

Europass Curriculum Vitae



Personal information

First name(s) / Surname(s) **Munteanu, Ligia Adriana**
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Fax(es) 0213126736
E-mail ligia_munteanu@hotmail.com
Nationality romanian
Date of birth 25.08.1967
Gender female

Occupational field **Scientific Research - Ph. D. Mathematics, Senior Researcher**

Work experience

Dates	1992-1993
Occupation or position held	Researcher
Main activities and responsibilities	Mechanics. Deformable media.
Name and address of employer	Institute of Solid Mechanics, Romanian Academy
Dates	1993-2000
Occupation or position held	Researcher
Main activities and responsibilities	Wave propagation. Materials with microstructure. Optimization. Contact/impact characterization.
Name and address of employer	Institute of Solid Mechanics, Romanian Academy
Dates	2000-2002
Occupation or position held	Senior Researcher (CS III)
Main activities and responsibilities	Composites, structural media. Soliton theory. Nanomechanics. Control of vibrations. Damping
Name and address of employer	Institute of Solid Mechanics, Romanian Academy
Dates	2002-2007
Occupation or position held	Senior Researcher (CS II)
Main activities and responsibilities	Smart materials. Sonic composites. Nanomechanics. Dynamics. Control of vibrations, Waves, Robotics, Contact/impact detection. Indentation.
Name and address of employer	Institute of Solid Mechanics, Romanian Academy
Dates	2007-present
Occupation or position held	Senior Researcher (CS I)
Main activities and responsibilities	Composite materials. Carbon nanotubes. Acoustics. Control, Waves, Nanoindentation. Nanocomposites, Optimization. Contact/ impact modeling and control
Name and address of employer	Institute of Solid Mechanics, Romanian Academy (www.imsar.ro)

Habilitation 2015. Title of habilitation thesis: *New analytical cnoidal approach with applications to nonlinear dynamical systems*- Technical Sciences, Mechanical Engineering, School of Advanced Studies of the Romanian Academy- SCOSAAR

Education and training

Dates 1986-1992

Title of qualification awarded MSc in Mathematics

Name and type of organisation providing education and training University of Bucharest, Faculty of Mathematics, Department of Solid Mechanics, Bucharest, Romania

Dates 1992-1993

Title of qualification awarded Advanced Studies in Mechanics (DEA)

Name and type of organisation providing education and training University of Poitiers, Laboratory of Theoretical Mechanics, Poitiers, France

Dates 1994-1999

Title of qualification awarded PhD in Mathematics

Name and type of organisation providing education and training University of Bucharest, Faculty of Mathematics, Department of Solid Mechanics, Bucharest, Romania

Personal skills and competences

Mother tongue(s) romanian

Other language(s) English, French

Self-assessment

European level (*)

English

French

Understanding		Speaking		Writing	
Listening	Reading	Spoken interaction	Spoken production		
C2	C2	C2	C1	C1	
C2	C2	C2	C1	C1	

(*) [Common European Framework of Reference for Languages](#)

Publications

Short description:

Dissertations: 4 – MSc Thesis (University of Bucharest, Faculty of Mathematics); DEA Thesis (University of Poitiers, Laboratory of Theoretical Mechanics, Poitiers, France); PhD Thesis (University of Bucharest, Faculty of Mathematics), Habilitation SCOSAAR.

Books: 6– 1 monograph (Kluwer Academic Publishers, Dordrecht, Boston (Springer Netherlands; new edition New York: Springer, 2005); 5 monographs (Publishing House of the Romanian Academy).

Co-edited Books: 4 (Publishing House of the Romanian Academy).

Chapters in Books: 17 – 1 (Springer-Verlag); 1 (Bentham Science Publishers Ltd); 16 (Publishing House of the Romanian Academy).

