

A. Teza de doctorat:

Denumirea: Cercetări privind analiza și sinteza unor mecanisme de la mașini agricole, 2009, sub îndrumarea Prof. Dr. ing. Nicolae Dumitru

Domeniul: Inginerie Mecanică

B. Cărți, monografii, cursuri format electronic

1. „Cursuri de perfecționare pentru tehnicienii din service-urile auto”, Secțiunea I Motorizare, Prof. dr. ing. Nicolae Dumitru, **drd. Ing. Geonea Ionuț Daniel**, drd. Ing. Copiluş Petre Cristian, Editura Cellina, Craiova 2007, ISBN 978-973-88345-5-2.
2. „Cursuri de perfecționare pentru tehnicienii din service-urile auto”, Secțiunea II Sisteme de direcție, Sisteme de suspensie, Prof. dr. ing. Nicolae Dumitru, **drd. Ing. Geonea Ionuț Daniel**, drd. Ing. Copiluş Petre Cristian, Editura Cellina, Craiova 2007, ISBN 978-973-88345-8-3.
3. „Cursuri de perfecționare pentru tehnicienii din service-urile auto”, Secțiunea III Sisteme de transmisie, Prof. dr. ing. Nicolae Dumitru, **drd. Ing. Geonea Ionuț Daniel**, drd. Ing. Copiluş Petre Cristian, Editura Cellina, Craiova 2007, ISBN 978-973-1827-5-2.
4. „Cursuri de perfecționare pentru tehnicienii din service-urile auto”, Secțiunea IV Sisteme electrice și electronice, Prof. dr. ing. Marin Mihnea, **drd. Ing. Geonea Ionuț Daniel**, drd. Ing. Copiluş Petre Cristian, Editura Cellina, Craiova 2007, ISBN 978-973-88345-06-03.
5. „Cursuri de perfecționare pentru tehnicienii din service-urile auto”, Secțiunea V Pregătirea și vopsirea autovehiculelor, Prof. dr. ing. Marin Mihnea, Prof. dr. ing. Rinderu Paul, **drd. Ing. Geonea Ionuț Daniel**, drd. Ing. Copiluş Petre Cristian, Editura Cellina, Craiova 2007.
6. Catrina Gh., Copilusi C., **Geonea I.**, Dumitru N., Margine A., A. Ungureanu, Îndrumar de proiectare pentru transmisii mecanice. Editura Universitaria Craiova, 404 pagini, ISBN 978-606-14-0043-0, 2010.
7. Vâlcu Roșca, **Ionuț Daniel Geonea**, Alina Elena Romanescu, Rezistența materialelor, vol. 1, Solicitări simple. Teorie și aplicații rezolvate, Editura Sitech, Craiova 2015, ISBN 978-606-11-4761-5, 340 pag.
8. **Ionuț Daniel Geonea**, Sisteme mecanice mobile. Analiza cinematică și dinamică, Editura Sitech, Craiova, 2015, 260 pag.
9. Alexandru Margine, **Ionuț Daniel Geonea**, Tribologie. Aspecte teoretice și aplicative. Editura Sitech, Craiova 2018, ISBN 978-606-11-6349-6, 248 pagini. (Publicația este înregistrată în fondul de carte al bibliotecii naționale).
10. Copiluş Cristian, Geonea Ionuț, Margine Alexandru, Dumitru Nicolae. Organe de mașini. Note de curs. Universitatea din Craiova 2016. 280 pagini (format electronic).
11. Geonea Ionuț Daniel, Calculul și proiectarea reductoarelor, Manual suport curs Organe de Mașini, Universitatea din Craiova, 2018, 143 pagini.

<http://mecanica.ucv.ro/Organizare/Departamente/MACC/Cadre/Individuale/Extra/Carte%20Aplicatii%20Organe%20de%20Masini.pdf>

12. Geonea Ionuț Daniel, Tribologie. Noțiuni teoretice și aplicații de laborator. Manual suport curs Tribologie, 190 pagini.

<http://mecanica.ucv.ro/Organizare/Departamente/MACC/Cadre/Individuale/Extra/Geonea%20notiuni%20Tribologie.pdf>

13. Cristian Copiluş, Nicolae Dumitru, **Ionuț Daniel Geonea**, Alexandru Margine, Alin Ungureanu, Bazele modelării sistemelor mecanice. Aplicații. Format electronic, 165 pagini.

14. Cristian Copiluş, **Ionuț Daniel Geonea**, Nicolae Dumitru, Alexandru Margine, Alin Ungureanu, Îndrumar laborator - Organe de Mașini.

15. Tarnita, D., Dumitru, N., Pisla, D., Carbone, G., & Geonea, I. (Eds.). (2023). New Trends in Medical and Service Robotics: MESROB 2023 (Vol. 133). Springer Nature.

C. Articole publicate în cadrul unor manifestări științifice, conferințe, reviste indexate:

1. Alexandru-Grigore PISOSCHI, A. CONSTANTINESCU, **Ionuț D. GEONEA**, „Determinarea mediei timpului de bună funcționare minim după legea lui Poisson folosind repartiția hi-pătrat pentru punțile motoare H 0835 de la autocamioanele ROMAN 8135 tip 4x2 după reparația capitală”, INMATEH 2005 –I- Lucrări Științifice cu tema: Transfer tehnologic și afaceri inovative, ISBN 1583-1019, 2005.
2. Alexandru-Grigore PISOSCHI, A. CONSTANTINESCU, **Ionuț D. GEONEA**, „Prelucrarea datelor privind probabilitatea căderilor cilindrilor receptorii frână punte spate de la un autoturism”, Conferința Națională de Termotehnică cu Participare Internațională, Ediția a-XV-a, Universitatea din Craiova, Facultatea de Mecanică, Craiova, 26-28 mai, 2005, ISBN 973-742-089-6.
3. N. Dumitru, Copilusi C., **Ionuț Geonea**, Al-Thahabi Zuhair, “Dynamic response modelling of a robot with four degrees of freedom”, pp. 143-141, Conferința Internațională PRASIC 2006, Brașov.
<http://www.dmg-lib.org/dmglib/main/portal.jsp?mainNaviState=browsen.docum.meta&id=23257009>
4. N. Dumitru, Copilusi C., **Ionuț Geonea**, Hoancă E., “Considerations about the finite element modelling of transmission from the industrial robots structure”, pp. 134-142, Conferința Internațională PRASIC 2006, Brașov.
<http://www.dmg-lib.org/dmglib/main/portal.jsp?mainNaviState=browsen.docum.meta&id=23328009>
5. **Ionuț GEONEA**, Copiluş C., “Considerations About Ecological Design of Agricultural Machines”, Primul simpozion cu participare internațională “Ingineria Mecanică și Mediul”, CRAIOVA 2006.

6. **Ionuț D. Geonea**, *Mechanical system link device carried plow modeling*, Analele Universității din Craiova, Agricultură - Montanologie - Cadastru, vol. XXXII B, 2007, pp. 164 – 171, ISSN 1841 8317.
http://cis01.ucv.ro/analele_universitatii/agricultura/promo/romana/istoric.pdf
7. N. Dumitru, Ghe. Catrina, C. Copiluş, **Ionuț GEONEA**, "Finite element modelling of snail and differential gears with applications in industrial robots", pp. 164 – 172, *The 1st International Conference ADEMS'07*. Cluj 2007.
http://www.atna-mam.utcluj.ro/pdf/2007no50volIII_cuprins_si_rezumate.pdf
8. Sorin Dumitru, Cristian Copilusi and **Ionuț Geonea**, "Snake Like Unit using Flexible Spines and Redundant Actuation", pp. 193 – 201, 4th WSEAS/IASME International Conference on DYNAMICAL SYSTEMS and CONTROL (CONTROL'08). Corfu, Greece, 2008. (Cotație ISI Thompson). <http://www.wseas.us/e-library/conferences/2008/corfu/control/control30.pdf>
9. **Ionuț. D. Geonea**, *The kinematics analyze of the cut off mechanism of a mower machine*, The Third Edition Of the International Conference About Optimization of The Robots and Manipulators - OPTIROB 2008, May 2008, pp. 101 – 106, ISBN 978 973 648 784 2.
10. **Ionuț D. Geonea**, N. Dumitru, *The kinematic analyse of a mechanism used for the farming machine actuation*, Annals of the Oradea University - CD ROM Edition, Volume VII (XVII), 2008, pp. 285 – 292, ISSN 1583 0691. http://imtuoradea.ro/auo.fmte/files-2008/MECANICA_files/GEONEA%20IONUT%201.pdf
11. **Ionuț D. Geonea**, N. Dumitru, Gh. Catrina, *The kinematic analyze of an eccentric mechanism of a mower machine*, Annals of the Oradea University - CD ROM Edition Volume VII (XVII), 2008, pp. 293 – 300, ISSN 1583 0691.
http://imtuoradea.ro/auo.fmte/files-2008/MECANICA_files/GEONEA%20IONUT%202.pdf
12. **Ionuț D. Geonea**, N. Dumitru, D. Vintilă, *Metode clasice și moderne pentru analiza și sinteza mecanismelor din structura unor mașini agricole*, THE THIRD NATIONAL SEMINAR on MECHANISMS, 2008 pp. 277 – 288, ISBN 978-973-746-910-6.
<http://mecanica.ucv.ro/ViataAcademica/Conferinte/snm08/continut/Abstracts.pdf>
13. Stanimir Al., Pascu I.C., Buzatu St., **Geonea I.**, „Chip Formation and Cutting Forces in the Machining of Hardened Rul1V steel”, Annals of the Oradea University, Fascicle of Management and Technological Engineering, volume II (XVII), 2008, pp.1812-1817, ISSN 1583-0691.
http://imtuoradea.ro/auo.fmte/files-2008/TCM_files/STANIMIR%20ALEXANDRU%201.pdf
14. **I. Geonea**, N. Dumitru, Gh. Catrina, „The kinematic and dynamic analyze of an experimental mechanism for the mowers machine”, Annals of the Oradea University – Fascicle of Management and Technological Engineering, CD-ROM Edition, volume VIII, 2009, ISSN 1583-0691.
http://imtuoradea.ro/auo.fmte/files-2009/MECANICA_files/GEONEA%20Ionut%20Daniel1.pdf
15. N. Dumitru, D. Neagoe, **I. Geonea**, S. Dumitru, „Researches upon the kinematic and dynamic response of the oscillatory washer mechanism from the harvester machine”, The 8th International Conference – Fuel Economy, Safety and Reliability of Motor Vehicles, 12-14 November 2009, volume 1, pp. 447-452, ISSN: 2067-1083.
<http://www.fisita.com/publications/papers?id=6441>
16. N. Dumitru, **I. Geonea**, Ilie D., V. Otaț, „Studies concerning the finite element modelling of mechanisms from farming machine structure”, The 8th International Conference – Fuel Economy, Safety and Reliability of Motor Vehicles, 12 - 14 November, 2009, volume 2, pp. 331-342, ISSN: 2067-1083.
17. Dumitru, N.; Ungureanu, A.; Catrina, G.; Rosca, V. & **Geonea, I.** (2009). *Dynamic Answer Modeling of a Mechanism from the Mowers Machine Structure* (2009). 1317-1319, *Annals of DAAAM for 2009 & Proceedings of the 20th International DAAAM Symposium*, ISBN 978-3 901509-70-4, ISSN 1726-9679, pp 659, Editor B[ranko] Katalinic, Published by DAAAM International, Vienna, Austria 2009.
https://spreadsheets.google.com/pub?key=0Av3ne3G71sICdFUwWTZIMXRFR2w0LXRvai1sS0dRcHc&hl=en_GB&output=html
18. Ungureanu, A.; **Geonea, I.**; Dumitru, N.; Catrina, G. & Rosca, V. (2009). *Dynamic Answer Modeling of a Mechanism from Harvester Machines Considering the Elements Deformable* (2009). 1311-1313, *Annals of DAAAM for 2009 & Proceedings of the 20th International DAAAM Symposium*, ISBN 978-3-901509-70-4, ISSN 1726-9679, pp 656, Editor B[ranko] Katalinic, Published by DAAAM International, Vienna, Austria, 2009.
https://spreadsheets.google.com/pub?key=0Av3ne3G71sICdFUwWTZIMXRFR2w0LXRvai1sS0dRcHc&hl=en_GB&output=html
19. Dumitru, S.; Cojocaru, D.; Dumitru, N.; Ciupitu, I.; **Geonea, I.** & Dumitru, V.; *Finite Element Modeling of a Polyarticulated Robotic System*, Annals of DAAAM for 2009 & Proceedings of the 20th International DAAAM Symposium, ISBN 978-3-901509-70-4, ISSN 1726-9679, Editor B[ranko] Katalinic, Published by DAAAM International, Vienna, Austria, 2009.
https://spreadsheets.google.com/pub?key=0Av3ne3G71sICdFUwWTZIMXRFR2w0LXRvai1sS0dRcHc&hl=en_GB&output=html
20. N. Dumitru, R. Malciu, **I. Geonea**, *Differential Transmission for Robotizing a Powered Wheelchair*, Proceedings of the Fifth International Conference on OPTIMIZATION OF THE ROBOTS AND MANIPULATORS, 28-30 May 2010, Published by Research Publishing Services, Singapore, ISBN 978-981-08-5840-7, pp. 47-51.
http://rpsonline.com.sg/proceedings/9789810858407/978-981-08-5840-7_S1-10.xml
21. A. Margine, A. Ungureanu, **I. Geonea**, *Dynamic Optimization of a Plane Manipulator*, Proceedings of the Fifth International Conference on OPTIMIZATION OF THE ROBOTS AND MANIPULATORS, 28-30 May 2010, Published by Research Publishing Services, Singapore, ISBN 978-981-08-5840-7, pp. 60-64.
22. N. Dumitru, D. Semenescu, N. Craciunoiu, D. Vintila, **I. Geonea**, *On the modeling of a hydraulic turbine directory apparatus*, Proceedings of the Fifth International Conference on OPTIMIZATION OF THE ROBOTS AND MANIPULATORS, 28-30 May 2010, Published by Research Publishing Services, Singapore, ISBN 978-981-08-5840-7, pp. 75-80.
http://rpsonline.com.sg/proceedings/9789810858407/978-981-08-5840-7_S2-5.xml
23. **I. Geonea**, A. Margine, A. Ungureanu, *Structure and Kinematics of Mechanisms for Position and Control from Farming Machine*, Proceedings of the Fifth International Conference on OPTIMIZATION OF THE ROBOTS AND MANIPULATORS, 28-30 May 2010, Published by Research Publishing Services, Singapore, ISBN 978-981-08-5840-7, pp. 81-85.

