



LISTA DE PUBLICAȚII ȘTIINȚIFICE

I. Articole științifice publicate în reviste de specialitate indexate ISI

1. Nemes D.I., Dragoi M., Poenaru D.V., Cretu O., Vermesan H., Prejbeanu R., Vermesan D., Popa D., Dragoi R., Suci O., Surducan D., Nemes C., **Lovasz E.-C.** - Complex assessments and therapies of the secondary scoliosis in inflammatory rheumatic diseases, Arthritis and Rheumatism, 58 (2008) 736.
2. Modler K.-H., **Lovasz E.-C.**, Bähr G., Neumann R., Perju D., Perner M., Margineanu D. - General method for the synthesis of geared linkages with non-circular gears, Mechanism and Machine Theory, 44(4) (2009) 726-738.
3. **Lovasz E.-C.**, Modler K.-H., Neumann R., Gruescu C.M., Perju D., Ciupe V., Maniu I.: Novel design solutions for fishing reel mechanisms, Chinese Journal of Mechanical Engineering, 1000-9345 (2015) 28(4) 726-736.
4. Gruescu C. M., Garaiman A., **Lovasz E.-C.**: Modeling of human spinal column and simulation of spinal deformities, Mechanics, 1392-1207 (2015) 21(3) 214-219
5. Hanke U., **Lovasz E.-C.**, Zichner M., Modler N., Comsa A., Modler K.-H.: Synthesis of PR-/RP-chain-based compliant mechanisms – design of applications exploiting fibre reinforced material characteristics, Journal Mechanical Sciences (2015) 6 155-161

II. Articole științifice publicate în volumele unor manifestări științifice indexate ISI Proceedings

1. Perju D., **Lovasz E.-C.**, Modler K.-H.: Coaxial Function Generating Mechanisms. A New Synthesis Approach, 11th World Congress in Mechanism and Machine Science, Tianjin 2004 3 1245-1249.
2. Modler K.-H., **Lovasz E.-C.**, Perju D., Hollmann Ch.: Geared Linkages with Linear Displacement Actuator Used as Function Generating Mechanisms, 11th World Congress in Mechanism and Machine Science, Tianji 2004 3 1254-1259.
3. Margineanu D., Margineanu E., **Lovasz E.-C.**, Maniu I., Modler K.-H.: Load distribution on spline joints, 11th World Congress in Mechanism and Machine Science, Tianjin 2004 1 361-365 .
4. Gruescu CM., Hora H., Nicoara I., **Lovasz E.-C.**: Influence of mechanically induced birefringence on image quality, 6th International Conference of DAAAM, Baltic Industrial Engineering DAAAM Int Vienna, Tallinn, ESTONIA 2008 239-244.
5. Văcărescu V., **Lovasz E.-C.**, Văcărescu C., Mărgineanu D.: The method for the evaluation of spinal column posture, The 19-th International DAAAM Symposium Intelligent Manufacturing & Automation: Focus on Next Generation of Intelligent Systems and Solutions, 22-25th October, 2008, Slovak University of Technologie 2008 239-244.
6. Văcărescu V., **Lovasz E.-C.**, Văcărescu C.: The modeling of end-effector's pose errors for the equivalent kinematical chain of the upper human limb, The 19-th International DAAAM Symposium Intelligent Manufacturing & Automation: Focus on Next Generation of Intelligent Systems and Solutions, 22-25th October, 2008, Slovak University of Technologie 2008 239-244.



