

Anexa 11

SIMBOLIZAREA LUCRĂRILOR ELABORATE

I. TEZA (E) DE DOCTORAT (T): Cercetări privind comportarea și degradarea compozitelor cu spume rigide și semirigide

II. CĂRȚI PUBLICATE (C)

III. ALTE MATERIALE PUBLICATE (I,D)

IV. ARTICOLE / STUDII IN EXTENSO PUBLICATE (R,V)

Lucrari reviste ISI

Ris - Marsavina L., Constantinescu D.M., Linul E., Stuparu F.A., **Apostol D.A.**, *Experimental and numerical crack paths in PUR foams*, Engineering Fracture Mechanics, vol. 167, pp. 68-83, 2016, ISSN: 0013-7944 , eISSN: 1873-7315 WOS:000387329000007 **FI=2,024**

Ris - Stuparu, F.A., Constantinescu, D.M., **Apostol, D.A.**, Sandu, M., *A Combined Cohesive Elements-XFEM Approach for Analyzing Crack Propagation in Bonded Joints*, Journal of Adhesion, vol. 92, pp. 535-552, 2016, ISSN: 0021-8464 eISSN: 1545-5823 WOS:000373314000004 **FI=1,409**

Ris - **Apostol D.A.**, Stuparu F.A., Constantinescu D.M., Marsavina L., Linul E., *Crack Length Influence on Stress Intensity Factors for the Asymmetric Four-point Bending Testing of a Polyurethane Foam*, Materiale Plastice, vol. 53, no. 2, 280-282, 2016, ISSN: 0025-5289 WOS:000380629300021 **FI=0,903**

Ris - **Apostol D.A.**, Constantinescu D.M., Stuparu F.A., *Characterization and Damage Assessment of Polyurethane Foams Subjected to Compression Testing*, Materiale Plastice, vol. 53, no. 3, 454-457, 2016,ISSN: 0025-5289 WOS:000384870300024 **FI=0,903**

Ris - **Apostol D.A.**, Stuparu F.A., Constantinescu D.M., Marsavina L., Linul E., *Experimental and XFEM Analysis of Mode II Propagating Crack in a Polyurethane Foam*, Materiale Plastice, vol. 53, no. 4, 685-688, 2016,ISSN: 0025-5289 WOS:000395047100024 **FI=0,903**

Ris - Marsavina L., Constantinescu D.M., Linul E., Voiconi T., **Apostol D.A.**, *Shear and mode II fracture of PUR foams*, Engineering Failure Analysis, vol. 58, pp. 465-476, 2015, ISSN: 1350-6307 eISSN: 1873-1961 WOS:000364917900013 **FI=1,358**

Ris - Marsavina L., Constantinescu D.M., Linul E., **Apostol D.A.**, Voiconi T., Sadowski, T., *Refinements of fracture toughness of polyurethane foams*, Engineering Fracture Mechanics, vol. 129, pp. 54-66 , 2014, ISSN: 0013-7944 eISSN: 1873-7315 WOS:000344987200007 **FI=2,024**

Ris - Sandu M., Sandu A., Constantinescu D.M., **Apostol D.A.**, *Single-strap adhesively bonded joints with square or tapered adherends in tensile test condition*, International Journal of Adhesion and Adhesives, vol. 44, pp.105-114, 2013, ISSN: 0143-7496 WOS:000320485200012 **FI=1,956**

Ris - **Apostol, D.A.**, Constantinescu D.M., *Temperature and speed of testing influence on the densification and recovery of polyurethane foams*, Mechanics of Time-Dependent Materials, vol.17, pp. 111-136, 2013, ISSN: 1385-2000 WOS:000314900300007 **FI=1,12**

Ris - Constantinescu, D.M., Sandu, M., Miron, M.C., **Apostol, D.A.**, Volceanov, Enikö, *Evaluation of the behavior of ceramic tiles under static loading*, Proceedings of the Romanian Academy, Series A, Vol. 12, Number 1, pp. 47–54, 2011, ISSN: 1454-9069 WOS:000289034300007 **FI=1,735**

