Publicaciones 2018

Departamento de Computación y Robótica

Lorena Díaz González

-Rosales-Rivera, M., Díaz-González, L., & Verma, S. P.; A new online compute program (bidasys) for ordinary and uncertainty weighted least-squares linear regressions: case studies from food chemistry.. *Revista Mexicana de Ingeniería Química*. **2018**, *17 (2)* (507 - 522)

Bruno Lara Guzmán

-Lara, Bruno;Astorga, Dadai;Mendoza-Bock, Emmanuel;Pardo, Manuel;Escobar, Esaú;Ciria, Alejandra; Embodied Cognitive Robotics and the learning of sensorimotor schemes. *Adaptive Behavior*. **2018**, *26 5* (225 - 238) 10.1177/1059712318780679

Jorge Hermosillo Valadez

-Fors-Isalguez, Yanet;Hermosillo-Valadez, Jorge;Montes-y-Gómez, Manuel; Query-oriented text summarization based on multiobjective evolutionary algorithms and word embeddings. *Journal of Intelligent & Fuzzy Systems*. **2018**, *34 5* (3235 - 3244) 10.3233/JIFS-169506

Nodari Vakhania

-Vakhania., N.; Scheduling a Single Machine with Primary and Secondary Objectives. *Algorithms*. **2018**, *11 80*10.3390/a11060080

Juan Manuel Rendón Mancha

-Hernandez-Herrera, P. Montoya, F. Rendon, J.M. Darszon, A. Corkidi, G.; 3-D Human Sperm Flagellum Tracing in Low SNR Fluorescence Images. *IEEE Transactions on Medical Imaging*. **2018**, *37 10* (2236 - 2247) 10.1109/TMI.2018.2840047

Departamento de Física

Miguel Eduardo Mora Ramos

-Ospina, D.A., Duque, C.A., Mora-Ramos, M.E., Correa, J.D.; Theoretical study of phosphorene multilayers: optical properties and small organic molecule physisorption. *Journal of Materials Science, Articles not published yet, but available online Article in Press*. **2018**, (1 - 11) 10.1007/s10853-017-1910-z

-Ospina, D.A. Duque, C.A.aEmail Author;Mora-Ramos, M.E.bEmail Author, Correa;J.D.c; Theoretical study of phosphorene multilayers: optical properties and small organic molecule physisorption. *Journal of Materials Science*. **2018**, *53 7* (5103 - 5113) 10.1007/s10853-017-1910-z

-El Haouari, M.;Mora-Ramos, M.E.;Talbi, A.;Feddi, E.;Dujardin, F.; Effect of conduction band non-parabolicity on bound polaron fundamental state in GaN/InN core shell quantum dots. *Physica E: Low-dimensional Systems and Nanostructures*.**2018**, *103* (188 - 193) 10.1016/j.physe.2018.05.039

-Tiutiunnyk, A.;Duque, C. A.;Mora-Ramos, M. E.; Intersubband Raman gain in strained zincblende III-nitride-based step asymmetric quantum wells: non-parabolicity effects. *Optical and Quantum Electronics*. **2018**, *50 6* (234 - 234)10.1007/s11082-018-1504-2

-J.D. Salazar-Santa, D. Fonnegra-García, M.R. Fullam M.E. Mora-Ramos, J.H. Marín; Energy structure and optical response of multi-hilled GaAs quantum Ribbon under crossed electric and magnetic fields. *Optical Materials*. **2018**, *83* (333 - 341)10.1016/j.optmat.2018.06.035

-M'zerd, S., El Haouari, M., Talbi, A., Feddi, E., Mora-Ramos, M.E.; Impact of electron-LO-phonon correction and donor impurity localization on the linear and nonlinear optical properties in spherical core/shell semiconductor. *Journal of Alloys and Compounds*. **2018**, *753* (68 - 78) https://doi.org/10.1016/j.jallcom.2018.04.185

-J.D. Salazar-Santa, D. Fonnegra, Y.A. Suaza, M.E. Mora-Ramos, J.H. Marín; Energy structure and electromagnetically induced transparency of neutral donor in a multi-hilled GaAs quantum ribbon. *Physics Letters A*. **2018**, *382* (2927 - 2937)10.1016/j.physleta.2018.06.027

-J.A. Vinasco, A. Radu, E. Kasapoglu, R.L. Restrepo, A. L . Morales, E. Feddi, M.E. Mora-Ramos, C.A. Duque; Effects of Geometry on the electronic properties of semiconductor ellipticar quantum rings. *Scientific reports*. **2018**, (1 - 15)10.1038/s41598-018-31512-4