7. **Lovasz E.-C.**, Modler K.-H., Perju D., Mărgineanu D., Zăbavă E.: On the relative sliding at the cam mechanisms with the tangential/flat follower, Proceedings of X-th International Congress on the Theory of Machines and Mechanisms, Liberec, Cehien 2008 371-376.
8. Văcărescu V., **Lovasz E.-C.**, Mateaș M., Mărgineanu D.: Algorithm for determination of human spinal column deviations tip scoliosis, Proceedings of X-th International Congress on the Theory of Machines and Mechanisms, Liberec, Cehien 2008 671-678.
9. Draghici A., Vacarescu V., **Lovasz E.-C.**: Interdisciplinary Researchs for occupational Risk Evaluation, 20th International Danube-Adria-Association-for-Automation-and-Manufacturing Symposium, Vienna 2009 1381-1382.
10. Dehelean N., **Lovasz E.-C.**: Solar Mill Engine, 20th International Danube-Adria-Association-for-Automation-and-Manufacturing Symposium, Vienna 2009 975-976.
11. **Lovasz E.-C.**, Modler K.-H., Draghici A., Vacarescu V.: Studies for a new Prosthesis Design for the Work Capacity Rehabilitation, 20th International Danube-Adria-Association-for-Automation-and-Manufacturing Symposium, Vienna 2009 1549-1550.
12. Dehelean N.M., Ciupe V., **Lovasz E.-C.**: A Digital Model of a Dwell Mechanism for Alpha-Stirling Engine, 10th International Symposium on Science of Mechanisms and Machines, Brasov 2010 521-527.
13. **Lovasz E.-C.**, Perju D., Modler K.-H., Margineanu D.T., Vacarescu V., Zabava E.S.: Cam Mechanism with Flat/Tangential Translating Follower and Its Size, 10th International Symposium on Science of Mechanisms and Machines, Brasov 2010 645-653.
14. Modler N., Modler K.-H., Hufenbach W., **Lovasz E.-C.**, Perju D., Margineanu D.: A Design of Compliant Mechanism with Integrated Actuators, 10th International Symposium on Science of Mechanisms and Machines, Brasov 2010 655-664.
15. **Lovasz E.-C.**, Perju D., Dehelean N., Dehelean L.M., Maniu I., Moldovan C.: Self-Balanced Conco-Balancer Manipulator with Band Mechanism, 5th International Conference on Robotics and Automation Systems 2010, Robotics and Automation System: Solid State Phenomena 1012-0394 2010 166-167 259-264.
16. Comsa A., Maniu I., **Lovasz E.-C.**: Triangulation 3D Scanning Method in Biomedical Reconstruction, 5th International Conference on Robotics and Automation Systems 2010, Robotics and Automation System: Solid State Phenomena 1012-0394 2010 166-167 145-148.
17. **Lovasz E.-C.**, Perju D., Modler K.-H., Lovasz A.E., Maniu I., Gruescu C., Margineanu D., Ciupe V., Comsa A.: Demonstrative Digital Mechanisms Library, MTM and Robotics 2012 - Joint International Conference of the 11th International Conference on Mechanisms and Mechanical Transmissions/ International Conference on Robotics, Clermont Ferrand 1660-9336 2012 162 37-46.
18. Ciupe V., **Lovasz E.-C.**, Gruescu C.M.: High Quality Document Digitization Equipment, MTM and Robotics 2012 - Joint International Conference of the 11th International Conference on Mechanisms and Mechanical Transmissions/ International Conference on Robotics, Clermont Ferrand 1660-9336 2012 162 589-596.
19. Perju D., **Lovasz E.-C.**, Modler K.-H., Moldovan C., Carabas I.: Kinematic Analysis of a Belt Mechanism with a Circular Eccentric Output Element, MTM and Robotics 2012 - Joint International Conference of the 11th International Conference on Mechanisms and Mechanical Transmissions/ International Conference on Robotics, Clermont Ferrand 1660-9336 2012 162 011-018.



