type-II superconductor Rh₉In₄ S₄. *PHYSICAL REVIEW B - CONDENSED MATTER AND MATERIALS PHYSICS*, 95(13), 134505. DOI: 10.1103/PhysRevB.95.134505
 37. Jelovina D; Feist J; Martín F; Palacios A (2017). Imaging ultrafast molecular wave packets with a single chirped UV pulse. *PHYSICAL REVIEW A - ATOMIC, MOLECULAR, AND OPTICAL PHYSICS*, 95(4), ARTN 043424. DOI: 10.1103/PhysRevA.95.043424
 38. Lara A, Aliev F, Moshchalkov V, Galperin Y (2017). Thermally Driven Inhibition of Superconducting Vortex Avalanches. *PHYSICAL REVIEW APPLIED*, 8(3), 034027. DOI: 10.1103/PhysRevApplied.8.034027
 39. Lara A, Robledo Moreno J, Guslienko KY, Guslienko KY, Aliev FG (2017). Information processing in patterned magnetic nanostructures with edge spin waves. *SCIENTIFIC REPORTS*, 7(1), 5597. DOI: 10.1038/s41598-017-05737-8
 40. Law J; Rial J; Villanueva M; López N; Camarero J; Marshall L; Blázquez J; Borrego J; Franco V; Conde A; Lewis L; Bollero A (2017). Study of phases evolution in high-coercive MnAl powders obtained through short milling time of gas-atomized particles. *JOURNAL OF ALLOYS AND COMPOUNDS*, 712, 373-378. DOI: 10.1016/j.jallcom.2017.04.038
 41. Lee E; Jiang X; Žitko R; Aguado R; Lieber C; De Franceschi S (2017). Scaling of subgap excitations in a superconductor-semiconductor nanowire quantum dot. *PHYSICAL REVIEW B*, 95(18), 180502. DOI: 10.1103/PhysRevB.95.180502
 42. López-Polín G; Jaafar M; Guinea F; Roldán R; Gómez-Navarro C; Gómez-Herrero J (2017). The influence of strain on the elastic constants of graphene. *CARBON*, 124, 42-48. DOI: 10.1016/j.carbon.2017.08.023
 43. López-Polín G; Ortega M; Vilhena J; Alda I; Gómez-Herrero J; Serena P; Gómez-Navarro C; Pérez R (2017). Tailoring the thermal expansion of graphene via controlled defect creation. *CARBON*, 116, 670-677. DOI: 10.1016/j.carbon.2017.02.021