ISI Journals: 37 (Smart Materials and Structures, New Journal of Physics; Mechanical Systems and Signal Processing; European Journal of Mechanics-A/Solids; Transportation Research part C: Emerging Technologies, New Journal of Physics; CMC: Computers, Materials & Continua; Mechanics Research Communications; CMES: Computer Modeling in Engineering& Sciences; Mechanics Research Communications RIS 0.86486; International Journal of Heat and Mass Transfer; Physiological Measurement, Institute of Physics Publishing; Inverse Problems, Institute of Physics Publishing; Acoustics Journal of the Acoustical Society of America; Proceedings of the Romanian Academy, Series A: Mathematics, Physics, Technical Sciences, Information Science; Proceedings of the.Balkan Society of Geometers, Geometry Balkan Press, BSG).

Other papers: 123 (World Journal of Mechanics; Computer and Experimental Simulations in Engineering and Science-CESES; Transactions on Mathematics; Acta Tehnica Napocensis, series Mechanical Engineering. Materials Science; International Review of Mechanical Engineering-IREME; AMSE: Modeling, Measurement and Control, Series B: Mechanics and Thermics, PVP: Natural Hazard Phenomena and Mitigation; Anales of the University Eftimie Murgu Reșița, Theta Series in Advanced Mathematics; Scientific Bulletin of the University of Pitesti, series Applied Mechanics, Proceedings of the Institute of Solid Mechanics).

Conference Proceedings:85

Miscellanea	<p>Supervisor in Engineering Sciences, Mechanical Engineering from 2015 Hirsch index 8 according to Web of Science Total number of citations, according to Web of Science: 123. Address of the researcherid.com profile: http://www.researcherid.com/rid/A-7563-2008 ResearcherID: A-7563-2008 http://www.cercetatori-romani.ro/on-line_intro_CEEEX.php https://orcid.org/0000-0002-5425-874X</p> <p>Invited Professor: 2 - University of Luxemburg (2005) and University of New South Wales, Sydney (2002). A review of the book [3], mentioned in the list of publications was published in SIAM REVIEW, 48, no. 4, (2006): 815-816 (author C. Roger from the University of New South Wales).</p> <p>Referee for Journals: Journal of Acoustical Society of America 2000-present; Mechanics Research Communication 2007-present; CMES: Computer Modeling Engineering&Sciences, CMC: Computers, Materials & Continua 2008-present; Physiological Measurement 2002-present; Inverse Problems 2002-present; Computer Methods in Applied Mechanics and Engineering 2005-present; International Journal for Numerical Methods in Engineering 2008-present; Computers and Mathematics with Applications 2008-present, Soft Nanoscience Letters (SNL) Scientific Research Publishing 2010-present; World Journal of Mechanics (WJM), Scientific Research Publishing 2010-present.</p> <p>Biography included in the 2010 Edition of <i>Dictionary of the personalities from Romania</i>. Co-editor of 4 books in Publishing House of the Romanian Academy.</p>
Awards	<p>Prize Henri Coandă - Romanian Academy (2002) for the book <i>Introduction to Soliton Theory. Applications to Mechanics</i>, Publishing House of the Romanian Academy (in Romanian).</p> <p>Associate Professor in Mathematics, Technical University of Civil Engineering 2000-present.</p>
Patent	<p>Patent Number A/00145 : Procedure and 3D printer for making items containing networks of composite materials, Inventors: <u>Brişan Cornel</u>, <u>Bara Mircea</u>, <u>Munteanu Ligia</u>, <u>Chiroiu Veturia</u>, 26 feb. 2015.</p>
Managerial Experience	See Annex 1. Managerial Experience
Visibility of Scientific Contributions	See Annex 2. Visibility of Scientific Contributions
Driving licence	yes