20. Comsa A., Maniu I., Modler N., Hufenbach W., **Lovasz E.-C.**, Ciupe V.: An Overview of Library Automation, MTM and Robotics 2012 - Joint International Conference of the 11th International Conference on Mechanisms and Mechanical Transmissions/ International Conference on Robotics, Clermont Ferrand 1660-9336 2012 162 583-588.
21. **Lovasz E.-C.**, Gruescu C.M., Garaiman A., Carabas I., Bodea R.: Scanning System Integrated Within Biometric Measurements, New Trends in Medical and Service Robots, MeSRob 2013, Cluj – Napoca 2014 16 131-144.
22. Comsa A., Maniu I., Modler N., **Lovasz E.-C.**, Ciupe V.: Automated Book Manipulator in Libraries, New Trends in Medical and Service Robots, MeSRob 2013, Cluj – Napoca 2014 16 75-85.
23. **Lovasz E.C.**, Rădulescu C., Ciupe V., Gruescu C.M., Maniu I.: Francisc Viliam Kovács (1929–2009), Distinguished Figures in Mechanism and Machine Science 1875-3442 2014 26 159-185.
24. Gruescu C.M., **Lovasz E.-C.**, Ciupe V.: Optics Optimization in Laser Spot Radius Minimization, 2014 International Conference on Production Research – Regional Conference Africa, Europe and the Middle East 3rd International Conference on Quality and Innovation in Engineering and Management 2014 231-234.
25. Hanke U., **Lovasz E.-C.**, Zichner M., Modler N., Comsa A., Modler K.-H.: Synthesis of PR/RP Chain Based Compliant Mechanisms: Design of Applications Exploiting Fibre Reinforced Material Characteristics, New Trends in Mechanism and machine Science: From Fundamentals to Industrial Applications Series: Mechanisms and Machine Science 2211-0984 2014 24 743-751.
26. **Lovasz E.-C.**, Perju D., Modler K.-H., Gruescu C.M., Margineanu D., Moldovan C.E., Pop C.: Path Generating Belt Mechanisms as Kinematic Chains for Mechatronic Applications, New Trends in Mechanism and machine Science: From Fundamentals to Industrial Applications Series: Mechanisms and Machine Science 2211-0984 2014 24 111-119

III. Articole științifice publicate în reviste indexate BDI

1. Modler K.H., Wadewitz C., **Lovasz E.-C.**: Viergliedrige Bandgetriebe und ihre Anwendung VDI BERICHTE 0083-5560 1998 1423 289-308. (SCOPUS)
2. Modler K.-H., Wadewitz C., **Lovasz E.-C.**: Bandgetriebe-Umschlingungsgetriebe zur ungleichaessigen Bewegungsuebertragung VDI BERICHTE 0083-5560 1999 1467 91-110. (SCOPUS)
3. Modler K.-H., **Lovasz E.-C.**: Erweiterung und Verallgemeinerung des Satzes von Grashof Wissenschaftliche Zeitschrift der Technischen Universität Dresden 0043-6925 2001 50(3) 116-12. (Google Scholar)
4. Militaru R., **Lovasz E.C.**: Functional Optimization of the Cam Mechanisms through using Helical Springs with variable Geometry, FACTA UNIVERSITATIS Series: Mechanical Engineering 0354–2025 2003 1(10) 1289 – 1298. (Google Scholar)
5. Modler K.-H., Wilhelm E., **Lovasz E.-C.**, Kleemann A.: Optimale Auslegung sechsgliedriger Koppelgetriebe zur Erzeugung von Scharnierbewegungen, VDI BERICHTE 0083-5560 2004 1845 333-352. (SCOPUS)



6. Gruescu C.M., Bodea R., Garaiman A., Costache M., **Lovasz E.-C.**, Relative Rotation Angle Between Spinal Vertebrae Using Complex Shape Markers, Annals of the Oradea University, Fascicle of Management and Technological Engineering 1583-0691 2008 VII(XVII) 847-852. (Copernicus)
7. Drăghici A., Văcărescu V., **Lovasz E.-C.**: The actual context of the occupational risk evaluation, Annals of the Oradea University, Fascicle of Management and Technological Engineering 1583-0691 2008 vol. VII (XVII) 1660-1669. (Copernicus)
8. Modler K.-H., Lin S., Hanke U., **Lovasz E.-C.**: Getriebetechnische Lösungen für Stabilisierende Formgebungsprozesse, VDI Berichte 0083-5560 2008 2050 187-194. (SCOPUS)
9. **Lovasz E.-C.**, Ciupe V., Gruescu C.M., Margineanu D.: Study Regarding the Actuation Choice for the Elbow Module of an Exoskeleton Arm, ROBOTICA SI MANAGEMENT International Journal 1453 2069 2013 18 29-32. (Copernicus)
10. Lovasz A.E., **Lovasz E.-C.**, Gruescu C.M.: Digital Library of Mechanisms, Procedia - Social and Behavioral Sciences 1877-0428 2014 163 85-91. (Elsevier Science Direct)
11. **Lovasz E.-C.**, Pop C., Pop F., Dolga V.: Novel solution for leg motion with 5 link belt mechanism, IJAME 2014-0048 2014 19 699-708. (INSPEC)