24. I. Dumitru, O. Theodor, C. Mihnea, **I. Geonea**, *Aspects concerning an improved functioning of diesel engines based on a three variables equation: performance map-software-on board information system*, Proceedings of the Fifth International Conference on OPTIMIZATION OF THE ROBOTS AND MANIPULATORS, 28-30 May 2010, Published by Research Publishing Services, Singapore, ISBN 978-981-08-5840-7, pp. 307-311.
http://rpsonline.com.sg/proceedings/9789810858407/978-981-08-5840-7_S10-9.xml
25. A. Margine, N. Dumitru, **I. Geonea**, Ungureanu, C. A., Gh. Catrina, *Dynamic answer and experimental research concerning the mechanisms of mowers machine*, World Congress on Engineering 2010, 30 June-2 July, Imperial College London, U.K., pp1236-1241, ISBN 978-988-18210-7-2, ISSN 2078-0958 (Print), ISSN 2078-0966 (Online), Publisher: Newswood Limited International Association of Engineers.
http://www.iaeng.org/publication/WCE2010/WCE2010_pp1236-1241.pdf
26. A. Margine, Gh. Catrina, **I. Geonea**, *Kinematics and dynamic modeling of a plane manipulator*, Analele Universității din Craiova, seria MECANICĂ, nr. 1/2009, pp. 147-154, ISSN 1223-5296.
27. V. Roșca, **I. Geonea**, *Durability variation of steel R520 with temperature to an oscillator traction fatigue test*, ACTA TECHICA NAPOCENSIS, Applied Mathematics and Mechanics, Nr. 53, Vol. II, 2010, pp. 323-328.
<http://www.atna-mam.utcluj.ro/id39.htm>
28. V. Roșca, **I. Geonea**, *Stress field variation at the tip of a crack by mono axial eccentric fatigue fracture to 213 K temperature*, ACTA TECHICA NAPOCENSIS, Applied Mathematics and Mechanics, Nr. 53, Vol. II, 2010, pp. 329-334.
http://www.atna-mam.utcluj.ro/pdf/2010no53volII_cuprins_si_rezumat.pdf
29. Rosca Vâlcu, **Geonea Ionuț**, Radulescu Mircea, „Proceedings of the International Conference of Mechanical Engineering ICOME 2010”, *Stress field distribution for the R520 steel to an oscillator positive fatigue solicitation*, pp. 509-518. Universitaria Publishing House, ISBN 978-606-510-873-3.
<http://mecanica.ucv.ro/ViataAcademica/Conferinte/ncome/continut/PapersICOME2010.pdf>
30. Rosca Vâlcu, **Geonea Ionuț**, Romanescu Alina, „Proceedings of the International Conference of Mechanical Engineering ICOME 2010”, *Influence of asymmetry coefficient variation upon the stresses from the crack tip to an axial eccentric fatigue solicitation*, 427-436, Universitaria Publishing House, ISBN 978-606-510-873-3.
<http://mecanica.ucv.ro/ViataAcademica/Conferinte/ncome/continut/PapersICOME2010.pdf>
31. C. Micu, **I. Geonea**, *Kinematic and dynamic analysis of a RRR-RRT mechanism*, 3rd Symposium “Durability and Reliability of Mechanical Systems”, pp.71-76, Târgu-Jiu, Romania, 20, 21 May 2010, Editura Academica Brâncuși ISBN 978-973-144-350-8.
32. C. Micu, **I. Geonea**, *Kinematic and dynamic modeling of a harvester machine mechanism*, 3rd Symposium “Durability and Reliability of Mechanical Systems”, pp. 484-489, Târgu-Jiu, Romania, 20, 21 May 2010, Editura Academica Brâncuși ISBN 978-973-144-350-8.
33. C. Micu, **I. Geonea**, *Kinematic modeling of a plane manipulator*, ANNALS of the ORADEA UNIVERSITY, Fascicle of Management and Technological Engineering, Volume IX (XIX), 2010, NR2
<http://imtuoradea.ro/auo.fmte/files-2010-v2/MECANICA/MICU%20Cristina%20L1.pdf>
34. C. Micu, **I. Geonea**, *Dynamic modeling of quadruped biomechanism*, ANNALS of the ORADEA UNIVERSITY, Fascicle of Management and Technological Engineering, Volume IX (XIX), 2010, NR2
<http://imtuoradea.ro/auo.fmte/files-2010-v3/MECANICA/MICU%20Cristina%20L2.pdf>
35. C. Micu, **I. Geonea**, *Kinematic modeling and simulation of quadruped biomechanism*, International Conference of Mechanical Engineering ICOME 2010 - 27th – 30th of April 2010, Craiova - Romania.
36. N. Dumitru, D. Semenescu, **I. Geonea**, *On the dynamic optimization of a hydraulic turbine directory apparatus*, International Conference Advances in Engineering and Management, ADEM 2010, May 19-21, 2010, pp.123-124, Editura Universitaria, Craiova 2010.
37. **Geonea I.**, Ungureanu C. A.; *Structural and Kinematic modeling of a quadruped biomechanism*, Annals of DAAAM for 2010 & Proceedings of the 21th International DAAAM Symposium, ISSN 1726-9679, ISBN 978-3-901509-73-5, Editor B[ranko] Katalinic, Published by DAAAM International, Vienna, Austria, 2010.
38. **Geonea I.**, Dumitru N. Ungureanu C.A., *Dynamic answer modeling of a manipulator mechanism*, Proceedings of 2010 International Conference on Mechanical Engineering, Robotics and Aerospace, Bucharest, Romania, December 2-4, 2010, pp. 167-171, ISBN: 978-1-4244-8867-4, IEEE Catalog Number: CFP1057L-ART.
<http://rpsonline.com.sg/proceedings/9789810858407/9789810858407-toc.html>
39. **Geonea I.**, Margine A., C.A. Ungureanu, *Study upon the Dynamic Answer of Plane Manipulators*, “Optimization of the Robots and Manipulators”, volume 8 of International Proceedings of Computer Science and Information Technology, 26-28 May, 2011, pp. 109-113, ISSN 2010-460X, ISBN 978-981-08-8906-7.
<http://rpsonline.com.sg/proceedings/9789810858407/9789810858407-toc.html>
<http://www.ipcsit.com/vol8/19-S4.6.pdf>
40. **Geonea, I. D.**, Dumitru, N.; Ungureanu, C. A. & Catrina, G.: *Design of a Transmission for a Electric Powered Wheelchair*, Annals of DAAAM for 2011 & Proceedings of the 22nd International DAAAM Symposium, ISBN 978-3-901509-83-4, ISSN 1726-9679, pp. 0477-0478, Editor B[ranko] Katalinic, Published by DAAAM International, Vienna, Austria 2011.
http://www.daaam.info/Downloads/Pdfs/proceedings/proceedings_2011/0477_Geonea.pdf
41. **Geonea I.**, Margine A., Ungureanu A., “*Kinematical Modelling and Simulation of Quadruped Biomechanism*”, 13th World Congress in Mechanism and Machine Science, Guanajuato, México, 19-25 June, 2011, ISBN 978-607-441-131-7.
http://somim.org.mx/conference_proceedings/pdfs/A22/A22_602.pdf

