

Publicaciones del departamento de física

Universidad Autónoma Metropolitana
Fenómenos Ópticos y de Transporte en la Materia

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1 2013

- Juan Azorín Nieto, Pedro González, Epifanio Cruz Zaragoza, Claudio Furetta, B, C, Alcántara. Effect Of Thermal Treatment On Tl Response Of Caso4: Dy Obtained Using A New Preparation Method. Applied Radiation And Isotopes. Vol. 75. Pag. Inicial: 58. Pag. Final: 63.
- Juan Azorín Nieto, R. Álvarez, T. Rivera, J. Guzmán, M.C. Piña-Barba. Thermoluminescent Characteristics Of Synthetic Hydroxyapatite. Applied Radiation And Isotopes. Vol. 83. Pag.Inicial: 192. Pag. Final: 195.
- Juan Azorín Nieto, J. Rodríguez-Cortés, R. Álvarez-Romero, T. Rivera-Montalvo. Electron Absorbed Dose In Linacs By Thermoluminescent Dosimetry. Applied Radiation And Isotopes. Vol. 83. Pag.Inicial: 210. Pag. Final: 213.
- Juan Azorín Nieto, C. Azorín, H.R. Vega Carrillo, T. Rivera. Calculation Of Fluence And Absorbed Dose In Head Tissues Due To Different Photon Energies. Applied Radiation And Isotopes. Vol. 83. Pag. Inicial: 230. Pag. Final: 234.
- Juan Azorín Nieto. Preparation Methods Of Thermoluminescent Materials For Dosimetric Applications: An Overview. Applied Radiation And Isotopes.Vol. 83. Pag. Inicial: 187. Pag. Final: 101.
- A. Rodríguez-Gómez, A. García-Valenzuela, E. Haro-Poniatowski, J. C. Alonso-Huitron. Effect Of Thickness On The Photoluminescence Of Silicon Quantum Dots Embedded In Silicon Nitride Thin Films. Journal Of Applied Physics. Vol. 113. Pag. Inicial: 1. Pag. Final: 10.
- J. L. Ecobar-Alarcon, D. A. Solís-Casados, S. Romero, M. Fernández, J. Pérez-Álvarez, E. Haro-Poniatowski. Effect Of Aluminum Plasma Parameters On The Physical Properties Of Ti-Al-N Thin Films Deposited By Reactive Crossed Beam Pulsed Laser Deposition. Applied Surface Science. Vol. 283. Pag. Inicial: 808. Pag. Final: 812.

- Carlos Acosta Zepeda, Giovanni Mecalco, José Luis Hernández Pozos, Marco Antonio Zepeda, Nikola Batina, Emanuel Haro Poniowski. Laser Induced Patterning Of Bi Thin Films. Materials Research Society Symposium Proceedings. Ciudad: Cambridge. Vol. 144.
- M. Martínez-Mares, V. Domínguez-Rocha. Evolution With Size In A Locally Periodic System: Scattering And Deterministic Maps. Journal Of Physics A: Meth. Vol. 46. Pag. Inicial: 1. Pag. Final: 12.
- G. Báez, M. Cobian-Suarez, A. M. Martínez-Arguello, M. Martínez-Mares, R. A. Mendez-Sánchez. Scattering Of Elastic Waves In Quasi-One-Dimensional Cavity: Theory And Experiment. Acta Physica Polonica A. Vol. 124. Numero: 6. Pag. Inicial: 1069. Pag. Final: 1073.
- U. Caldiño, E. Álvarez, A. Speghini, M. Bettinelli. New Greenish-Yellow And Yellowish-Green Emitting Phosphors: Tb³⁺/Eu³⁺ And Ce³⁺/Tb³⁺/Eu³⁺ In Zinc Phosphate Glasses. Journal Of Luminescence. Vol. 135. Pag. Inicial: 216. Pag. Final: 220.
- R. Martínez-Martínez, E. Yescas, E. Álvarez, C. Falcony, U. Caldiño. White Light Generation In Rare-Earth-Doped Amorphous Films Produced By Ultrasonic Spray Pyrolysis. Advances In Science And Technology. Vol. 82. Pag. Inicial: 19. Pag. Final: 24.
- G. Lakshminarayana, Eric M. Weis, A.C. Lira, Ulises Caldiño, Darrick J. Williams, Markus P. Hehlen. Cross Relaxation In Rare-Earth-Doped Oxyfluoride Glasses. Journal Of Luminescence, Vol. 139. Pag. Inicial: 132. Pag. Final: 142.
- W. González, E. Álvarez, G.C. Righini, U. Caldiño. New Yellowish-Green Light Emitting Thin Film: 89al2o35cecl33eucl33tbcl3. Optical Materials. Vol. 35. Numero: 6. Pag. Inicial: 1304. Pag. Final: 1308.
- E. Téllez-Flores, R. Aceves, R. Pérez-Salas, I. Camarillo, U. Caldiño. Luminescent Characteristic Of The Csbr Phosphor Activated With Eu²⁺ And Mn²⁺ Ions. Journal Of Luminescence, Vol. 144. Pag. 8 Inicial: 22. Pag. Final: 25.
- Michel Picquart, Marco Antonio Zepeda, Emmanuel Haro-Poniowski. Laser Induced Oxidation Effects In Bismuth Thin Films. Material Research Society Symposium Proceedings. Vol. 1477. Pag. Inicial: 1. Pag. Final: 6.
- Sosa Fonseca R., M. A. García Sánchez, C. Menchaca-Campos, L. A. Díaz Alejo, J. Uruchurtuchavarin. Effects Of The Addition Of Ortho And Para-Nh₂ Substituted Tetraphenylporphyrins On The Structure Of Nylon-6-6. International Journal Of Polymer Science.
- Sosa Fonseca R., I. N. Serratos, F. Rojas-González, J. M. Esparza Schulz, V. Campos Peña, S.R. Tello Solís, M. A. García Sánchez. Fluorescence Optimization Of Chlorophyll Covalently Bonded To Mesoporous Silica Synthesized By The Sol-Gel Method. Journal Of Photochemistry And Photobiology A: Chemistry. Vol. 272. Pag. Inicial: 28. Pag. Final: 40.

