

## PUBLICATIONS LIST

### A. Doctoral thesis

**Mircea Cristian Dudescu** (2001): *Study of flexible shells with application at metallic bellows*. Universitatea Tehnică din Cluj-Napoca. Adviser: Prof.dr.ing. Ioan Păstrav.

### B. Books and book chapters:

1. **Mircea Cristian Dudescu**, (2013): *Rezistența Materialelor. Noțiuni fundamentale. Solicitări simple*. Editura U.T.PRESS, Cluj-Napoca, ISBN 978-973-662-831-3, 320 p.
2. Pustan, M., Birleanu, C., **Dudescu C.**, Golinval, J.C. (2013): *Smart sensors and MEMS: Intelligent devices and microsystems for industrial applications*, **Woodhead Publishing Limited**, Cambridge, UK, ISBN 0-85709-502-1, Chapter 12 "Dynamical behavior of smart MEMS in industrial applications", pp. 349-365, DOI: [10.1533/9780857099297.2.349](https://doi.org/10.1533/9780857099297.2.349)
3. **Mircea Cristian Dudescu**, (2010): *Introducere în interferometria electronică granulară*. Editura **Risoprint**, Cluj-Napoca, ISBN 978-973-53-0291-7, 164 p.
4. Ioan Păstrav, **Mircea Cristian Dudescu** (2009): *Lucrări de laborator de metode optice de analiză a tensiunilor*. Editura U.T.Pres, Cluj-Napoca, ISBN 978-973-662-452-0, 92 p.
5. **Mircea Cristian Dudescu**, (2005): *Calculul de Rezistență al Tuburilor Ondulate*. Editura U.T.Press, Cluj-Napoca, ISBN 973-662-207-X, 160 pag. (tiraj 100 ex).
6. Mihail Hărdău, Marioara Șomotecan, **Mircea Cristian Dudescu** (2002): *Metoda Elementelor Finite, Îndrumător de lucrări, vol. I – Structuri formate din bare*. Editura U.T.Pres, ISBN 973-8335-30-2, 76 pag.
7. Augustin Crețu (coordonator), ș.a., **Mircea Cristian Dudescu**, ș.a. (2001): *Tensiuni, Stresses, Contraintes*. Editura Mediamira, Cluj-Napoca, ISBN 973-9358-89-6, 238 pag.

### C. Articles in scientific journals

#### C1. Articles published in databases of peer-reviewed scientific literature

1. Pustan, M., **Dudescu, C.**, Birleanu, C. (2015): *The effect of sensing area position on the mechanical response of mass - detecting cantilever sensor*. *Microsystems Technologies*, article in press, DOI: [10.1007/s00542-015-2536-1](https://doi.org/10.1007/s00542-015-2536-1)
2. Ilea, A., Cristea, A., **Dudescu, C.**, Hurubeanu, L., Vâjâean, C., Albu, S., Câmpian, R. (2015): *Lip Forces and Chewing Efficiency in Children with Peripheral Facial Paralysis*. *Neuropediatrics*, article in press, DOI: [10.1055/s-0035-1550146](https://doi.org/10.1055/s-0035-1550146)
3. Pop, S.I., **Dudescu, M.**, Bratu, D.C., Merie, V.V., Pacurar, M. (2015): *Effect of Esthetic Coating on the Load Deflection and Surface Characteristics of the NiTi Orthodontic Archwires*. *Revista de Chimie*, 66 (3), pp. 364-367.
4. Ilea, A., Butnaru, A., Sfrângeu, S., **Dudescu, M. C.**, Câmpian, R. S., Tombitaș, V. E., Albu, S. (2015): *The Use of Bone-Like Materials in Skull Base Traumatology*. *Key Engineering Materials*, Vol 638, pp. 274-279, DOI: [10.4028/www.scientific.net/KEM.638.274](https://doi.org/10.4028/www.scientific.net/KEM.638.274)
5. Baracu, A., Voicu, R., Müller, R., Avram, A., Pustan, M., Chiorean, R., Birleanu, C., **Dudescu, C.** (2015): *Design and fabrication of a MEMS chevron-type thermal actuator*. *AIP Conference Proceedings*, 1646, pp.25-30, DOI: [10.1063/1.4908578](https://doi.org/10.1063/1.4908578)
6. Miron-Borzan, C.S., **Dudescu, M.C.**, Khalid Abd Elghany, Ceclan, V., Berce P. (2015): *Analysis of Mechanical Properties of Selective Laser Sintered Polyamide Parts Obtained on Different Equipment*. *Materiale Plastice*, **52**(1), pp. 39-42.
7. Leordean, D., **Dudescu C.**, Marcu, T., Berce, P., Bâlc, N. (2015): *Aspects related to the application of the selective laser melting technology to customized Ti-6Al-7Nb implants*. *Rapid Prototyping Journal*, vol. 21 issue 1, pp. DOI: [10.1108/RPJ-11-2012-0107](https://doi.org/10.1108/RPJ-11-2012-0107)
8. Pustan, M., **Dudescu, C.**, Birleanu, C. (2015): *Nanomechanical and nanotribological characterization of a MEMS micromembrane supported by two folded hinges*. *Analog Integrated Circuits and Signal Processing*, 82 (3), pp. 627-635, DOI: [10.1007/s10470-014-0482-y](https://doi.org/10.1007/s10470-014-0482-y)

