



**Research and Development Unit in
Mechanical and Industrial Engineering**

Fluids & Structures Engineering – FSE

Publications List

(2008 to 2014)

Publications in peer reviewed journals**2008**

1. Almeida R.A.B., Urgueira A.P.V., Maia N.M.M. (2008), Evaluation of the Performance of Three Different Methods Used in the Identification of Rigid Body Properties, Shock and Vibration, Vol. 15, Issue:3-4, pp. 467-479. SCOPUS WOS
2. Cardoso J.B., Almeida J.R., Dias J.M., Coelho PG (2008), Structural reliability analysis using Monte Carlo simulation and neural networks, Advances in Engineering Software, Vol. 39 (6), pp 505-513, SCOPUS WOS
3. Coelho P.G., Fernandes P.R., Guedes J.M & Rodrigues H.C. (2008), A hierarchical model for concurrent material and topology optimization of three-dimensional structures. Struct Multidisc Optim, 35:107-115. SCOPUS WOS
4. Leal J.G.A.B, Ferreira R.M.L & Cardoso A.H. (2008). Closure to Dam-break wave-front celerity. Journal of Hydraulic Engineering, 134(6), 867-869. SCOPUS WOS
5. Paixão Conde, J. M., Gato, L. M. C. (2008). Numerical study of the air-flow in an oscillating water column wave energy converter. Renewable Energy, Vol. 33, pp. 2637– 2644. ELSEVIER. ISSN: 0960-1481. SCOPUS WOS

2009

1. Coelho P.G., Fernandes P.R., Rodrigues H.C., Cardoso J.B., Guedes J.M. (2009), Numerical modeling of bone tissue adaptation - A hierarchical approach for bone apparent density and trabecular structure, Journal of Biomechanics, Vol. 42, Nº 7, pp. 830-837 SCOPUS WOS
2. Didier E., Neves M.G. (2009). Wave overtopping of a typical coastal structure of the Portuguese coast using a SPH model. Journal of Coastal Research, SI.56, pp.496-500. SCOPUS WOS
3. Dimitrovová Z., Varandas JN. (2009), Critical Velocity of a Load Moving on a Beam with a Sudden Change of Foundation Stiffness: Applications to High-Speed Trains, Computers & Structures, 87, pp. 1224–1232, 2009. WOS
4. Ferreira R.M.L, Franca M.J., Leal J.G.A.B, Cardoso A.H. (2009). Mathematical modelling of shallow flows: Closure models drawn from grain-scale mechanics of sediment transport and flow hydrodynamics, Canadian Journal of Civil Engineering, 36(10), 1605-1621. SCOPUS WOS
5. Leal J., Ferreira R., Cardoso A. (2009). Maximum Level and Time to Peak of Dam-break Waves on Mobile Horizontal Bed. Journal of Hydraulic Engineering, 135(11), 995-999. SCOPUS WOS
6. Lemos R., Fortes C.J., Gil L., Neves M. G. (2009). The influence of the geometric scale model on the physical modelling of the wave propagation and breaking in a flume, Journal of Coastal Research , SI 56, 1000-1004. ISSN 0749-0258. SCOPUS WOS
7. Paixão Conde J.M., Didier E., Lopes M.F.P, Gato L.M.C (2009). Nonlinear wave diffraction by a submerged horizontal circular cylinder, International Journal of Offshore and Polar Engineering, Vol.19, No.3, pp.198-205. SCOPUS WOS

2010

1. Almeida R.A.B., Urgueira A.P.V., Maia N.M.M. (2010). The use of Transmissibility Properties to Estimate FRFs on Modified Structure, Shock and Vibration, Vol. 17, Issue 4-5, pp. 563-577. SCOPUS WOS
2. Almeida R.A.B., Urgueira A.P.V., Maia N.M.M. (2010), Further developments on the estimation of rigid body properties from experimental data. Mechanical Systems and Signal Processing, Vol. 24, Issue 5, pp. 1391-1408. SCOPUS WOS
3. Didier E., Neves M.G. (2010). Study of wave interaction with coastal structures using a SPH numerical model. Journal of Integrated Coastal Zone Management, Vol.10, No.4, pp.435-455. OTHERS
4. Dimitrovová Z., Rodrigues H.C. (2010), Optimization of Passive Vibration Isolators Mechanical Characteristics, Structural and Multidisciplinary Optimization, 42 (3), pp. 325-340, 2010. SCOPUS WOS
5. Dimitrovová Z. (2010), A General Procedure for the Dynamic Analysis of Finite and Infinite Beams on Piece-Wise Homogeneous Foundation under Moving Loads, Journal of Sound and Vibration, 329 (13), pp. 2635– 2653, 2010. SCOPUS WOS