IV. Articole științifice publicate în volumele unor manifestări științifice indexate BDI

1. Dehelean N.M., Dehelean L.-M., **Lovasz E.-C.**, Perju D.: A Theoretical Improvement of a Stirling Engine PV Diagram, The 3-th European Conference on Mechanisms Science EUCOMES 2010, Springer Series Mechanisms and Machine Science 2211-0984 2010 5 613-625. (Springer Link)
2. Modler N., Modler K.-H., Hufenbach W., Gude M., Jaschinski J., Zichner M., **Lovasz E.-C.**, Margineanu D.T., Perju D.: Cyclic Test of textile-Reinforced Composites in Hinge Mechanisms, The 3-th European Conference on Mechanisms Science EUCOMES 2010, Springer Series Mechanisms and Machine Science 2211-0984 2010 5 173-180. (Springer Link)
3. Perju D., **Lovasz E.-C.**, Modler K.-H., Dehelean L.-M., Moldovan C.E., Margineanu D.T.: Size Minimization of the Cam Mechanism with Translating Roll Follower, The 3-th European Conference on Mechanisms Science EUCOMES 2010, Springer Series Mechanisms and Machine Science 2211-0984 2010 5 245-252. (Springer Link)
4. Dehelean L.-M., Dehelean N.M., **Lovasz E.-C.**: Matrix Pad Transducer, 1st Workshop on Microactuators and Micromechanisms, Springer Series Mechanisms and Machine Science 2211-0984 2011 2 101-112. (Springer Link)
5. **Lovasz E.-C.**, Perju D., Corves B., Torsen B., Modler K.-H., Maniu I., Gruescu C.M., Lovasz A.E., Ciupe V.: Multilingual Illustrated u-thesaurus in Mechanisms Science, The 1st Workshop on Mechanisms, Transmissions and Applications, Springer Series Mechanisms and Machine Science 2211-0984 2011 3 47-58. (Springer Link)
6. Modler N., Hufenbach W., Modler K.-H., Margineanu D.T., **Lovasz E.-C.**, Perju D., Ianosi E.: RBS Simulation of Compliant Mechanisms with Integrated Actuators, The 1st Workshop on Mechanisms, Transmissions and Applications, Springer Series Mechanisms and Machine Science 2211-0984 2011 3 169-186. (Springer Link)



