

PUBLICACIONES EN REVISTAS INTERNACIONALES

- 1** A. Akbari-Fakhrebadi, E. Toledo, J. Canales, V. Meruane, S. H. Chan, M. Jamshidijam, M. A. Gracia-Pinilla. "Effect of Sr²⁺ and Ba²⁺ doping on structural stability and mechanical properties of La₂NiO_{4+δ}". Ceramics international, 44(9), 10551-10557, 2018.
- 2** S. Rajendran, T.K.A. Hoang, R. Boukherroub, D.E.D. Drogue, F. Gracia, M.A.G .Pinilla, A. Akbari-Fakhrebadi, V.K. Gupta, "Hydrogen adsorption properties of Ag decorated TiO₂ nanomaterials", International Journal of Hydrogen Energy, 43, 2018, 2861-8.
- 3** R. Bustamante, K.R. Rajagopal, "Modeling residual stresses in elastic bodies described by implicit constitutive relations". International Journal of Nonlinear Mechanics, 105 (2018) 113-129.
- 4** R. Bustamante, K.R. Rajagopal, "Correction to: On a new class of electroelastic bodies". I. Proceedings of the Royal Society of London, 473 (2018) 20170523.
- 5** R. Bustamante, K.R. Rajagopal, "A nonlinear model for describing the mechanical behaviour of rock". Acta Mechanica 229 (2018) 251-272.
- 6** R. Meneses, O. Orellana, R. Bustamante, "A note on the wave equation for a new class of constitutive relation for nonlinear elastic bodies". Mathematics and Mechanics of Solids 23 (2018)148-158.
- 7** Herrmann-Priesnitz, B., Calderón Muñoz, W.R., Soto, R., "Stability and receptivity of boundary layers in a swirl flow channel", Acta Mechanica, (2018) 229: 4005.
- 8** B. Herrmann-Priesnitz, W. R. Calderón-Muñoz, G. Diaz, and R. Soto, "Heat transfer enhancement strategies in a swirl flow minichannel heat sink based on hydrodynamic receptivity" Int. J. Heat Mass Transf., vol. 127, pp. 245-256, Dec. 2018.
- 9** Y. Simsek, C. Mata-Torres, A.M. Guzmán, J.M. Cardemil, R. Escobar, "Sensitivity and effectiveness analysis of incentives for concentrated solar power projects in Chile", Renew. Energy. 129 (2018) 214-224.
- 10** A.R. Starke, J.M. Cardemil, R. Escobar, S. Colle, "Multi-objective optimization of hybrid CSP+PV system using genetic algorithm", Energy. 147 (2018) 490-503.
- 11** A. Zurita, C. Mata-Torres, C. Valenzuela, C. Felbol, J.M. Cardemil, A.M. Guzmán, R.A. Escobar, "Techno-Economic Evaluation of a Hybrid CSP+PV Plant Integrated with Thermal Energy Storage and a Large-Scale Battery Energy Storage System for Base Generation", Sol. Energy. 173 (2018) 1262-1277.
- 12** R. Leiva-illanes, R. Escobar, J.M. Cardemil, D. Alarcón-padilla, "Comparison of the levelized cost and thermoeconomic methodologies - Cost allocation in a solar polygeneration plant to produce power, desalinated water, cooling and process heat", Energy Convers. Manag. 168 (2018) 215-229.
- 13** A.R. Starke, J.M. Cardemil, S. Colle, "Multi-objective optimization of a solar-assisted heat pump for swimming pool heating using genetic algorithm", Appl. Therm. Eng. 142 (2018) 118-126.
- 14** J.M. Cardemil, A.R. Starke, S. Colle, "Multi-objective optimization for reducing the auxiliary electric energy peak in low cost solar domestic hot-water heating systems in Brazil", Sol. Energy. 163 (2018) 486-496.
- 15** A.R. Starke, L.F.L. Lemos, J. Boland, J.M. Cardemil, S. Colle, "Resolution of the cloud enhancement problem for one-minute diffuse radiation prediction", Renew. Energy. 125 (2018) 472-484.
- 16** C. Sarmiento, J.M. Cardemil, A.J. Díaz, R. Barraza, "Parametrized analysis of a Carbon Dioxide transcritical Rankine cycle driven by solar energy", Appl. Therm. Eng. 140 (2018) 580-592.
- 17** N. Hernández, A. Fuentes, J. L. Consalvi, and J. C. Elicer-Cortés, "Spontaneous ignition of wildland fuel by idealized firebrands", Exp. Therm. Fluid Sci., vol. 95, pp. 88-95, Jul. 2018.
- 18** R. Fernández and B. Jodoin, "Cold Spray Aluminum-Alumina Cermet Coatings: Effect of Alumina Content," J. Therm. Spray Technol., vol. 27, no. 4, pp. 603-623, Apr. 2018.