42. Geonea I., Margine A., Ungureanu A., Dumitru N., "Dynamic Answer Optimization and Experimental Research Concerning the Mechanisms of Farming Machine", 13th World Congress in Mechanism and Machine Science, Guanajuato, México, 19-25 June, 2011, ISBN 978-607-441-131-7.
http://somim.org.mx/conference_proceedings/pdfs/A24/A24_593.pdf
43. Geonea Ionuț, Margine Alexandru, Ungureanu Alin, *Dynamic Optimization of a Plane Manipulator*, Advanced Materials Research Vols. 463-464 (2012) pp 1006-1010, © (2012) Trans Tech Publications, Switzerland, <http://www.scientific.net/AMR.463-464.1006>.
44. Geonea Ionuț, Margine Alexandru, Ungureanu Alin, *Structure and Kinematics of Mechanisms for Position and Control from Farming Machine*, Advanced Materials Research Vols. 463-464 (2012) pp 1021-1024, © (2012) Trans Tech Publications, Switzerland, <http://www.scientific.net/AMR.463-464.1021>.
45. Geonea Ionuț, Margine Alexandru, Ungureanu Alin, *Study upon the Dynamic Answer of Plane Manipulators*, Advanced Materials Research Vols. 463-464 (2012) pp 1304-1308, © (2012) Trans Tech Publications, Switzerland, <http://www.scientific.net/AMR.463-464.1304>.
46. Geonea I., Margine A., Dumitru N., *Structural design and kinematics study of a mechanism for quadruped walking*, New Trends in Mechanism and Machine Science, Theory and Applications in Engineering, Series: Mechanisms and Machine Science, Vol. 7, Editors: Fernando Viadero; Marco Ceccarelli, ISBN 978-94-007-4901-6, DOI 10.1007/978-94-007-4902-3_47, Editura Springer Science, <http://www.springer.com/engineering/mechanical+engineering/book/978-94-007-4901-6>. http://link.springer.com/chapter/10.1007%2F978-94-007-4902-3_47#page-1
47. V. Dumitru, C. Copilusi, I. Geonea, I. Dumitrache, G. Marinescu, *Determining the Design Specifications for Mechanical Polyarticulated System Compatible with Minimally Invasive Surgery*, New Trends in Mechanism and Machine Science, Theory and Applications in Engineering, Series: Mechanisms and Machine Science, Vol. 7, Editors: Fernando Viadero; Marco Ceccarelli, ISBN 978-94-007-4901-6, DOI 10.1007/978-94-007-4902-3_47, Editura Springer Science, pp. 367-374.
http://link.springer.com/chapter/10.1007/978-94-007-4902-3_39
48. Vâlcu Roșca, Geonea I., *Studiul vitezei de creștere a fisurii în raport cu modelul matematic propus*, („Study of speed increase of the crack in relation to the mathematical model proposed”), a XII-a Conferință Națională multidisciplinară – cu participare internațională „Profesorul Dorin PAVEL – fondatorul hidroenergeticii românești” Sebeș, 2012, pag. 797-802. <http://stiintasiinginerie.ro/wp-content/uploads/2013/12/108-STUDIUL-VITEZEI-DE-CREȘTEREA-FISURII-%C3%8EN.pdf>
49. MARINESCU Gabriel Cătălin, DUMITRU Nicolae, GEONEA Ionuț, „Dynamic Modelling and Simulation of an Auto Vehicle Steering Mechanism Considering its Elements as Flexible”, Applied Mechanics and Materials”, Vol. 245 (2013) pp 150-155, © (2013) Trans Tech Publications, Switzerland, [doi:10.4028/www.scientific.net/AMM.245.150](http://www.scientific.net/AMM.245.150).
<http://www.scientific.net/AMM.245.150>
50. S.I. Dumitrache, N. Dumitru and I. Geonea, *Human Locomotion System Design Based on Cam Mechanisms*, Proceedings of the World Congress on Engineering 2012 Vol III, WCE 2012, July 4 - 6, 2012, London, U.K., ISBN: 978-988-19252-2-0, ISSN: 2078-0958 (Print); ISSN: 2078-0966 (Online)
http://www.iaeng.org/publication/WCE2012/WCE2012_pp2032-2037.pdf
51. Cristian Copilusi, Mihnea Marin, Ligia Rusu, Ionuț Geonea, *Design Considerations regarding a New Knee Orthosis*, Applied Mechanics and Materials Vol. 162 (2012) pp 276-285 Online available since 2012/Mar/27 at www.scientific.net © (2012) Trans Tech Publications, Switzerland, doi:10.4028/www.scientific.net/AMM.162.276
<http://www.scientific.net/AMM.162.276>
52. GEONEA Ionuț Daniel, ALEXANDRU Cătălin, MARGINE Alexandru, UNGUREANU Alin, *Design and Simulation of a Single DOF Human-Like Leg Mechanism*, Applied Mechanics and Materials Vol. 332 (2013) pp 491-496, © (2013) Trans Tech Publications, Switzerland, doi:10.4028/www.scientific.net/AMM.332.491.
<http://www.scientific.net/AMM.332.491>
53. Ovidiu Antonescu, Ionuț Geonea, Paun Antonescu, *Review on Mechanisms Used as Handbrake in Carriages and Locomotives*, The 11th IFToMM International Symposium on Science of Mechanisms and Machines Mechanisms and Machine Science Volume 18, 2014, pp 523-530, Series Title: Mechanisms and Machine Science Series Volume 18, Series ISSN2211-0984, Publisher Springer International Publishing.
http://link.springer.com/chapter/10.1007%2F978-3-319-01845-4_52
54. GEONEA Ionuț, CECCARELLI Marco, DUMITRU Nicolae, COPILUȘI Cristian, *Kinematics simulation of a mechanism for human leg motion assistance*, INTERNATIONAL CONFERENCE OF MECHANICAL ENGINEERING, ICOME 2013: 16th – 17th of May 2013, Craiova – Romania, ISBN 978-606-14-0692-0, pp. 49-60.
<http://webuser.unicas.it/weblarm/pdf/publications/LARM%20Publications.pdf>
55. ROȘCA Vâlcu, GEONEA Ionuț, ROMANESCU Alina, MIRIȚOIU Cosmin, *STUDY UPON THE DURABILITY OF STEEL R520 UPON THE TEMPERATURE TO AN ECCENTRIC AXIAL SOLICITATION WITH ASYMMETRY COEFFICIENT R0.5*, INTERNATIONAL CONFERENCE OF MECHANICAL ENGINEERING, ICOME 2013: 16th – 17th of May 2013, Craiova – Romania, ISBN 978-606-14-0692-0.
http://mecanica.ucv.ro/ViataAcademica/Conferinte/ICOME2013/Final-Program-ICOME%202013_final.pdf
56. MARGINE Alexandru, DUMITRU Nicolae, GEONEA Ionuț, DRAGUT Emil, *ELECTROMECHANICAL SYSTEM FOR QUALITY ASSESMENT OF SPUR GEAR*, INTERNATIONAL CONFERENCE OF MECHANICAL ENGINEERING, ICOME 2013: 16th – 17th of May 2013, Craiova – Romania, ISBN 978-606-14-0692-0.
http://mecanica.ucv.ro/ViataAcademica/Conferinte/ICOME2013/Final-Program-ICOME%202013_final.pdf

57. **Geonea Ionuț**, Dumitru Nicolae, Margine Alexandru, Copilusi Cristian, *Design an Simulation of a Mechanism for Human Leg Motion Assistance*, Advanced Materials Research Vol. 1036, ISBN 978-3-03835-255-6, Trans Tech Publications, 2014.
<https://www.scientific.net/AMR.1036.811>
58. **Geonea Ionuț**, Tarnita Daniela, Racila Laurentiu, Romanescu Alina, *Design of a Transmission for Wheelchairs intended to Human with Locomotor Disabilities*, International Congress Science and Management of Automotive and Transportation Engineering, pp. 75-82, ISBN 978-606-14-0866-5, Editura Universitaria Craiova, 2014.
59. **Geonea Ionuț**, Margine Alexandru, Romanescu Alina, Vintila Daniela, *Dynamic Simulation of a Mechanism for Human Leg Motion Rehabilitation*, International Congress Science and Management of Automotive and Transportation Engineering, pp. 153-156, ISBN 978-606-14-0864-1, Editura Universitaria Craiova, 2014.
60. Racila Laurentiu, Dumitru Ilie, **Geonea Ionuț**, *Car Jack Based on 6R Overconstrained Mechanism*, International Congress Science and Management of Automotive and Transportation Engineering, pp. 165-168, ISBN 978-606-14-0864-1, Editura Universitaria Craiova, 2014.
61. Mihaela Bogdan, **Ionuț Geonea**, Loreta Simniceanu, Victor Otat, Dragos Popa, *The dynamic study for the helicoidal spring of the Macpherson automotive suspension*, International Congress Science and Management of Automotive and Transportation Engineering, pp. 67-73, ISBN 978-606-14-0864-1, Editura Universitaria Craiova, 2014.
62. **Geonea Ionuț**, Ungureanu Alin, Dumitru Nicolae, Racila Laurentiu, *Dynamic Modelling of a Four Legged Robot*, New Trends in Mechanism and Machine Science Mechanisms and Machine Science Volume 24, 2015, Springer International Publishing, pp 147-155, DOI 10.1007/978-3-319-09411-3_16, Print ISBN 978-3-319-09410-6, Online ISBN 978-3-319-09411-3, Series ISSN 2211-0984, Editors: Paulo Flores, Fernando Viadero.
https://link.springer.com/chapter/10.1007/978-3-319-09411-3_16
63. N. Dumitru, C. Copilusi, **I. Geonea**, D. Tarnita, I. Dumitrache, *Dynamic Analysis of an Exoskeleton New Ankle Joint Mechanism*, New Trends in Mechanism and Machine Science Mechanisms and Machine Science Volume 24, 2015, Springer International Publishing, pp 709-717, DOI 10.1007/978-3-319-09411-3_75, Print ISBN 978-3-319-09410-6, Online ISBN 978-3-319-09411-3, Series ISSN 2211-0984.
https://link.springer.com/chapter/10.1007/978-3-319-09411-3_75
64. Craciunoiu Nicolae, **Geonea Ionuț**, *Analysis of the single right flute reamer using FEA method*, International Congress Science and Management of Automotive and Transportation Engineering, pp. 421-424, ISBN 978-606-14-0864-1, Editura Universitaria Craiova, 2014.
<http://mecanica.ucv.ro/ViataAcademica/Conferinte/smat2014/Pages/Program%20SMAT%202014.pdf>
65. **Geonea Ionuț**, *Design of a Wheelchair for Human with Locomotion Disabilities*, Joint International Conference of Doctoral and Post-Doctoral Researchers, Craiova, 12-13 September 2014, pag.5.
66. **Ionuț Daniel GEONEA**, Nicolae DUMITRU, Alexandru MARGINE, *Design, kinematic and structural analysis of a wheelchair transmission*, PROCEEDINGS of the ANNUAL SESSION OF SCIENTIFIC PAPERS "IMT ORADEA - 2015", 28th – 30th May, Oradea, Romania, 2015, ISSN 2285-3278, ISBN 978-606-10-1537-5, pp.135-140.
<https://imtuoradea.ro/auo.fmte/files-2015-v2/Ionuț%20Daniel%20GEONEA,%20Nicolae%20DUMITRU,%20Alexandru%20MARGINE%20-%20DESIGN,%20KINEMATIC%20AND%20STRUCTURAL%20ANALYSIS%20OF%20A%20WHEELCHAIR%20TRANSMISSION.pdf>
67. **Ionuț Daniel GEONEA**, Nicolae DUMITRU, Alexandru MARGINE, *Motion study of a wheelchair prototype for disabled people*, PROCEEDINGS of the ANNUAL SESSION OF SCIENTIFIC PAPERS, "IMT ORADEA - 2015", 28th – 30th May, Oradea, Romania, ISSN 2285-3278, ISBN 978-606-10-1537-5, pp.103-108.
<https://imtuoradea.ro/auo.fmte/files-2015-v1/Ionuț%20Daniel%20GEONEA%20-%20MOTION%20STUDY%20OF%20A%20WHEELCHAIR%20PROTOTYPE%20FOR%20DISABLED%20PEOPLE.pdf>
68. **Ionuț Daniel GEONEA**, Nicolae DUMITRU, Alexandru MARGINE, *Design and structural analysis of a powered wheelchair transmission*, ACTA UNIVERSITATIS CIBINIENSIS – TECHNICAL SERIES, Vol. LXVII 2015, DOI: 10.1515/aucts-2015-0061, pp.37-43.
<https://content.sciendo.com/view/journals/aucts/67/1/article-p37.xml>
69. **Ionuț Daniel GEONEA**, Nicolae DUMITRU, Alexandru MARGINE, *Motion evaluation of a wheelchair prototype for disabled people*, ACTA UNIVERSITATIS CIBINIENSIS – TECHNICAL SERIES, Vol. LXVII 2015, DOI: 10.1515/aucts-2015-0062, pp.44-50.
<https://content.sciendo.com/view/journals/aucts/67/1/article-p44.xml>
70. **Ionuț Daniel GEONEA**, Nicolae DUMITRU, Alexandru MARGINE, *Design and Motion Study of a Wheelchair for Disabled People*, Proceedings of the World Congress on Engineering 2015 Vol. II, WCE 2015, July 1 - 3, 2015, London, U.K., ISBN: 978-988-14047-0-1, ISSN: 2078-0958 (Print); ISSN: 2078-0966 (Online), pp.1028-1033.
http://www.iaeng.org/publication/WCE2015/WCE2015_pp1028-1033.pdf
71. **Ionuț Daniel GEONEA**, Nicolae DUMITRU, Violeta DUMITRU, *Design and Motion Analysis of a Powered Wheelchair*, Applied Mechanics and Materials Vol. 772 (2015), doi:10.4028/www.scientific.net /AMM.772.613, ISSN 1660-9336, pp. 613-620, © (2015) Trans Tech Publications, Switzerland.
<https://www.scientific.net/AMM.772.613>