Managerial Experience

National Projects as a Principal Investigator

Project	Period
1. Project 6109/2000 ANSTI, <i>Simulation code for dynamical behavior of the human cardio-vascular system.</i>	2000
2. Projects 33517/2002 CNCSIS, code 49/2003 and 34395/2003 <i>Solitonic behavior of the nonlinear mesoscopic materials.</i>	2002-2003
3. Project 27664/2005 CNCSIS, code 160/2005 <i>Architecture of new nanocomposites with tailored properties of strength and damping.</i>	2005-2007
4. Project PN2 Idei 106/2007, code ID_247/2007, <i>Knowledge-based characterization of damping capacity of nanocomposites with auxetic materials and carbon nanotubes.</i>	2007-2010
5. Project PN-II-PT-PCCA-2011-3.1-0190, Contract 149/2012, <i>Reconfigurable Haptic Interfaces used in Dynamic Contact Reproduction -Theoretical and Experimental Developments, manager dr. hab. Ligia Munteanu, partener Technical University from Cluj-Napoca, prof.dr.ing. Cornel Brisan.</i>	2012-2016
6. Project PNII-ID-PCE-2012-4-0023, Contract 3/2013, <i>Local resonant sonic composites with applications in mechanics, manager dr.hab. Ligia Munteanu</i>	2013-2016

Investigator (Team Member): 12 (4 International and 8 National Projects)

Program/Project	Period
1. Project Copernicus CIPA-CT94-0132, <i>Development of Mathematical Modelling and Computer Simulation Techniques for the Ultrasonic Characterization of Structural Materials</i> , European Community – Politecnico di Torino, Dipartimento di Fisica.	1995-1998
2. Project GAR 4024/1998 Romanian Academy, code 8/1998, <i>Wavelets analysis in modelling of the supermodulus effect in modulated metallic foils.</i>	1998
3. Project MCT 4105 GR/1998, <i>Inverse strategies in composites modelling for obtaining new</i>	1998-1999

<i>materials with desired properties.</i>	
4. Project ANSTI 5208/1999, <i>Optimal configuration of smart structures with applications in aeronautics and machine tools.</i>	1999
5. Project 6109/2000, ANSTI, <i>Fracture processes in laminated composites with adhesive bonding.</i>	2000
6. Project NATO 2000–2002, PST.CLG. 976864/2000, <i>Modeling of Nonlinear Mesoscopic Elastic Materials.</i>	2000-2002
7. Projects 99/2003 and 95/2004 Romanian Academy, code 4/2003, <i>Shape memory alloys with applications to control of vibrations.</i>	2003-2004
8. Project 40197/2003, CNCSIS, A1, code_CNCSIS 152/2003, <i>On the intelligent control of damping in nanostructures and nanostructured materials with application in mechanics.</i>	2003-2005
9. Project 2657/2001, Svenska Institutet, Stockholm, <i>Active and passive damping with applications in manufacturing. Theory.</i>	2001-2004
10. Project 01834/2004, Svenska Institutet, Stockholm, <i>Active and passive damping with applications in manufacturing. Applications.</i>	2004-2006
11. Project GAR 95/2005-2006, code 3/2005 Romanian Academy, <i>Vibrations of carbon nanotubes with single walls subjected to axial forces, transverse forces and bending moments on elastic medium, with applications to super-strength nanostructured materials.</i>	2005-2006
12. Project CEEEX-partner, X2C32/2006, code MEC 5632, <i>Mechanical system for coupling of power electrical and thermal sources for ecological autovehicles with hybrid propulsion.</i>	2006-2008

Visibility of Scientific Contributions

(a) Fundraising by Research Projects :

- a) Co-Investigator (i.e. Team Member) of the Project Copernicus CIPA–CT94–0132. Title: *Development of Mathematical Modelling and Computer Simulation Techniques for the Ultrasonic Characterization of Structural Materials*. Funding Agency: European Community – Politecnico di Torino, Dipartimento di Fisica, Italy (1995-1998);
- b) Co-Principal Investigator (i.e. Project Co-Manager) of the Project NATO 2000–2002, PST.CLG. 976864/2000. Title: *Modelling of Nonlinear Mesoscopic Elastic Materials*. Funding Agency: The Science for Peace and Security (SPS) (2000-2002);
- c) Co-Investigator (i.e. Team Member) of the Project 2657/2001, Svenska Institutet, Stockholm. Title: *Active and passive damping with applications in manufacturing. Theory*. Funding Agency: Svenska Institutet, Stockholm (2001-2004);
- d) Co-Investigator (i.e. Team Member) of the Project 01834/2004, Svenska Institutet, Stockholm. Title: *Active and passive damping with applications in manufacturing. Applications*. Funding Agency: Svenska Institutet, Stockholm (2004-2006). We add to these the organizing and running two workshops (Tri Studne Czech Republic (1997), Galanesti (1998)) as Co-Investigator of the Project Copernicus CIPA–CT94–0132

