

PUBLICACIONES EN REVISTAS INTERNACIONALES

- 1** P. Alvia, G. Bravo, M.P. Bustos, G. Moreno, R. Alfaro, R. Cancino, **J.C. Zagal**, "Quantitative Functional Evaluation of a 3D-Printed Silicone-Embedded Prosthesis for Partial Hand Amputation. A Case Report", *Journal of Hand Therapy*, 2017, In Press.
- 2** A. Vergara, Y. Lau, R.F. Mendoza-Garcia, **J.C. Zagal**, "Soft Modular Robotic Cubes: Toward Replicating Morphogenetic Movements of the Embryo", *PLoS ONE*, vol. 12, no 1, e0169179, 2017.
- 3** L.F.L. Lemos, A.R. Starke, J. Boland, **J.M. Cardemil**, R.D. Machado, and S. Colle, "Assessment of solar radiation components in Brazil using the BRL model," *Renew. Energy*, vol. 108, pp. 569-580, 2017.
- 4** A.R. Starke, **J.M. Cardemil**, R. Escobar, and S. Colle, "Thermal analysis of solar-assisted heat pumps for swimming pool heating," *J. Brazilian Soc. Mech. Sci. Eng.*, vol. 39, no. 6, pp. 2289-2306, 2017.
- 5** A.J. Díaz, R. Cáceres, **J.M. Cardemil**, and L. Silva-Llanca, "Energy and exergy assessment in a perimeter cooled data center: The value of second law efficiency," *Appl. Therm. Eng.*, vol. 124, pp. 820-830, 2017.
- 6** C. Valenzuela, C. Mata-Torres, **J.M. Cardemil**, and R.A. Escobar, "CSP + PV hybrid solar plants for power and water cogeneration in northern Chile," *Sol. Energy*, vol. 157, no. August, pp. 713-726, 2017.
- 7** R. Leiva-Illanes, R. Escobar, **J.M. Cardemil**, and D. Alarcón-Padilla, "Thermoeconomic assessment of a solar polygeneration plant for electricity, water, cooling and heating in high direct normal irradiation conditions," *Energy Convers. Manag.*, vol. 151, no. August, pp. 538-552, 2017.
- 8** D. Verstraete, A. Ferrada, **E. López Droguett**, V. Meruane, M. Modarres. Deep Learning Enabled Fault Diagnosis Using Time-Frequency Image Analysis of Rolling Element Bearings. *Journal of Shock and Vibration*, vol. 17, 2017.
- 9** I. Da Silva, M. C. Moura, I. D. Lins, **E. López Droguett**, E. Braga. Non-Stationary Demand Forecasting Based on Empirical Mode Decomposition and Support Vector Machines. *IEEE Latin America Transactions*, vol. 15, no 9, pp. 1785-1792, 2017.
- 10** M. Ramos, **E. López Droguett**, A. Mosleh, M. C. Moura, M. Martins. Revisiting Past Refinery Accidents from a Human Reliability Analysis Perspective: the BP Texas City and the Chevron Richmond Accidents. *Canadian Journal of Chemical Engineering*, vol. 95, no 12, pp. 2293-2305, 2017.
- 11** M. C. Moura, J. Santana, **E. López Droguett**, I. Lins, B. Guedes. Analysis of Extended Warranties for Medical Equipment: a Stackelberg Game Model Using Priority Queues. *Reliability Engineering & System Safety*, vol. 168, 2017.
- 12** R. Pascual, M. Sina, G. Santelices, M. Roman, **E. López Droguett**. Optimal Channel Coordination in Use-based Product-Service System Contracts. *International Journal of Production Research*, vol. 55, no 23, pp. 1-11, 2017.
- 13** N. Díaz, R. Pascual, F. Ruggeri, **E. López Droguett**. Modelling Age Replacement Policy under Multiple Time Scales and Stochastic Usage Profiles. *International Journal of Production Economics*. vol. 188, pp. 22 - 28, 2017.
- 14** M. Xu, **E. López Droguett**, I. Lins, M. C. Moura. On The q-Weibull Distribution for Reliability Applications: An Adaptive Hybrid Artificial Bee Colony Algorithm for Parameter Estimation. *Reliability Engineering & System Safety*, vol. 158, pp. 93 - 105, 2017.
- 15** T. Zhou, M. Modarres, **E. López Droguett**. An Improved Multi-Unit Nuclear Plant Seismic Probabilistic Risk Assessment Approach. *Reliability Engineering and System Safety*, In press.
- 16** M. C. Moura, H. Diniz, **E. López Droguett**, I. Lins, E. Sales, V. Simoni. Embedding Resilience in the Design of the Electricity Supply for Industrial Clients. *Plos One*, In Press.
- 17** Paola A. Benavidesa, Benjamín Soto, **Rodrigo H. Palma**, Liquid phase sintering of mechanically alloyed Mo-Cu powders; *Materials Science & Engineering A*, vol. 701, pp. 237-244, 2017.
- 18** M.H.B.M. Shariff, **R. Bustamante**, J. Merodio, On the spectral analysis of residual stress in finite elasticity. *IMA Journal of Applied Mathematics*, vol. 82, pp. 656-680, 2017.
- 19** **R. Bustamante**, K.R. Rajagopal, Implicit equations for thermoelastic bodies. *International Journal of Non-linear Mechanics*, vol. 92, pp. 144-152, 2017.
- 20** M.H.B.M Shariff, **R. Bustamante**, M. Hossain and P. Steinmann, A novel spectral formulation for nonlinear transversely magnetoelastic deformations. *Mathematics and Mechanics of Solids*, vol. 22, pp. 1158-1176, 2017.
- 21** 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*, In Press.
- 22** **R. Bustamante**, Corrigendum: Direct determination of stresses from the stress equations of motion and wave propagation for a new class of elastic bodies. *Mathematics and Mechanics of Solids*, In press.
- 23** M.H.B.M. Shariff, **R. Bustamante**, J. Merodio, Rate type constitutive equations for fiber reinforced nonlinearly viscoelastic solids using spectral invariants. *Mechanics Research Communications*, In press.