9. Pustan, M., **Dudescu, C.**, Birleanu, C. (2014): *Reliability Design Based on Experimental Investigations of Paddle MEMS Cantilevers Used in Mass Sensing Applications*. Sensor Letters, 12 (11), pp. 1600-1606(7), DOI: [10.1166/sl.2014.3371](https://doi.org/10.1166/sl.2014.3371)
10. **Dudescu, C.**, Botean, A., Hărdău, M., Bal, N. (2014): *Measurement of thermoplastics tensile properties using digital image correlation*, Key Engineering Materials, vol. 601 (2014) pp. 33-36, DOI:[10.4028/www.scientific.net/KEM.601.33](https://doi.org/10.4028/www.scientific.net/KEM.601.33).
11. Chiorean, R., **Dudescu, C.**, Pustan, M., Hărdău, M. (2014): *V-beam Thermal Actuator's Performance Analysis Using Digital Image Correlation*, Applied Mechanics and Materials Vol. 658 (2014) pp 173-176, DOI: [10.4028/www.scientific.net/AMM.658.173](https://doi.org/10.4028/www.scientific.net/AMM.658.173)
12. Takacs, I., **Dudescu, C.**, Hărdău, M., Botean, A. (2014): *Experimental Validation of a Finite Element Model of an Osteoporotic Human Femoral Bone Using Strain Gauge Measurement*, Applied Mechanics and Materials Vol. 658 (2014) pp 513-519, DOI: [10.4028/www.scientific.net/AMM.658.513](https://doi.org/10.4028/www.scientific.net/AMM.658.513)
13. Bere P., **Dudescu M.C.**, Balc N., Berce P., Iurian A.M., Nemes O. (2014): *Design and analysis of carbon/epoxy composite bicycle handlebar*, Materiale Plastice **51**(2), pp. 145-149.
14. Chiorean, R., **Dudescu, C.**, Pustan, M., Hărdău, M. (2014): *Micro-tweezers Based on V-Beam Thermal Actuator*, International Conference on Advancements of Medicine and Health Care through Technology; 5th – 7th June 2014, Cluj-Napoca, Romania, IFMBE Proceedings, vol. 44, pp.159-162, DOI: [10.1007/978-3-319-07653-9\\_32](https://doi.org/10.1007/978-3-319-07653-9_32).
15. Ilea, A., Butnaru, A., Sfrângeu, S.A., Hedeşiu, M., **Dudescu, C.M.**, Berce, P., Chezan, H., Hurubeanu, L., Trombitaş, V.E., Câmpian, R.S., Albu, S. (2014): *Role of Mastoid Pneumatization in Temporal Bone Fractures*, American Journal of Neuroradiology, DOI: [10.3174/ajnr.A3887](https://doi.org/10.3174/ajnr.A3887)
16. Pustan, M., Birleanu, C., Rusu, F., **Dudescu, C.**, Belcin, O. (2014): *Size effect on the microbridges quality factor tested in free air space*, 15<sup>th</sup> IEEE International Conference on Thermal, Mechanical and Multi-Physics Simulation and Experiments in Microelectronics and Microsystems (EuroSimE 2014), 7-9 April 2014 Gent, Belgium, p. 1/6 - 6/6, ISBN 978-1-4799-4791-1, DOI: [10.1109/EuroSimE.2013.6529890](https://doi.org/10.1109/EuroSimE.2013.6529890).
17. Chiorean, R., **Dudescu, C.**, Pustan, M., Hardau, M. (2014): *Deflection determination of V-beam thermal sensors using Digital Image Correlation*, Key Engineering Materials, vol. 601 (2014) pp. 41-44, DOI: [10.4028/www.scientific.net/KEM.601.41](https://doi.org/10.4028/www.scientific.net/KEM.601.41)