72. **Ionuț Daniel GEONEA**, Marco CECCARELLI, Cristian COPILUSI, *New Assistive Device for People with Motor Disabilities*, Applied Mechanics and Materials Vol. 772 (2015), doi:10.4028/www.scientific.net/AMM.772.574, ISSN 1660-9336, pp. 574-579, © (2015) Trans Tech Publications, Switzerland.
<https://www.scientific.net/AMM.772.574>
73. Geonea, I., Ceccarelli, M., & Carbone, G. (2015, October). Design and analysis of an exoskeleton for people with motor disabilities. In The 14th IFTOMM World Congress, Taipei, Taiwan.
<http://www.iftomm2015.tw/IFTOMM2015CD/PDF/OS1-006.pdf>
74. **Ionuț Daniel GEONEA**, Nicolae DUMITRU, *Motion Analysis of a Robotic Wheelchair*, Advances in Intelligent Systems and Computing 371, Springer International Publishing Switzerland 2016, ISBN 978-3-319-21289-0, ISBN 978-3-319-21290-6 (eBook), DOI 10.1007/978-3-319-21290-6, pp.471-479.
https://link.springer.com/chapter/10.1007/978-3-319-21290-6_47
75. **I. Geonea**, A. Romanescu, L. Racila, I. Dumitru, "*Design of a Wheelchair Intended to Humans with Locomotor Disabilities*", Applied Mechanics and Materials, Vol. 822, pp. 293-298, 2016.
<https://www.scientific.net/AMM.822.293>
76. **I. Geonea**, A. Romanescu, L. Racila, I. Dumitru, "*Design of a Transmission for Wheelchairs Intended to Humans with Locomotor Disabilities*", Applied Mechanics and Materials, Vol. 822, pp. 60-67, 2016.
<https://www.scientific.net/AMM.822.60>
77. M. L. Bogdan, **I. Geonea**, L. Simniceanu, V. Otat, D. L. Popa, "*The Modal Analysis for the Helicoidally Spring of the Macpherson Automotive Suspension*", Applied Mechanics and Materials, Vol. 822, pp. 83-88, 2016.
<https://www.scientific.net/AMM.822.83>
78. N. Dumitru, S. Dumitru, V. Stoian, **I. Geonea**, "*Vehicle Steering Mechanism Elastodynamic Analysis*", Applied Mechanics and Materials, Vol. 823, pp. 241-246, 2016.
<https://www.scientific.net/AMM.823.241>
79. D. Tarnita, A. Rosca, **I. Geonea**, D. Calafeteanu, "*Experimental Measurements of the Human Knee Flexion Angle during Squat Exercises*", Applied Mechanics and Materials, Vol. 823, pp. 113-118, 2016.
<https://www.scientific.net/AMM.823.113>
80. D. Tarnita, D. Calafeteanu, M. Catana, **I. Geonea**, D. Tarnita, "*Development of a Three-Dimensional Finite Element Knee Prosthesis Model*", Applied Mechanics and Materials, Vol. 822, pp. 150-155, 2016.
<https://www.scientific.net/AMM.822.150>
81. L. Racila, I. Dumitru, **I. Geonea**, "*Car Jack Based on 6R Overconstrained Mechanism*", Applied Mechanics and Materials, Vol. 822, pp. 12-17, 2016.
<https://www.scientific.net/AMM.822.12>
82. D. Tarnita, **I. Geonea**, A. Petcu and D.N. Tarnita, *Numerical Simulations and Experimental Human Gait Analysis Using Wearable Sensors*, MESROB 2016.
https://link.springer.com/chapter/10.1007/978-3-319-59972-4_21
83. Tarniță, D., **Geonea, I.**, Petcu, A., & Tarniță, D. N. (2016, June). *Experimental Characterization of Human Walking on Stairs Applied to Humanoid Dynamics*. In International Conference on Robotics in Alpe-Adria Danube Region (pp. 293-301). Springer International Publishing.
https://link.springer.com/chapter/10.1007/978-3-319-49058-8_32
84. Nicolae Dumitru, **Ionut Geonea**, Alexandru Margine, Mihnea Cataneanu, *Design of a vehicle for disabled people motion*, The International Congress of Automotive and Transport Engineering, CONAT 2016, Brasov, Romania, Oct. 26-29, 2016.
<http://aspekt.unitbv.ro/jspui/bitstream/123456789/2069/1/18.pdf>
85. Dumitru, N., Copilusi, C., **Geonea, I.**, & Margine, A. (2016, October). *Kinematic and Dynamic Study of a Mechanism for a Vehicle Front and Rear Stabilizer Bars*. In International Congress of Automotive and Transport Engineering (pp. 161-169). Springer International Publishing.
https://link.springer.com/chapter/10.1007/978-3-319-45447-4_18
86. **Ionut Geonea**, Dumitru Nicolae, Dumitru Ilie, *Experimental and theoretical study of friction torque from radial ball bearings*, 2017 IOP Conf. Ser.: Mater. Sci. Eng. 252 012048.
<http://iopscience.iop.org/article/10.1088/1757-899X/252/1/012048>
87. **GEONEA Ionut**, DUMITRU Nicolae, MARGINE Alexandru and COPILUSI Petre, *Experimental Investigations Concerning Friction from Threaded Assemblies*, 4th International Conference of Mechanical Engineering, Trans Tech Publication.
<https://www.scientific.net/AMM.880.33>
88. **GEONEA Ionut**, DUMITRU Nicolae, ROSCA Adrian, PETCU Alin, CIUREZU Leonard, *Experimental Validation of an Exoskeleton for Motion Assistance*, 4th International Conference of Mechanical Engineering, Trans Tech Publication.
<https://www.scientific.net/AMM.880.111>
89. ROSCA Adrian, CRACIUNOIU Nicolae, **GEONEA Ionut** and PLOSCARU Cristina, *Design of a Test Rig for Vehicle Stabilizer Bar Fatigue Study*, 4th International Conference of Mechanical Engineering, Trans Tech Publication.
<https://www.scientific.net/AMM.880.226>