- M. Fernández-Guasti And F. Zaldívar. A Hyperbolic Non Distributive Algebra In 1+2 Dimensions. Adv. Appl. Clifford Algebras. Vol. 23. Numero: 3. Pag. Inicial: 639. Pag. Final: 653.
- R. Diamant, M. Fernández-Guasti. Phase Change Of Light Reflected By A Discontinuity In The Derivatives Of The Refractive Index. Optics Comm... Vol. 294. Pag. Inicial: 64. Pag. Final: 72.
- M. Fernández-Guasti. Escultura Métrica: Escatores Imaginarios En 1+2 Dimensiones Y La Escala Humana... Cyberspace And The Quest For A Materialistic Epistemology Of Liberation. Pag. Inicial: 141. Pag. Final: 148.
- M. Fernández-Guasti And Felipe Zaldívar. An Elliptic Non Distributive Algebra. Adv. Appl. Clifford Algebras. Adv. Appl. Clifford Algebras. Vol. 23. Pag. Inicial: 825. Pag. Final: 835.

2 2014

- U. Caldiño, A. Speghini, S. Berneschi, M. Bettinelli, M. Brenci, E. Pasquini, S. Pelli, G.C. Righini. Optical Spectroscopy and Optical Waveguide Fabrication in Eu³⁺ and Eu³⁺/Tb³⁺ Doped Zinc-Sodium-Aluminosilicate Glasses. Journal of Luminescence. Vol: 147. Pag. Inicial: 336. Pag. Final: 340. [Http://Dx.Doi.Org/10.1016/J.Jlumin.2013.11.061](http://Dx.Doi.Org/10.1016/J.Jlumin.2013.11.061)
- E. Álvarez, Ma. E. Zayas, J. Alvarado-Rivera, F. Félix-Domínguez, R.P. Duarte-Zamorano, U. Caldiño. New Reddish-Orange and Greenish-Yellow Light Emitting Phosphors: Eu³⁺ and Tb³⁺/Eu³⁺ In Sodium Germanate Glass. Journal of Luminescence. Vol: 153. Pag. Inicial: 198. Pag. Final: 202. [Http://Dx.Doi.Org/10.1016/J.Jlumin.2014.03.030](http://Dx.Doi.Org/10.1016/J.Jlumin.2014.03.030)
- A.N. Meza-Rocha , E.F. Huerta, U. Caldiño, E. Zaleta-Alejandre, H. Murrieta S, J.M. Hernández A, E. Camarillo, Z. Rivera-Álvarez, G.C. Righini, C. Falcony. Li+ Co-Doping Effect on the Photoluminescence Time Decay Behavior of Y₂O₃:Er³⁺ Films. Journal of Luminescence. Vol: 154. Pag. Inicial: 106. Pag. Final: 110.
- E. Álvarez, Ma. E. Zayas, D. Rodriguez-Carvajal, F. Félix-Domínguez, R.P. Duarte-Zamorano, C. Falcony, U. Caldiño. Cold White Light Generation through the Simultaneous Emission from Ce³⁺ and Tb³⁺ In Sodium Germanate Glass. Optical Materials (2014) 451. Vol 37. Pag. Inicial: 451. Pag. Final: 456
- Lira, A. Speghini, E. Camarillo, M. Bettinelli, U. Caldiño. Spectroscopic Evaluation of Zn (Po₃)₂:Dy³⁺ Glass As an Active Medium for Solid State Yellow Laser. Optical Materials. Vol: 38. Pag. Inicial: 188. Pag. Final: 192.
- G.C. Righini, U. Caldiño, C. Falcony, M. Ferrari, S. Pelli. Rare-Earth Phosphors for the Control of Wled'S Colour Output: State Of The Art. 2014 16th International Conference on Transparent Optical Networks (Icton). Pag. Inicial: 1. Pag. Final: 4. Proceedings De 16th International Conference on Transparent Optical Networks (Icton). Doi: 10.1109/Icton.2014.6876519