(b) Talks to the following universities:

2010-2015 every year Politecnico di Torino, Dipartimento di Fisica; 2016 Technical University of Braunschweig, 2015 University from Lecce, Italy, 2014 Friedrich-Alexander Universität (FAU) Erlangen-Nürnberg, 2012 Technische Universität Darmstadt; 2002 University of New South Wales, Sydney. A review of the book [4], mentioned in the list of publications was published in SIAM REVIEW, 48, no. 4, (2006): 815-816 (author C. Roger from the University of New South Wales); 2000-2010 (every year) Polytechnic University of Turin; 2005 University of Luxembourg; 2008 ZARM University of Bremen; 2009 Gdansk University of Technology, 2001 University of Roma La Sapienza and Istituto di Acustica O.M. Corbino, Roma; 2010 Karlsruhe Institut für Technologie; 2011 Graz University of Technology; 1995 Technische Universität Hamburg-Harburg; . Biography included in the 2010 Edition of *Dictionary of the personalities from Romania*.

(d). **Memberships of Professional Organisation:** Gesellschaft fuer Angewandte Mathematik und Mechanik (GAMM); European Mechanics Society (EUROMECH); Society of the Scientific Research Publishing Paseo Segovia, Irvine; European Society of Biomechanics (ESB); Romanian Society of Industrial and Applied Mathematics (ROMAI); New York Academy of Sciences. **Scientific Consultant-** Naval Research Lab. 2003-2004 (with Prof. P.P.Delsanto, Politecnico di Torino).

Relevant publications in the last years

Books and chapters

1. L. Munteanu, St.Donescu, 2004. *Introduction to Soliton Theory. Applications to Mechanics*, Book Series Fundamental Theories of Physics, vol.143, Kluwer Academic Publishers, Dordrecht, Boston (Springer Netherlands) 308 pages (new edition New York: Springer, 2005).
2. L. Munteanu, 2012. *Nanocomposites*, Editura Academiei, 330 pag.
3. N.D.Stănescu, L. Munteanu, V.Chiroiu, N.Pandrea, 2010. *Sisteme dinamice. Teorie și aplicații*, vol.2, Editura Academiei, 500 pag.
4. N.D.Stănescu, L. Munteanu, V. Chiroiu, N. Pandrea, 2007. *Sisteme dinamice. Teorie și aplicații*, vol.1, Editura Academiei, 489 pag.
5. V.Chiroiu, P.Stiucă, L. Munteanu, St.Donescu, 2005. *Introducere în nanomecanică*, Editura Academiei, 300 pag.
6. L. Munteanu, Șt.Donescu, 2002. *Introducere în teoria solitonilor. Aplicații în mecanică*, Editura Academiei, 330 pag.
7. *Inverse Problems and Computational Mechanics*, 2011. vol.1, Editura Academiei (eds: L. Marin, L. Munteanu, V.Chiroiu).
8. *Research Trends in Mechanics*, 2010. vol.4, Editura Academiei (eds. L. Munteanu, V. Chiroiu, T.Sireteanu).
9. *Research Trends in Mechanics*, 2009. vol.3, Editura Academiei (eds. D. Popa, V. Chiroiu, L. Munteanu).
1. L.Munteanu, P.P.Delsanto, M.Poenariu, 2012. *On reconstructions from boundary measurements*, Inverse Problems and Computational Mechanics, vol.1, 259-274, Editura Academiei (eds. L.Marin, L. Munteanu, V.Chiroiu).