18. Cherecheş, A., **Dudescu, C.**, Lakatos, G., Vidican, I., Bejan, M. (2014): *State of stress determination in a water drinker by numerical and experimental methods*, Key Engineering Materials, vol. 601 (2014) pp. 45-49, DOI: [10.4028/www.scientific.net/KEM.601.45](https://doi.org/10.4028/www.scientific.net/KEM.601.45)
19. Chiorean, R., **Dudescu, C.**, Pustan, M., Hardau, M. (2014): *Analytical and Numerical Study on the Maximum Force Developed by a V-beam Thermal Actuator*, Procedia Technology, vol. 12, pp. 359-363, DOI: [10.1016/j.protcy.2013.12.499](https://doi.org/10.1016/j.protcy.2013.12.499)
20. Paşcalău, V., Popescu, V., Popescu, G., **Dudescu, M.C.**, Borodi, G., Dinescu, A., Moldovan, M. (2013): *Obtaining and Characterizing Alginate/k-Carrageenan Hydrogel Cross-Linked with Adipic Dihydrazide*, Advances in Materials Science and Engineering, vol. 2013, Article ID 380716, 12 pages, DOI: [10.1155/2013/380716](https://doi.org/10.1155/2013/380716)
21. **Dudescu, C.**, Botean, A., Hardau, M. (2013): *Thermal expansion coefficient determination of polymeric materials using digital image correlation*, **Materiale Plastice** **50** (1) pp. 55-59.
22. Pop, S.I., **Dudescu, M.**, Bratu, D.C., Pop, R.V., Păcurar M., Petrişor, M. (2013): *Influence of the Chemical Composition on the Mechanical Properties of Orthodontic Archwires*, Revista de Chimie, 64, Issue 7, pp. 771-775.
23. Pustan, M., Birleanu, C., **Dudescu, C.** (2013): *Simulation and experimental analysis of thermo-mechanical behavior of microresonators under dynamic loading*, Microsystems Technologies, vol. 19, Issue 6, pp. 915-922, DOI: [10.1007/s00542-012-1728-1](https://doi.org/10.1007/s00542-012-1728-1).
24. Pustan, M., **Dudescu, C.**, Birleanu, C., Rymuza, Z. (2013): *Nanomechanical studies and materials characterization of metal/polymer bilayer MEMS cantilevers*, International Journal of Materials Research, volume 12, pp. 1-7, DOI: [10.3139/146.110879](https://doi.org/10.3139/146.110879)
25. Pustan, M., **Dudescu, C.**, Birleanu, C. (2013): *The effect of sensing area position on the mechanical response of mass - detecting cantilever sensor*. Symposium on Design, Test, Integration and Packaging of MEMS/MOEMS (**DTIP 2013**), 16-18 April 2013 Barcelona, Spain, p. 173-179, ISBN: 978-2-35500-025-6, [IEEE Xplore](https://doi.org/10.1109/DTIP.2013.6529890).
26. Mager, V., Balc N., Leordean D., **Dudescu C.**, Fockele M. (2013): *Research on Producing Complex Metal Parts with Lattice Structure, by Selective Laser Melting*. Applied Mechanics and Materials, Vol. 371 (2013), pp. 280-284, Trans Tech Publications, Switzerland, DOI: [10.4028/www.scientific.net/AMM.371.280](https://doi.org/10.4028/www.scientific.net/AMM.371.280)