6. Leal J.G.A.B, Ferreira R.M.L, Cardoso A.H. (2010). Geomorphic dam-break flows. Part I: 1D conceptual model. Proceedings of the Institution of Civil Engineers (ICE) - Water Management, 163(6), 297-304, ISSN: 1741-7589. SCOPUS WOS
7. Leal J.G.A.B, Ferreira R.M.L, Cardoso A.H. (2010). Geomorphic dam-break flows. Part II: numerical simulation. Proceedings of the Institution of Civil Engineers (ICE) - Water Management, 163(6), 305-313, ISSN: 1741-7589. SCOPUS WOS
8. Lopes M. F. P., Paixão Conde J. M., Glória Gomes M. and Ferreira J. G. (2010). Numerical calculation of the wind action on buildings using Eurocode 1 atmospheric boundary layer velocity profiles. Wind and Structures, Vol. 13, No. 6, pp. 487-498, Techno Press, Korea. ISSN: 1226-6116, eISSN: 1598-6225. SCOPUS WOS

2011

1. Coelho, P.G., Cardoso, J.B., Fernandes, P.R., Rodrigues, H.C. (2011), Parallel computing techniques applied to the simultaneous design of structure and material, Advances in Eng. Software, Vol. 42, Nº 5, pp 219-227, SCOPUS WOS
2. Coelho, P.G., Fernandes, P.R. and Rodrigues, H.C. (2011), Multiscale modeling of bone tissue with surface and permeability control. Journal of Biomechanics, 44(2): 321-329. SCOPUS WOS
3. Fernandes JN, Leal J.B. & Cardoso A.H. (2011). Apparent friction coefficient in straight compound channels. Journal of Hydraulic Research, 49(6), 836-839. SCOPUS WOS
4. Maia N.M.M., Almeida R.A.B., Urgueira A.P.V., Sampaio R.P.C. (2011). Damage detection and quantification using transmissibility. Mechanical Systems and Signal Processing, Vol. 25 , Issue 7, pp. 2475-2483. SCOPUS WOS
5. Urgueira A.P.V., Almeida R.A.B., Maia. N.M.M. (2011). On the use of the transmissibility concept for the evaluation of frequency response functions. Mechanical Systems and Signal Processing, Vol. 25, Issue 3, pp. 940-951. SCOPUS WOS

2012

1. Almeida R.A.B., Vaz D.C., Urgueira A.P.V., Borges A.R.J. (2012). Using ring strain sensors to measure dynamic forces in wind-tunnel testing. Sensors and Actuators A-Physical, Vol. 185, pp. 44-52. SCOPUS WOS
2. Conde, J. M. P., Reis, R., Fortes, C. J. and Neves D. R. C. B. (2012). Wave propagation on a flume: Physical modelling. Engenharia Térmica (Thermal Engineering), Vol. 11, No. 01 – 02, June and December 2012, p. 22-29, Associação Brasileira de Ciências Mecânicas, ABCM. OTHERS
3. Didier E. & Neves M.G. (2012). A semi-infinite numerical wave flume using Smoothed Particle Hydrodynamics. International Journal of Offshore and Polar Engineering, Vol.22, No.3, pp.193-199. SCOPUS WOS
4. Didier E., Neves D.C.B., Martins R., Neves M.G. (2012). Modelling of an impermeable breakwater: comparison between SPH numerical model and physical model. RETERM, Vol.11, No.1-2, pp.68-76. OTHERS
5. Dimitrovová Z., Rodrigues A.S.F. (2012), Critical Velocity of a Uniformly Moving Load, Advances in Engineering Software, 50 (August) pp. 44–56, SCOPUS WOS
6. Ferreira R.M.L, Franca MJ, Leal J.G.A.B, Cardoso A.H. (2012). Flow over rough mobile beds: friction factor and vertical distribution of the longitudinal mean velocity. Water Resources Research, 48, W05529. SCOPUS WOS
7. Gonçalves R.A., Teixeira P.R.F., Didier E. (2012). Numerical simulations of low Reynolds number flows pas elastically mounted cylinder. RETERM, Vol.11, No.1-2, pp.61-67. OTHERS
8. Jesus A.H., Dimitrovová Z., Silva M.A.G. (2012), "The Qualitative Influence of Model Parameters on the Dynamic Response of a Viaduct", International Journal of Railway Technology, 1 (2), pp. 89-113. OTHERS