- Michel Picquart, Carlos Gerónimo López, Jorge Vázquez Arenas, Ignacio González. The Energetic Conditions Determining the Active Dissolution of Carbon Steel During Electrocoagulation in Sulfate Media. *Electrochimica Acta*. Vol: 136. Pag. Inicial: 146. Pag. Final: 156.
- Michel Picquart, C. Álvarez Macías, B.M. Monroy, L. Huerta, M.A. Canseco Martínez, M.F. García Sánchez, G. Santana. Influence of Light-Soaking Treatment on the Optoelectronic Properties of Polymorphous Silicon Thin Films to Be Used In Solar Cells. *IEEE*. Pag. Inicial: 526. Pag. Final: 529.
- Michel Picquart, L. Hamui , A. Remolina , M.F. García Sánchez , A. Ponce , D. Mendoza, B.M. Monroy , G. Santana. Deposition And Optoelectronic And Structural Characterization Of Polymorphous Silicon Thin Films To Be Applied In A Solar Cell Structure. *Mat. Sc. Semicond. Proces.* Vol: 30. Pag. Inicial: 85. Pag. Final: 91.
- Azorín Nieto Juan. Preparation Methods of Thermoluminescent Materials for Dosimetric Applications: An Overview. *Applied Radiation and Isotopes*. Exeter. Vol: 53. Pag. Inicial: 187. Pag. Final: 191.
- Juan Azorín Nieto, R. Alvarez, T. Rivera, J. Guzman, M.C. Piña-Barba. Thermoluminescent Characteristics of Synthetic Hydroxyapatite (Shap). *Applied Radiation and Isotopes*. Exeter. Vol: 83. Pag. Inicial: 192. Pag. Final: 195.
- Juan Azorín Nieto, J. Rodriguez-Cortes, R. Alvarez-Romero, T. Rivera-Montalvo. Electron Absorbed Dose Measurements in Linacs by Thermoluminescent Dosimeters. *Applied Radiation and Isotopes*. Exeter. Vol: 83. Pag. Inicial: 210. Pag. Final: 213.
- Juan Azorín Nieto, C. Azorin, H.R. Vega-Carrillo, T. Rivera. Calculation of Fluence and Absorbed Dose in Head Tissues Due To Different Photon Energies. *Applied Radiation and Isotopes*. Exeter. Vol: 83. Pag. Inicial: 230. Pag. Final: 234.
- Moisés Martínez Mares, Angel M. Martínez Argüello Y Julio C. García. Joint Moments of Proper Delay Times. *Journal of Mathematical Physics*. Melville, NY. Vol: 55. Numero: 8. Pag. Inicial: 1. Pag. Final: 17.
- Rebeca Sosa Fonseca, R.I.Y. Quiroz-Segoviano, Iris. N. Serratos, F. Rojas-González, S.R. Tello-Solís, R. Sosa-Fonseca, O. Medina-Juere1,, E.C. Menchaca,, M.A. García-Sánchez. On Tuning the Fluorescence Emission of Porphyrin Free Bases Bonded To the Pore Walls of Organo-Modified Silica. *Molecules*. Basel. Vol: 19. Numero: 2. Pag. Inicial: 2261. Pag. Final: 2285.
- D. Fink, G. Muñoz H., N. L. Ruiz, J. Hacik, V. Hnaowicz, L. Alfonta, A. Kiv. Coupled Chemical Reactions In Dynamic Nanometric Confinement V: The Influence Of Li+ And F-On Etching Of Nuclear Tracks In Polymers. *Radiat. Eff. Def. Solids* 169 (2014) 1-22
- H. García Arellano, D. Fink, G. Muñoz H., J. Vacik, V. Hnatowiczl Alfonta. A Nuclear Track-Based Biosensor Using the Enzyme Laccase *Appl. Surf. Sci.* 310 (2014) 66-76