90. I. Geonea, N. Dumitru, A. Rosca and A. Didu, Design, *Numerical Simulation and Manufacturing of a Powered Wheelchair*, The 12th IFToMM International Symposium on Science of Mechanisms and Machines, SYROM 2017.
<https://www.springerprofessional.de/en/design-numerical-simulation-and-manufacturing-of-a-powered-wheel/15786824>
https://link.springer.com/chapter/10.1007/978-3-319-79111-1_19
91. Geonea I., A. Rosca, P. Rinderu, Design, *Development and Testing of a Dynamometer for Drill Force Measurement*, The 12th IFToMM International Symposium on Science of Mechanisms and Machines, SYROM 2017.
<https://www.springerprofessional.de/en/design-development-and-testing-of-a-dynamometer-for-drill-force-/15786896>
https://link.springer.com/chapter/10.1007/978-3-319-79111-1_48
92. Geonea I., Dumitru N., Margine A. (2018) Analytical and Numerical Study of Critical Speed for Right Shafts. In: Herisanu N., Marinca V. (eds) *Acoustics and Vibration of Mechanical Structures—AVMS-2017*. Springer Proceedings in Physics, vol 198. Springer, Cham
https://link.springer.com/chapter/10.1007/978-3-319-69823-6_49
93. Daniela Tarnita, **Geonea Ionuț***, Petcu Alin, *Experimental Human Walking and Virtual Simulation of Rehabilitation on Plane and Inclined Treadmill*, *Acoustics and Vibration of Mechanical Structures—AVMS-2017*.
https://link.springer.com/content/pdf/10.1007/978-3-319-69823-6_18.pdf
94. N. Dumitru, E. Dragut, N. Craciunoiu and I. Geonea, *Experimental Bench for Spur Gears Efficiency Measurement*, The 12th IFToMM International Symposium on Science of Mechanisms and Machines, SYROM 2017.
<https://www.springerprofessional.de/experimental-bench-for-spur-gears-efficiency-measurement/15786894>
https://link.springer.com/chapter/10.1007/978-3-319-79111-1_47
95. Geonea, I. D. and Tarnita, D.: *Design and evaluation of a new exoskeleton for gait rehabilitation*, Mech. Sci., 8, 307-321, <https://doi.org/10.5194/ms-8-307-2017>, 2017.
96. TARNIȚĂ, D., CALAFETEANU, D. M., **GEONEA, I. D.**, PETCU, A., & TARNIȚĂ, D. N. (2017). Effects of malalignment angle on the contact stress of knee prosthesis components, using finite element method. Rom J Morphol Embryol, 58, 3.
http://www.rjme.ro/RJME/resources/files/Tarnita_Daniela_RJME_58_3_2017.pdf
97. Dumitru, N., Craciunoiu, N., **Geonea, I.**, & Copilusi, C. (2017). *Elastodynamic Analysis of a Mechanism with Flexible Links*. In Proceedings of the World Congress on Engineering (Vol. 2).
http://www.iaeng.org/publication/WCE2017/WCE2017_pp821-828.pdf
98. ADRIAN, ROSCA, N. Craciunoiu, **I. Geonea**, C. Ploscaru. Design of a Test Rig for Vehicle Stabilizer Bar Fatigue Study. *Applied Mechanics & Materials*, 2018, 880.
99. **Geonea, I.**, Dumitru, S., Copilusi, C., Margine, A., & Rinderu, P. (2018). Design and Numerical Characterization of a Leg Exoskeleton Linkage for Motion Assistance. In Proceedings of the World Congress on Engineering and Computer Science (Vol. 2).
http://www.iaeng.org/publication/WCECS2018/WCECS2018_pp594-599.pdf
100. **Geonea, I.**, Dumitru, N., Rinderu, P., & Margine, A. (2018). Design Solutions for Human Legs Motion Assistance Exoskeletons. In Proceedings of the World Congress on Engineering (Vol. 2).
http://www.iaeng.org/publication/WCE2018/WCE2018_pp783-788.pdf
101. **Geonea, I.D.**, & Daniela, Tarnita. (2018, May). Motion assistance with an exoskeleton for stair climb. In 2018 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR) (pp. 1-6). IEEE.
<https://ieeexplore.ieee.org/abstract/document/8402731>
102. **Dumitru N.**, Geonea I., Copilusi C., Dumitru S., Otat O. (2019) Dynamic Models for Analyzing a Self-propelled Vehicle for People with Locomotor Disabilities. In: Burnete N., Varga B. (eds) *Proceedings of the 4th International Congress of Automotive and Transport Engineering (AMMA 2018)*. AMMA2018 2018. Proceedings in Automotive Engineering. Springer, Cham.
https://link.springer.com/chapter/10.1007/978-3-319-94409-8_78
103. **Ionuț Geonea.**, Nicolae Dumitru., Cristian Copilusi., Ilie Dumitru., Otat Oana., Dragos Tutunea. (2019) Theoretical and Experimental Analysis for the Load Capacity of the Cone Tightening Assemblies. In: Burnete N., Varga B. (eds) *Proceedings of the 4th International Congress of Automotive and Transport Engineering (AMMA 2018)*. AMMA2018 2018. Proceedings in Automotive Engineering. Springer, Cham.
https://link.springer.com/chapter/10.1007/978-3-319-94409-8_51
104. **Geonea I.**, Tarnita D., Carbone G., Ceccarelli M. (2019) Design and Simulation of a Leg Exoskeleton Linkage for Human Motion Assistance. In: Carbone G., Ceccarelli M., Pisla D. (eds) *New Trends in Medical and Service Robotics. Mechanisms and Machine Science*, vol 65. Springer, Cham.
https://link.springer.com/chapter/10.1007/978-3-030-00329-6_11
105. **Copilusi C.**, Dumitru S., Geonea I., Rosu E., Ceccarelli M. (2019) Numerical Simulation of a Leg Exoskeleton for Human Motion Assistance. In: Carbone G., Ceccarelli M., Pisla D. (eds) *New Trends in Medical and Service Robotics. Mechanisms and Machine Science*, vol 65. Springer, Cham.
https://link.springer.com/chapter/10.1007/978-3-030-00329-6_12
https://doi.org/10.1007/978-3-030-00329-6_12

106. Tarnita D., Georgescu M., **Geonea I.**, Petcu A., Tarnita DN. (2019) Nonlinear Analysis of Human Ankle Dynamics. In: Carbone G., Ceccarelli M., Pisla D. (eds) New Trends in Medical and Service Robotics. Mechanisms and Machine Science, vol 65. Springer, Cham.
https://link.springer.com/chapter/10.1007/978-3-030-00329-6_27
107. Rosca, A. S., & **Geonea, I. D.** (2019). Influence of Gates on Quality Parameters for a Joystick Handler. In Materials Science Forum (Vol. 957, pp. 399-408). Trans Tech Publications Ltd.
<https://www.scientific.net/MSF.957.399>
108. Ionica, V., Bagnaru, D., Stanescu, M., Bogdan, M., & **Geonea, I.** Dynamic Modeling of Mechanisms with Spur Gears, Proceedings of the World Congress on Engineering 2019, WCE 2019, July 3-5, 2019, London, U.K.
http://www.iaeng.org/publication/WCE2019/WCE2019_pp410-417.pdf
109. Tarnita, D., Pisla, D., **Geonea, I.**, Vaida, C., Catana, M., & Tarnita, D. N. (2019). Static and Dynamic Analysis of Osteoarthritic and Orthotic Human Knee. Journal of Bionic Engineering, 16(3), 514-525.
<https://doi.org/10.1007/s42235-019-0042-3>
110. Alina, DUTA., **GEONEA, I. D.**, Djukanovic, G., Popescu, M., & Ludmila, S. A. S. S. (2019). ASPECTS AND GEOMETRIC INTERPRETATION IN SOLVING CONICAL SECTIONS. Journal of Industrial Design and Engineering Graphics, 14(1), 23-26.
<http://sorging.ro/jideg/index.php/jid/article/view/419>
111. **Geonea, I.**, Margine, A., Copilusi, C., Tutunea, D., & Ionica, V. (2019). MODAL DYNAMIC ANALYSIS FOR THE SHAFTS OF A GEARBOX. Journal of Industrial Design and Engineering Graphics, 14(1), 113-118.
<http://www.sorging.ro/jideg/index.php/jid/article/view/438>
112. **Geonea, I.**, & Cretu, S. M. (2019). COMPUTER GRAPHICS USED TO OVER CONSTRAINED MECHANISMS' MOBILITY. Journal of Industrial Design and Engineering Graphics, 14(1), 289-294.
<http://sorging.ro/jideg/index.php/jid/article/view/467>
113. **Geonea, I.**, Dumitru, N., Tarnita, D., & Rinderu, P. (2019, June). Design and kinematics of a new leg exoskeleton for human motion assistance. In IFToMM World Congress on Mechanism and Machine Science (pp. 165-174). Springer, Cham.
https://doi.org/10.1007/978-3-030-20131-9_17
114. Oțăt, O. V., Oțăt, V., Racilă, L., **Geonea, I.**, & Tutunea, D. (2019, August). Vehicle dynamics influence on traffic safety in case of a certain route deceleration. In IOP Conference Series: Materials Science and Engineering (Vol. 568, No. 1, p. 012056). IOP Publishing.
<https://iopscience.iop.org/article/10.1088/1757-899X/568/1/012056/meta>
115. Tutunea, D., Ilie, D., Racila, L., **Geonea, I.**, Otat, O., & Matei, L. (2019, August). Application of thermogravimetric analysis for thermal characterization of walnut oil and biodiesel. In IOP Conference Series: Materials Science and Engineering (Vol. 568, No. 1, p. 012075). IOP Publishing.
<https://iopscience.iop.org/article/10.1088/1757-899X/568/1/012075/meta>
116. Pascu, I., Popescu, I., Gheorghe, S., **Geonea, I.**, & Didu, A. (2019, August). Research about the quality of the surface after turning out of duralumin alloy. In IOP Conference Series: Materials Science and Engineering (Vol. 568, No. 1, p. 012066). IOP Publishing.
<https://iopscience.iop.org/article/10.1088/1757-899X/568/1/012066/meta>
117. Copilusi, C., Dumitru, N., Margine, A., & **Geonea, I.** (2019, August). Dynamic Analysis of a Human Ankle Joint Prosthesis. In IOP Conference Series: Materials Science and Engineering (Vol. 568, No. 1, p. 012077). IOP Publishing.
<https://iopscience.iop.org/article/10.1088/1757-899X/568/1/012077/meta>
118. Ionica, V., Stanescu, M., Miritoiu, C., & **Geonea, I.** (2019, August). Vibrations influence on the operation of gears. In IOP Conference Series: Materials Science and Engineering (Vol. 568, No. 1, p. 012037). IOP Publishing.
<https://iopscience.iop.org/article/10.1088/1757-899X/568/1/012037/meta>
119. **Geonea, I.**, Dumitru, N., Rosca, A., Craciunoiu, N., Racila, L., & Copilusi, C. (2019, August). Computation of a torsion spring stabilizer bar rigidity and fatigue resistance. In IOP Conference Series: Materials Science and Engineering (Vol. 568, No. 1, p. 012013). IOP Publishing.
<https://iopscience.iop.org/article/10.1088/1757-899X/568/1/012013/meta>
120. Racila, L. D., Dumitru, I., Tutunea, D., Matei, L., **Geonea, I.**, Otat, O., & Racila, M. (2019, August). Focusing device based on overconstrained mechanism. In IOP Conference Series: Materials Science and Engineering (Vol. 568, No. 1, p. 012004). IOP Publishing.
<https://iopscience.iop.org/article/10.1088/1757-899X/568/1/012004/meta>
121. Popescu, D., & **Geonea, I.** (2019, August). Surface roughness measuring in case of electro-erosion processed work pieces. In IOP Conference Series: Materials Science and Engineering (Vol. 568, No. 1, p. 012023). IOP Publishing.
<https://iopscience.iop.org/article/10.1088/1757-899X/568/1/012023/meta>
122. **Geonea, I.**, Racila, L., Valeriu, I., & Miritoiu, C. M. (2019, October). Modeling of Dynamic Behavior of a Spur Gear. In SIAR International Congress of Automotive and Transport Engineering: Science and Management of Automotive and Transportation Engineering (pp. 559-564). Springer, Cham.
https://link.springer.com/chapter/10.1007/978-3-030-32564-0_65

