Listă de lucrări
selecţie din perioada 2008 - 2016

1. Monografii

1. **Jaliu, C**., Climescu, O. Sisteme microhidroenergetice, Ed. Junimea Iași, 2015, ISBN 978-973-37-1895-6.
2. Vișa, I., **Jaliu, C**., Duță, A., Neagoe, M. s.a. The Role of Mechanisms in Sustainable Energy Systems, Ed. Universității Transilvania din Brașov, 2015, ISBN 978-606-19-0571-3
3. Diaconescu, D., Neagoe, M., **Jaliu, C.**, Săulescu, R. Products' Conceptual Design. Editura Universităţii Transilvania, 2010, ISBN 978-973-598-230-0.
4. Neagoe, M., Diaconescu, D., **Jaliu, C**., Munteanu, O., Săulescu, R., Creţescu, N. Linkage accuracy modelling. Editura Universităţii Transilvania, 2010, ISBN 978-973-635-921-7.
5. **Jaliu, C**., Diaconescu, D., Neagoe, M., Munteanu, O., Săulescu, R., Pascale, L., Gall, R. Planetary gearset modelling. Editura Universităţii Transilvania, 2010, ISBN 978-973-598-481-6.

2. Lucrări publicate în reviste de specialitate (ISI)

1. Climescu, O., Săulescu, R., **Jaliu, C**. Specific features of a counter-rotating transmission for renewable energy systems. Environmental Engineering and Management Journal, August 2011 Vol.10, ISSN 1582 - 959, pp. 1105-1113.
2. **Jaliu, C**., Diaconescu, D., Neagoe, M., Săulescu, R. The eco-impact of small hydro implementation. Environmental Engineering and Management Journal, July/August 2009 Vol.8 No. 4, ISSN 1582 - 959, pp. 837-841.

3. Lucrări publicate în volumele conferinţelor de specialitate (procc. ISI)

1. Ciobanu, D., Eftimie, E., **Jaliu, C**. The influence of measured/simulated weather data on evaluating the energy need in buildings, Energy Procedia, Volume: 48 Pages: 796-805, DOI: 10.1016/j.egypro.2014.02.092, 2014.
2. Todi-Eftimie, A., Velicu, R., Săulescu, R., **Jaliu C**. Bearing friction vs. chain friction for chain drives, 3rd International Conference on Advanced Engineering Materials and Technology (AEMT 2013), Jurnal: Advanced Materials Research Vols. 753-755 (2013) pp 1110-1113, Trans Tech Publications, Switzerland, doi:10.4028/www.scientific.net/AMR.753-755.1110.
3. Săulescu, R., **Jaliu, C**., Climescu, O., Diaconescu, D. On the use of 2 DOF planetary gears as "speed increaser" in small hydros and wind turbines. Proceedings of the ASME 2011 International Design Engineering Technical Conferences & Computers and Information in Engineering Conference, IDETC/CIE 2011, 28 - 31.08, 2011, Washington, DC, USA, CD Proceedings, ISBN: 987-0-7918-3856-3.
4. **Jaliu, C**., Saulescu, R., Diaconescu, D., Neagoe, M., Climescu, O. Dynamic Features of a Planetary Speed Increaser Usable in Small Hydropower Plants. Proceedings of the 5th IASME / WSEAS International Conference on ENERGY & ENVIRONMENT (EE '10), pp. 241-246, February 23-25, 2010, University of Cambridge, UK. ISSN: 1790-5095, ISBN: 978-960-474-159-5.
5. **Jaliu, C**., Visa, I., Diaconescu, D.V., Săulescu, R., Neagoe, M., Climescu, O. Dynamic Model of a Small Hydropower Plant. OPTIM 2010. Proceedings of the 12th International Conference on Optimization pf Electrical and Electronic Equipment. Renewable Energy Conversion and Control. May 20-21.10, Braşov, pp. 1216-1223. ISSN: 1842-0133, ISBN 978-973-131-080-0.
6. Săulescu, R., Climescu, O., **Jaliu, C**., Diaconescu, D. Optimization of a Planetary Chain Speed Increaser for Small Hydros. The 21th International DAAAM Symposium.Volume 21, No. 1, ISSN: 1726-9679, ISBN: 978-3-901509-73-5. 20-23th October 2010, Zadar, Croaţia, pp. 0465-0466.
7. **Jaliu, C**., Săulescu, R., Diaconescu, D., Neagoe, M., Conceptual design of a chain speed increaser for small hydropower stations. Proceedings of the ASME 2009 International Design Engineering Technical Conferences & Computers and Information in Engineering Conference, IDETC/CIE 2009, 30.08 – 2.09, 2009, San Diego, California, USA, CD Proceedings, ISBN: 987-0-7918-3856-3.
8. **Jaliu, C**., Diaconescu, D.V., Neagoe, M., Săulescu, R., Vătăşescu, M. Conceptual Synthesis of Speed Increasers for Renewable Energy Systems. The 10th IFToMM International Symposium on Science of Mechanisms and Machines, Braşov, SYROM 2009, September 12-15, pp. 171-183, 2009, ISBN: 978-90-481-3521-9. Springer.