Rolando Pérez Álvarez

-Rodríguez-Magdaleno, K.A.;Pérez-Álvarez, R.;Martínez-Orozco, J.C.; Intra-miniband absorption coefficient in GaAs/Al x Ga 1−x As core/shell spherical quantum dot. *Journal of Alloys and Compounds*. **2018**, *736 5* (211 - 215)10.1016/j.jallcom.2017.11.091

Federico Vázquez Hurtado

-Federico Vázquez, Mariano López de Haro, Aldo Figueroa; On the causality relations in thermoelectricity. *Continuum Mech. Thermodyn*. **2018**, 10.1007/s00161-018-0620-3

-Rodríguez, J., Yousif, F.B., Fuentes, B.E., Vázquez, F., Rivera, M., López-Patiño, J., Figueroa, A., Martínez, H.; Photo-detachment of negative ions in Ar-CO2 dc discharge employing Langmuir probe. *Physics of Plasmas*. **2018**, *25 5* (053512 - 053512) 10.1016/j.disc.2018.01.013

Marco Rivera

-R. Phogat, I. Tiwari, P. Kumar, M. Rivera, P. Parmananda; Cessation of oscillations in a chemo-mechanical oscillator. *The European Physical Journal B*. **2018**, *91 6* (111 - 111) 10.1140/epjb/e2018-80625-8

-Rodríguez, J., Yousif, F.B., Fuentes, B.E., Vázquez, F., Rivera, M., López-Patiño, J., Figueroa, A., Martínez, H.; Photo-detachment of negative ions in Ar-CO2 dc discharge employing Langmuir probe. *Physics of Plasmas*. **2018**, *25 5* (053512 - 053512) 10.1016/j.disc.2018.01.013

-TanuSinglaacP.ParmanandabM.Riverac; Stabilizing antiperiodic oscillations in Chua's circuit using periodic forcing. *Chaos, Solitons & Fractals*. **2018**, *107* (128 - 134) 10.1016/j.chaos.2017.12.028

Markus Müller Bender

-Paola V. Olguín-Rodríguez, J. Daniel Arzate-Mena, Maria Corsi-;Cabrera, Heidemarie Gast, Arlex Marín-García, Johannes Mathis, Julieta;Ramos Loyo, Irma Yolanda del Rio-Portilla, Christian Rummel, Kaspar;Schindler, and Markus Müller; Characteristic Fluctuations Around Stable Attractor Dynamics Extracted from Highly Nonstationary Electroencephalographic Recordings. *Brain Connectivity*. **2018**, *8* (457 - 474) 10.1089/brain.2018.0609

Aldo Figueroa Lara

-Figueroa, Federico Vázquez Mariano López de HaroEmail authorAldo; On the causality relations in thermoelectricity.*Continuum Mechanics and Thermodynamics*. **2018**, (1 - 6) 10.1007/s00161-018-0620-3

Alejandro Ramírez Solís

-Ramirez-Solis, Alejandro;Bartulovich, Caroline;Chciuk, Tesia V.;Hernández-Cobos, Jorge;Saint-Martin, Humberto;Maron, Laurent;Anderson, William R.;Li, Anna M.;Flowers, Robert A; Experimental and Theoretical Studies on the Implications of Halide Dependent Aqueous Solvation of Sm(II). *Journal of the American Chemical Society*. **2018**, (jacs.8b09857 - jacs.8b09857) 10.1021/jacs.8b09857

-Amaro-Estrada, Jorge I.;Hernández-Cobos, Jorge;Saint-Martin, Humberto;Maron, Laurent;Ramírez-Solís, Alejandro; Hydration of CH_3HgOH and CH_3HgCl compared to $HgCl_2$, HgClOH, and $Hg(OH)_2$: A DFT microsolvation cluster approach.*The Journal of Chemical Physics*. **2018**, *149 14* (144301 - 144301) 10.1063/1.5038418

-A. Ramírez-Solís, J.I. Amaro-Estrada, C.I. León-Pimentel, J. Hernández-Cobos S. E. Garrido-Hoyos, H. Saint-Martin.; On the aqueous solvation of $AsO(OH)_3$ vs. $As(OH)_3$. Born–Oppenheimer molecular dynamics density functional theory cluster studies.. *Phys. Chem. Chem. Phys.*. **2018**, 10.1039/c8cp01673a

-C. I. León-Pimentel, J. I. Amaro-Estrada, J. Hernández-Cobos, H. Saint-Martin, A. Ramírez-Solís; Aqueous solvation of Mg(ii) and Ca(ii): A Born-Oppenheimer molecular dynamics study of microhydrated gas phase clusters.*The Journal of Chemical Physics*. **2018**, *148 144307* 10.1063/1.5021348