2013

1. Didier E., Martins R., Neves M.G. (2013). Numerical and experimental modeling of regular wave interacting with a composite breakwater. International Journal of Offshore and Polar Engineering, Vol.23, No.1, pp.46-54. SCOPUS WOS
2. Fernandes JN, Leal J.B., Cardoso A.H. (2013). Flow Structure in a Compound Channel with Smooth and Rough Floodplains. European Water, E.W. Publications, 38, 3-12. OTHERS
3. Filonovich M.S., Azevedo R., Rojas-Solórzano L.R., Leal J.B. (2013). Credibility Analysis of Computational Fluid Dynamic Simulations for Compound Channel Flow. Journal of Hydroinformatics, IAHR, 15(3), 926-938. SCOPUS WOS

4. Proust S., Fernandes J.N., Peltier Y., Leal J.B., Riviere N., Cardoso A.H. (2013). Turbulent non-uniform flows in straight compound open-channels. *Journal of Hydraulic Research, IAHR, iFirst*, 1-12. SCOPUS WOS
5. Teixeira P.R.F., Davyt DP, Didier E. & Ramalhais R. (2013). Numerical simulation of an oscillating water column device using a code based on Navier-Stokes equations. *ENERGY*, Vol.61, pp.513-530. WoS

2014

1. Chojaczyk, A.A., Teixeira, A.P., Neves, L.C., Cardoso, J.B. and Guedes Soares, C. (2014), "Review and application of Artificial Neural Networks models in reliability analysis of steel structures", *Structural Safety*. (Accepted for publication).
2. Coelho, P.G. and Rodrigues, H.C. (2014), Hierarchical topology optimization addressing material design constraints and application to sandwich-type structures. *Struct Multidisc Optim* (under review).
3. Coelho, P.G., Hollister, S.J., Flanagan, C.L. and Fernandes, P.R. (2014), Bioresorbable scaffolds for bone tissue engineering: optimal design, fabrication, mechanical testing and scale-size effects analysis. *Medical Engineering & Physics* (under review).
4. Didier E., Neves D.R.C.B., Martins R., Neves M.G. (2014), Wave interaction with a vertical wall: SPH numerical and experimental modelling. *Ocean Engineering*, Vol. 88, pp.330-341. WoS: 000341474200029; IF=1.448; CN=0; WoS Q1, "Engineering, Marine", "Engineering, Ocean", Q2 "Engineering, Civil". DOI: 10.1016/j.oceaneng.2014.06.029
5. Didier E., Parxotomo D. (2014), Redução dos esforços num cilindro circular usando dois pequenos cilindros de controlo na esteira. *RIBIM - Revista Iberoamericana de Ingeniería Mecánica*, Vol.18(1), pp.23-45.

Books and book chapters of international circulation

2011

1. Dimitrovová, Z. (2011), Dynamic Analysis of Beam Structures under Moving Loads: A Review of the Modal Expansion Method, em B.H.V. Topping and Y. Tsompanakis, (Editores), *Civil and Structural Engineering Computational Technology*, Saxe-Coburg Publications, Stirlingshire, UK, Chapter 4, pp 99-130, 2011. doi:10.4203/csets.28.4, ISBN978-1-874672-55-5.
2. Maia N. M. M., Urgueira A. P. V. and Almeida R. A. B. (2011). *Whys and Wherefores of Transmissibility, Vibration Analysis and Control - New Trends and Developments*, Francisco Beltran-Carbajal (Ed.), ISBN: 978-953-307-433-7, InTech, Available from: <http://www.intechopen.com/articles/show/title/whys-and-wherefores-of-transmissibility>, pgs. 197-216.
3. Rodrigues H. C., Coelho P. G., Fernandes P. R. (2011), Multiscale Modelling of Bone Tissue – Remodelling and Application to Scaffold Design, in P. R. Fernandes and P. Bártolo (eds.), *Advances on Modeling in Tissue Engineering*, ISBN: 978-94-007-1253-9, Springer, pp. 15-34.