9. **Jaliu, C**., Diaconescu, D.V., Săulescu, R., Neagoe, M. Conversion Analysis of A Planetary Chain-Set Speed Reducer into A Speed Increaser to Be Used in RES. Proceedings of the Third International Conference On Mechanical Engineering and Mechanics, Beijing, China, Oct. 21-23, 2009, Vol. 1 and 2, pp 767-770, ISBN: 978-1-933100-33-3, Publisher: SCIENCE PRESS USA INC, ISI Document Delivery No.: BOE55.
10. Săulescu, R., **Jaliu, C**., Neagoe, M., Vătăsescu, M. On The Dynamic Modelling of a Planetary Chain Speed Increaser For R.E.S. The 20th International DAAAM Symposium.Volume 20, No. 1, ISSN: 1726-9679, ISBN: 978-3-901509-70-4. 25-28th October 2009, Viena, Austria, pp. 0659-0660.
11. Săulescu, R., Diaconescu, D., **Jaliu, C**., Vătăsescu, M. Dynamic Simulations of a Planetary Chain Speed Increaser for R.E.S. The 20th International DAAAM Symposium.Volume 20, No. 1, ISSN: 1726-9679, ISBN: 978-3-901509-70-4. 25-28th October 2009, Viena, Austria, pp. 0661-0662.
12. **Jaliu, C**., Diaconescu, D.V., Neagoe, M., Săulescu R. Dynamic features of speed increasers from mechatronic wind and hydro systems. Part I. Structure. Kinematics. Proceedings of EUCOMES 08. The Second European Conference on Mechanism Science, Casino, Italia, pp. 355-363, Septembrie 2008, Ed. Springer, ISBN 987-1-4020-8914-5.
13. **Jaliu, C**., Diaconescu, D.V., Neagoe, M., Săulescu R. Dynamic features of speed increasers from mechatronic wind and hydro systems. Part II. Dynamic aspects. Proceedings of EUCOMES 08. The Second European Conference on Mechanism Science, Casino, Italia, pp.365-373, Septembrie 2008, Ed. Springer, ISBN 987-1-4020-8914-5.
14. Neagoe, M., Diaconescu, D.V., **Jaliu, C**., Pascale, L., Săulescu, R., Siscă, S. On a New Cycloidal Planetary Gear used to Fit Mechatronic Systems of RES. OPTIM 2008. Proceedings of the 11th International Conference on Optimization of Electrical and Electronic Equipment. Vol. II-B. Renewable Energy Conversion and Control. May 22-23.08, Braşov, pp. 439-449, IEEE Catalog Number 08EX1996. ISBN 987-973-131-028-2.