24 R. Bustamante, K.R. Rajagopal, A nonlinear model for describing the mechanical behaviour of rock. Acta Mechanica, In press.

25 R. Bustamante, K.R. Rajagopal, Corrigendum: On a new class of electroelastic bodies. I. Proceedings of the Royal Society of London, In press.

26 A. Ortiz-Bernardin, A. Russo, N. Sukumar, Consistent and stable meshfree Galerkin methods using the virtual element decomposition, International Journal for Numerical Methods in Engineering, vol. 112, no 7, pp. 655-684, 2017.

27 A. Francis, A. Ortiz-Bernardin, S.P.A. Bordas, S. Natarajan, Linear smoothed polygonal and polyhedral finite elements, International Journal for Numerical Methods in Engineering, vol. 109, no 9, pp. 1263-1288, 2017.

28 A. Valencia, F. Torres, Effects of hypertension and pressure gradient in a human cerebral aneurysm using fluid structure interaction simulations, Journal of Mechanics in Medicine and Biology, vol. 17, no 1, 1750018, 2017.

29 I. Jiron, I. Soto, C.A. Azurdia-Meza, A. Valencia, R. Carrasco, A new DNA cryptosystem based on AG codes evaluated in gaussian channels Telecommunication Systems, vol. 64, no 2, pp. 279-291, 2017.

30 D. Diaz, A. Valencia. Heat transfer in an oval tube heat exchanger with different kinds of longitudinal vortex generators. Heat Transfer Research, vol. 48, no 18, pp. 1707-1725, 2017.

31 J.U. Valdebenito, A. Akbari-Fakhrabadi, M.R. Viswanathan, "Effect of flash sintering on microstructure of Ce_{0.9}Gd_{0.1}O_{1.95} electrolyte fabricated by tape-casting", Materials Letters, vol. 209, pp. 291-294, 2017.

32 M. Jamshidijam, P. Thangaraj, A. Akbari-Fakhrabadi, M.A.N. Galeano, J.B. Usuba, R.V. Mangalaraja, "Influence of rare earth (RE=Nd, Y, Pr and Er) doping on the microstructural and optical properties of ceria nanostructures", Ceramics International, vol. 43, pp. 5216-5222, 2017.