44. Martínez Galera, Antonio Javier; Schroeder, Ulrike A.; Petrovic, Marin; Gerber, Timm; Martínez-Galera, Antonio J.; Granaes, Elin; Arman, Mohammad A.; Herbig, Charlotte; Schnadt, Joachim; Kralj, Marko; Knudsen, Jan; Michely, Thomas (2017). Core level shifts of intercalated graphene. *2D MATERIALS*, 4(1), 015013. DOI: 10.1088/2053-1583/4/1/015013
45. Martínez I; Ribeiro M; Andrés P; Hueso L; Casanova F; Aliev F (2017). Photodoping-Driven Crossover in the Low-Frequency Noise of MoS₂ Transistors. *PHYSICAL REVIEW APPLIED*, 7(3), 034034. DOI: 10.1103/PhysRevApplied.7.034034
46. Martínez-Galera AJ, Wei Z, Nicoara N, Brihuega I, Gómez-Rodríguez JM (2017). PTCDA Growth on Ge(111)-c(2x8) Surfaces: a Scanning Tunneling Microscopy Study. *NANOTECHNOLOGY*, 28(9), 095703. DOI: 10.1088/1361-6528/aa5783
47. Molina-Mendoza A; Giovanelli E; Paz W; Niño M; Island J; Evangeli C; Aballe L; Foerster M; van der Zant H; Rubio-Bollinger G; Agrait N; Palacios J; Pérez E; Castellanos-Gómez A (2017). Franckeite as a naturally occurring van der Waals heterostructure. *NATURE COMMUNICATIONS*, 8, 14409. DOI: 10.1038/ncomms14409
48. Moreno-Madrid F; Martín-González N; Llauro A; Ortega-Esteban A; Hernando-Pérez M; Douglas T; Schaap I; De Pablo P (2017). Atomic force microscopy of virus shells. *BIOCHEMICAL SOCIETY TRANSACTIONS*, 45(2), 499-511. DOI: 10.1042/BST20160316
49. Navarro JJ, Calleja F, Miranda R, Pérez EM, Vázquez de Parga AL (2017). High yielding and extremely site-selective covalent functionalization of graphene. *CHEMICAL COMMUNICATIONS*, 53, 10421. DOI: 10.1039/c7cc04458e
50. Nazari Z; Herrero J; Fojan P; Gurevich L (2017). Formation of conductive DNA-based nanowires via conjugation of dsDNA with cationic peptide. *NANOMATERIALS-BASEL*, 7(6), 128. DOI: 10.3390/nano7060128
51. Núñez A, Amo de Paz G, Ferencova Z, Rastrojo A, Guantes R, García AM, Alcamí A, Gutiérrez-Bustillo AM, Moreno DA (2017). Validation of the Hirst-type spore trap for simultaneous monitoring of prokaryotic and eukaryotic biodiversity in urban air samples by NGS. *APPLIED AND ENVIRONMENTAL MICROBIOLOGY*, 83(13), e00472-17. DOI: 10.1128/AEM.00472-17
52. Olivera, B.; Salgado, C.; Lado, J. L.; Karimi, A.; Henkel, V.; Scheer, E.; Fernandez-Rossier, J.; Palacios, J. J.; Untiedt, C. (2017). Electronic transport in gadolinium atomic-size contacts. *PHYSICAL REVIEW B*, 95(7), 075409. DOI: 10.1103/PhysRevB.95.075409
53. Ossiander M; Siegrist F; Shirvanyan V; Pazourek R; Sommer A; Latka T; Guggenmos A; Nagele S; Feist J; Burgdörfer J; Kienberger R; Schultze M (2017). Attosecond correlation dynamics. *NATURE PHYSICS*, 13(3), 280-285. DOI: 10.1038/nphys3941
54. Otero R; Vázquez De Parga A; Gallego J (2017). Electronic, structural and chemical effects of charge-transfer at organic/inorganic interfaces. *SURFACE SCIENCE REPORTS*, 72(3), 105-145. DOI: 10.1016/j.surfrep.2017.03.001

55. Panzuela S; Pelàez R; Delgado-Buscalioni R (2017). Collective colloid diffusion under soft two-dimensional confinement. *PHYSICAL REVIEW E - STATISTICAL, NONLINEAR, AND SOFT MATTER PHYSICS*, 95(1), 012602. DOI: 10.1103/PhysRevE.95.012602
56. Paz, Wendel S.; Palacios, J. J. (2017). A theoretical study of the electrical contact between metallic and semiconducting phases in monolayer MoS₂. *2D MATERIALS*, 4(1), 015014. DOI: 10.1088/2053-1583/4/1/015014
57. Perna P; Maccariello D; Ajejas F; Guerrero R; Méchin L; Flament S; SantaMaría J; Miranda R; Camarero J (2017). Engineering Large Anisotropic Magnetoresistance in La_{0.7}Sr_{0.3}MnO₃ Films at Room Temperature. *ADV MATER OPT ELECTR*, 27(26), 1700664. DOI: 10.1002/adfm.201700664
58. Politano, A.; Radovic, I.; Borka, D.; Miskovic, Z. L.; Yu, H. K.; Farias, D.; Chiarello, G. (2017). Dispersion and damping of the interband pi plasmon in graphene grown on Cu(111) foils. *CARBON*, 114, 70-76. DOI: 10.1016/j.carbon.2016.11.073
59. Polop C, Vasco E, Perrino AP, Garcia R (2017). Mapping stress in polycrystals with sub-10 nm spatial resolution. *NANOSCALE*, 2017(9), 13938-13946. DOI: 10.1039/c7nr00800g
60. Prada, E; Aguado, R; San-José, P. (2017). Measuring Majorana nonlocality and spin structure with a quantum dot. *PHYSICAL REVIEW B* 96: 085418. DOI: 10.1103/PhysRevB.96.085418
61. Prieto J; Galan P; Zucchiatti A (2017). Cross sections of X-ray production induced on Ti, Fe, Zn, Nb and Ta by O, Cl, Cu and Br ions with energies between 4 MeV and 40 MeV. *NUCLEAR INSTRUMENTS AND METHODS IN PHYSICS RESEARCH, SECTION B: BEAM INTERACTIONS WITH MATERIALS AND ATOMS*, 410, 102-107. DOI: 10.1016/j.nimb.2017.08.008
62. Prieto J; Markov I (2017). Stranski–Krastanov mechanism of growth and the effect of misfit sign on quantum dots nucleation. *SURFACE SCIENCE*, 664, 172-184. DOI: 10.1016/j.susc.2017.05.018
63. Prieto J; Zucchiatti A; Galan P; Prieto P (2017). Cross sections of X-ray production induced by C and Si ions with energies up to 1MeV/u on Ti, Fe, Zn, Nb, Ru and Ta. *NUCLEAR INSTRUMENTS AND METHODS IN PHYSICS RESEARCH, SECTION B: BEAM INTERACTIONS WITH MATERIALS AND ATOMS*, 406, 167-172. DOI: 10.1016/j.nimb.2017.01.047
64. Ramezani, Mohammad; Halpin, Alexei; Fernández-Domínguez, Antonio I.; Feist, Johannes; Rodríguez, Said Rahimzadeh-Kalaleh; García-Vidal, Francisco J.; Rivas, Jaime Gómez (2017). Plasmon-exciton-polariton lasing. *OPTICA*, 4(1), 31-37. DOI: 10.1364/OPTICA.4.000031
65. Rial J; Villanueva M; Céspedes E; López N; Camarero J; Marshall L; Lewis L; Bollero A (2017). Application of a novel flash-milling procedure for coercivity development in nanocrystalline MnAl permanent magnet powders. *JOURNAL OF PHYSICS D - APPLIED PHYSICS*, 50(10), 105004. DOI: 10.1088/1361-6463/aa57a1
66. Rodríguez-Fernández, Jonathan; Robledo, Maitreyi; Lauwaet, Koen; Martín-Jiménez, Alberto; Cirera, Borja; Calleja, Fabian; Díaz-Tendero, Sergio; Alcamí, Manuel; Floreano, Luca; Domínguez-Rivera, Marcos; Vázquez de Parga, Amadeo