123. Tutunea, D., Dumitru, I., Racila, L., Oțat, O., **Geonea, I.**, Matei, L., & Rotea, C. (2019, October). Experimental Stand to Evaluate Engine Mass Air Flow (MAF) Sensor. In *SIAR International Congress of Automotive and Transport Engineering: Science and Management of Automotive and Transportation Engineering* (pp. 26-30). Springer, Cham. https://link.springer.com/chapter/10.1007/978-3-030-32564-0_3
124. Racila, L., Dumitru, I., Matei, L., Racila, M., Tutunea, D., & **Geonea, I.** (2019, October). Solicitations in the Rear Axle Support of a Karting Frame. In *SIAR International Congress of Automotive and Transport Engineering: Science and Management of Automotive and Transportation Engineering* (pp. 607-613). Springer, Cham. https://link.springer.com/chapter/10.1007/978-3-030-32564-0_71
125. Dumitru, N., Copilusi, C., Calangiu, A., & **Geonea, I.** (2019, October). An Engine Mechanism Dynamic Analysis by Considering the Kinematic Elements as Deformable Ones. In *SIAR International Congress of Automotive and Transport Engineering: Science and Management of Automotive and Transportation Engineering* (pp. 15-25). Springer, Cham. https://link.springer.com/chapter/10.1007/978-3-030-32564-0_2
126. Craciunoiu, N., Tarata, D., Rosca, A. S., & **Geonea, I.** (2019, October). Surface Roughness and Temperature in Dry Milling of an Austenitic Stainless Steel. In *SIAR International Congress of Automotive and Transport Engineering: Science and Management of Automotive and Transportation Engineering* (pp. 670-677). Springer, Cham. https://link.springer.com/chapter/10.1007/978-3-030-32564-0_78
127. **Geonea, I.**, Dumitru, N., Copilusi, C., Margine, A., & Racila, L. (2020). Kinematics and Design of a Leg Exoskeleton for Human Motion Assistance. In *The 10th International Conference on Engineering, Project, and Production Management* (pp. 511-522). Springer, Singapore. https://link.springer.com/chapter/10.1007/978-981-15-1910-9_42
128. **Geonea, I.**, Dumitru, N., Copilusi, C., & Margine, A. (2020, January). Experimental Determination of the Loading Capacity of the Elastic Bracelet Assembly. In *IOP Conference Series: Materials Science and Engineering* (Vol. 724, No. 1, p. 012006). IOP Publishing. <https://iopscience.iop.org/article/10.1088/1757-899X/724/1/012006/meta>
129. **Geonea, I. D.**, Rosca, A. S., Racila, L., Rinderu, P., & Valeriu, I. (2020). About the Vibration and Dynamics of a Bus Chassis. In *Applied Mechanics and Materials* (Vol. 896, pp. 97-104). Trans Tech Publications Ltd. <https://www.scientific.net/AMM.896.97>
130. Cretu, S. M., & **Geonea, I. D.** (2020). Circular-Arc Radial Cams with One Connection Arc. In *Applied Mechanics and Materials* (Vol. 896, pp. 83-94). Trans Tech Publications Ltd. <https://www.scientific.net/AMM.896.83>
131. **Geonea, I. D.**, Dumitru, N., Margine, A., Craciunoiu, N., & Copilusi, C. (2020). Design, Manufacture and Testing of a S Type Force Transducer. In *Applied Mechanics and Materials* (Vol. 896, pp. 255-262). Trans Tech Publications Ltd. <https://www.scientific.net/AMM.896.255>
132. Tutunea, D., Dumitru, I., Oțat, O. V., Racila, L., **Geonea, I. D.**, & Rotea, C. C. (2020). Oxygen Sensor Testing for Automotive Applications. In *Applied Mechanics and Materials* (Vol. 896, pp. 249-254). Trans Tech Publications Ltd. <https://www.scientific.net/AMM.896.249>
133. Rosca, A. S., Craciunoiu, N., & **Geonea, I. D.** (2020). Considerations on Single and Multiple Nests Molding Injection. In *Applied Mechanics and Materials* (Vol. 896, pp. 286-292). Trans Tech Publications Ltd. <https://www.scientific.net/AMM.896.286>
134. Ciurezu-Gherghe, L. M., Dumitru, N., **Geonea, I. D.**, & Copilusi, C. (2020). Dynamic and Modal Analysis of a Snake like Robot. In *Applied Mechanics and Materials* (Vol. 896, pp. 203-210). Trans Tech Publications Ltd. <https://www.scientific.net/AMM.896.203>
135. Valeriu, I., Bagnaru, D. G., & **Geonea, I. D.** (2020). Modeling the Vibrations of the Pale of a Wind. In *Applied Mechanics and Materials* (Vol. 896, pp. 47-58). Trans Tech Publications Ltd. <https://www.scientific.net/AMM.896.47>
136. Copilusi, C., Dumitru, N., Margine, A., & **Geonea, I. D.** (2020). Dynamic Answer of a Human Ankle Joint Implant. In *Applied Mechanics and Materials* (Vol. 896, pp. 23-30). Trans Tech Publications Ltd. <https://www.scientific.net/AMM.896.23>
137. Mirițoiu, C. M., Craciunoiu, N., Bolcu, A., **Geonea, I. D.**, Valeriu, I., Pădeanu, A. P., & Vașarhelean, I. G. (2020). About the Static Mechanical Properties of Epoxy/Hemp Composites. In *Applied Mechanics and Materials* (Vol. 896, pp. 321-326). Trans Tech Publications Ltd. <https://www.scientific.net/AMM.896.321>
138. **Geonea, I. D.**, Dumitru, N., Copilusi, C., Margine, A., Ciurezu, L., & Didu, A. (2020, May). New design and motion analysis of an exoskeleton robot for assisting human locomotion. In *2020 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR)* (pp. 1-6). IEEE. https://ieeexplore.ieee.org/abstract/document/9129951?casa_token=pduIMXOW-4kAAAAA:mhg_vj3yhum8_KTU1IFkUpYXkfXBMtwlZIX2e9-LEo8tNwmqbwLGI38ogucizcgV9QE-dQ19oEqw
139. Stanescu, M., Ionica, V., **Geonea, I.**, Mirițoiu, C., & Bolcu, A. (2020, July). Research in the field of vibration of automotive systems. In *IOP Conference Series: Materials Science and Engineering* (Vol. 898, No. 1, p. 012039). IOP Publishing. <https://iopscience.iop.org/article/10.1088/1757-899X/898/1/012039/meta>
140. Cretu, S. M., & **Geonea, I. D.** (2020, September). Computer-Assisted Learning Used to Overconstrained Mechanism's Mobility. In *European Conference on Mechanism Science* (pp. 519-527). Springer, Cham. https://link.springer.com/chapter/10.1007/978-3-030-55061-5_58

141. Ionica V., **Geonea I.**, Miritoiu C., Bolcu A. (2021) Gears Dynamic Response to Vibrations. In: Herisanu N., Marinca V. (eds) *Acoustics and Vibration of Mechanical Structures—AVMS 2019*. Springer Proceedings in Physics, vol 251. Springer, Cham. https://doi.org/10.1007/978-3-030-54136-1_10
142. Rosca, A. S., Craciunoiu, N., **Geonea, I. D.**, & Ciurezu Gherghe, L. (2021). Experimental measurement of the cutting forces and wear of the drill in processing X17CrNi16-2 martensitic stainless steel. *Mechanical Sciences*, 12(1), 269-287.
<https://ms.copernicus.org/articles/12/269/2021/>
143. COPILUSI, C., DUMITRU, S., **GEONEA, I.**, COLICI, F., & DUMITRU, N. (2021). DESIGN AND NUMERICAL CHARACTERIZATION OF A NEW LEG EXOSKELETON FOR HUMAN NEUROMOTOR REHABILITATION. *ACTA TECHNICA NAPOCENSIS-Series: APPLIED MATHEMATICS, MECHANICS, and ENGINEERING*, 64(1-S2).
<https://atna-mam.utcluj.ro/index.php/Acta/article/view/1525>
144. **GEONEA, I. D.**, IONICĂ, V., BOGDAN, M., RACILĂ, L., & MATEI, L. (2021). VIBRATION OF AUTOMOTIVE SUSPENSIONS. *ACTA TECHNICA NAPOCENSIS-Series: APPLIED MATHEMATICS, MECHANICS, and ENGINEERING*, 64(1-S2).
<https://atna-mam.utcluj.ro/index.php/Acta/article/view/1530>
145. STANESCU, M. M., BOLCU, D., BOGDAN, M. L., **GEONEA, I. D.**, & IONICA, V. (2021). A METHOD FOR THE ANALYSIS OF VIBRATIONS OCCURRING WITHIN SOME MECHANICAL SYSTEMS WHICH CONTAIN SPUR GEARS. *ACTA TECHNICA NAPOCENSIS-Series: APPLIED MATHEMATICS, MECHANICS, and ENGINEERING*, 64(1-S2).
<https://atna-mam.utcluj.ro/index.php/Acta/article/view/1542>
146. Dumitru, N., Ciurezu-Gherghe, L., Copiluși, C., **Geonea, I.**, & Dumitru, S. (2022). Theoretical and experimental study methods for a robotic system with deformable elements used in minimally invasive surgery. *Mechanism and Machine Theory*, 167, 104459.
<https://www.sciencedirect.com/science/article/pii/S0094114X21002172>
147. Rădoi, A. I., Miritoiu, C. M., Bogdan, M., Bolcu, A., & **Geonea, I.** (2020, December). Mechanical properties determination for a hybrid sandwich bar reinforced with steel wire mesh. In *IOP Conference Series: Materials Science and Engineering* (Vol. 997, No. 1, p. 012030). IOP Publishing.
<https://iopscience.iop.org/article/10.1088/1757-899X/997/1/012030/pdf>
148. Rădoi, A. I., Miritoiu, C. M., Bogdan, M., Stănescu, M. M., Bolcu, D., & **Geonea, I.** (2021). Dynamic behaviour of composites reinforced with needles from fir trees. In *MATEC Web of Conferences* (Vol. 343). EDP Sciences.
<https://www.proquest.com/docview/2583950206?pq-origsite=gscholar&fromopenview=true>
149. Rădoi, A. I., Miritoiu, C. M., Bogdan, M., Stănescu, M. M., Bolcu, D., & **Geonea, I. D.** (2021). Researches about the Dynamic Behavior of Green Composites Reinforced with Rush and Bulrush. In *Advanced Engineering Forum* (Vol. 42, pp. 24-29). Trans Tech Publications Ltd.
<https://www.scientific.net/AEF.42.24>
150. Copilusi, C., **Geonea, I.**, Margine, A., & Rosca, A. (2021). Human Upper Limb Experimental Analysis for Assistive Devices in Feeding Process. In *Advanced Engineering Forum* (Vol. 42, pp. 122-127). Trans Tech Publications Ltd.
<https://www.scientific.net/AEF.42.122>
151. Pîslă, D., Tarnita, D., Tucan, P., Tohanean, N., Vaida, C., **Geonea, I. D.**, ... & Plitea, N. (2021). A Parallel Robot with Torque Monitoring for Brachial Monoparesis Rehabilitation Tasks. *Applied Sciences*, 11(21), 9932.
<https://www.mdpi.com/2076-3417/11/21/9932>
152. Cristian, C., **Ionuț, G.**, Alexandru, M., & Andra, C. (2021, October). Design and Numerical Characterization of a Human Ankle Prosthesis. In *IOP Conference Series: Materials Science and Engineering* (Vol. 1190, No. 1, p. 012034). IOP Publishing.
<https://iopscience.iop.org/article/10.1088/1757-899X/1190/1/012034/meta>
153. **Geonea, I. D.**, Tarnita, D., Pîslă, D., Carbone, G., Bolcu, A., Tucan, P., ... & Tarniță, D. N. (2021). Dynamic Analysis of a Spherical Parallel Robot Used for Brachial Monoparesis Rehabilitation. *Applied Sciences*, 11(24), 11849.
<https://www.mdpi.com/2076-3417/11/24/11849>
154. Dumitru, N., Ciurezu-Gherghe, L., Copiluși, C., **Geonea, I.**, & Dumitru, S. (2022). Theoretical and experimental study methods for a robotic system with deformable elements used in minimally invasive surgery. *Mechanism and Machine Theory*, 167, 104459.
<https://www.sciencedirect.com/science/article/pii/S0094114X21002172>
155. Tutunea, D., Ilie, D., Racila, L., Otat, O., & **Geonea, I.** (2022). Evaluation of temperature sensors used in automotive applications type NTC and PTC. In *IOP Conference Series: Materials Science and Engineering* (Vol. 1220, No. 1, p. 012035). IOP Publishing.
<https://iopscience.iop.org/article/10.1088/1757-899X/1220/1/012035/meta>
156. Ionica, V., Dumitru, I., Bogdan, M., & **Geonea, I.** (2022). Study on a test bench of a vehicle rear axle fatigue behavior. In *IOP Conference Series: Materials Science and Engineering* (Vol. 1220, No. 1, p. 012040). IOP Publishing.