Papers in International Conference proceedings

2008

1. Almeida R.A.B., Maia N.M.M., Urgueira, A.P.V., (2008). Understanding Transmissibility Properties, *Proceedings of IMAC XXVI: a Conference & Exposition on Structural Dynamics*, Orlando, Florida, U.S.A, February 2008. ISBN: 0-912053-98-4.
2. Coelho, P.G., Fernandes, P.R., Cardoso, J.B., Guedes, J.M. & Rodrigues, H.C. (2008), Hierarchical Topology Optimization of Structures Subjected to Constraints on Material Design. *EngOpt 2008 – International Conference on Engineering Optimization*. Rio de Janeiro, Brazil, 01-05 June.
3. Coelho, P.G., Rodrigues, H.C. & Fernandes, P.R. (2008), Bone Tissue Adaptation – A Hierarchical Approach for Apparent Density an Trabecular Structure. *16th Congress of European Society of Biomechanics*, Lucerne, Switzerland, July 6-9.
4. Didier E. (2008). Numerical simulation of flow past a circular cylinder in elliptic orbit at low Reynolds number. *Proc. 9th International Conference on Flow-Induced-Vibrations*, eds I. Zolotarev and J. Horacek, Prague, Czech Republic, pp.291-296.
5. Didier E., Gil L, Neves M.G. & Fortes CJ (2008). Numerical modelling of wave propagation and wave breaking. *Proc. International Conference on Coastal Engineering - ICCE*, Hamburg, Alemanha, Vol.1, pp.268-280.

6. Didier E. & Neves M.G. (2008). Numerical modelling of wave interaction with an impermeable seawall using an SPH model. Proc. Mediterranean Days of Coastal and Port Engineering, Palermo, Italia.
7. Dimitrovová, Z. (2008), Transition Radiation in High-Speed Lines Applications, Proceedings of the 8th World Congress on Computational Mechanics e 5th European Congress on Computational Methods in Applied Sciences and Engineering (WCCM8 e ECCOMAS 2008), B.A. Schrefler e U. Perego (editores), 30 de Junho - 4 de Julho 2008, Veneza, Itália.
8. Fernandes, P.R., Coelho, P.G. & Rodrigues, H.C. (2008), A bone remodelling model for apparent density and trabecular architecture. 8th World Congress on Computational Mechanics, Venice, Italy, June 30 – July 5.
9. Ferreira R.M.L, Franca MJP & Leal J.G.A.B (2008). Flow resistance in open-channel flows with mobile hydraulically rough beds. River Flow 2008, Altinakar, M., Kokpinar, M., Aydin, I., Cokgor, S. and Kirkgoz, S. eds., Kubaba Congress Department and Travel Services, Vol. 1, 385-394 (ISBN 978-605-60136-2-1).
10. Leal J.G.A.B, Ferreira R.M.L & Cardoso A.H. (2008). Experimental dam-break waves profile analysis: Horizontal mobile bed. River Flow 2008, Altinakar, M., Kokpinar, M., Aydin, I., Cokgor, S. and Kirkgoz, S. eds., Kubaba Congress Department and Travel Services, Vol. 2, 1699-1706 (ISBN 978-605-60136-2-1).
11. Lopes, T., Dimitrovová, Z., Faria L., Rodrigues, H.C. (2008), Design of New Materials for Passive Vibration Control, Proceedings of the 9th International Conference on Computational Structures Technology (CST2008), p. 77, B.H.V. Topping e M. Papadrakakis, (Editors), Civil-Comp Press, Stirlingshire, UK, 2-5 de Setembro 2008, Atenas, Grécia. doi:10.4203/ccp.88.77
12. Maia N.M.M., Urgueira A.P.V., Almeida R.A.B., (2008). Estimation of the Structural Dynamic Response Using the Transmissibility Concept, Proceedings of International Conference of Acústica (Acústica 2008), Coimbra, Portugal, 20-22 October 2008.
13. Rodrigues, H.C., Faria L., Dimitrovová, Z. (2008), An Optimization Model to Design Materials for Passive Vibration Control, Proceedings of the International Conference on Engineering Optimization, p. 154, j: Herskovits, A. Canelas, H. Cortes e M. Aroztegui (editors), 1-5 Junho 2008, Rio de Janeiro, Brazil.
14. Santos, L., Coelho, P., Fonseca, J., Rodrigues, H., Fernandes, P., (2008), A DXA validation of a bone remodelling model for the assessment of osteoporotic bone quality. 6th International Conference on Engineering Computational Technology, Athens, Greece.
15. Urgueira A.P.V., Almeida R.A.B., Maia N.M.M., (2008). Experimental Estimation of FRFs Using the Transmissibility Concept, Proceedings of International Conference on Modal Analysis Noise and Vibration Engineering (ISMA 2008), pgs. 1807-1814, Leuven, Belgium, 15-17 September 2008. ISBN: 978-90-73802-86-5.