- 19** Restrepo, C. Medina, **V. Meruane, A. Akbari-Fakhrebadi**, P. Flores, S. Rodríguez-Llamazares. "The effect of molecular weight and hydrolysis degree of poly(vinylalcohol)(PVA) on the thermal and mechanical properties of poly(lacticacid)/PVA blends". Polímeros, 28(2), 2018.
- 20** Restrepo, C. Medina, **V. Meruane, A. Akbari-Fakhrebadi**, P. Flores, S. Rodríguez-Llamazares. "The effect of molecular weight and hydrolysis degree of poly(vinyl alcohol)(PVA) on the thermal and mechanical properties of poly(lactic acid)/PVA blends," Polímeros, vol. 28, no. 2, pp. 169-177, May 2018.
- 21** J. Butterfield, G. Meyers, **V. Meruane**, C. Richard, B. Stephen. "Experimental investigation into techniques to predict leak shapes inwater distribution systems using vibration measurements". Journal of Hydroinformatics, 20(4), 815-828, 2018.
- 22** M. Fallahian, F. Khoshnoudian, S. Talaei, **V. Meruane**, F. Shadan. "Experimental validation of a deep neural network—Sparse representation classification ensemble method". The Structural Design of Tall and Special Buildings, e1504, 2018.
- 23** J. Butterfield, **V. Meruane**, R.P. Collins, G. Meyers, S.B. "Prediction of leak flow rate in plastic water distribution pipes using vibro-acoustic measurements". Structural Health Monitoring, 17(4), 959-970, 2018.
- 24** M. Fallahian, F. Khoshnoudian, **V. Meruane**. "Ensemble classification method for structural damage assessment under varying temperature". Structural Health Monitoring, 17(4), 747-762, 2018.
- 25** F. Seguel, **V. Meruane**. "Damage assessment in a sandwich panel based on full-field vibration measurements". Journal of Sound and Vibration, 417, 1-18, 2018.
- 26** San Martin, G.; **López Droguett, E.; Meruane, V.**; Moura, M. "Deep Variational Auto-Encoders: A Promising Tool for Dimensionality Reduction and Ball Bearing Elements Fault Diagnosis". Structural Health Monitoring. 2018.
- 27** Modarres, C.; Astorga, N.; **López Droguett, E.; Meruane, V.**. "Convolutional neural networks for automated damage recognition and damage type identification," Struct. Control Heal. Monit., vol. 25, no. 10, p. e2230, Oct. 2018.
- 28** Duarte, H.: **López Droguett, E.**; Moura, M. "Quantitative Ecological Risk Assessment of Shortfin Mako Shark (*Isurus Oxyrinchus*): Proposed Model and Application Example". Applied Ecology and Environmental Research, v.16, n. 3, p. 3691-3709, 2018.
- 29** Lins, I.; Moura, M C; **López Droguett, E.**; Correa, T I. "Combining Generalized Renewal Processes with Non-Extensive Entropy-Based *q*-Distributions for Reliability Applications". Entropy. v. 20, n. 223, 2018.
- 30** Rabiei, E.; **López Droguett, E.**; Modarres, M. "Fully Adaptive Particle Filtering Algorithm for Damage Diagnosis and Prognosis," Entropy, vol. 20, no. 2, p. 100, Jan. 2018.
- 31** Aliyari, M.; Ayele, Y. Z.; Barabadi, A.; **López Droguett, E.**. "Risk analysis in low-voltage distribution systems," Proc. Inst. Mech. Eng. Part O J. Risk Reliab., p. 1748006X1875980, Mar. 2018.
- 32** Smith, R; Modarres, M; **López Droguett, E.**. "A Recursive Bayesian Approach to Small Fatigue Crack Propagation and Detection Modeling". Journal of Risk and Reliability 2018.
- 33** Zhou, T; Modarres, M; **López Droguett, E.**. "An Improved Multi-Unit Nuclear Plant Seismic Probabilistic Risk Assessment Approach". Reliability Engineering and System Safety, v. 171, p. 34-47. 2018.
- 34** **A. Ortiz-Bernardin**, Philip Köbrich, Jack S. Hale, Edgardo Olate-Sanzana, Stéphane P. A. Bordas, Sundararajan Natarajan, "A volume-averaged nodal projection method for the Reissner-Mindlin plate model", Computer Methods in Applied Mechanics and Engineering, Volume 341, Issue 1, 2018, Pages 827-850.
- 35** A. Aranda, **A. Valencia**, "Study on the Relationship Between Wall Shear Stress and Aspect Ratio of Cerebral Aneurysms with Different Pressure Differences Using CFD Simulations", Journal of Mechanics in Medicine and Biology 18 (05), 1850055.
- 36** P. Alvial, G. Bravo, M. Bustos, G Moreno, **J.C. Zagal**, "Quantitative functional evaluation of a 3D-printed silicone-embedded prosthesis for partial hand amputation: A case report," J. Hand Ther., vol. 31, no. 1, pp. 129-136, Jan. 2018.