- <https://iopscience.iop.org/article/10.1088/1757-899X/1220/1/012040/meta>
157. **Geonea, I.**, Copilusi, C., Dumitru, S., Roșca, A.S. (2022). Design and Motion Simulation of a New Exoskeleton Leg Mechanism. In: Rauter, G., Carbone, G., Cattin, P.C., Zam, A., Pisla, D., Riener, R. (eds) *New Trends in Medical and Service Robotics. MESROB 2021. Mechanisms and Machine Science*, vol 106. Springer, Cham. https://doi.org/10.1007/978-3-030-76147-9_8
 158. Pascu, C. I., Nicolicescu, C., Cioateră, N., Gheorghe, Ș., **Geonea, I.**, & Didu, A. (2022). Characterization of Titanium Alloy Obtained by Powder Metallurgy. *Materials*, 15(6), 2057. <https://www.mdpi.com/1996-1944/15/6/2057>
 159. Copilusi, C., Dumitru, S., **Geonea, I.**, Ciurezu, L. G., & Dumitru, N. (2022). Design Approaches of an Exoskeleton for Human Neuromotor Rehabilitation. *Applied Sciences*, 12(8), 3952. <https://www.mdpi.com/2076-3417/12/8/3952>
 160. **Geonea, I.**, Copilusi, C., Dumitru, N., Margine, A., Ciurezu, L., & Rosca, A. S. (2022, May). A New Exoskeleton Robot for Human Motion Assistance. In 2022 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR) (pp. 1-6). IEEE. <https://ieeexplore.ieee.org/abstract/document/9801965>
 161. Ciurezu-Gherghe, L., Dumitru, N., **Geonea, D.**, & Bostina, S. (2022, May). Snake-Like Flexible Mechanical System With Applications in Exploratory Activities. In 2022 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR) (pp. 1-5). IEEE. <https://ieeexplore.ieee.org/abstract/document/9802035>
 162. Tarnita, D., Georgescu, M., & **Geonea, I.** (2022). Study of the influence of orthoses on the stability of human walking with osteoarthritic knee. *The Romanian Journal of Technical Sciences. Applied Mechanics.*, 67(2), 173-173. <http://rjts-applied-mechanics.ro/index.php/rjts/article/view/345>
 163. Tarnita, D., **Geonea, I. D.**, Pisla, D., Carbone, G., Gherman, B., Tohanean, N., ... & Tarnita, D. N. (2022). Analysis of Dynamic Behavior of ParReX Robot Used in Upper Limb Rehabilitation. *Applied Sciences*, 12(15), 7907. <https://www.mdpi.com/2076-3417/12/15/7907>
 164. Duta, A., **Geonea, I. D.**, Popa, D. L., & Sass, L. (2022). Influence of Contact Surfaces' Impact on the Gear Profile during Hobbing Process. *Applied Sciences*, 12(16), 8027. <https://www.mdpi.com/2076-3417/12/16/8027>
 165. **Geonea, I.**, Tarnita, D., & Grigorie, L. (2022, November). Kinematic and Dynamic Analysis of an Exoskeleton Robotic System. In IFToMM International Symposium on Science of Mechanisms and Machines (SYROM) (pp. 187-196). Cham: Springer International Publishing. https://link.springer.com/chapter/10.1007/978-3-031-25655-4_20
 166. **GEONEA, I.**, & TARNITA, D. (2022). KINEMATIC AND DYNAMIC EVALUATION OF EXOSKELETONASSISTED GAIT ON AN INCLINED PLANE. *Romanian Journal of Technical Sciences-Applied Mechanics*, 67(3).
 167. **GEONEA, I. D.**, MARGINE, A., ROȘCA, A. S., & ONCESCU, A. (2022). DYNAMIC ANALYSIS OF AN EXOSKELETON ROBOT CONSIDERING FRICTION IN JOINTS. *ACTA TECHNICA NAPOCENSIS-Series: APPLIED MATHEMATICS, MECHANICS, and ENGINEERING*, 65(2S). <https://atna-mam.utcluj.ro/index.php/Acta/article/view/1909>
 168. ROȘCA, A. S., Dumitru, S., CATALU, D., DUMITRU, N., & **GEONEA, I.** (2022). DYNAMIC MOTION ANALYSIS OF A WHEELCHAIR FOR PEOPLE WITH LOCOMOTOR DISABILITIES. *ACTA TECHNICA NAPOCENSIS-Series: APPLIED MATHEMATICS, MECHANICS, and ENGINEERING*, 65(2S). <https://atna-mam.utcluj.ro/index.php/Acta/article/view/1921>
 169. IONICĂ, V., DUMITRU, N., **GEONEA, I.**, & BOGDAN, M. (2022). MODELLING THE VIBRATORY EFFECTS OF RAIL TRAFFIC ON THE ENVIRONMENT. *ACTA TECHNICA NAPOCENSIS-Series: APPLIED MATHEMATICS, MECHANICS, and ENGINEERING*, 65(2S). <https://atna-mam.utcluj.ro/index.php/Acta/article/view/1911>
 170. Duta, A., Popescu, I., **Geonea, I. D.**, Cretu, S. M., Sass, L., & Popa, D. L. (2023). Inverse Curves-Research on Two Quondam Inversor Mechanisms. *Journal of Mechanical Engineering/Strojniški Vestnik*, 69. <https://www.sv-jme.eu/article/inverse-curves-research-on-two-quondam-inversor-mechanisms/>
 171. **Ionut, G.**, Dumitru, N., Copilusi, C., Grigorie, L., & Tarnita, D. (2023, April). Kinematics and Design of a New Leg Exoskeleton for Human Motion Assistance. In IFToMM International Conference on Mechanisms, Transmissions and Applications (pp. 199-208). Cham: Springer Nature Switzerland. https://link.springer.com/chapter/10.1007/978-3-031-29815-8_20
 172. Tarnita, D., **Geonea, I.**, Georgescu, M., Marghitu, D. B., Marinache, G., & Tarnita, D. N. (2023, May). Nonlinear Dynamics Used to Study the Influence of Treadmill Speed and Incline on the Human Hip Stability. In *International Workshop on Medical and Service Robots* (pp. 238-250). Cham: Springer Nature Switzerland. https://link.springer.com/chapter/10.1007/978-3-031-32446-8_26
 173. Copilusi, C., Ceccarelli, M., Dumitru, S., Margine, A., & **Geonea, I.** (2023, May). A Leg Exoskeleton Mechanism for Human Walking Assistance. In *International Workshop on Medical and Service Robots* (pp. 160-167). Cham: Springer Nature Switzerland. https://link.springer.com/chapter/10.1007/978-3-031-32446-8_18

174. **Geonea, I.**, Copilusi, C., Margine, A., Dumitru, S., Rosca, A., & Tarnita, D. (2023, May). Dynamic Analysis and Structural Optimization of a New Exoskeleton Prototype for Lower Limb Rehabilitation. In International Workshop on Medical and Service Robots (pp. 168-178). Cham: Springer Nature Switzerland. https://link.springer.com/chapter/10.1007/978-3-031-32446-8_19
175. **Geonea, I.**, Dumitru, N., Ceccarelli, M., & Tarnita, D. (2023, May). Kinematic and Dynamic Analysis of a New Mechanism for Assisting Human Locomotion. In International Workshop on Medical and Service Robots (pp. 306-316). Cham: Springer Nature Switzerland. https://link.springer.com/chapter/10.1007/978-3-031-32446-8_33
176. Dumitru, S., Dumitru, N., Copilusi, C., **Geonea, I.**, & Gherghe-Ciurezu, L. (2023, May). Virtual Prototyping of a Leg Exoskeleton for Human Persons with Neuromotor Deficiencies. In International Workshop on Medical and Service Robots (pp. 198-207). Cham: Springer Nature Switzerland. https://link.springer.com/chapter/10.1007/978-3-031-32446-8_22
177. **Geonea, I.**, Dumitru, I., Oprica, A., & Gencărau, N. (2023, May). Study Concerning Contact Strain and Stresses in Radial-Axial Bearings. In International Conference of Mechanical Engineering (ICOME-2022) (pp. 313-321). Atlantis Press. <https://www.atlantis-press.com/proceedings/ico-me-22/125987636>
178. Roșca, A. S., Dumitru, I., **Geonea, I.**, & Roșca, D. (2023, May). Consideration on New Application for Rotary Engine. In International Conference of Mechanical Engineering (ICOME-2022) (pp. 357-368). Atlantis Press. <https://www.atlantis-press.com/proceedings/ico-me-22/125987678>
179. Panduru, D., Bica, M., Craciunoiu, N., **Geonea, I.**, & Patru, E. N. (2023, May). Analysis of Turning Process of Pure Titanium Using Finite Element Method. In International Conference of Mechanical Engineering (ICOME-2022) (pp. 449-454). Atlantis Press. <https://www.atlantis-press.com/proceedings/ico-me-22/125987658>
180. **Geonea, I.**, Copilusi, C., Dumitru, N., & Margine, A. (2023, May). Kinematic and Dynamic Analysis of a Mechanism for Assisting Human Locomotion. In International Conference of Mechanical Engineering (ICOME-2022) (pp. 36-44). Atlantis Press. <https://www.atlantis-press.com/proceedings/ico-me-22/125987673>
181. Tutunea, D., Dumitru, I., Racila, L., **Geonea, I.**, Otat, O., & Rotea, C. (2023, May). Experimental Stand to Investigate the Sealing Properties of Piston Rings Used in Automotive Industry. In International Conference of Mechanical Engineering (ICOME-2022) (pp. 340-344). Atlantis Press. <https://www.atlantis-press.com/proceedings/ico-me-22/125987657>
182. Ionica, V., Bogdan, M., Ciurezu-Gherghe, L. M., Bogdan, A., & **Geonea, I.** (2023, May). Applications of Some Extremal and Variational Problems to the Study of Vibrations in Mechanical Systems. In International Conference of Mechanical Engineering (ICOME-2022) (pp. 96-106). Atlantis Press. <https://www.atlantis-press.com/proceedings/ico-me-22/125987634>
183. Patru, E. N., Bica, M., Craciunoiu, N., **Geonea, I.**, Panduru, D., & Ciurezu-Gherghe, L. (2023, May). Analysis of Milling Process of Aluminum Alloy Using Finite Element Method. In International Conference of Mechanical Engineering (ICOME-2022) (pp. 455-461). Atlantis Press. <https://www.atlantis-press.com/proceedings/ico-me-22/125987643>
184. Copilusi, C., **Geonea, I.**, Vladu, C., & Margine, A. (2023, May). Design of a Parameterized Mannequin Using Rapid Prototyping Technology. In International Conference of Mechanical Engineering (ICOME-2022) (pp. 27-35). Atlantis Press. <https://www.atlantis-press.com/proceedings/ico-me-22/125987689>
185. Duta, A., Popescu, I., Sass, L., Cherciu, M., & **Geonea, I. D.** (2023, May). Ellipse's Versiera–Structure and Kinematics of the Generator Mechanism. In International Conference of Mechanical Engineering (ICOME-2022) (pp. 5-17). Atlantis Press. <https://www.atlantis-press.com/proceedings/ico-me-22/125987652>
186. Copilusi, C., Vladu, C., **Geonea, I.**, & Margine, A. (2023, May). Experimental Approaches Regarding a Children Rehabilitation Test Bed. In International Conference of Mechanical Engineering (ICOME-2022) (pp. 197-204). Atlantis Press. <https://www.atlantis-press.com/proceedings/ico-me-22/125987635>
187. Constantin, A., Dumitru, S., Dumitru, N., **Geonea, I.**, & Copilusi, C. Dynamics of Mechanical Impact on a Quadrilateral Articulated Mechanism. ECCOMAS Thematic Conference on Multibody Dynamics July 24 – 28, 2023, Lisbon, Portugal. https://multibody2023.tecnico.ulisboa.pt/prog_MULTIBODY_WEB/MULTIBODY2023_PAPERS/ID_257_547_EC_COMAS_MBD_2023_full_paper.pdf
188. **Geonea, I.D.**; Copilusi, C.P. Special Issue on Exoskeleton Robotic Systems. Appl. Sci. 2023, 13, 9788. <https://doi.org/10.3390/app13179788>
189. Copilusi, C.; Ceccarelli, M.; Dumitru, S.; **Geonea, I.**; Margine, A.; Popescu, D. A Novel Exoskeleton Design and Numerical Characterization for Human Gait Assistance. Machines 2023, 11, 925. <https://doi.org/10.3390/machines11100925>
190. **Geonea, I.**, Copilusi, C., Dumitru, S., Margine, A., Rosca, A., & Tarnita, D. (2023). A New Exoskeleton Prototype for Lower Limb Rehabilitation. Machines, 11(11), 1000. <https://www.mdpi.com/2075-1702/11/11/1000>
191. Tarnita, D., Dumitru, N., Marghitu, D. B., Dumitru, I., **Geonea, I.**, Calafeteanu, D., ... & Tarnita, D. N. (2023, November). Finite Element Analysis of Contact Stresses in Knee-Prosthesis with Antero-Posterior Tibial Slope. In IFToMM World Congress on Mechanism and Machine Science (pp. 83-92). Cham: Springer Nature Switzerland. https://link.springer.com/chapter/10.1007/978-3-031-45705-0_9
192. **GEONEA, I.**, COPILUSI, C., RACILA, L., SHEHOVA, D. A., LYUBOMIROV, S. Y., & VELEV, E. G. Dynamic Study and Structural Optimization of the Connecting Rod from a Thermal Combustion Engine. Physics AUC, vol. 33, 9-20 (2023). https://cis01.central.ucv.ro/pauc/vol/2023_33/2_PAUC_2023_9_20.pdf