33 A. Akbari-Fakhrabadi, V. Meruane, M. Jamshidijam, Miguel A. Gracia, R. Garcia, M. Orellana, "Structural and mechanical properties of La_{0.6}Sr_{0.4}M_{0.1}Fe_{0.9}O_{3-d} (M: Co, Ni and Cu) perovskites" Ceramics International, vol. 43, pp. 2089-2094, 2017.

34 MacDonald D, Fernández R, Delloro F, Jodoin B (2017) Cold Spraying of Armstrong Process Titanium Powder for Additive Manufacturing. J Therm Spray Technol vol. 26, no 6, pp. 598-609, 2017.

35 Fernández R, Jodoin B (2017) Effect of Particle Morphology on Cold Spray Deposition of Chromium Carbide-Nickel Chromium Cermet Powders. J Therm Spray Technol vol. 26, no 6, pp. 1356-1380, 2017.

36 Richmond-Navarro, G., Calderón-Muñoz, W.R., LeBoeuf, R., Castillo, P., A Magnus wind turbine power model based on direct solutions using the Blade Element Momentum Theory and symbolic regression, IEEE Transactions on Sustainable Energy, vol. 8, no 1, pp. 425-430, 2017.

37 H. Nguyen, H. Nguyen-Xuan, E. Atroshchenko, T. Vo, Geometrically Nonlinear Isogeometric Analysis of Functionally Graded Microplates with the Modified Couple Stress Theory, Computers and structures, vol. 193, pp. 110-127, 2017.

38 S. Natarajan, A.K.R. Kumar, S. P.A. Bordas, E. Atroshchenko, Trefftz polygonal finite element for linear elasticity: convergence, accuracy, and properties, Asia Pacific Journal on Computational Engineering, vol. 4, no 1, pp. 3, 2017.

39 E. Atroshchenko, J. Hale, J. Videla, S. Potapenko, S.P.A. Bordas, Micro-structured materials: inhomogeneities and imperfect interfaces in plane micropolar elasticity, a boundary element approach, Engineering analysis with boundary elements, In press.

40 S.H. Sun, T.T. Yu, T.T. Nguyen, C. Wang, E. Atroshchenko, T.Q. Bui, Structural shape optimization by isogeometric boundary element method and particle swarm optimization algorithm, Engineering analysis with boundary elements, 2017, In Press.

41 M. Fallahian, F. Khoshnoudian, V. Meruane. Ensemble Classification method for structural damage detection under varying temperature. Structural Health Monitoring, In press.

42 V. Meruane, E. López Droguett, P. Veliz, A. Ortiz-Bernardin. Impact location and quantification on an aluminum sandwich panel using PCA and linear approximation with maximum entropy. Entropy, vol. 19, no 4, pp. 137, 2017.

43 J. Butterfield, V. Meruane, R. Collins, G. Meyers, S. Beck. Prediction of circular hole area in MDPE pipe using vibration measurements and least squares support vector machines. Structural Health Monitoring, In press.

44 R. Ruiz, V. Meruane. Uncertainties propagation and global sensitivity analysis of the frequency response function of piezoelectric energy harvesters. Smart materials and structures, vol. 26, no 6, 2017.

45 V. Meruane, M. Lasen, E. López Droguett, A. Ortiz-Bernardin. Modal Strain Energy-Based Debonding Assessment of Sandwich Panels Using a Linear Approximation with Maximum Entropy, Entropy, vol 19, no 11, pp. 619, 2017.

46 G. Petrone, V. Meruane. Mechanical properties updating of a non-uniform natural fibre composite panel by means of a parallel genetic algorithm. Composites Part A: Applied Science and Manufacturing, vol. 94, pp.226-233, 2017.

47 Hernández, R. H., Rodríguez, G. Passive scalar transport mediated by laminar vortex rings. Fluid Dynamics Research, vol. 49, no 2, 025514, 2017.

48 Hernández, R. H., Reyes, T. Symmetrical collision of multiple vortex rings. Physics of Fluids, vol. 29, no 10, 103604, 2017.

49 Vial, M., Hernández, R. H. Feedback control and heat transfer measurements in a Rayleigh-Bénard convection cell. Physics of Fluids, vol. 29, no 7, 074103, 2017.