2. I.Girip, 2012, L. Munteanu, A. Gliozzi, *Inverse problems in the hysteresis modeling*, Inverse Problems and Computational Mechanics, vol.1, 125-146, Editura Academiei (eds. L.Marin, L.Munteanu, V.Chiroiu).
3. V.Chiroiu, L. Munteanu, V.P.Paun, 2010. *On the paddle resonator*. Series in Micro and Nanoengineering, Nanostructuring and Nanocharacterization, vol.16, 83-97, Editura Academiei (eds. M.Zaharescu, M.Ciurea, I.Kleps, D.Dascalu).
4. L. Munteanu, V.Chiroiu, P.P.Teodorescu, 2010. *Nanobeams with damping elements*, Series in Micro and Nanoengineering, Nanostructuring and Nanocharacterization, vol.16, 241-256, Editura Academiei (eds. M.Zaharescu, M.Ciurea, I.Kleps, D.Dascalu).
5. M.Beldiman, L. Munteanu, M.Poenariu, 2010. *On the multifunctional nanofoils based on carbon nanotubes and auxetic foams*, Research Trends in Mechanics, vol.4, 9-24, Editura Academiei (eds. L. Munteanu, V.Chiroiu, T.Sireteanu).
6. L. Munteanu, P.P.Delsanto, A.Gliozzi, 2010. *On the phenomenological universality with applications to mechanics*, Research Trends in Mechanics, vol.4, 205-220, Editura Academiei (eds. L. Munteanu, V.Chiroiu, T.Sireteanu).
7. L. Munteanu, D. Dumitriu, Șt. Donescu, V.Chiroiu, 2009. *On the complexity of the auxetic systems*, Proc.of the European Computing Conference, Lecture Notes in Electrical Engineering nr.28, vol.2, 1543-1549, Springer-Verlag (eds. N.Mastorakis, V.Mladenov).
8. V.Chiroiu, L. Munteanu, V.P.Paun, P.P.Teodorescu, 2009. *On the bending and torsion of carbon nanotubes ropes* New Applications of Micro-and Nanotechnologies, Series of Micro and Nanoengineering,vol.14, 26-44, Editura Academiei (eds. M.Zaharescu, M.Ciurea, I.Kleps, D.Dascalu).
9. Șt.Donescu, L. Munteanu, P.P.Delsanto,V.Mosnegutu, 2009. *On the advanced auxetic composites*, Research Trends in Mechanics, 3, 78-93, Editura Academiei.
10. L. Munteanu, Șt.Donescu, P.P.Delsanto, D.Dumitriu, V.Mosnegutu, 2008. *On the characterization of auxetic materials*, Research Trends in Mechanics, vol.2, 205-234, Editura Academiei (eds. D.Popa, V.Chiroiu, I.Toma).
11. L. Munteanu, A.M.Mitu, Șt.Donescu, P.Stiucă, 2007. *On the micromorphic theory of motion of blood in large and small vessels*, Research Trends in Mechanics, vol.1, 140-172, Editura Academiei (eds. D.Popa, V.Chiroiu, I.Toma).
12. V.Chiroiu, L. Munteanu, P.Știucă, 2005. *On the modeling of nanostructured materials*, Topics in Applied Mechanics, vol.3, 31-56, Editura Academiei, (eds. T.Sireteanu. V.Chiroiu).
13. Șt.Donescu, L.Munteanu, 2004. *The effect of damping on the stability of dynamical systems*, Topics in Applied Mechanics, vol.2, 85-117, Editura Academiei (eds. T.Sireteanu, V.Chiroiu).
14. L. Munteanu, 2003. *Statics and dynamics of the thin elastic rod*, Topics in Applied Mechanics, vol.1, 267-300, Editura Academiei (eds. T.Sireteanu. V.Chiroiu).