- E. Haro-Poniatowski, C. Acosta-Zepeda, G. Mecalco, J. L. Hernández-Pozos, N. Batina, I. Morales-Reyes, And J. Bonse. Diffraction Assisted Micropatterning of Silicon Surfaces by Ns-Laser Irradiation. *Journal of Applied Physics*. Vol: 115. Pag. Inicial: 22430.
- L. Escobar-Alarcón, D. A. Solis-Casados, J. Perez-Alvarez, S. Romero, J. G. Morales-Mendez, E. Haro-Poniatowski. Preparation of Bi: Tio₂ Thin Films by a Hybrid Deposition Configuration: Pulsed Laserdeposition and Thermal Evaporation. *Applied Physics A*. Vol: 117. Núm: 1. Pag. Inicial: 31. Pag.Final: 35.
- M. Jimenez De Castro, F. Cabello, J. Toudert, R. Serna, E. Haro-Poniatowski. Potential Of Bismuth Nanoparticles Embedded In A Glass Matrix For Spectral-Selective Thermo-Opticaldevices. *Applied Physics Letters*. Vol: 105. Pag. Inicial: 1. Pag. Final: 5.
- Luis Escobar-Alarcón, Emmanuelvelarde, Diana Villa, Oscar Olea-Mejía, Emmanuel Haro-Poniatowski, Alma Arrieta, Dora A. Solís-Casados. Bismuth and Gold Nanoparticles Prepared By Laser Irradiation in Aqueous Solutions... *Advanced Materials Research*. Vol: 976. Pag. Inicial: 196. Pag. Final: 201.

3 2015

- M. Díaz, P. A. Mello, M. Yépez and S. Tomsovic. Wave transport in one-dimensional disordered systems with finite-size scatterers. *Physical Review B* 91, 184203 (2015)
- Juan Azorín, Claudia Azorin, Teodoro Rivera, Fermin Aguirre. Dose measurements in intraoral radiography using thermoluminescent dosimeters. *Journal of Physics. Conference Series*. Vol: 582. Num: 1.
- Juan Azorín Nieto. Current Status and Future Trends of Medical Physics in Mexico. *Journal of Physics. Conference Series* Vol. 582 (2015). Num: 1.
- Juan Azorín Nieto, Lozano Ivonne, Gonzalez Pedro, Rivera Teodoro, Azorin Claudia. Development of a new thermoluminescent phosphor based on lif:Mg,T. *Radiat. Phys. Chem.* 116, 74-77 (2015). Vol: 116. Pag. Inicial: 74. Pag. Final: 77.
- D. Fink, J. Vacik, V. Hnatowicz, G. Muñoz H, H. García Arellano, A. Kiv and L. Alfonta; Coupled chemical reactions in dynamic nanometric confinement: IV. Ion transmission spectrometric analysis of nanofluidic behavior and membrane formation during track etching in polymers. *Radiation Effects & Defects in Solids* (2015) 1-20.
- U. Caldiño, G. Muñoz H., I. Camarillo, A. Speghini, M. Bettinelli; Down-shifting by energy transfer in Tb³⁺/Dy³⁺ co-doped zinc phosphate glasses. *Journal of Luminescence*. Vol: 161. Pag. Inicial: 142. Pag. Final: 146.
- G.V. Vázquez, G. Muñoz H., I. Camarillo, C. Falcony, U. Caldiño, A. Lira. Spectroscopic analysis of a novel Nd³⁺-activated barium borate glass for broadband laser amplification. *VOL*: 46. Pag. Inicial: 97. Pag. Final: 103.

- A.N. Meza-Rocha, G. Muñoz H., A. Speghini, M. Bettinelli, U. Caldiño; Neutral and warm white light emission in Tb³⁺/Sm³⁺ zinc phosphate glasses. *Optical Materials*. Vol: 47. PAG. Inicial: 537. Pag. Final: 542.
- Michel Picquart, A. Benítez Rico, M.F. García Sánchez, B.M. Monroy Peláez, G. Santana Rodríguez. Understanding the high ionic conductivity in nanostructured Ytterbium stabilized zirconia Thin films. *Journal of nanomaterials*. New York. Pag. Inicial: 1. Pag. Final: 7.
- Michel Picquart, Hamui, A. Remolina, M.F. García Sánchez, A. Ponce, M. López López, B.M.Monroy, G. Santana. Deposition, opto-electronic and structural characterization of polymorphous silicon thin Films to be applied in a solar cell structure. *Materials Science in Semiconductor Processing*. Vol: 30. Pag. Inicial: 85. Pag. Final: 91.
- T. Tápia-Esquivel, I.N. Serratos, R. Sosa-Fonseca, D. Huerta-Figueroa, F. Rojas-González, B. Segura-Bailón, J.M. Esparza-Schulz, S.R. Tello-Solís, F. González-García, M.A.García-Sánchez. Caracterización espectroscópica de la clorofila unida a alcóxidos órgano-sustituidos a través del método sol-gel. *Memorias del XXXVI Encuentro Nacional de la AMIDIC*. Cancún, Quintana Roo. Pag. Inicial: 2651. Pag. Final: 2656.
- M Gómez-Miranda,, C Velásquez Ordoñez, R Sosa Fonseca. Study of absorption, emission and EDS properties of Pr³⁺ incorporated in a sio₂ matrix by Sol-gel method. *Journal Of Physics: Conference Series*. Vol: 582. Num: 1203. Pag. Inicial: 1. Pag.final: 4.
- Benito de Celis Alonso, Silvia S. Hidalgo-Tobón, Manuel Menendez-González, José Salas-Pacheco and Oscar Arias-Carrión. Magnetic Resonance Techniques Applied to the Diagnosis and Treatment of Parkinsons Disease, *Frontiers in Neurology*, Julio, 2015. DOI: 10.3389/fneur.2015.00146
- Diana Platas-Neri, Silvia Hidalgo-Tobón, Benito da Celis Alonso, Fernando Chico-Ponce de Leon, Jairo Muoz-Delgado, Kimberley A. Phillips. Tractography of the spider monkey (*Ateles geoffroyi*) corpus callosum using diffusion tensor magnetic resonance imaging. *Plos one* doi:10.1371/journal.pone.0117367, 2015
- Manuel Fernández Guasti. Dielectric interfaces and mirrors in the amplitude and phase representation. *Journal of Modern Optics*. Vol: 62. Num: 5. Pag. Inicial: 265. Pag. Final: 271.
- Manuel Fernández Gusti, R. Diamant. Photonic crystal with triangular stack profile. *Optics Comm*. Vol: 346. Pag. Inicial: 133. Pag. Final: 140.
- Manuel Fernández Guasti. Analytical solution to a non autonomous second order differential equation with modified hyperbolic tangent function. *Journal of Optics*. VOL: 17. PAG. INICIAL: 1. PAG. FINAL: 6.