4. Lucrări publicate în reviste și conferințe cu volume BDI

1. Săulescu, R., **Jaliu, C**., Neagoe, M. Structural and Kinematic Features of a 2 DOF Speed Increaser for Renewable Energy Systems, Applied Mechanics and Materials, Vol. 823 (2016) pp 367-372, doi:10.4028/www.scientific.net/AMM.823.367.
2. Săulescu, R., Neagoe, M., **Jaliu, C**., Munteanu, O. Comparative Analysis of Two Wind Turbines with Planetary Speed Increaser in Steady-State, Applied Mechanics and Materials, Vol. 823 (2016) pp 355-360, doi:10.4028/www.scientific.net/AMM.823.355.
3. Săulescu, R., Neagoe, M., **Jaliu, C**., Munteanu, O. On a New Chain Planetary Transmission for Renewable Energy Systems. Part I: Product Design, Applied Mechanics and Materials, Volume 658, pag. 147-152, 2015.
4. Saulescu, R., **Jaliu, C**., Neagoe, M., Climescu, O., On a New Chain Planetary Transmission for Renewable Energy Systems - Part II: Virtual Prototyping and Experimental Testing, Applied Mechanics and Materials, Vol. 760, pp. 153-158, 2015.
5. Săulescu, R., Climescu, O., **Jaliu, C**. Assessment of Wind Energy Resources in Communities. Case Study: Brasov, Romania, Springer Proceedings in Energy, pp. 151-166, 2014.
6. Papuc, R., Velicu, R., Lateș, M., **Jaliu, C**. Geometrico-static modeling and simulation of the contact between chain and guide of a reference transmission, Applied Mechanics and Materials, Volume 658, pag. 111-116, 2014.
7. Saulescu, R., **Jaliu, C**., Munteanu, O., Climescu, O. Planetary Gear for Counter-Rotating Wind Turbines, Applied Mechanics and Materials, Vol. 658, pp. 135-140, 2014.
8. Ciobanu, D., **Jaliu, C**., Saulescu, R. Chain Tracking System for Solar Thermal Collector, Applied Mechanics and Materials, Vol. 658, pp. 35-40, 2014.
9. **Jaliu C.**, Neagoe M., Săulescu R, Dobre E. B., Low-speed actuator used in solar tracking systems, The 11th IFToMM International Symposium on Science of Mechanisms and Machines- SYROM 2013. Mechanisms and Machine Science 18, November 11-12, pp. 381-389, 2013, ISBN: 978-3-319-01844-7, ISSN: 2211-0984, DOI 10.1007/978-3-319-01845_38. Ed. Springer.
10. Todi-Eftimie, A., Velicu, R. , Săulescu, R., **Jaliu, C**. Geometric modelling of power joints from bush chain drives, The 11th IFToMM International Symposium on Science of Mechanisms and Machines- SYROM 2013. Mechanisms and Machine Science 18, November 11-12, pp. 471-479, 2013, ISBN: 978-3-319-01844-7, ISSN: 2211-0984, DOI 10.1007/978-3-319-01845_47.

11. Climescu, O., **Jaliu, C**., Săulescu, R. On the Efficiency of a Planetary Speed Increaser Usable in Small Hydros. Power Transmissions. Mechanism and Machine Science, Vol. 13, 2013, pp 259-268 (http://link.springer.com/chapter/10.1007/978-94-007-6558-0_18).
12. Săulescu, R., **Jaliu, C**., Ciobanu, D., Diaconescu, D. Differential Planetary Gear Transmission Usable in Renewable Energy Systems. Proceedings of MeTrApp 2011. Mechanism and Machine Science, Vol. 3, Mechanisms, Transmissions and Applications, Timişoara, România, pp. 275-282, Octombrie 2011, Ed. Springer, ISSN: 2211-0984, ISBN: 978-94-007-2726-7.
13. **Jaliu, C**., Diaconescu, D., Săulescu, R., Climescu, O., On a New Planetary Speed Increaser Drive Used in Small Hydros. Part I. Conceptual Design. Proceedings of EUCOMES 2010. New Trends in Mechanism Science. Analysis and Design. Mechanism and Machine Science, Vol. 5, Cluj Napoca, România, pp. 199-207, Septembrie 2010, Ed. Springer, ISBN 987-90-481-9688-3.
14. Săulescu, R., **Jaliu, C.**, Diaconescu, D., Climescu, O., On a New Planetary Speed Increaser Drive Used in Small Hydros. Part II. Dynamic Model. Proceedings of EUCOMES 2010. New Trends in Mechanism Science. Analysis and Design. Mechanism and Machine Science, Vol. 5, Cluj Napoca, România, pp. 209-216, Septembrie 2010, Ed. Springer, ISBN 987-90-481-9688-3.