27. Bere, P., Nemeş O., **Dudescu, C.**, Berce, P., Sabău, E. (2013): *Design and Analysis of Carbon/Epoxy Composite Tubular Parts*. Advanced Engineering Forum Vols. 8-9 (2013) pp. 207-214, Trans Tech Publications, Switzerland, DOI:[10.4028/www.scientific.net/AEF.8-9.207](https://doi.org/10.4028/www.scientific.net/AEF.8-9.207)
28. Pustan, M., Birleanu, C., **Dudescu, C.**, Belcin, O. (2013): *Temperature Effect on Tribological and Mechanical Properties of MEMS*. 14<sup>th</sup> IEEE International Conference on Thermal, Mechanical and Multi-Physics Simulation and Experiments in Microelectronics and Microsystems (EuroSimE 2013), 15-17 April 2013 Warsaw, Poland, p. 1/6 - 6/6, ISBN 978-1-4673-6139-2, IEEE Catalog number CFP13566-CDR, DOI: [10.1109/EuroSimE.2013.6529890](https://doi.org/10.1109/EuroSimE.2013.6529890)
29. Bratu, D.C., Pop, S.I., Balan, R., **Dudescu, M.**, Petrescu, H.P., Popa, G. (2013): *Effect of Different Artificial Saliva on the Mechanical Properties of Orthodontic Elastomers Ligatures*. Materiale Plastice **50** (1), pp. 49-52.
30. **Dudescu, M.C.**, Stockmann, M., Naumann, J. (2012): *Optical measurement of the strain-stress response during unloading of metal sheets undergoing large plastic deformations*. In: 11th IMEKO TC15 Youth Symposium on Experimental Solid Mechanics, 30<sup>th</sup> of May 2012 – 2<sup>nd</sup> of June 2012, Brasov, Romania, ISBN **978-606-19-0078-7**, pp. 204-209. (Scopus).
31. Pustan, M., Birleanu, C., **Dudescu, C.** (2012): *Simulation and experimental analysis of thermo-mechanical behavior of microresonators under dynamic loading*. Symposium on Design, Test, Integration and Packaging of MEMS/MOEMS (DTIP 2012), 25-27 April 2012 Cannes, France, p. 87-92, ISBN: 978-2-35500-020-1, IEEE Xplore.
32. Pustan, M., Birleanu, C., **Dudescu, C.**, Belcin, O., (2012): *Mechanical and tribological characterizations for reliability design of micromembranes*. 13th IEEE International Conference on Thermal, Mechanical and Multi-Physics Simulation and Experiments in Microelectronics and Microsystems (EuroSimE), Portugal, p.1/6 - 6/6. DOI: [10.1109/ESimE.2012.6191802](https://doi.org/10.1109/ESimE.2012.6191802)
33. Pascalau, V., Popescu, V., Popescu, G.L., **Dudescu, M.C.**, Borodi, G., Dinescu, A., Perhaița, I., Paul, M. (2012): *The alginate/k-carrageenan ratio's influence on the properties of the cross-linked composite films*. Journal of Alloys and Compounds, Vol. 536, Suppl. 1, pag. S418-S423, DOI [10.1016/j.jallcom.2011.12.026](https://doi.org/10.1016/j.jallcom.2011.12.026).