- Manuel Fernández Guasti. A non-distributive extension of complex numbers to higher dimensions. *Adv. Appl. Clifford Algebras*. Vol: 25. PAG. Inicial: 829. Pg. Final: 849.
- Manuel Fernández Guasti and F. Zaldívar. Hyperbolic superluminal scator algebra. *Adv. Appl. Clifford Algebras*. Vol: 25. Num: 2. Pág. Inicial: 321. Pag. Final: 335.
- Emmanuel Velarde Granados, Luis Escobar Alarcón, Dora Alicia Solís Casados, Cecilia Encarnación Gómez, Oscar Fernando Olea Mejoa, Manuel Espinosa Pesqueira, Emmanuel Haro Poniatowski. Nanoestructuras basadas en Bi soportadas en películas delgadas de tio2 y su desempeño fotocatalítico. *Superficies y Vacío*. Vol: 28. Num: 2. Pag. Inicial: 54. Pag. Final: 60.
- M. Jiménez de Castro, R. Serna, J. Toudert, J. M. Fernández-Navarro, E. Haro-Poniatowski. Thermo-optical properties of Bi nanoparticles embedded in germanate glasses and alumina thin films. *Ceramics international*. Vol: 41. Pag. Inicial: 8216. Pag. Final: 8222.
- L. Escobar-Alarcon, J. G. Morales-Mendez, D. A. Solis-Casados, S. Romero, M. Fernandez, E. Haro-Poniatowski. Preparation and characterization of Bi nano-structures deposited by pulsed laser ablation. *Journal of Physics: Conference Series*. Vol: 582. Pag. Inicial: 1. Pag. Final: 5. Pais:
- A.N. Meza-Rocha, A. Speghini, M. Bettinelli, U. Caldiño. Orange and reddish-orange light emitting phosphors: Sm³⁺ and Sm³⁺/Eu³⁺ doped zinc phosphate glasses. *Journal of Luminescence*. Vol: 167. Pag. Inicial: 305. Pag. Final: 309.
- U. Caldiño, A. Lira, A.N. Meza-Rocha, E. Pasquini, S. Pelli, A. Speghini, M. Bettinelli, G.C. Righini. White light generation in Dy³⁺-and Ce³⁺/Dy³⁺-doped zinc-sodium-aluminosilicate glasses. *Journal of Luminescence*. Vol: 167. Pag. Inicial: 327. Pag. Final: 332.
- A.N. Meza-Rocha, E.F. Huerta, U. Caldio, S. Carmona-Téllez, M. Bettinelli, A. Speghini, S.Pelli, G.C. Righini, C. Falcony. Dependence of the up-conversion emission of Li⁺ co-doped Y₂O₃:Er³⁺ films with dopant concentration. *Journal of Luminescence*. Vol: 167. Pag. Inicial: 352. Pag. Final: 359.
- Ulises Caldiño, Marco Bettinelli, Maurizio Ferrari, Elisa Pasquini, Stefano Pelli, Adolfo Speghini, Giancarlo C. Righini. Rare Earth Doped Glasses for Displays and Light Generation. *Advances in Science and Technology*. Vol: 90. Pag. Inicial: 174. Pag. Final: 178.
- M. Marínez-Argüello, M. Cobián-Suárez, G. Báez, R. A. Méndez-Sánchez. A new Fano resonance in measurement processes. *Europhysics Letters*. Bristol. Vol: 110. Pag. Inicial: 1. Pag. Final: 5.