Ris - Sandu M., Sandu Adriana, Constantinescu, D.M., Miron, M.C., **Apostol, D.A.**, *Possibilities to reduce the stress concentration in adhesively bonded joints*, Transactions of FAMENA, Vol. 34, no.3, p. 21-28, , 2010, ISSN 1333-1124 WOS:000283605600003**FI=0,23**

Ris - Marsavina L., Linul E., Voiconi T., Constantinescu D.M., **Apostol D.A.**, *On the crack path under mixe mode loading on PUR foams*, Frattura ed Integrità Strutturale, vol 34, p 387-396, 2015, DOI: 10.3221/IGF-ESIS.34.43, ISSN: 1971-8993 WOS:000385961800043

Ris - Stuparu F.A., **Apostol D.A.**, Constantinescu D.M., Sandu M., Sorohan Șt., *Failure analysis of dissimilar single-lap joints*, Frattura ed Integrità Strutturale, Vol. 36, pp. 70-78; doi: 10.3221/IGF-ESIS.36.08, ISSN 1971-8993, 2016, ISSN: 1971-8993 WOS:000393169300008

Lucrari reviste BDI

Rio - Stuparu F.A., Constantinescu D.M., **Apostol D.A.**, Sandu M., Sorohan Șt., *Combined XFEM-cohesive finite element analyses of single-lap joints*, Romanian Journal of Technical Sciences - Applied Mechanics, Vol. 61, No. 1, pp. 41-55, ISSN: 0035-4074, 2016, IndexCopernicus, MathSciNet,

Rio - **Apostol D.A.**, Constantinescu D.M., Marsavina L., Linul E., *Particularities of the asymmetric four-point bending testing of polyurethane foams*, U.P.B. Sci. Bull., vol. 78, no. 2, pp. 107–119, 2016, Scopus

- Rio** - I. Cosmoiu, **D.A. Apostol**, D.M. Constantinescu, C.R. Picu, M. Sandu, *Advances on the Manufacturing Process of Nanocomposites with MWNT and Nanopowders*, Applied Mechanics and Materials, vol. 760, pp. 281–286, 2015 Index Copernicus
- Rio** - **D.A. Apostol**, D.M. Constantinescu, L. Marşavina, E. Linul, *Mixed-mode testing for an asymmetric four-point bending configuration of polyurethane foams*, Applied Mechanics and Materials, Vol. 760, pp. 239-244, doi: 10.4028/www.scientific.net/AMM.760.239, 2015, Index Copernicus
- Rio** - **D.A. Apostol**, D.M. Constantinescu, M. Sandu, A. Sandu, F. Stuparu, *Evaluation of shear debonding in double lap joints of sandwich type*, Applied Mechanics and Materials, Vol. 760, pp 293-298, doi: 10.4028/www.scientific.net/AMM.760.293, 2015 Index Copernicus
- Rio** - I. Cosmoiu, **D.A. Apostol**, C.R. Picu, D.M. Constantinescu, M. Sandu, *Manufacturing and testing of nanocomposites with carbon nanotubes and nanoparticles*, U.P.B. Sci. Bull., vol. 77, no. 7, pp. 107–119, 2015, ISSN 1454-2358, Scopus
- Rio** - Constantinescu D.M., Picu C.R., **Apostol D.A.**, Cosmoiu I., Sandu M., *Investigations on the behaviour of MWNT epoxy nanocomposites: static and toughness testing*, Buletinul Universitatii Petrol si Gaze Ploiesti, Seria Tehnica, vol. LXV, pp. 43-48, ISSN 1224-8495, 2013, Index Copernicus
- Rio** - **Apostol, D.A.**, Constantinescu, D.M., *Influence of speed of testing and temperature on the behaviour of polyurethane foams*, Revue Roumaine des Sciences Techniques - Serie de Mecanique Appliquee, vol. 57, nr. 1, pp. 27-61, ISSN 0035-4074, 2012, Index Copernicus
- Rio** - **Apostol, D.A.**, Constantinescu, D.M., *Influence of the speed of loading on the response of a rigid polyurethane foam, in compression testing*, U.P.B. Sci. Bull., Series D, Vol. 73, Iss. 3, pp. 119-134, ISSN 1454-2358, 2011, Scopus
- Rio** - Constantinescu, D.M., Sandu, M., Marsavina, L., Miron, M.C., Negru, R., **Apostol, D.A.**, *Re-evaluation of the strain concentration factor through elasto-plastic analyses*, Rev. Roum. Sci. Tech. – Méc. Appl., Tome 56, N° 1, pp. 35-62, ISSN 0035-4074, 2011, Index Copernicus
- Rio** - Constantinescu, D.M., Moldovan, P., Sillekens, W.H., Sandu, M., Bojin, D, Baciuc, F., **Apostol, D.A.**, Miron, M.C., *Static and fatigue properties of magnesium alloys used in automotive industry*, University of Pitesti, Scientific Buletin, Automotive Series, year XV, no. 19, vol. B, 2009, Index Copernicus