- L.; Ecija, David; Gallego, José M.; Miranda, Rodolfo; Martín, Fernando; Otero, Roberto (2017). Tuning Intermolecular Charge Transfer in Donor-Acceptor Two-Dimensional Crystals on Metal Surfaces. *JOURNAL OF PHYSICAL CHEMISTRY C*, 121(42), 23505-23510. DOI: 10.1021/acs.jpcc.7b08017
67. Roldán R; Chirolli L; Prada E; Silva-Guillén JA; San-Jose P; Guinea F (2017). Theory of 2D crystals: Graphene and beyond. *CHEMICAL SOCIETY REVIEWS* 46(15): 4387-4399. DOI: 10.1039/c7cs00210f
68. Romero-Muniz, C.; Franco, V.; Conde, A. (2017). Two different critical regimes enclosed in the Bean-Rodbell model and their implications for the field dependence and universal scaling of the magnetocaloric effect. *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*, 19(5), 3582-3595. DOI: 10.1039/c6cp06291a
69. Rubio-Bollinger, G; Castellanos-Gómez, A; Agrait, N; Palacios, JJ; Quereda, J; (2017). Strain engineering of Schottky barriers in single- and few-layer MoS₂ vertical devices. *2D MATERIALS*, 4(2), 35-47. DOI: 10.1088/2053-1583/aa5920
70. Rubio-Verdu, C.; Saenz-Arce, G.; Martínez-Asencio, J.; Milan, D. C.; Moaied, M.; Palacios, J. J.; Caturla, M. J.; Untiedt, C. (2017). Graphene flakes obtained by local electro-exfoliation of graphite with a STM tip. *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*, 19(11), 8061-8068. DOI: 10.1039/c6cp07236d
71. Sáez-Blázquez R, Feist J, Fernández-Domínguez A, García-Vidal F (2017). Enhancing photon correlations through plasmonic strong coupling. *OPTICA*, 4(11), 1363-1367. DOI: 10.1364/OPTICA.4.001363
72. Simón, S.; Knispel, T.; Herbig, C.; Martínez-Galera, A (2017). From Permeation to Cluster Arrays: Graphene on Ir(111) Exposed to Carbon Vapor. *NANO LETTERS*, 17(5), 3105-3112. DOI: 10.1021/acs.nanolett.7b00550
73. Sindona A, Pisarra M, Vacacela Gómez C, Riccardi P, Falcone G, Bellucci S (2017). Calibration of the fine-structure constant of graphene by time-dependent density-functional theory. *PHYSICAL REVIEW B*, 96(20), 201408. DOI: 10.1103/PhysRevB.96.201408
74. Stauber T, Gómez-Santos G, Brey L (2017). Plasmonics in Topological Insulators: Spin-Charge Separation, the Influence of the Inversion Layer, and Phonon-Plasmon Coupling. *ACS PHOTONICS*, 4(12), 2978-2988. DOI: 10.1021/acsphotonics.7b00524
75. Svatek S; Antolin E; Lin D; Frisenda R; Reuter C; Molina-Mendoza A; Muñoz M; Agrait N; Ko T; de Lara D; Castellanos-Gómez A (2017). Gate tunable photovoltaic effect in MoS₂ vertical p-n homostructures. *JOURNAL OF MATERIALS CHEMISTRY C*, 5(4), 854-861. DOI: 10.1039/c6tc04699a
76. Van de Waterbeemd M; Llauro A; Snijder J; Valbuena A; Rodríguez-Huete A; Fuertes M; De Pablo P; Mateu M; Heck A (2017). Structural Analysis of a Temperature-Induced Transition in a Viral Capsid Probed by HDX-MS. *BIOPHYSICAL JOURNAL*, 112(6), 1157-1165. DOI: 10.1016/j.bpj.2017.02.003
77. Vispa, A.; Romanini, M.; Ramos, M. A.; Pardo, L. C.; Bermejo, F. J.; Hassaine, M.; Krivchikov, A. I.; Taylor, J. W.; Tamarit, J. Ll. (2017). Thermodynamic and Kinetic Fragility of Freon 113: The Most Fragile Plastic Crystal. *PHYSICAL REVIEW LETTERS*, 118(10), 105701. DOI: 10.1103/PhysRevLett.118.105701