2009

1. Almeida R.A.B., Maia N.M.M., Urgueira A.P.V., (2009). The use of Transmissibility properties to estimate FRFs on Modified Structures, Proceedings of International Conference on Structural Engineering Dynamics (ICEDyn 2009), Ericeira, Portugal, 22-24 June 2009. ISBN: 978-989-96276-0-4.
2. Coelho, P.G., Cardoso, J.B., Fernandes, P.R. & Rodrigues, H.C. (2009), Parallel computing techniques applied to the simultaneous design of structure and material. Proceedings of the First International Conference on Parallel, Distributed and Grid Computing for Engineering, B.H.V. Topping and P.Iványi, (Editors), Civil-Comp Press. 6-8 April, Pécs, Hungary.
3. Coelho, P.G., Fernandes, P.R, Rodrigues, H.C., Guedes, J.M. & Cardoso, J.B. (2009), Hierarchical optimization of structure and material with local constraints. Proceedings of the 8th World Congress on Structural and Multidisciplinary Optimization (WCSMO-8), June 1-5, Lisbon, Portugal.
4. Coelho, P.G., Fernandes, P.R, Rodrigues, H.C., Guedes, J.M. & Cardoso, J.B. (2009), Hierarchical bone remodeling with permeable microstructures. ICCB2009, 16-18 September, Bertinoro (Forli), Italy.
5. Didier E., Neves M.G. (2009). Wave overtopping of a typical coastal structure of the Portuguese coast using a SPH model. Proc. Internacional Coastal Symposium - ICS2009, Lisbon, Portugal, pp.496-500.
6. Didier E., Neves M.G. (2009). Coastal flow simulation using SPH: Wave overtopping on an impermeable coastal structure. Proc. 4th International SPHERIC Workshop, Nantes, France, pp.357-364.
7. Didier E. (2009). Numerical investigation of steady flow past an elliptic cylinder at various axes ratios. Proc. Conference on Modelling Fluid Flow - CMFF'09, Budapest, Hungary, pp.355-362.
8. Didier E. (2009). Numerical simulation of low Reynolds number flows over two circular cylinders in tandem. Proc. Conference on Modelling Fluid Flow - CMFF'09, Budapest, Hungary, pp.347-354.