Papers ISI

1. V. Chiroiu, C. Brișan, D. Dumitriu, L. Munteanu, A sonification algorithm for developing the off-road models for driving simulators, Mechanical Systems and Signal Processing, vol. 98, January 2018, 310-323, 2018.
2. V.Chiroiu, L. Munteanu, D. Dumitriu, C.Rugina, C.Brisan, On the sonic films with defects, Proceedings of the Romanian Academy, series A, series A, 2017, vol.18, nr 4, 378-385, 2017.
3. L. Munteanu, V. Chiroiu, C. Brișan, D. Dumitriu, T. Sireteanu, S. Petre, *On the 3D normal tire/off-road vibro-contact problem with friction*, Mechanical Systems and Signal Processing, 54-55, pp.377-393, 2015.
4. V. Chiroiu, M.F. Ionescu, T. Sireteanu, R. Ioan, L. Munteanu, *On intrinsic time measure in the modeling of cyclic behavior of a Nitinol cubic block*, Smart Materials and Structures, ISSN: 0964-1726, 2015.
5. L. Munteanu, V. Chiroiu, Șt. Donescu, C. Brișan, *A new class of sonic composites*, Journal of Applied Physics, 115, 104904, 2014.
6. L. Munteanu, C. Brișan, V. Chiroiu, D. Dumitriu, R. Ioan, *Chaos-hyperchaos transition in a class of models governed by Sommerfeld effect*, Nonlinear Dynamics, 78(3) 1877-1889, 2014.
7. L. Munteanu, V.Chiroiu, V. Serban, *From geometric transformations to auxetic materials*, CMC: Computers, Materials & Continua, vol.42, nr.3, pp.175-203, ISSN 1546-2218, 2014.
8. V. Chiroiu, C. Brișan, M.A. Popescu, I. Girip, L. Munteanu, *On the sonic composites without/with defects*, Journal of Applied Physics, vol. 114 (16), pp. 164909-1-10, 2013.
9. L. Munteanu, V. Chiroiu, T. Sireteanu, *On the response of small buildings to vibrations*, Nonlinear Dynamics, vol.73, issue 3, pp.1527-1543, 2013.
10. D. Dumitriu, L. Munteanu, C. Brisan, V. Chiroiu, R. V. Vasiiu, O. Melinte, V. Vlădăreanu, *On the continuum modeling of the tire/ road dynamic contact*, CMES: Computer Modeling in Engineering and Sciences, Materials & Continua, vol. 94 (2),159-173, 2013.
11. C. Brișan, R.V.Vasiu, L. Munteanu, *A modular road auto-generating algorithm for developing the road models for driving simulators*, Transportation Research part C: Emerging Technologies, vol.26, pp. 269-284. 2013.
12. L. Munteanu, C. Brisan, Șt. Donescu, V. Chiroiu, *On the compression viewed as a geometric transformation*, CMC: Computers, Materials & Continua, vol 31 no.2 pp.127-146, 2012.
13. L. Munteanu, V. Chiroiu, *On the feedforward control of hysteresis for a piezoelectric plate*, CMC: Computers, Materials & Continua, vol. 28, nr.1, 57-80, 2012.
14. L. Munteanu, V. Chiroiu, V. Mosnegutu, *The anisotropy of Young's modulus in bones*, CMC: Computers, Materials & Continua, vol. 26, nr.2, 137-156, 2012.
15. L. Munteanu, V. Chiroiu, *Hysteresis modeling and feedforward control for a Cantor-like piezoelectric plate*, CMC: Computers, Materials & Continua, vol.27, nr.1, 2011.
16. L. Munteanu, V.Chiroiu, *On the three-dimensional spherical acoustic cloaking*, New Journal of Physics, 13(8), 1-12, ISSN 1367-2630 2011.
17. L. Munteanu, V.Chiroiu, *On the dynamics of locally resonant sonic composites*, European Journal of Mechanics-A/Solids, 29(5), 871-878, 2010.
18. V.Chiroiu, L. Munteanu, P.P.Delsanto, *Evaluation of the Toupin-Mindlin Theory for Predicting the Size Effects in the Buckling of the Carbon Nanotubes*, CMC: Computers, Materials, & Continua, 16(1), 75-100, 2010.

