

## LISTA DE PUBLICA II

### Lucruri publicate în reviste internaționale (ISI):

1. G Miranda, **M Buciumeanu**, O Carvalho, D Soares, FS Silva, Interface analysis and wear behavior of Ni particulate reinforced aluminum–silicon composites produced by PM, *Composites Part B: Engineering* 69 (2015), 101-110. (Factor de impact: **2,602**).
2. Z. Doni, A.C. Alves, F. Toptan, L.A. Rocha, **M. Buciumeanu**, L. Palaghian, F.S. Silva, Tribocorrosion behaviour of hot pressed CoCrMo-HAP biocomposites, *Tribology International* (2015), DOI: doi:10.1016/j.triboint.2015.04.009. (Factor de impact: **2,124**).
3. G Miranda, **M Buciumeanu**, S Madeira, O Carvalho, D Soares, FS Silva, Hybrid composites–metallic and ceramic reinforcements influence on mechanical and wear behavior, *Composites Part B: Engineering*, Volume 74, 1 June 2015, Pages 153–165. (Factor de impact: **2,602**).
4. O. Carvalho, **M. Buciumeanu**, S. Madeira, D. Soares, F.S. Silva, G. Miranda, Dry sliding wear behaviour of AlSi-CNTs-SiCp hybrid composites, *Tribology International* 90 (2015) 148-156. (Factor de impact: **2,124**)
5. O. Carvalho, **M. Buciumeanu**, S. Madeira, D. Soares, F.S. Silva, G. Miranda, Optimization of AlSi-CNTs functionally graded material composites for engine piston rings, *Materials and Design* 80 (2015) 163-173. (Factor de impact: **3,171**).
6. O Carvalho, **M Buciumeanu**, D Soares, J Gomes, FS Silva, Improvement on sliding wear behaviour of Al/cast iron tribopair by CNT's reinforcement of an Al alloy, *Tribology Transactions* 58, 2015, 643-653, DOI: 10.1080/10402004.2014.1002143 (Factor de impact: **1,081**).
7. Z. Doni, A.C. Alves, F. Toptan, A.M. Pinto, L.A. Rocha, **M. Buciumeanu**, L. Palaghian, F.S. Silva, Tribocorrosion behaviour of hot pressed CoCrMo–Al<sub>2</sub>O<sub>3</sub> composites for biomedical applications, *Tribology – Materials, Surfaces & Interfaces* 8 (2015), 201-208 (Factor de impact: **0,256**).
8. Daniela S. Rodrigues, Mihaela Buciumeanu, Bruno Henriques, Julio C. M. Souza, Filipe S. Silva, Análise da porosidade, resistência mecânica e desgaste de materiais restauradores diretos, *Revista Portuguesa de Estomatologia, Medicina Dentária e Cirurgia Maxilofacial* 10/2014; 55. DOI: 10.1016/j.rpemd.2014.11.127 (Factor de impact: **0,12**).
9. Z Doni, **M Buciumeanu**, L Palaghian, A Simplified Method for Wear Loss Prediction in Corrosive Environment, *Applied Mechanics and Materials* 436, 121-126, 2014 (Factor de impact: **0.134**).
10. Z. Doni, A.C. Alves, F. Toptan, J.R. Gomes, A. Ramalho, **M. Buciumeanu**, L. Palaghian, F.S. Silva, Dry sliding and tribocorrosion behaviour of hot pressed CoCrMo biomedical alloy as compared with the cast CoCrMo and Ti6Al4V alloys, *Materials & Design*, Volume 52, December 2013, Pages 47-57 (Factor de impact: **3,219**)
11. Z Doni, **M Buciumeanu**, L Palaghian, Topographic and electrochemical Ti6Al4V alloy surface characterization in dry and wet reciprocating sliding, *Tribology in Industry* 35 (3), 217-224, 2013 (Factor de impact: **0,412**).