7. **Lovasz E.-C.**, Perju D., Maniu I., Radulescu C., Ciupe V.: Francisc Viliam Kovacs - Leader in the Development of Mechanisms and Robotics in Romania, International Symposium on the History of Machines and Mechanisms, Springer Series History of Mechanism and Machine Science 2012 15 171-184. (Springer Link)
8. **Lovasz E.C.**, Gruescu C.M., Carabas I., Margineanu D.T., Maniu I., Ciupe V., Dehelean N.: Advanced Digitization Techniques in Retrieval of Mechanism and Machine Science Resources, The XIth International Conference on the Theory of Machines and Mechanisms, Springer Series Mechanisms and Machine Science 2211-0984 2012 8 35-42. (Springer Link)
9. **Lovasz E.-C.**, Perju D., Gruescu C.M., Modler K.-H., Carabas I., Zabava E.S.: Numerical Method for Determination of Base Circle Radius of Cam Mechanisms with Oscillating Flat-Face Follower, The XIth International Conference on the Theory of Machines and Mechanisms, Springer Series Mechanisms and Machine Science 2211-0984 2012 8 143-150. (Springer Link)
10. Vacarescu V., **Lovasz E.C.**, Buciuman C.F.: Research on Multi-Directional Pose Accuracy Variation to a Welding Robot, The XIth International Conference on the Theory of Machines and Mechanisms, Springer Series Mechanisms and Machine Science 2211-0984 2012 8 323-328. (Springer Link)
11. **Lovasz E.-C.**, Perju D., Modler K.-H., Gruescu C.M., Maniu I., Zabava E.S.: Numerical Iterative Method for Computing the Base Circle Radius of Cam Mechanisms with Translating Flat-Face Follower, The 4-th European Conference on Mechanisms Science EUCOMES 2012, Springer Series Mechanisms and Machine Science 2211-0984 2013 7 237-244. (Scopus)
12. Garaiman A., Gruescu C.M., **Lovasz E.-C.**, Amarandei M., Patrascu Jenel M., Bogdan C.A.: Discussions on the Procedure and Results of an Evaluation Health Program Regarding Spinal Deformity in School-aged Children, E-Health and Bioengineering Conference, EHB 2013, Iasi 2013 001-004. (IEEE)
13. **Lovasz E.-C.**, Ciupe V., Modler K.-H., Gruescu C.M., Hanke U., Maniu I., Mărgineanu D.T.: Experimental Design and Control Approach of an Active Knee Prosthesis with Geared Linkage New Advances in Mechanisms, Transmissions and Applications MeTrApp 2013, Springer Series Mechanisms and Machine Science 2211-0984 2014 17 149-156. (Springer Link)
14. Ehlig J., Hanke U., **Lovasz E.-C.**, Zichner M., Modler K.-H.: Geometrical Synthesis Approach for Compliant Mechanisms–Design of Applications Exploiting Fibre Reinforced Material Characteristics, New Advances in Mechanisms, Transmissions and Applications MeTrApp 2013, Springer Series Mechanisms and Machine Science 2211-0984 2014 17 215-223. (Springer Link)
15. Mărgineanu D. T., **Lovasz E.-C.**, Ciupe V., Ciurdariu L.: Kinematic and Dynamic Modeling and Simulation of an Intelligent Adaptive CTLSO Brace, The 11th IFToMM International Symposium on Science of Mechanisms and Machines, Springer Series Mechanisms and Machine Science 2211-0984 2014 18 159-167. (Scopus)
16. Niels Modler, Andrei Comsa, Inocentiu Maniu, **Erwin-Christian Lovasz**, Valentin Ciupe: Dedicated Gripper for Books Handling in a Library, The 11th IFToMM International Symposium on Science of Mechanisms and Machines, Springer Series Mechanisms and Machine Science 2211-0984 2014 18 515-521. (Scopus)