Lucrari conferințe ISI

- Vis** - Stuparu F.A., **Apostol D.A.**, Constantinescu D.M., Picu C.R., Sandu M., Sorohan Şt., *Cohesive and XFEM evaluation of adhesive failure for dissimilar single-lap joints*, 21st European Conference on Fracture, ECF21, 20-24 June 2016, Catania, Italy, Procedia Structural Integrity 2, pp. 316-325, 10.1016/j.prostr.2016.06.041, 2016, ISSN: 2452-3216 WOS:000387976800040
- Vis** - Cosmoiu, **D.A. Apostol**, R.C. Picu, D.M. Constantinescu, M. Sandu, St. Sorohan, *Influence of filler dispersion on the mechanical properties of nanocomposites*, Materials Today: Proceedings, 3, 953-958, 2016., ISSN: 2214-7853 WOS:000373068900009
- Vis** - Marsavina L, Constantinescu D.M., Linul E., Voiconi T., Apostol D.A., Sadowski T., *Evaluation of mixed mode fracture for PUR foams*, Procedia Materials Science 3, pp. 1342-1352, 2014, ISSN: 2211-8128 WOS:000398274600212
- Vis** - **Apostol D.A.**, Constantinescu D.M., Marsavina L., Linul E., *Analysis of deformation bands in polyurethane foams*, Proceedings of the 14th Symposium on Experimental Stress Analysis and Material Testing, Key Engineering Materials, vol. 601, pp. 250-253, 2014, ISSN: 1013-9826, WOS:000343792400058,
- Vis** - D.M. Constantinescu, M. Sandu, Eniko Volceanov, M.C. **Miron, D.A. Apostol**, *Strength response and failure analysis of ceramic alumina tiles*, Key Engineering Materials, ISSN 1013-9826, vols. 417-418, pp. 673-676, 2010, ISSN: 1013-9826, WOS:000279319200169
- Vis** - Constantinescu D.M., Sandu M., Marsavina, L., Negru, R., Matei, M.C., **Apostol, D.A.**, *Evaluation of interlaminar damage and crack propagation through digital image correlation method*, Key Engineering Materials, Trans Tech Publications, ISSN 1013-9826, Vol. 399, pp. 105-112, 2009, Scopus, Index Copernicus,
- Vi** - I. Cosmoiu, **D.A. Apostol**, C.R. Picu, D.M. constantinescu, M. Sandu, *Influence of filler dispersion on the mechanical properties of nanocomposites*, 32nd Danubia-Adria Symposium on Advances in Experimental Mechanics, 22-25 septembrie, Starý Smokovec, Slovakia, pp. 180-181, ISBN 978-80-554-1094-4, 2015
- Vi** - R.C. Picu, D.M. Constantinescu, **D.A. Apostol**, I. Cosmoiu, *Toughness enhancement in particulate epoxy nanocomposites*, 7th International Conference on Fracture of Polymers, Composites and Adhesives, Les Diablerets, Switzerland, 14-18 September, 2014
- Vi** - Sandu M., Sandu A., Vladulescu F., Constantinescu D.M., **Apostol D.A.**, *Mechanical behaviour of structural sandwich panels with a cellular grid core*, 16th International Conference on Experimental Mechanics, July 7-11, 2014, University of Cambridge, UK, 2014
- Vi** - Sorohan S., Sandu M., Constantinescu D.M., Sandu A., **Apostol D.A.**, *Static response of an anti-tetrachiral sandwich panel*, 30th Danubia-Adria Symposium on Advances in Experimental Mechanics, September 25-28, Primosten, Croatia, 2013
- Vi** - Picu C.R., Constantinescu D.M., Sandu M., **Apostol D.A.**, Cosmoiu I., *Toughness Enhancement in Nanocomposite Thermosets with Application to Carbon-Epoxy System*, 13th International Conference on Fracture, June 16–21, 2013, Beijing, China. Keynote lecture.
- Vi** - Constantinescu D.M., Sandu M, Sandu A.G., **Apostol D.A.**, *Evaluation of Shear Debonding between Foam Cores and Adherends in Double Symmetric Lap Joints*, 2nd International Conference on Adhesive Bonding, July 4-5, 2013, Porto, Portugal, 2013