34. **Dudescu, C.** (2011): *Measurement of materials proprieties by electronic speckle pattern interferometry*. In: 10th IMEKO TC15 Youth Symposium on Experimental Solid Mechanics, 25-28 May 2011, Chemnitz, Germany (*Keynote lecture*) ISBN 978-3-941003-34-7, pp.26-27. (Scopus).
35. **Dudescu, M.**, Mândru, D. (2011): *Analysis of a Dexterous Instrument for Minimally Invasive Procedures, Based on Bellows Actuators*. In: International conference on advancements of medicine and health care through technology, Cluj-Napoca, Romania. IFMBE Proceedings, 2011, vol. 36, Part 2, pp.176-179, DOI: [10.1007/978-3-642-22586-4\\_38](https://doi.org/10.1007/978-3-642-22586-4_38).
36. **Dudescu, C.**, Naumann, J., Stockmann, M. and Steger H. (2011): *Investigation of Non linear Springback for High Strength Steel Sheets by ESPI*. STRAIN - International Journal of Experimental Mechanics, Blackwell Publishing, UK, Vol. 47, Issue Suppl.2, pp. 8-18, DOI: [10.1111/j.1475-1305.2009.00729.x](https://doi.org/10.1111/j.1475-1305.2009.00729.x).
37. **Dudescu, M.**, Naumann, J., Stockmann, M., Nebel, S., (2006): *Characterisation of Thermal Expansion Coefficient of Anisotropic Materials by ESPI*. STRAIN - International Journal of Experimental Mechanics, Blackwell Publishing, UK, Vol. 42, Issue 3, August 2006, pp. 197-206, DOI: [10.1111/j.1475-1305.2006.00271.x](https://doi.org/10.1111/j.1475-1305.2006.00271.x).
38. **Dudescu, M.**, Şomotecan, M., Hărdău, M. (2009): *Aspects related direct application of strain gages on wood*. Annals of DAAAM for 2009 & Proceedings of 20th DAAAM International Symposium "Intelligent Manufacturing & Automation: Theory, Practice & Education", Vienna, Austria, 25-28<sup>th</sup> November 2009, pp. 40-42, ISBN 978-3-901509-70-4. (WoS)
39. **Dudescu, M.**, Botean, A., Hărdău, M. (2009): *Application of digital image correlation for measuring e-modulus of wood beam*. Annals of DAAAM for 2009 & Proceedings of 20th DAAAM International Symposium "Intelligent Manufacturing & Automation: Theory, Practice & Education", Vienna, Austria, 25-28<sup>th</sup> November 2009, pp.42-44, ISBN 978-3-901509-70-4. (WoS)
40. **Dudescu, M.**, Păstrav, I., Şomotecan, M. (2008): *Aspects related application of the electrical strain gauges on wood*. 25<sup>th</sup> Danubia-Adria Symposium on Advances in Experimental Mechanics, Ceske Budejovice, CZECH REPUBLIC, Sep. 24-27, pp. 59-60. (WoS)

