

Publicaciones 2016 - 2018

Nombre	LGAC	Producto	Participación estudiante
Dr. Carlos Michel Uribe	Física Experimental	Artículos: • “CO sensing properties of novel nanostructured La₂O₃ microspheres”, Carlos R. Michel, Alma H. Martinez Preciado, Sensors and Actuators B 208 (2015) 355-362. • “CO₂ gas sensing response of YPO₄ nanobelts produced by a colloidal method”, Carlos R. Michel, Alma H. Martines Preciado, Cesar D. Rivera Tello, Sensors and Actuators B 221 (2015) 499-506. • Carlos R. Michel, Alma H. Martínez-Preciado, Cesar D. Rivera-Tello, Edgar R. López-Mena, Virginia F. Marañón-Ruiz, Rubén A. Rodríguez, Response to environmental gases of BaCoO₃ nanowires prepared by a microwave-assisted colloidal method, Sensors and Actuators B/Elsevier 233 (2016) 39-46 • Carlos R. Michel, Alma H. Martínez-Preciado, Improvement of the gas sensing response of nanostructured LaCoO₃ by the addition of Ag nanoparticles, Sensors and Actuators B/Elsevier 246 (2017) 181-189 • Carlos R. Michel, Miguel A. López-Alvarez, Alma H. Martínez-Preciado, Vitaliy Oleinikov, Ultraviolet Detection and Photocatalytic Activity of Nanostructured LaCoO₃ Prepared by Solution-Polymerization, ECS Journal of Solid State Science and Technology, 8 (2) Q9-Q14 (2019) • Carlos R. Michel, Miguel A. Lopez-Alvarez, Alma H. Martinez-Preciado, Gregorio G. Carbajal-Arizaga, Novel UV Sensing and Photocatalytic Properties of DyCoO₃, Journal of Sensors, Vol. 2019,	Miguel A. López-Alvarez Miguel A. López-Alvarez

		Article ID 5682645, doi.org/10.1155/2019/5682645	
Dr. Armando Pérez Centeno	Física Experimental	ARTÍCULOS • Mater Scie & Eng B, a2016 v203 p7-12 • Mater Res Bull, a2016 v76 p376-383 • J Nanomaterials, a2016 v2016 p6917950-7 • Crystals, a2016 v6 p135-15 • Dalton Transactions, a2017 v46 p3809-3811 • Mater Res Express, a2018 v5 p015038 • J Laser Appl, a2018 v30 (01) p012007 • Catalysts, a2018 v8 p161 (14) • Mater Res Express, a2018 v5 p066417 • Mater Scie Semic Proces, a2018 v87 p7-12	
Dr. Miguel Ángel Santana Aranda	Física Experimental	• J.G. Quiñones-Galván, Enrique Camps, E. Campos-González, A. Hernández-Hernández, M.A. Santana-Aranda, A. Pérez-Centeno, A. Guillén-Cervantes, J. Santoyo-Salazar, O. Zelaya-Angel, F. de Moure-Flores, "Influence of plasma parameters and substrate temperature on the structural and optical properties of CdTe thin films deposited on glass by laser ablation", Journal of Applied Physics 118 (2015) 125304. ISSN: 0021-8979 • J.G. Quiñones-Galván, R. Lozada-Morales, S. Jiménez-Sandoval, Enrique Camps, V.H. Castrejón-Sánchez, E. Campos-González, M. Zapata-Torres, A. Pérez-Centeno, M.A. Santana-Aranda, "Physical properties of a non-transparent cadmium oxide thick film deposited at low fluence by pulsed laser deposition", Materials Research Bulletin 76 (2016) 376. ISSN: 0025-5408	
Dr. Simon	Astrofísica	• Nigoche-Netro, A.; Ruelas-Mayorga, A.;	