5. Granturi şi contracte de cercetare ştiinţifică

Programul/Proiectul	Funcţia	Perioada
Proiect Leonardo da Vinci NL/06/B/P/PP/157604 Euromaint: European Maintenance: Professional skills for Maintenance Managers & Maintenance Engineers	Coordonator local	2006-2008
Sisteme mecatronice inovative destinate microhidrocentralelor pentru exploatarea eficientă a potențialului hidrologic din zonele izolate, Proiect tip PNII, cod CNCSIS ID_140/2007	Director de proiect	2007-2009
Modele, programe și simulări pentru optimizarea dinamică a transmisiilor mecanice cu flux energetic ramificat, prin eliminarea defectelor structurale. Grant de cercetare CNCSIS, proiect tip A, cod CNCSIS 1060 / 2005	Director de proiect	2005-2006
Sistem inovativ integrat materiale-Tehnologie -Echipament pentru procese simultane de fotocataliza si adsorbtie aplicate in epurarea sustenabila a apelor uzate SimFotoAd, 217/2014	membru	2014 - 2016
Sistem inovativ sustenabil pentru auto-decontaminarea fotocatalitică a echipamentelor de protecție CBRN – CB-PhotoDeg, 282/2014	membru	2014 - 2016
Proiectarea, realizarea si experimentarea unui sistem mecatronic de monitorizare multispectrala a starii de vegetatie a culturilor agricole – MoniCult, 225/2014	membru	2014 - 2016
CDS Dynamic Tribology, Contract cu Schaeffler 4029 / 2008	membru	2011 - 2014
Sisteme solar termice eficiente cu acceptanță ridicată pentru implementare in mediul urban EST IN URBA, 28 / 2012	membru	2012 - 2014
Creşterea eficienţei conversiei energiei solare în platforme fotovoltaice orientabile, Parteneriate 21-003/2007.	membru	2007 – 2010
Statie autonoma de monitorizare cu aplicatii in domeniul energiei fotovoltaice si al protectiei mediului, Parteneriate 22-101/2008.	membru	2008 – 2011
Sisteme mecatronice complexe pentru aplicatii in medicina SMART, Parteneriate 72197/2008.	membru	2008 – 2011
Sisteme fotocatalitice complexe pentru epurarea avansata a apelor rezultate din industria textilă, Parteneriate 71-047/2007.	membru	2007 – 2010

CEEX 226/2006 "Sistem integrat de conversie a energiei din surse regenerabile", RECIS	membru	2008
CEEX 752/2006 Sisteme mecanice noi pentru creşterea eficienţei conversiei energiei solare în energie electrică	membru	2008
Platforma CNCSIS 79 2006 - Design de Produs pentru Dezvoltare Durabilă	membru	2006-2008
SEE-EU Tool, Sustainable energy for high school education - an European training tool, 226362-CP-1-2005-1-RO-COMENIUS-C21	membru	2006-2008

6. Brevete de invenţii

- Transmisie planetară, BI RO 126694/28.08.15.
- Transmisie planetară cu lanţ, BI RO 128109/30.07.2014.
- Transmisie cicloidală cu role, BI RO125177 B1/30.11.2011.
- Dispozitiv pentru producerea de hidrogen si oxigen prin fotoelectroliză cu senzori pentru monitorizarea parametrilor procesului, BI RO 125540/28.06.2013.
- Mecanism de orientare, BI RO97189/1989.

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