4 2016

- A.N. Meza-Rocha, R. Lozada-Morales, A. Speghini, M. Bettinelli, U. Caldiño. White light generation in Tb³⁺/Eu³⁺/Dy³⁺ triply-doped Zn(PO₃)₂ glass. *Optical materials*. Volumen: 51. Pag. Inicial: 128. Pag. Final: 132.
- Y.A. González-Rivera, A.N. Meza-Rocha, L. Aquino-Meneses, S. Jiménez-Sandoval, E. Rubio-Rosas, U. Caldiño, E. Álvarez, O. Zelaya-Angel, M. Toledo-Solano, R. Lozada-Morales. Photoluminescent and electrical properties of novel Nd³⁺ doped Zn₂O₆ and Zn₂V₂O₇. *Ceramics International*. Volumen: 42. Pag. Inicial: 8425. Pag. Final: 8430.
- A.N. Meza-Rocha, A. Speghini, M. Bettinelli, U. Caldiño. White light generation through Zn(PO₃)₂ glass activated with Eu³⁺ and Dy³⁺. *Journal of Luminescence*. Volumen: 176. Pag. Inicial: 235. Pag. Final: 239.
- A.N. Meza-Rocha, A. Speghini, R. Lozada-Morales, U. Caldiño. Blue and white light emission in Tm³⁺ and Tm³⁺/Dy³⁺ doped zinc phosphate glasses upon UV light excitation. *Optical Materials*. Volumen: 58. Pag. Inicial: 183. Pag. Final: 187.
- J. Juárez-Batalla, A.N. Meza-Rocha, G. Muñoz H., I. Camarillo, U. Caldiño. Luminescence properties of Tb³⁺-doped zinc phosphate glasses for green laser application. *Optical Materials*. Volumen: 58. Pag. Inicial: 406. Pag. Final: 411.
- David A. Rodríguez-Carvajal, A.N. Meza-Rocha, U. Caldiño, R. Lozada-Morales, E. Álvarez, Ma.E. Zayas. Reddish-orange, neutral and warm white emissions in Eu³⁺, Dy³⁺ and Dy³⁺/Eu³⁺ doped CdO-GeO₂-TeO₂ glasses. *Solid state science*. Volumen: 61. Pag. Inicial: 70. Pag. Final: 76.
- Claudia Azorín Vega, Teodoro Rivera Montalvo, Eugenio Torijano Cabrera, Juan Azorín Nieto. Determination of kinetic parameters of BeO using isothermal decay method. *Applied Radiation and Isotopes*. Volumen: 100. Pag. Inicial: 8. Pag. Final: 11.
- Ivonne Lozano Rojas, Jesús Román López, Rebeca Sosa Fonseca, José Antonio Díaz Gongora, Juan Azorín Nieto. Preparation of cerium doped calcium pyrophosphate: Study of luminescent behavior. *Journal of Luminescence*. Volumen: 173. Pag. Inicial: 5. Pag. Final: 10.
- Juan Azorín Nieto. Present status and future trends in the development of thermoluminescent materials. *Applied Radiation and Isotopes*. Volumen: 173. Pag. Inicial: 135. Pag. Final: 142.
- Alí César Medrano Sandoval, Omar Medina Arreguín, Silvia Hidalgo Tobn, Pilar Dies, Juan Azorín Nieto. Thermoluminescent dosimetry in computed tomography for pediatric patients. *Medical physics aip conf. Proc.*