## C2. Articles published in journals tracked by CNCSIS

1. Nagy E.M., Cota C., **Dudescu C.**, Fehete-Tutunaru L., Cioica N. (2014): *The influence of mischantus fiber insertion on the mechanical properties of composite materials based on starch obtained by*

- thermoforming*. Annals of the University of Craiova - Agriculture, Montanology, Cadastre Series, vol. 44 (2), pp.14—143. ([Google Scholar](#))
2. Pustan, M., Birleanu, C., **Dudescu, C.**, Belcin, O., Golinval J-C. (2012): *Size effect on the dynamical behaviour of electrostatically actuated MEMS resonators*, Acta Technica Napocensis, Series: Applied Mathematics and Mechanics, vol. 55, pp. 599-605, ISSN 1221 – 5872, <http://atna-mam.utcluj.ro>
  3. Birleanu, C., Pustan, M., **Dudescu, C.**, Belcin, O., Rymuza, Z. (2012): *Nanotribological Investigations on Adesion Effect Applied to MEMS Materials*, vol. 55, pp. 671-676, ISSN 1221–5872, <http://atna-mam.utcluj.ro>
  4. Simion, M., Botean, A., **Dudescu, M.** (2010): *Experimental studies of the normal stresses for an equal strength beam and a flanged beam*, Acta Technica Napocensis, Series: Applied Mathematics and Mechanics, nr. 53, pp. 185-189, ISSN 1221 – 5872, <http://atna-mam.utcluj.ro>
  5. **Dudescu, M.**, Somotecan, M., Botean, A. (2010): *Direct application of strain gauges on wood*, Acta Technica Napocensis, Series: Applied Mathematics and Mechanics, nr. 53, pp. 179-185, ISSN 1221 – 5872, <http://atna-mam.utcluj.ro>
  6. Bodnari, I., **Dudescu, M.**, (2009): *Deflection analysis of square plates by 3D digital image correlation*, Acta Mechanica Anul I, nr.1, pp. 95-98, Editura U.T.Press, Cluj-Napoca 2009, ISSN 2066-9577.
  7. **Dudescu, M. C.**, (2008): *Analysis of the properties of strain gauges measuring point on wood*. Messtechnische Briefe, nr. 2/2008, pp. 2-15, Editată de HBM GmbH, Germania, ISSN 1614-6719.
  8. **Dudescu, M.**, Botean, A.I. (2007): *Deformations measurement using digital image correlation principle*. Acta Technica Napocensis, nr. 50/2007, pp. 21-24, Editura U.T.Press Cluj-Napoca, ISSN 1224-9106.
  9. **Dudescu, M.**, Hărdău, M., (2007): *Strain-stress analysis by Electronic Speckle Pattern Interferometry*. Acta Technica Napocensis, nr. 50/2007, pp. 17-20, Editura U.T.Press Cluj-Napoca, ISSN 1224-9106.
  10. **Dudescu, M.**, (2006): *MATLAB Scientific Toolbox for Full-field Strain and Stress Computation*. Acta Universitatis Cibiniensis a Universității Lucian Blaga din Sibiu, vol.54, pag. 31-36, ISSN 1583-7149.
  11. **Dudescu, M.**, (2005): *Metode moderne de calcul numeric și experimental al elementelor elastice de tip membrană*. Revista de Politică Științei și Științometrie - Număr Special 2005, ISSN 1582-1218, (raport cercetare).
  12. **Dudescu, M.**, (2004): *Matlab Scientific Toolbox for Strain-Stress Analysis*. Acta Technica Napocensis, nr. 47/2004, pag. 31-40, Editura U.T.Press Cluj-Napoca, ISSN 1224-9106.
  13. Păstrav, I., Badea, C., **Dudescu, M.**, (2003): *Study by shadow-Moiré of the prismatic bars subjected to torsion*. Acta Technica Napocensis, nr. 46/2003, pag. 47-50, Editura U.T.Press Cluj-Napoca, ISSN 1221-5872;
  14. **Dudescu, M.**, Etemeyer A., (2002): *Analiza tridimensională prin interferometrie Speckle*. Buletinul Asociației Române de Tensometrie (ARTENS), nr. 8/2002.
  15. **Dudescu, M.**, (1999): *Stress analysis in bellows subjected to axial loading*. Acta Technica Napocensis, nr. 42/1999, pag. 167-172, Editura U.T.Pres Cluj-Napoca, ISSN 1221-5872;
  16. Bejan, M., **Dudescu M.**, (1999): *Unele considerații privind solicitările statice ale preselor hidraulice*. Revista "Prelucrări la cald" nr. 13/1999, Editura INTEC București, pag. 68-77, ISSN 1224-425x.
  17. Bodea Sanda, Hărdău, M., **Dudescu, M.**, (1998): *The Analysis of Variation of the Stress Concentration Factor for Turbo-compressor Rotary Elements*. Acta Technica Napocensis, nr. 41/1998, pp. 114-119, Editura U.T.Press Cluj-Napoca, ISSN 1221-5872.
  18. **Dudescu M.**, Bodea S., Hărdău, M., (1998): *Studies concerning variations of stress concentration factor in fretage joints between pieces with longitudinal asymmetry*. Acta Technica Napocensis, nr. 41/1998, pp. 107-114, Editura U.T.Pres Cluj-Napoca, ISSN 1221-5872;