Nicholas Kemp		Lagos, P.; Ramos-Larios, G.; Kehrig, C.; Kemp, S. N.; Montero-Dorta, A. D.; González-Cervantes, J. How much dark matter is there inside early-type galaxies? Monthly Notices of the Royal Astronomical Society, 446, 85-103 (2015) • Mata, H.; Ramos-Larios, G.; Guerrero, M. A.; Nigoche-Netro, A.; Toalá, J. A.; Fang, X.; Rubio, G.; Kemp, S. N.; Navarro, S. G.; Corral, L. J Spitzer mid-infrared spectroscopic observations of planetary nebulae Monthly Notices of the Royal Astronomical Society, accepted (2016) • Spitzer mid-infrared observations of planetary nebulae, Mata H., Ramos-Larios, G., Guerrero, M.A., Nigoche-Netro, A., Toala, J.A., Fang, X., Rubio, G., Kemp, S.N., Navarro, S.G., Corral, L.J., MNRAS, 459, 841 (2016) • The total filament of NGC 4660. Kemp, S.N., Martinez-Robles, C., Marquez-Lugo, R.A., Zepeda-Garcia, D. , Franco-Hernandez, R., Nigoche-Netro, A., Ramos-Larios, G., Navarro, S.G., Corral, L.J., ApJ 830, 66 (2016) • Dark matter inside early-type galaxies as function of mass and redshift . Nigoche-Netro, A., Ramos-Larios, G., Lagos, P., Ruelas-Mayorga, A., de la Fuente, E., Kemp, S.N., Navarro, S.G., Corral, L.J., Hidalgo-Gamez A.M. , MNRAS 462, 951 (2016) • Analytical model for the dynamical motion of the bulges of two interacting galaxies, Lopez, Elkin L., Lopez, Gustavo V., Kemp, Simon N., AJ 156, 215 (2018) • The quantity of dark matter in early-type galaxies and its relationship to the environment, Nigoche-Netro A., Ramos-Larios, G., Lagos, P., de la Fuente E., Ruelas-Mayorga, A., Mendez-Abreu, J., Kemp, S.N., Diaz, R.J., MNRAS 488, 1320	Elkin L., Lopez Elkin L., Lopez
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		• “Dynamical model of the kinesin protein motor” A. Nesterov, G. Berman, M. Ramirez, LA-UR-16-22931 (2016). • AI Nesterov, GP Berman, FA de la Cruz, JC Beas Zepeda, Non-Hermitian Quantum Annealing and Superradiance, in “Non-Hermitian Hamiltonians in Quantum Physics”, (Springer, 2016). • M Merkli, GP Berman, RT Sayre, S Gnanakaran, M Könenberg , AI Nesterov, Dynamics of a Chlorophyll Dimer in Collective and Local Thermal Environments J Math Chem, 54, 866–917 (2016). • Shmuel Gurvitz, Alexander I Nesterov and Gennady P Berman, Multi-scale exciton and electron transfer in multi-level donor–acceptor systems, J. Phys. A: Math. Theor. 50, 365601 (30pp) (2017). • Yu. S. Orlov, S. V. Nikolaev, A. I. Nesterov, and S. G. Ovchinnikov, Magnetic and Structural Phase Transitions in Systems with Spin Crossover under Pressure, JETP Letters, 2017, Vol. 105, No. 12, pp. 771–774. • Alexander I. Nesterov, Yu. S. Orlov, S. G. Ovchinnikov and S. V. Nikolaev, Cooperative phenomena in spin crossover systems, PHYSICAL REVIEW B 96, 134103 (2017). • Gennady P. Berman, Alexander I. Nesterov, Shmuel Gurvitz and Richard T. Sayre, Possible role of interference, protein noise, and sink effects in nonphotochemical quenching in photosynthetic complexes, J. Math. Biol. 74, 43–76 (2017). • M. Merkli, GP Berman, RT Sayre , X. Wang and AI Nesterov, Production of Entanglement Entropy by Decoherence, Open Systems & Information Dynamics,	Héctor Mata
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Dr. Thomas Gorin	Física teórica	ARTÍCULOS • “Joint probability distributions for projection probabilities of random orthonormal states”. L Alonso and T Gorin. J. Phys. A: Math. Theor. 49 (2016)	”. L Alonso

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Dra. Isabel Sainz Abascal	Física teórica	ARTÍCULOS • "Quantum tomography via nonorthogonal basis and weak values", J. J. Díaz, I. Sainz, and A.B. Klimov, Phys .Rev. A 91, 062127 (2015). • “Error estimation in the direct stat tomography”, Euro Phys. Rev. 116,	", J. J. Díaz

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Dr. José Luis Romero Ibarra	Física teórica	• Semiclassical dynamics of a rigid rotator: $SO(3)$ covariant approach, J.L. Romero, A.B. Klimov, S. Wallentowitz New J. Phys. 17, 043015 (2015). • Semiclassical phase-space dynamics of compound quantum systems: $SU(2)$ covariant approach, K Tomatani, J L Romero and A B Klimov, J. Phys. A, Volume 48, Number 21 (2015). • Correlation transfer in large-spin chains, Valtierra, IF, Romero, JL, Klimov, AB, Phys. Rev. A94, 42336 (2016) • TWA versus semiclassical unitary approximation for spin-like systems, Ann. Phys. Valtierra, IF Romero, JL, Klimov, AB 383, 620 (2017) • Generalized $SU(2)$ covariant Wigner functions and some of their applications, Klimov, A. B.; Luis Romero, Jose; de Guise, Hubert J. Phys. A (Topical Review) 50, 323001 (2017)	K Tomatani Valtierra, IF, Valtierra, IF

Jorge E. Sánchez-Rodríguez	Física experimental	• Sofia Rodríguez-Rangel, Alyssa D. Bravin, Karla M. Ramos-Torres, Pedro Brugarolas*, Jorge E. Sánchez-Rodríguez* (2019). Structure-activity relationship studies of three novel 4-aminopyridine K⁺ channel blockers. Artículo depositado en bioRxiv, DOI: http://dx.doi.org/10.1101/731943. • Pedro Brugarolas, Jorge E Sánchez-Rodríguez, Hsiu-Ming Tsai, Falguni Basuli, Shih-Hsun Cheng, Xiang Zhang, Andrew V Caprariello, Jerome J Lacroix, Richard Freifelder, Dhanabalan Murali, Onofre DeJesus, Robert H Miller, Rolf E Swenson, Chin-Tu Chen, Peter Herscovitch, Daniel S Reich, Francisco Bezanilla, Brian Popko (2018). • Development of a PET radioligand for potassium channels to image CNS demyelination. Scientific reports 8 (1): 607. • Mikheil Nanazashvili, Jorge E Sánchez-Rodríguez, Ben Fosque, Francisco Bezanilla, Henry Sackin (2018). LRET Determination of Molecular Distances during pH Gating of the Mammalian Inward Rectifier Kir1. 1b, Biophysical journal 114(1):88-97. • Juan Pablo Castillo*, Jorge E. Sánchez-Rodríguez*, H. Clark Hyde*, Christian Zaelzer, Daniel Aguayo, Romina Sepúlveda, Louis Y. P. Luk, Stephen Kent, Fernando Gonzalez-Nilo, Francisco Bezanilla and Ramon Latorre (2016). β1 Subunit-Induced Structural Rearrangements of the Ca²⁺ -and Voltage-Activated (BK) Channel, Proc. Natl. Acad. Sci. (U.S.A.). *Equal contribution. 113 (23):E3231-E3239.	
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