17. V. Ciupe, **E.-Ch. Lovasz**, M. Reessing, V. Henkel, C. M. Gruescu, E. S. Zabava: Interactive Animation Production by means of Advanced Image Processing, The 11th IFToMM International Symposium on Science of Mechanisms and Machines, Springer Series Mechanisms and Machine Science 2211-0984 2014 18 329-337. (Scopus)
18. **Lovasz E.-C.**, Perju D., Modler K.-H., Modler M., Gruescu C.M., Maniu I., Comșa A.: On the Structural Analysis of the Mechanisms with Elastic Connections, The 11th IFToMM International Symposium on Science of Mechanisms and Machines, Springer Series Mechanisms and Machine Science 2211-0984 2014 18 59-67. (Scopus)
19. Mateas M., **Lovasz E.-C.**, Margineanu D.T., Ciupe V., Zabava E.S., Maniu I., Diaconu A.: Control Characteristics of Haptic Exoskeleton Elbow Module Used in Space Robotised Applications, The 6th International Conference on Advanced Concepts in Mechanical Engineering, Journal Applied Mechanics and Materials 1662-7482 2014 658 654-659. (Scopus)
20. **Lovasz E.-C.**, Mateas M., Gruescu C.M., Mărgineanu E.Z., Carabas I., Stan S.D.: Development of a Quality Indicator System for Haptic Exoskeleton Modules, The 6th International Conference on Advanced Concepts in Mechanical Engineering, Journal Applied Mechanics and Materials 1662-7482 2014 658 648-653. (Scopus)
21. Pop C., Grigorescu S.M., **Lovasz E.C.**: Image Processing and Artificial Neural Network for Robot Application, The 6th International Conference on Advanced Concepts in mechanical Engineering, Journal Applied Mechanics and Materials 1662-7482 2014 658 678-683. (Scopus)
22. Ciupe V., Maniu I., **Lovasz E.-C.**: Structure and Control Method for a Pneumatic Muscle Actuated Seat Used in a Motion Simulator, Conference on Robotics, Journal Applied Mechanics and Materials 1662-7482 2015 762 83-90. (Google Scholar)
23. Moldovan C., Craciun A., Dolga V., **Lovasz E.-C.**, Maniu I., Sticlaru C.: On the Development of a Voice and Gesture Based HMI for the Control of a Mobile Robot, Conference on Robotics, Journal Applied Mechanics and Materials 1662-7482 2015 762 201-204. (Google Scholar)
24. Mărgineanu D., **Lovasz E.-C.**, Modler N.: Multibody System Simulation of Hysteresis Effect by Micro Textile-Reinforced Compliant Mechanisms with Piezo-electric Actuators, The 3-rd Conference on Microactuators and Micromechanisms, Springer Series Mechanisms and Machine Science 2211-0984 2015 30 177-189. (Springer Link)
25. Mărgineanu D., **Lovasz E.-C.**, Modler K.H., Gruescu C.M.: Steering and Non-steering Crawling Tetrahedral Micro-mechanisms, The 3-rd Conference on Microactuators and Micromechanisms, Springer Series Mechanisms and Machine Science 2211-0984 2015 30 9—22. (Springer Link)
26. **Lovasz E.-C.**, Grigorescu S, Margineanu D., Gruescu C.M., Pop C., Ciupe V., Maniu I.: Gearred Linkages with Linear Actuation Used as Kinematic Chains of a Planar Parallel Manipulator, Proc. of 3rd MeTrApp Conference Mechanisms, Transmissions and Applications MeTrApp 2015, Springer Series Mechanisms and Machine Science 2211-0984 2015 31 21-31. (Springer Link)
27. Mărgineanu D., **Lovasz E.-C.**, Ciupe V., Mateas M., Zabava E.S.: 3 DoF Haptic Exoskeleton for Space Telerobotic, Proc. of 3rd MeTrApp Conference Mechanisms, Transmissions and Applications MeTrApp 2015, Springer Series Mechanisms and Machine Science 2211-0984 2015 31 279-287. (Springer Link)



V. Lista cărților publicate

1. **Erwin-Chr. Lovasz**, Corneliu Rădulescu - Robotică avansată, Editura Politehnica, 2013, 255 pages, ISBN 978-973-625-920-32011.
2. **Erwin-Chr. Lovasz** - Mecanisme de tip centroidal, Editura Politehnica, 2009, 320 pages ISBN 978-973-625-920-3.
3. **Erwin-Chr. Lovasz** - Getriebelehre II Kurvengetriebe, Editura Politehnica, 2008, 128 pages, ISBN 978-973-625-715-5.
4. **Erwin-Chr. Lovasz**, Cărăbaș, Iosif - Principii de sinteză a mecanismelor cu roți dinate și came, Editura Politehnica, Timișoara, 2004, II Ed. 2006, 198 pages, ISBN 973-625-157-8.
5. **Lovasz, Erwin-Chr.** - Mechanismen in Verarbeitungsmaschinen – Studienbrief, TU Dresden Verlag, 2004, 168 pages.
6. Ioan Nicolae Văcărescu, Valeria Văcărescu, **Erwin-Christian Lovasz**, Marius Mateaș - Aparatură Biomedicală, Editura Mirton, 2001, 119 pages, ISBN 973-585-456-2 119.