## D. Articles presented in conferences

### D1. Articles presented in international conferences

1. Baracu, A., Voicu, R., Müller, R., Avram, A., Pustan, M., Chiorean, R., Birleanu, C. and **Dudescu, C.** (2015): *Design and fabrication of a MEMS chevron-type thermal actuator*, AIP Conference Proceedings, 1646, 25-30, DOI: [10.1063/1.4908578](https://doi.org/10.1063/1.4908578)
2. Ilea A., Butnaru, A., Sfrângeu S., **Dudescu, M.C.**, Câmpian, R.S., Trombitaș, V., Albu, S. (2014): *The use of bone-like materials in skull base traumatology*. In: 6<sup>th</sup> International Conference "Biomaterials,

- Tissue Engineering & Medical Devices” BiomMedD’2014. 17th-20th September 2014, Constanta, Romania, pp.89-90, ISSN 2069-0193, ISSN-L 2069-0193.
3. Ilea A., Cristea A., **Dudescu M.C.**, Crişan L., Vâjâean C., Albu S., Câmpian R.S. (2014): *Lip Forces and Chewing Efficiency in Facial Paralysis in Children*. In: **IADR** General Session and Exhibition, June 25-28, 2014, Cape-Town, South Africa.
  4. Pustan M., **Dudescu C.**, Birleanu C. (2014): *Nanomechanical and nanotribological characterization of MEMS micromembrane supported by folded hinges*. In: Symposium on Design, Test, Integration and Packaging of MEMS/MOEMS (**DTIP 2014**), 2-4 April 2014, Cannes Côte d’Azur, France.
  5. Pustan M., Birleanu C., **Dudescu C.** (2013): *Micromembranes supported by serial – parallel connected hinges*. In: 6<sup>th</sup> ECCOMAS Thematic Conference on Smart Structures and Materials (SMART2013) Torino, Italy, 24-26 June 2013, pp.1-8 ([Google Scholar](#)).
  6. Pustan M., **Dudescu C.**, Birleanu C. (2013): *Measurement of energy loss coefficient of electrostatically actuated MEMS resonators*. In: 4<sup>th</sup> International Conference on Integrity, Reliability & Failure **IRF2013**, Funchal, 23-27 June 2013, pp. 305-309.
  7. Pustan M., Birleanu C., **Dudescu C.**, Calin L. (2013): *The influence of temperature on mechanical and tribological properties of dental materials*. In: 4<sup>th</sup> International Conference on Integrity, Reliability & Failure **IRF2013**, Funchal, 23-27 June 2013, pp. 473-475.
  8. Pustan M., Birleanu C., **Dudescu C.**, Belcin O. (2013): *Adhesion, Friction and Wear Measurement of Dental Materials using Atomic Force Microscope*. In: 6<sup>th</sup> ConsEuro 2013, 9<sup>th</sup>-11<sup>th</sup> of May, Paris.
  9. Popescu V., Paşcalău V., Popescu G.L., **Dudescu M.C.**, Borodi G., Dinescu A. (2012): *ZnO/alginate/k-carrageenan hydrogel composites for biomedical and/or cosmetic applications*. In: Polymeric and Self-assembled Hydrogels, London 4<sup>th</sup>-5<sup>th</sup> September 2012, p.36. (poster)
  10. Paşcalău V., Popescu V., Popescu G.L., **Dudescu M.C.**, Borodi G., Dinescu A. (2012): *Hydrogels of oxidized alginate/k-carrageenan chemical cross-linked for biomedical applications*. In: Polymeric and Self-assembled Hydrogels, London 4<sup>th</sup>-5<sup>th</sup> September 2012, p.60. (poster)
  11. **Dudescu, M.** (2010): *Optical methods in experimental mechanics*. In: Humboldt-Kolleg Cluj 2010, Förderung der Nachhaltigen Entwicklung im Donauraum durch Kulturelle und Wissenschaftliche Zusammenarbeit, 23-26 Mai, Cluj-Napoca, Romania, pp. 316-322, ISBN 978-97-713-276-5 (oral presentation).
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