- J. Juárez-Batalla, A.N. Meza-Rocha, G. Muñoz H., Ulises Caldiño. Green to white tunable light emitting phosphors: Dy³⁺/Tb³⁺ in zinc phosphate glasses. <http://dx.doi.org/10.1016/j.optmat.2017.01.011> Optical Materials 64(2017) 33-39
- Dietmar Fink, Gerardo Muñoz Hernández, Humberto García Arellano, Jiri Vacík, Vladimir Havranek, Vladimir Hnatowicz. Nuclear track-based biosensing: an overview. <http://dx.doi.org/10.1080/10420150.2016.1160905>, Radiation Effects and Defects in Solids Volume 171, 2016 - Issue 1-2: Editor's Special 173-185
- Manuel Fernández Guasti. Imaginary Scators Bound Set Under The Iterated Quadratic Mapping In 1+2 Dimensional Parameter Space.. Publicacion: Int. J. of Bifurcation and Chaos. Vol: 26. Num: 1. Pag. Inicial: 16300. Pag. Final: 16300.
- Rebeca Sosa Fonseca, Fernando Arteaga-Cardona, Eric Gutiérrez-García, Silvia Hidalgo-Tobón, Ciro López-Vasquez, Yazmín A. Brito-Barrera, Julia Flores-Tochihuitl, Aracely Angulo-Molina, Julio R. Reyes-Leyva, Roberto González-Rodríguez, Jeffery L. Coffey. Cell viability and MRI performance of highly efficient polyol-coated magnetic nanoparticles. J nanopart res. Vol: 18. Num: 345. Pag. Inicial: 1. Pag. Final: 16.
- M. A. García-Sánchez, I. N. Serratos, R. Sosa, F. Rojas-González, S. R. Tello-Solís, T. Tapia-Esquivel, F. González-García, J. M. Esparza-Schulz, D. E. Huerta-Figueroa. Fluorescence and Textural Characterization of Ortho-Amine Tetraphenylporphyrin Covalently Bonded to Organo-Modified Silica Xerogels. J fluorescence. New York.
- M. A. García-Sánchez, I. N. Serratos, R. Sosa, T. Tapia-Esquivel, F. González-García, F. Rojas-González, S. R. Tello-Solís, A. Y. Palacios-Enriquez, J. M. Esparza Schulz, A. Arrieta. Chlorophyll a Covalently Bonded to Organo-Modified Translucent Silica Xerogels:Optimizing Fluorescence and Maximum Loading. Molecules. New York. Vol: 21. Pag. Inicial: 961. Pag. Final: 984.
- L. Escobar-Alarcón, D. A. Solís-Casados, A. Arrieta, E. Haro-Poniatowski. Structural characterization of TiO₂ nano-powders alloyed with Bi prepared by sol-gel. Materials Physics and Chemistry. VOL: 172. PAG. INICIAL: 11. PAG. FINAL: 19.
- Rodríguez, L. Escobar-Alarcón, F. Cabello, R. Serna, E. Haro-Poniatowski, García Valenzuela, J. C. Alonso. Refractive index and composition of nanometric chlorinated silicon nitride films with embedded quantum dots. Journal of Applied Physics. Vol: 120. Pag. Inicial: 1. Pag. Final: 6.
- A. L. Irais Vera-Robles, M. Picquart, L. Escobar-Alarcón, J. L. Hernández-Pozos, E. Haro-Poniatowski. A biological approach for the synthesis of Bismuth nanoparticles using thiolated M13 phage as scaffold. Langmuir. Vol: 32. Num: 13. Pag. Inicial: 3199. Pag. Final: 3206.
- F. Gonzalez-Zavala, L. Escobar-Alarcón, D. A. Solís-Casados, C. Rivera-Rodríguez, R. Basurto, E. Haro-Poniatowski. Preparation of vanadium oxide thin films modified with Ag using a hybrid deposition configuration. Applied physics a. Vol: 122. Pag. Inicial: 1. Pag. Final: 6.

- L. Escobar-Alarcón, E. Velarde Granados, D.A. Solís-Casados, O Olea-Mejía, M. Espinoza-Pesqueira, E. Haro-Poniatowski. Preparation of bismuth based nanosheets by ultrasound assisted liquid laser ablation. *Applied physics a*. Vol: 122. Pag. Inicial: 1. Pag. Final: 7.
- J.Luis Hernández, Kurt W Kolasinski, Dmitry A Znamensky, Abbie S Ganas, Harrison M Snodgrass, Grant J Sturgeon. The effects of laser ablation texturing and nanoparticles on anodic nanotube and porous filmformation. *ECS transactions*. Vol: 75. Num: 1. Pag. Inicial: 3. Pag. Final: 8.
- Moisés Martínez Mares, E. Flores Olmedo, A. M. Martínez Argëllo, G, Báez, J. A. Franco Villafañe, R. A. Méndez Sánchez. Experimental evidence of coherent transport. *Scientific Reports (Nature)*. Londres. Vol: 6. Pag. Inicial: 1. Pag. Final: 5.
- Guerrero Arenas, S. S. Hidalgo Tobón, P. Dies Suarez, E. Barragán Pérez, E. Castro Sierra, J. García, de Celis Alonso B. Brain and Behavior, Strategies for tonal and atonal musical interpretation in blind and normally sighted children: an fMRI study, 2016; 0(0), e00450, doi: 10.1002/brb3.450.
- Fernando Arteaga-Cardona, Esmeralda Santillan Urquiza, Patricia de la Presa, Silvia Hidalgo Tobón, de Umapada Pal, Patricia Horta Fraijo, G Miguel Jose Yacaman, Jose Daniel Lozada Ramrez, A Robert Ivkov, Aracely Angulo-Molinai and Miguel Angel Mendez-Rojas. Enhanced magnetic properties and MRI performance of bi-magnetic core-shell nanoparticles. *RSC Advances*, 2016, 6, 77558–77568. DOI: 10.1039/c6ra14265f
- Fernando Arteaga-Cardona & Eric Gutiérrez-García & Silvia Hidalgo-Tobón, Ciro López-Vasquez & Yazmín A. Brito-Barrera & Julia Flores-Tochihuitl, Aracely Angulo-Molina & Julio R. Reyes-Leyva & Roberto González-Rodríguez & Jeffery L. Coffey & Umapada Pal & Mario Pérez-Peña Diaz-Conti & Diana Platas-Neri & Pilar Dies-Suarez & Rebeca Sosa Fonseca & Oscar Arias-Carrión & Miguel A. Méndez-Rojas. Cell viability and MRI performance of highly efficient polyol-coated magnetic nanoparticles. *J Nanopart Res* (2016) 18:345 DOI 10.1007/s11051-016-3646-0.