-A. Ramírez-Solís, JI Amaro-Estrada, J Hernández-Cobos, and L. Maron; Aqueous Solvation of SmI_3: A Born–Oppenheimer Molecular Dynamics Density Functional Theory Cluster Approach.. *Inorganic Chemistry*. **2018**,10.1021/acs.inorgchem.7b03220

-A. Ramírez-Solís, AJ Ochoa-Calle, R. Hernández-Lamoneda.; Core excitations of the solid oxygen ε phase. Periodic hybrid Density Functional Theory studies with localized atomic bases. *Theoretical Chemistry Accounts*. **2018**, 10.1007/s00214-018-2213-4

Farook Bashir Yousif

-J. Rodríguez Legorreta, J. López-Patiño, F. B. Yousif.; Laser induced photo-detachment of O2 in DC discharge. *Plasma Science and Technology*. **2018**, *20 7* (075401 - 075401) 10.1088/2058-6272/aab48d

-Rodríguez, J., Yousif, F.B., Fuentes, B.E., Vázquez, F., Rivera, M., López-Patiño, J., Figueroa, A., Martínez, H.; Photo-detachment of negative ions in Ar-CO2 dc discharge employing Langmuir probe. *Physics of Plasmas*. **2018**, *25 5* (053512 - 053512) 10.1016/j.disc.2018.01.013

Departamento de Matemáticas

Antonio Daniel Rivera López

-Pérez, C., Rivera, D.; Graphical characterization of positive definite non symmetric quasi-Cartan matrices. *Discrete Mathematics*. **2018**, *341 5* (1215 - 1224) 10.1016/j.disc.2018.01.013

-Pérez, Claudia;Abarca, Mario;Rivera, Daniel; Cubic algorithm to compute the dynkin type of a positive definite quasi-cartan matrix. *Fundamenta Informaticae*. **2018**, *158 4* (369 - 384) 10.3233/FI-2018-1653

Gabriela Hinojosa Palafox

-Hernández, E.M., Hinojosa, G.; Collision induced electron detachment cross sections of the H2CC−anion below 10 keV on O2and N2. *International Journal of Mass Spectrometry*. **2018**, *424* (35 - 39) 10.1016/j.ijms.2017.11.013

Rogelio Valdez Delgado

-Díaz, Juan Pablo;Hinojosa, Gabriela;Valdez, Rogelio;Verjovsky, Alberto; Smoothing closed gridded surfaces embedded in ℝ4. *Journal of Knot Theory and Its Ramifications*. **2018**, *27 12* (1850065 - 1850065) 10.1142/S0218216518500657

Larissa Sbitneva

-Sbitneva, L.; Differential equations of smooth loops related to some space-time models: Integrability conditions and geometry. *Journal of Knot Theory and Its Ramifications*. **2018**, *27 7* (1841004 - 1 -- 1841004-13)10.1142/S0218216518410043

-Larissa Sbitneva, Nehemías Moreno Martínez, Lucinda Serna Herrera, Rogelio Valdez Delgado; VISUALIZACIÓN DE TRANSFORMACIONES LINEALES CON APOYO DE GEOGEBRA. *Acta Latinoamericana de Matemática Educativa*. **2018**, *31 2*(1843 - 1852) https://clame.org.mx/uploads/actas/alme31_2.pdf

Yuri Karlovich

-Karlovich, Y.I.; Pseudodifferential operators with compound non-regular symbols. *Operator Theory: Advances and Applications*. **2018**, *268 2018* (331 - 53) https://doi.org/10.1007/978-3-319-75996-8_17

-Asekritova, Irina;Karlovich, Yuri;Kruglyak, Natan; One-sided invertibility of discrete operators and their applications. *Aequationes mathematicae*. **2018**, *92 1* (39 - 73) 10.1007/s00010-017-0522-7

-Karlovich, A.Y.aEmail Author, Karlovich;Y.I.bEmail Author, Lebre, A.; Criteria for n(d)-normality of weighted singular integral operators with shifts and slowly oscillating data. *Proceedings of the London Mathematical Society*. **2018**, *116 4* (997 - 1027) 10.1112/plms.12108

Jorge Rivera Noriega

-Rivera-Noriega, Jorge; A connection between regularity and dirichlet problems for non-divergence elliptic equations. *Differential Equations & Applications*. **2018**, *10 1* (75 - 86) 10.7153/dea-2018-10-05

Liudmila Sabinina

-Carrillo-Catalán, R.a, Rasskazova, M.b;Sabinina, L.c; Malcev algebras corresponding to smooth almost left automorphic Moufang loops. *Journal of Algebra and its Applications*. **2018**, 10.1142/S0219498818502328