Vi - Sorohan St., Sandu M., Constantinescu D.M., Sandu A., **Apostol D.A.**, *Static response of an anti-tetrachiral sandwich panel*, Danubia-Adria Symposium on Advances in Experimental Mechanics, September 25-28, Primosten, Croatia, pp. 37-38, Keynote lecture, ISBN 978-953-7539-17-7, 2013

Vi - Constantinescu D.M., Picu C.R., **Apostol D.A.**, *Evaluation of the fracture toughness of MWNT and GPL epoxy nanocomposites*, Proceedings of the 29th Danubia-Adria-Symposium on Advances in Experimental Mechanics, Belgrade, Serbia, 26-29 September, 2012

V. BREVETE DE INVENȚIE / INOVAȚII (B,A)

B -

A -

VI. CONTRACTE ȘI RAPOARTE ȘTIINȚIFICE (P,F)

Membru în echipa de cercetare:

Pi- Proiect european FP 6, cu tema: Magnesium Forged components for Structural Lightweight Transport Applications (MagForge), Contract COLL-CT-2006-030208

Pn - Contractul nr. 202/20.07.2006, CEEEX-M1-C3-3215, "Modelarea și simularea comportării la solicitări complexe a materialelor compozite cu aplicații în industria aeronautică ", acronim MOSCOM

Pn - Contractul nr. 255/11.09.2006, titlul "Platforma tehnologică integrată de inginerie electrochimică a suprafețelor pentru materiale avansate; aplicații în domeniul evaluării integrității și fiabilității structurilor ", acronim ELSURFSTRUCT

Pn - Contractul nr. 2-CEX06-10-81 / 26-07-2006 - CERES, cu titlul proiectului "Rețea integrată de monitorizare a integrității structurale a componentelor critice din instalațiile nucleare ", acronim RIMIS

Pn - Contract. nr. 81-008/15.09.2007, cu titlul proiectului „Structuri compozite complexe destinate protecției balistice a persoanelor și echipamentelor militare și civile, solicitate la impact cu viteze supersonice”, acronim PROTECTIMPACT, PN II, CNMP

Pn - Contractul nr. 82-097/01.10.2008, cu titlul proiectului „Blindaje compozite performante pentru protecție la amenințări multiple”, acronim PROTECTCOMB, PN II, CNMP

Pn - Contractul nr. 172/05.10.2011 cu titlul proiectului „Modelarea micro-mecanică a comportării la rupere și degradare a materialelor celulare ”, PN-II-ID-PCE-2011-3-0456, PNII, UEFISCDI

Pn - Contractul nr. 206/2012 cu titlul proiectului „Ridicarea performanțelor panourilor ușoare cu o nouă proiectare optimizată pentru structuri aeronautice avansate”, acronim HIPEAS, PNII, UEFISCDI

Pn - Contractul nr. 293/05.10.2011 cu titlul proiectului "Următoarea generație de materiale epoxi pentru aplicații structurale:nanocompozite cu rezistență și tenacitate ridicate", PN-II-ID-PCE-2011-3-0120,UEFISCDI

Pn - Contractul nr. 170/2012 cu titlul proiectului "Oțeluri microaliate cu nanoprecipitate de tenacitate ridicată", PN-II-PT-PCCA-2011-3, acronim ToughNanoMicrAl, UEFISCDI

Pi - "Functional Hierarchical Composites for Structural Applications", HieroComp, Proiect 1154, MERA.NET Joint Call 2013, (2015-prezent)

VII. COMUNICĂRI ȘTIINȚIFICE NEPUBLICATE (E)