9. Dimitrovová, Z. (2009), Transversal Vibrations in Infinite Beams Supported by Piece-Wise Homogeneous Visco-Elastic Foundation, Proceedings of the 7th EUROMECH Solid Mechanics Conference (ESMC2009), pp. 307-308, J. Ambrósio, M.T. Silva (editores), 7-11 de Setembro, 2009, Lisboa, Portugal.
10. Dimitrovová, Z., Rodrigues, H.C. (2009), Design of New Materials for Passive Vibration Control, Proceedings of the 12th International Conference on Civil, Structural and Environmental Engineering Computing (CC2009), p. 166, B.H.V. Topping, L.F. Costa Neves e R.C. Barros (editores), Civil-Comp Press, Stirlingshire, UK, 1-4 de Setembro, 2009, Funchal, Madeira, Portugal. doi:10.4203/ccp.91.166.
11. Dimitrovová, Z., Frýba, L. (2009), Transversal Vibrations in Beams Supported by a Piece-Wise Homogeneous Visco-Elastic Foundation, Proceedings of the 12th International Conference on Civil, Structural and Environmental Engineering Computing (CC2009), p. 44, B.H.V. Topping, L.F. Costa Neves e R.C. Barros (editores), Civil-Comp Press, Stirlingshire, UK, 1-4 de Setembro, 2009, Funchal, Madeira, Portugal. doi:10.4203/ccp.91.44.
12. Dimitrovová, Z., Rodrigues, H.C. (2009), Optimization of Passive Vibration Isolators Mechanical Characteristics, Proceedings of the 8th World Congress on Structural and Multidisciplinary Optimization (WCSMO-8), p. 22, H.C. Rodrigues, J.M. Guedes, P.F. Fernandes, J.O. Folgado e M.M. Neves (editores), 1-5 de Junho, 2009, Lisboa, Portugal.
13. Ferreira R.M.L, Nicolau VA, Amaral SR, Leal JGA & Almeida AB (2009). A conceptual model for sheet-flow drawn from rapid granular flow theories. Proceedings of the XXXIII IAHR Congress, 9-14 August, Vancouver, Canada, 3872-3879 (ISBN 978-94-90365-01-1).
14. Ferreira R.M.L, Franca MJ, Leal J.G.A.B & Cardoso A.H. (2009). Organized turbulence over mobile and immobile hydraulically rough boundaries. Proceedings of the XXXIII IAHR Congress, 9-14 August, Vancouver, Canada, 36-43 (ISBN 978-94-90365-01-1).
15. Santos, L., Coelho, P., Fonseca, J., Rodrigues, H., Fernandes, P., (2009), An approach towards patient-specific bone remodelling simulation in osteoporosis. ICCB2009, 16-18 September, Bertinoro (Forli), Italy.

2010

1. Coelho, P.G., Fernandes, P.R. and Rodrigues, H.C. (2010), Multiscale modeling of bone tissue with surface and permeability control. UCLA, April 21-23, Los Angeles, California, USA.
2. Coelho, P.G., Kang, H., Hollister, S.J., Lin, C-Y, Fernandes, P.R. and Rodrigues, H.C. (2010), Hierarchical topology optimization of the biodegradable intervertebral fusion cage attaining designs for manufacturability. ESB2010, 5-8 July, University of Edinburgh, UK.
3. Coelho P.G., Fernandes P. R., Rodrigues H. C. (2010), Hierarchical Optimization of the Structure with Applications in Bone Tissue Modeling, 13th International Conference on Mechanical Engineering, pp. P-37-47 Bratislava, Eslováquia, 21 Outubro.
4. Davyt DP, Teixeira P.R.F., Ramalhais R, Didier E. (2010). Numerical analysis of regular waves over an offshore oscillating water column. Proc. 13th Brazilian Congress of Thermal Sciences and Engineering - ENCIT 2010, Uberlandia, MG – Brazil.
5. Didier E., Neves M.G. (2010). A Lagrangian Smoothed Particle Hydrodynamics – SPH – method for modelling waves-costal structure interaction. Proc. V European Conference on Computational Fluid Dynamics - ECCOMAS CFD 2010, Lisbon, Portugal, pp.30.
6. Dimitrovová Z., Rodrigues A.F.S. (2010), Critical Velocity Obtained by Simplified Models of the Railway Track: Viability and Applicability, Proceedings of the 10th International Conference on Computational Structures Technology (CST2010), p. 36, B.H.V. Topping, J.M. Adam, F.J. Pallarés, R. Bru e M.L. Romero (editores), Civil-Comp Press, Stirlingshire, UK, 14-17 de Setembro, 2010, Valencia, Espanha, doi:10.4203/ccp.93.36.
7. Fernandes JN, Leal J.G.A.B & Cardoso A.H. (2010). Analysis of flow characteristics in a compound channel: comparison between experimental data and 1D numerical simulations, Urban Environment. Proceedings of the 10th Urban Environment Symposium, Rauch, S., Morrison, G.M. eds., Springer, vol. 19, 249-262 (ISBN 978-3-939230-00-7).
8. Fernandes JN, Leal J.B. & Cardoso A.H. (2010). Ultrasound velocity profile (UVP) measurements in shallow open-channel flows. Proceedings of the 1st European IAHR Congress, 6-4 May, Edinburgh, Scotland (edited in CD-Rom).
9. Ferreira R.M.L, Franca MJ, Leal J.G.A.B & Cardoso A.H. (2010). Effects of bedload transport in the vertical profile of the longitudinal mean velocity in hydraulically rough mobile beds. European Geosciences Union (EGU) General Assembly, 2-7 May, Vienna, Austria, 14759 (edited in CD-Rom).