19. V.Chiroiu, L. Munteanu, A.S.Gliozzi, *Application of the Cosserat theory for modeling the reinforcement carbon nanotube beams*, CMC: Computers, Materials & Continua, 19(1), 1-16, 2010.
20. V. Chiroiu, V. Mosneguțu, L. Munteanu, R. Ioan, *On a micromorphic model for the synovial fluid in the human knee*, Mechanics Research Communications, 37(2), 246-255, 2010.
21. V. Chiroiu, L. Munteanu, A.Toader, *Optimum design of a thin elastic rod using a genetic algorithm*, CMES: Computer Modeling in Engineering & Sciences, 65(1), 1-26, 2010.
22. L. Marin, L. Munteanu, *Boundary reconstruction in two-dimensional steady state anisotropic heat conduction using a regularized meshless method*, International Journal of Heat and Mass Transfer, 53(25-26), 5815-5826, 2010.
23. L. Munteanu, V. Chiroiu, *Shell Buckling of Carbon Nanotubes Using Nanoindentation*, CMES: Computer Modeling in Engineering & Sciences, 48(1), 27-41, 2009.
24. Șt. Donescu, V. Chiroiu, L. Munteanu, *On the Young's modulus of a auxetic composite structure*, Mechanics Research Communications, 36, 294-301, 2009..
25. D. Baldoiu, V. Chiroiu, L. Munteanu, L. Solomon, *On the double couple radiation pattern for a slab-track system*, Proceedings of the Romanian Academy, Series A: Mathematics, Physics, Technical Sciences, Information Science, 10(2), 151-156, 2009.
26. P.P. Delsanto, L. Munteanu, V. Chiroiu, Șt. Donescu, *On the nanotorsional pendulum*, Proceedings of the Romanian Academy, Series A: Mathematics, Physics, Technical Sciences, Information Science, 10(2), 173-178, 2009.
27. D. Popa, L. Munteanu, V. Chiroiu, *On the shape reconstruction of 3D Stokes flows*, Proceedings of the Romanian Academy, Series A: Mathematics, Physics, Technical Sciences, Information Science, 10(3), 254-260, 2009.
28. L. Munteanu, V. Chiroiu, D. Dumitriu, M.Beldiman, *On the characterization of auxetic composites*, Proceedings of the Romanian Academy, Series A: Mathematics, Physics, Technical Sciences, Information Science, 9(1), 33-40, 2008.
29. V. Chiroiu, L. Munteanu, D. Dumitriu, M. Beldiman, C. Secara, *On the arhitecture of a new cellular elastic material*, Proceedings of the Romanian Academy, Series A: Mathematics, Physics, Technical Sciences, Information Science, 9(2), 105-115, 2008.
30. L. Munteanu, D. Popa, C. Secara, V. Chiroiu, *The analysis of a system of rigid bodies's dynamics by linear equivalence method*, Proceedings of the Romanian Academy, Series A: Mathematics, Physics, Technical Sciences, Information Science, 8(2), 145-150, 2007.
31. V. Chiroiu, L. Munteanu, *On the free vibrations of a piezoceramic hollow sphere*, Mechanics Research Communications, Elsevier, 34(2), 123-129, 2007.
32. L. Munteanu, Șt. Donescu, V. Chiroiu, *An inverse problem for the motion of blood in small vessels*, Physiological Measurement, Institute of Physics Publishing, 27, 865-880, 2006.
33. L. Munteanu, C.Chiroiu, V. Chiroiu, *Nonlinear dynamics of the left ventricle*, Physiological Measurement, Institute of Physics Publ., 23, 417-435, 2002.
34. C. Chiroiu, L. Munteanu, V. Chiroiu, P.P. Delsanto, M. Scalerandi, *A genetic algorithm for determining of the elastic constants of a monoclinic crystal*, Inverse Problems, Institute of Physics Publishing, 16, 121-132, 2000.

Brevet RO109783-B1: *Vibration transducer for dynamic measurement of thickness of pre-fabricated concrete component*; RO109783-B1 Patent Assignee: Institute of Solid Mechanics, Inventors: Luigi Vladareanu, Tudor Sireteanu, Veturia Chiroiu. Brevet A/00145 : Procedure and 3D printer for making items containing networks of composite materials, Inventors: Brișan Cornel, Bara Mircea, Munteanu Ligia, Chiroiu Veturia, 20 Febr., 2015

November 4 2018

Semnatura Dr. hab. Ligia Munteanu