5 2017

- D. A. Solís-Casados, L. Escobar-Alarcón, L. Gómez-Olivan, E. Haro-Poniatowski, T. Klimova. Photodegradation of pharmaceutical drugs using Sn-modified TiO₂ powders under visible laser irradiation. *Fuel*. Vol: 198. Pag. Inicial: 3. Pag. Final: 10.
- F. Gonzalez-Zavala, L. Escobar-Alarcón, D. A. Solís-Casados, M. Espinosa-Pesqueira, E. Haro-Poniatowski, E. Rodríguez-Castellón, E. Rodríguez-Aguado. Synthesis and characterization of silver vanadates thin films for photocatalytic applications. *Catalysis Today*. Artículo publicado hasta ahora solo en línea
- A.N. Meza-Rocha, I. Camarillo, R. Lozada-Morales, U. Caldiño. Reddish-orange and neutral/warm white light emitting phosphors: Eu³⁺, Dy³⁺ and Dy³⁺/Eu³⁺ in

potassium-zinc phosphate glasses. *Journal of Luminescence*. VOL: 183. Pag. Inicial: 341. Pag. Final: 347.

- G. Lakshminarayana, S.O. Baki, A. Lira, I.V. Kityk, U. Caldiño, Kawa M. Kaky, M.A. Mahdi, Structural, thermal and optical investigations of Dy³⁺-doped B₂O₃-WO₃-ZnO-Li₂O-Na₂O glasses for warm white light emitting applications. *Journal of Luminescence*. VOL: 186. PAG. INICIAL: 283. PAG. FINAL: 300.
- Kawa M. Kaky, G. Lakshminarayana, S.O. Baki, A. Lira, U. Caldiño, A.N. Meza-Rocha, C. Falcony, I.V. Kityk, Y.H. Taufiq-Yap, M.K. Halimah, M.A. Mahdi. Structural and optical studies of Er³⁺-doped alkali/alkaline oxide containing zinc borosilicate glasses for 1.5 m optical amplifier applications. *Optical Materials*. VOL: 69. PAG. INICIAL: 401. PAG. FINAL: 419.
- A.N. Meza-Rocha, A. Speghini, J. Franchini, R. Lozada-Morales, U. Caldiño. Multi-color emission in lithium-aluminum-zinc phosphate glasses activated with Dy³⁺, Eu³⁺ and Dy³⁺/Eu³⁺. *Journal of Materials Science: Materials in Electronics*. VOL: 28. PAG. INICIAL: 10564. PAG. FINAL: 10572.
- G. Lakshminarayana, Kawa M. Kaky, S.O. Baki, A. Lira, U. Caldiño, I.V. Kityk, M.A. Mahdi. Optical absorption, luminescence, and energy transfer processes studies for Dy³⁺/Tb³⁺-codoped borate glasses for solid-state lighting applications. *Optical Materials*. VOL: 72. PAG. INICIAL: 380. PAG. FINAL: 391.
- J. Juarez-Batalla, A.N. Meza-Rocha, G. Muñoz H., Ulises Caldiño. Green to white tunable light emitting phosphors: Dy³⁺/Tb³⁺ in zinc phosphate glasses *Optical Materials* 64(2017) 33-39; <http://dx.doi.org/10.1016/j.optmat.2016.11.033>
- Dietmar Fink, Jiri Vacik, V. Hnatowicz, G. Muñoz Hernández, G. García Arrellano, Lital Alfonta, Arik Kiv. Diffusion Kinetics of the glucose/glucose oxidase system in swift heavy ion track-based biosensors. *Nuclear Instruments and methods in Physics Research B* 398(2017) 21-26
- Azorín Nieto Juan. Thermoluminescence of metallic oxides: Development and applications in Mexico: An overview. *Applied Radiation and Isotopes*. Oxford.
- M. Fernández-Guasti. Solutions to a periodic nonlinear differential equation: nonlinear Floquet theorem. *International Journal of applied and computational Mathematics* 3.4, pags. 2349-5103, 2017.
- X. Cheng, X. Ma, M. Yépez, A. Z. Genack and P. A. Mello. Single-parameter scaling and maximum entropy inside disordered one-dimensional systems: Theory and experiment, *Physical Review B* 96,180203(R) (2017). DOI: 10.1103/PhysRevB.96.180203.