10. Ferreira R.M.L, Leal J.G.A.B & Cardoso A.H. (2010). The thickness of the transport layer in stratified geomorphic flows. *River Flow 2010*, Dittrich, A., Koll, K., Aberle, J. and Geisenhainer, P. eds, Taylor & Francis, Vol. 1, 1371-1378 (ISBN 978-3-939230-00-7).
11. Filonovich M, Azevedo R., Rojas-Solorzano LR & Leal J.B. (2010). Simulation of the velocity field in compound channel flow using different closure models. *Proceedings of the 1st European IAHR Congress*, 6-4 May, Edinburgh, Scotland (edited in CD-Rom).
12. Heczko J., Dimitrovová Z., Rodrigues H.C. (2010), Optimization of Linear and Non-Linear One-Dimensional Visco-Elastic Isolators for Passive Vibration Control, *Proceedings of the 2nd International Conference on Engineering Optimization (EngOpt2010)*, p. 114, HC. Rodrigues, J. Herskovits, CM. Soares, J.M.. Guedes, J. Folgado, A. Araújo, F. Moleiro, JP. Kuzhichalil, JA. Madeira e Z. Dimitrovová (editores), 6-9 de Setembro, Lisbon Portugal.
13. Henriques B, Didier E., Brás R (2010). Calibration of a numerical jet fan model for simulating smoke control in underground car park. *Proc. V European Conference on Computational Fluid Dynamics - ECCOMAS CFD 2010*, Lisbon, Portugal, pp.755.
14. Maia N.M.M., Almeida R.A.B., Urgueira A.P.V., Sampaio R.P.C., (2010). Damage Detection and Quantification using Transmissibility, *Proceedings of the fifth European Workshop Structural Health Monitoring 2010 (SHM 2010)*, Naples, Italy, 29 June - 4 July 2010. ISBN: 978-1-60595-024-2.
15. Neves M.G., Reis MT, Didier E. (2010). Comparisons of wave overtopping at coastal structures calculated with AMAZON, COBRAS-UC and SPHysics. *Proc. V European Conference on Computational Fluid Dynamics - ECCOMAS CFD 2010*, Lisbon, Portugal, pp.31.
16. Rodrigues, H.C., Coelho, P.G., Fernandes, P.R. and Guedes, J.M. (2010), Hierarchical optimization of the structure and the material used in its construction. *CILAMCE 2010 - XXXI Iberian-Latin-American Congress on Computational Methods in Engineering*, 15 - 18 November, Buenos Aires, Argentina.
17. Urgueira A.P.V., Almeida R.A.B., Maia N.M.M., (2010). On the use of the transmissibility concept for the evaluation of frequency response functions, *Proceedings of International Conference on Modal Analysis Noise and Vibration Engineering (ISMA 2010)*, pp. 3303-3315, Leuven, Belgium, 20-22 September 2010. ISBN: 978-90-73802-87-2.
18. Vaz D, Didier E., Borges ARJ (2010). Effects of geometry modification on the aerodynamics of a generic bridge deck section. *Proc. V European Conference on Computational Fluid Dynamics - ECCOMAS CFD 2010*, Lisbon, Portugal, pp.346.

2011

1. Almeida R.A.B., Urgueira A.P.V., Maia N.M.M., (2011). Using Transmissibility to Detect and Quantify Structural Damage, *Proceedings of International Conference on Engineering Dynamics (ICEDyn2011)*, Tavira, Algarve, Portugal, 20-22 July 2011. ISBN: 978-989-96276-0-4.
2. Azevedo R., Filonovich M.S., Rojas-Solorzano LR & Leal J.B. (2011). Influence of the sidewall effect on asymmetric compound channel flows. *Proceedings of the IX ASME USB Annual Engineering Congress*, 23-25 June, Caracas, Venezuela, 1-7 (edited in CD-Rom).
3. Cardoso, J.B., Coelho, P.G. and Custódio, A.L. (2011), Parallel Direct Search in Structural Optimization. *The Second International Conference on Parallel, Distributed, Grid and Cloud Computing for Engineering*. Civil-Comp Press. Ajaccio, Corsica, France, 12-15 April.
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