VI. Lista cărților editate

1. **Erwin-Chr. Lovasz**, Burkhard Corves (Editors) - Mechanisms, Transmissions and Applications, Series: Mechanisms and Machine Science, Vol. 3, Springer Verlag, 2011, 292 pages, ISBN 978-94-007-2726-7.
2. Grigore Gogu, Inocentiu Maniu, **Erwin-Chr. Lovasz**, Jean-Christophe Fauroux, Valentin Ciupe (Editors) - Mechanisms, Mechanical Transmissions and Robotics, Series: Applied Mechanics and Materials, Trans Tech Publications, 2012, 624 pages, ISBN 978-3-03785-395-5.
3. Victor Petuya, Charles Pinto, **Erwin-Chr. Lovasz** (Editors) - New Advances in Mechanisms, Transmissions and Applications, Proceedings of the Second Conference MeTrApp 2013, Series: Mechanisms and Machine Science, Vol. 17, Springer Verlag, 2014, 419 pages, ISBN 978-94-007-7484-1.
4. **Erwin-Chr. Lovasz**, Gondi Kondaiah Ananthasuresh, Burkhard Corves, Victor Petuya (Editors) - Microactuators and Micromechanisms, Proceedings of MAMM 2014, Series: Mechanisms and Machine Science, Vol. 30, Springer Verlag, 2014, 200 pages, ISBN 978-3-319-15861-7.
5. Burkhard Corves, **Erwin-Chr. Lovasz**, Mathias Hüsing (Editors) - Mechanisms, Transmissions and Applications, Proceedings of the Third MeTrApp Conference 2015, Series: Mechanisms and Machine Science, Vol.31, Springer Verlag, 2015, 352 pages, ISBN 978-3-319-17066-4.

VII. Lista contractelor in calitate de director sau responsabil partener grant international

1. Digital Mechanism and Gear Library goes Europeana ThinkMOTION FP-7 CIP-ICT-PSP.2009.2.3/ 50485 2010-2013, FP-7 CIP-ICT-PSP

VIII. Lista contractelor in calitate de director sau responsabil partener grant national

1. Studiul mecanismelor cu cuple cinematice de tip centroidal ANSTI 6153/2000/10, Cod ANSTI 464 2000-2001, ANSTI.



2. Proiectarea unui sistem asistat de calculator, destinat măsurării modificărilor antropomorfe în urma efectuării de implanturi și protezări CNC SIS-At, 33501/2002/5 Cod 32, 2002-2003, CNC SIS
3. Dezvoltarea și implementarea unor sisteme performante de investigare și recuperare a deformațiilor de coloană vertebrală la populația de vârstă școlară și categorii profesionale cu activități sedentare CEE X 88/2006 2006, CNMP Bucuresti AVISAN
4. New Haptic Arm Exoskeletons for Robotics and Automation in Space – EXORAS PNCDI2/ 13/2012 2012-2015, Agenția Spațială Română

IX. Director contract cu beneficiar din mediul economic internațional

1. Investigations on the kinetostatic analysis of compliant mechanisms using multi body simulation BC 12/ 9.12.2009 BC1/25.10.2010, 2009-2014, ILK -TU Dresden
2. Aufbau eines FuE-Netzwerkes zur ressourceneffizienten Fertigung, PRODNET IWINDOR-021, 2014, BMBF Projekt

X. Director contract cu beneficiar din mediul economic național

1. Analiza cinematica si dinamica a mecanismelor specifice din industria automotiva 784/14.11.2007 2007, SC TAKATA-PETRI ROMANIA SRL

XI. Membru in echipa de grant național

1. Cercetări privind posibilități de utilizare ale sistemelor robotice în scopul creșterii competitivității tehnico-economice a industriei românești 21 CEE X I 03/2005 2005-2007, CNMP Bucuresti INFOSOC
2. Ergoingineria locului de munca-aplicatii in medicina dentara – ERGIDENT 91-022/2007 2007-2011, CNMP Bucuresti
3. Sisteme mecatronice complexe cu aplicatii in medicina 72/197/01.10.2008 2009-2011, CNMP Bucuresti
4. Cercetări interdisciplinare pentru realizarea unei platforme de evaluare a riscurilor profesionale cu impact asupra culturii securității in organizații ID 1022 Contr. 629/2009 2009, CNC SIS