12. Z. Doni, **M. Buciumeanu**, L. Palaghian, Surface Integrity of Ti6Al4V Alloy under Dry Sliding Conditions, Applied Mechanics and Materials Vol. 371 (2013) pp 126-130 (Factor de impact: **0,134**).
13. V. Mereuta, **M. Buciumeanu**, L. Palaghian, 3D Roughness Parameters as Factors in Determining the Evolution of Effective Stress Concentration Factors in Fatigue Processes, Applied Mechanics and Materials Vol. 248 (2013) pp 504-510 (Factor de impact: **0,134**).
14. **M. Buciumeanu**, L. Palaghian, A. S. Miranda, F. S. Silva, Fatigue life predictions including the Bauschinger effect, International Journal of Fatigue 33 (2011) 145-152, doi:10.1016/j.ijfatigue.2010.07.012 (Factor de impact: 1,694).
15. C. Gheorghies, L. Palaghian, S. Baicean, **M. Buciumeanu**, S. Ciorta, Fatigue Behaviour of Naval Steel Under Seawater Environmental and Variable Loading Conditions, Journal of Iron and Steel Research International 18 (2011) 64-69 (Factor de impact: **0,357**).
16. **M. Buciumeanu**, I. Crudu, L. Palaghian, A. S. Miranda, F. S. Silva, Influence of an additional elastic stress on dry wear behaviour in reciprocating tests, Tribology International 42 (2009) 1101-1107, doi:10.1016/j.triboint.2009.03.014 (Factor de impact: **2,124**).
17. **M. Buciumeanu**, I. Crudu, L. Palaghian, A. S. Miranda, F. S. Silva, Influence of wear damage on the fretting fatigue life prediction of an Al7175 alloy, International Journal of Fatigue 31 (2009) 1278–1285, 10.1016/j.ijfatigue.2009.02.032 (Factor de impact: **1,694**).
18. **M. Buciumeanu**, A. S. Miranda, F. S. Silva, Evolution of relevant parameters on fretting fatigue tests, Key Engineering Materials Vols. 385-387 (2008) 565-568 (Factor de impact: **0,194**).
19. **M. Buciumeanu**, A. S. Miranda, F. S. Silva, Influence of Wear Properties on Fretting Fatigue Life of a CK45 Alloy and the Al7175 Alloy, Material Science Forum Vols. 587-588 (2008) 971-975 (Factor de impact: **0,251**).
20. **M. Buciumeanu**, A.S. Miranda, A.C.M. Pinho, F.S. Silva, Design improvement of an automotive-formed suspension component subjected to fretting fatigue, Engineering Failure Analysis 14 (2007) 810-821, 10.1016/j.engfailanal.2006.11.023 (Factor de impact: 1,086, Factor de impact relativ: **1,130**).

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1. Z. Doni, A. M. Ribeiro, F. Toptan, A. C. Alves, J. R. Gomes, A. Ramalho, **M. Buciumeanu**, L. Palaghian, F. S. Silva, Corrosion and tribocorrosion behaviour of hot pressed CoCrMo-Al<sub>2</sub>O<sub>3</sub> biocomposites, Conference of Sociedade portuguesa de Materiais, 25-27 March, Coimbra, Portugal, 2013.
2. **Buciumeanu M.**, Palaghian L., Miranda A., Silva F.S.: Some consideration on the modification of the fretting contact. In: Proceedings of 11-th International Conference Tribology, Iasi 4-6 Nov, 2010, pag. 1.-9-1.1, ISSN 1843-6501.
3. Mereu a V., Palaghian L., **Buciumeanu M.**, Surface roughness parameters under fatigue loading,. In: Proceedings of 11-th International Conference Tribology, Iasi 4-6 Nov., 2010, pag. 2.3-8-2.3, ISSN 1843-6501.
4. **M. Buciumeanu**, L. Palaghian, A. S. Miranda, F. S. Silva, An analytical procedure to incorporate the Bauschinger effect on fretting fatigue models, The 2<sup>nd</sup> International Conference Diagnosis And Prediction In Mechanical Systems Engineering, October 22-23, 2009, Galati, Romania.

5. **M. Buciumeanu**, A. S. Miranda, F. S. Silva, Evolution of relevant parameters on fretting fatigue tests, 7th International Conference on Fracture and Damage Mechanics, FDM 2008, 9-11 September, 2008, Korea.
6. **M. Buciumeanu**, A.S. Miranda, F.S. Silva, "Effect of relative displacement and normal contact load on fretting fatigue behaviour of Ti6Al4V alloy", 11<sup>th</sup> Portuguese Conference on Fracture, 13-15 February, Lisbon, Portugal, 2008.
7. **M. Buciumeanu**, A.S. Miranda, F.S. Silva, "Wear behaviour of the Al7175 alloy under different bulk stress states", 10<sup>th</sup> International Conference on Tribology, November 8-10, 2007, Bucharest, Romania.
8. **M. Buciumeanu**, A.S. Miranda, F.S. Silva, "Damage evolution of Al7175 and Ck45 alloys under fretting fatigue", International Conference Diagnosis And Prediction In Mechanical Systems Engineering, October 26-27, 2007, Galati, Romania.
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10. **M. Buciumeanu**, A.S. Miranda, F.S. Silva, Development of a Fretting Fatigue Apparatus, XXIII Encuentro del Grupo Espanol de Fractura, Albarracín, Spain, March 29-31, 2006.
11. **Buciumeanu, M.**; Miranda, A.S., F.S. Silva, Some Considerations on the Development of an Apparatus for Fretting Fatigue Testing, 10<sup>th</sup> Portuguese Conference on Fracture, 22-24 February, Guimaraes, Portugal, 2006.
12. **Buciumeanu M.**, Characterisation of the Superficial Layer in Sliding Tribosistem Regarding Composite Materials, 9<sup>th</sup> International Conference on Tribology, September 24-26, 2003, Galati, Romania.