78. Ynsa M; Agullo-Rueda F; Gordillo N; Maira A; Moreno-Cerrada D; Ramos MA (2017). Study of the effects of focused high-energy boron ion implantation in diamond. NUCLEAR INSTRUMENTS AND METHODS IN PHYSICS RESEARCH, SECTION B: BEAM INTERACTIONS WITH MATERIALS AND ATOMS, 404, 207-210. DOI: 10.1016/j.nimb.2017.01.052
79. Zubeltzu J, Artacho E (2017). Simulations of water nano-confined between corrugated planes. JOURNAL OF CHEMICAL PHYSICS, 147(19), 194509. DOI: 10.1063/1.5011468
80. Zucchiatti A; Galan P; Prieto J (2017). A procedure to correct for target thickness effects in heavy-ion PIXE at MeV energies. NUCLEAR INSTRUMENTS AND METHODS IN PHYSICS RESEARCH, SECTION B: BEAM INTERACTIONS WITH MATERIALS AND ATOMS, 407, 1-4. DOI: 10.1016/j.nimb.2017.05.022

OTRAS PUBLICACIONES (4)

Capítulos de libro

1. Guillamón I., Rodrigo J., Vieira S., Suderow H. (2017) Imaging vortices in superconductors: From the atomic scale to macroscopic distances. EN: SUPERCONDUCTORS AT THE NANOSCALE: FROM BASIC RESEARCH TO APPLICATIONS. (ISSN/ISBN: 9783110456806). 29-59 . DOI: 10.1515/9783110456806-002

Conferencia publicada

2. Chaluvadi, S. K.; Perna, P.; Ajejas, F.; Camarero, J.; Pautrat, A.; Flament, S.; Mechin, L. (2017). Thickness and angular dependent magnetic anisotropy of La_{0.67}Sr_{0.33}MnO₃ thin films by Vectorial Magneto Optical Kerr Magnetometry. DOI:10.1088/1742-6596/903/1/012021

Meeting-Abstract

3. Ajejas F, Maccariello D, Guerrero R, Camarero J, Miranda R, Perna P (2017). Chiral asymmetry driven by unidirectional magnetic anisotropy in spin-orbitronic systems. 2017 IEEE INTERNATIONAL MAGNETICS CONFERENCE, INTERMAG 2017, 8007780. DOI: 10.1109/INTMAG.2017.8007780
4. Ramezani M, Halpin A, Feist J, Fernández-Domínguez A, Rodríguez S, García-Vidal F, Gómez-Rivas J (2017). Plasmon exciton-polariton lasing. OPTICS INFOBASE CONFERENCE PAPERS, Part F82-CLEO_Europe 2017.



This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).