#### **Lucruri publicate in reviste (BDI):**

1. L. Palaghian, S. Bicean, **M. Buciumeanu**, Z. Doni, Electrochemical response of a naval steel under corrosion fatigue conditions, Proceedings of VAREHD 16 (2012), "Stefan cel Mare" University of Suceava Publishing House, ISSN 1844-8917.
2. Z. Doni, **M. Buciumeanu**, L. Palaghian, Tribochemical characterization of Ti6Al4V alloy under reciprocating sliding conditions, Tribological Journal BULTRIB', issue No. 3, ISSN: 1313-9878.
3. Z. Doni, **M. Buciumeanu**, L. Palaghian, Tribochemical behaviour of steel and ceramic balls sliding against Al7175 alloy, In: The Annals of University "Dunarea de Jos" of Galati, Fascicle VIII Tribology, vol.2, 2012, ISSN 1221-4590.
4. C. Gheorghies, **M. Buciumeanu**, D. Scarpete, L. Gheorghies, D. Bold, A test for rapid tribological characterization of bearing steels, In: The Annals of University "Dunarea de Jos" of Galati, Fascicle IX Metallurgy and Materials Science, vol.1, 2012, pag. 25-29, ISSN 1453-083X
5. **Buciumeanu M.**, Palaghian L., The Neuber's rule and a correlation between fretting fatigue and plain fatigue. In: The Annals of University "Dunarea de Jos" of Galati, Fascicle VIII Tribology, vol.2, 2010, pag. 81-84, ISSN 1221-4590.
6. **M. Buciumeanu**, L. Palaghian, A. S. Miranda, F. S. Silva, An analytical procedure to incorporate the Bauschinger effect on fretting fatigue models, The Annals of University "Dunarea de Jos" of Galati, Fascicule VIII, 2009 (XV), pages 31-37, ISSN 1221-4590, Tribology.

7. S. Bicean, L. Palaghian, **M. Buciumeanu**, V. Mereu, Damage prediction in fatigue corrosion processes, The Annals of University "Dunarea de Jos" of Galati, Fascicole VIII, 2009 (XV), ISSN 1221-4590, Tribology.
8. **M. Buciumeanu**, A. S. Miranda, F. S. Silva, Effect of relative displacement and normal contact load on fretting fatigue behaviour of Ti6Al4V alloy, Ciência e Tecnologia dos Materiais 20 (2008) 92-98.
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13. Gheorghe D., Diaconu N., Tarau I., Pan uru D., Iliuta V., Barâu N., **Buciumeanu M.**, Instalatie pentru controlul suprafetelor sferice interioare (Control Equipment for Internal Spherical Surfaces). In: TEHNOMUS XII. Tehnologii si produse noi în constructia de masini -Conf. Stiintifica cu participare internationala, Ed/Univ.Suceava, 2003 (in Romanian).
14. Gheorghe D., Diaconu N., Pan uru D., **Buciumeanu M.**, Chiri G., Starea de tensiuni din stratul superficial al tribosistemelor de rostogolire si rostogolire cu alunecare pentru doua materiale destinate rotilor dintate, " (Tension State on the Superficial Layer in the Rolling and Rolling/Sliding with Sliding Tribosystems for Two Materials for Gears), In: Tehnologii Moderne, Calitate, Restructurare. Vol. 3. Chisinau, UTM, 2003, pag. 89, ISSN 9975-9748-3-X.

#### Teza de doctorat:

**M. Buciumeanu**, Prediction of fretting fatigue life (Predictia duratei de via la oboseala fretting), Universitatea Minho, Guimaraes, Portugalia, 2009, Conducatori științifici: Prof. Dr. Ing. Filipe Samuel P. Silva, Prof. Dr. Ing. António Augusto Sousa Miranda.

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2. C. Banu și colectiv (**Buciumeanu M.**), Dicționar explicativ pentru știința și tehnologie - Industrie alimentară, Român/Englez/Francez/Rus, Editura AGIR, Bucuresti, 2006, 1114 pages, ISBN 973-720-079-2.
3. D. Pan uru, V. Palade, N. Diaconu, I.G. Bîrsan, **M. Buciumeanu**, S. Dorin, Reologia curgerii vâscoase (The Reology of Viscous Flow), Vol. 2, Editura "Evrika" Braila (Evrika Publishing House), 2004, 246 pages, ISBN 973-641-050-1.

4. C. Spânu, **M. Buciumeanu**, D. Pan uru, Variatoare de tura ie cu curele late, Editura Funda iei Universitare "Dun rea de jos" Gala i (Educational Publishing Foundation "Dunarea de Jos" of Galati), 2004, 103 pages, ISBN 973-627-131-5.
5. N. Diaconu, V. Palade, **M. Buciumeanu**, I.G. Bîrsan, D. Pan uru, S. Dorin, Bazele reologiei (Basics of Reology), Vol. 1. Editura "Evrika" Braila (Evrika Publishing House), 2003, 225 pages, ISBN 973-641-049-8.
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8. D. Pan uru, V. Palade, **M. Buciumeanu**, I. Mircea, Elemente de inginerie mecanica (Basics of Mechanical Engineering), vol.I, Editura Fundatiei Universitare "Dunarea de Jos" Galati (Educational Publishing Foundation "Dunarea de Jos" of Galati), 2002, 184 pages, ISBN 973-8352-63-0.