193. **GEONEA, I., COPILUSI, C., RACILA, L., SHEHOVA, D. A., LYUBOMIROV, S. Y., & VELEV, E. G.** Study on Assisting People with Locomotor Disabilities to Climb Stairs with the Help of an Exoskeleton. *Physics AUC*, vol. 33, 1-8 (2023). https://cis01.central.ucv.ro/pauc/vol/2023_33/1_PAUC_2023_1_8.pdf
194. Parushev, A., Popov, R., Lyubomirov, S., Cristian, C., **Ionuț, G.**, & Laurentiu, R. (2023, September). Laboratory Setup for Studying Heat Transfer through Thermal Insulation Panels. In 2023 XXXII International Scientific Conference Electronics (ET) (pp. 1-4). IEEE. <https://ieeexplore.ieee.org/abstract/document/10279583>
195. Geonea, I. D., & Petre, C. C. (2024). Exoskeleton Robotic Systems. ISBN978-3-7258-2469-4 (Hardback) ISBN978-3-7258-2470-0 (PDF) <https://doi.org/10.3390/books978-3-7258-2470-0>
196. Hazem, A., Mărășescu, F. I., Țuculină, M. J., Popa, D. L., Geonea, I. D., Iliescu, A., ... & Dascălu, I. T. (2024). Simulation of an Orthodontic System Using the Lingual Technique Based on the Finite Element Method. *Diagnostics*, 14(24), 2832.
197. Calangiu, A., Dumitru, N., Copilusi, C., Dumitru, S., & Geonea, I. (2024, November). Contributions Regarding the Dynamic Optimization Process of a Connecting Rod from an Internal Combustion Engine. In *International Congress of Automotive and Transport Engineering* (pp. 200-211). Cham: Springer Nature Switzerland.
198. Copilusi, C., Dumitru, S., Dumitru, N., Geonea, I., & Mic, C. (2024). An Exoskeleton Design and Numerical Characterization for Children with Duchenne Muscular Dystrophy. *Bioengineering*, 11(11), 1072.
199. Dumitru, S., Copilusi, C., Dumitru, N., & Geonea, I. (2024). A Dynamic Analysis of a Poly-Articulated Robot. *Computation*, 12(8), 156.
200. CORZANU, V., CORZANU, A., GEONEA, I., & CRETU, S. M. (2024). COMPUTER DESIGN, KINEMATIC ANALYSIS AND 3D PRINTING OF AN EXOSKELETON MECHANICAL SYSTEM. *Journal of Industrial Design and Engineering Graphics*, 19(1), 93-98.
201. Geonea, I., Dumitru, N., Dumitru, S., Copilusi, C., & Tarnita, D. (2024, June). Structural Solutions of Walking Mechanisms Intended to Exoskeleton Robots to Assist Human Gait. In *IFTOMM Symposium on Mechanism Design for Robotics* (pp. 251-258). Cham: Springer Nature Switzerland.
202. Dumitru, N., Dumitru, S., Copilusi, C., Geonea, I., & Catalu, D. (2024, June). Structural Kinematic Analysis of a Wheelchair Mechanism Designed for Disabled Persons. In *International Conference Innovation in Engineering* (pp. 59-70). Cham: Springer Nature Switzerland.
203. Georgescu, M., Tarniță, D., Berceanu, C., Geonea, I., & Tarniță, D. N. (2024, May). Phenomenological Modelling of the Nonlinear Flexion–Extension Movement of Human Lower Limb Joints. In *International Conference on Robotics in Alpe-Adria Danube Region* (pp. 163-174). Cham: Springer Nature Switzerland.
204. Geonea, I., & Tarnita, D. (2024, May). Dynamic Analysis of an Exoskeleton Robotic System for Stair Walking Assistance. In *International Conference on Robotics in Alpe-Adria Danube Region* (pp. 109-117). Cham: Springer Nature Switzerland.
205. Tarnita, D., Geonea, I., Dumitru, I., Petcu, A., & Tarnita, D. N. (2024, April). Experimental Evaluation and Numerical Simulation in a Lower Limb Exoskeleton. In *IFTOMM International Symposium on Robotics and Mechatronics* (pp. 151-161). Cham: Springer Nature Switzerland.
206. Geonea, I., Racila, L., Dumitru, I., Grigorie, L., Romanescu, A., Rosca, S., & Tarnita, D. (2024, April). Kinematic and Dynamic Analysis of a New Prototype Exoskeleton for Human Lower Limb Rehabilitation. In *IFTOMM International Symposium on Robotics and Mechatronics* (pp. 197-205). Cham: Springer Nature Switzerland.
207. Geonea, I. D. (2024, March). Finite element analysis and experimental study of strain for a vehicle rear suspension. In *IOP Conference Series: Materials Science and Engineering* (Vol. 1303, No. 1, p. 012024). IOP Publishing.
208. DUMITRU, S., GEONEA, I., DUMITRU, N., CONSTANTIN, A., & COPILUSI, C. (2024). Theoretical and Experimental Studies on Mechanical Impact Dynamics in Multibody Systems.
209. Chihaia, C. E., Tarnita, D., Dumitru, I., Geonea, I., & Tarnita, D. N. (2025, July). EMG Correlation with Elbow Joint Kinematics During ADL: Implications in Dynamic Modeling of an Upper Limb Orthotic Device. In *International Workshop on Medical and Service Robots* (pp. 554-564). Cham: Springer Nature Switzerland. https://link.springer.com/chapter/10.1007/978-3-031-96081-9_55
210. Geonea, I., Dumitru, N., Copilusi, C., & Tarnita, D. (2025, July). Dynamic Study and Prototype Manufacture of an Exoskeleton Robotic System for Locomotor Rehabilitation. In *International Workshop on Medical and Service Robots* (pp. 240-250). Cham: Springer Nature Switzerland. https://link.springer.com/chapter/10.1007/978-3-031-96081-9_24
211. Copilusi, C., Ceccarelli, M., Dumitru, N., Dumitru, S., Geonea, I., & Mic, C. (2025, July). A Leg Exoskeleton Designed for Children Walking Assistance. In *International Workshop on Medical and Service Robots* (pp. 162-169). Cham: Springer Nature Switzerland. https://link.springer.com/chapter/10.1007/978-3-031-96081-9_17
212. GEONEA, I., DUMITRU, N., MARGINE, A., COPILUSI, C., MARINACHE, G., & TARNITA, D. (2025). STRUCTURAL SYNTHESIS AND DYNAMIC ANALYSIS OF A NEW HUMAN LEG MOTION ASSISTANCE MECHANISM. *ACTA TECHNICA NAPOCENSIS-Series: APPLIED MATHEMATICS, MECHANICS, and ENGINEERING*, 68(1 & 2). <https://atna-mam.utcluj.ro/index.php/Acta/article/view/2700>
213. LYUBOMIROV, S., VELEV, E., SHOTAROVA, S., GEONEA, I., COPILUSI, C., RACILA, L., & MIRITOIU, C. (2025). RESEARCH OF PROTOTYPES THROUGH FDM TECHNOLOGY. *ACTA TECHNICA NAPOCENSIS-Series: APPLIED MATHEMATICS, MECHANICS, and ENGINEERING*, 68(1 & 2). <https://atna-mam.utcluj.ro/index.php/Acta/article/view/2695>
214. ONCESCU, T. A., BOSTINA, S., VILCELEANU, M. V., CHIHAIA, C., ALBU, C. B., GEONEA, I., ... & TARNITA, D. (2025). ANALYSIS OF SEAT TO HEAD TRANSMISSIBILITY OF VIBRATIONS FOR A TRACTOR DRIVER, ON AN UNEVEN LAND, BASED ON BIOMETRICS ACQUISITION SYSTEM. *ACTA TECHNICA NAPOCENSIS-Series: APPLIED MATHEMATICS, MECHANICS, and ENGINEERING*, 68(1 & 2). <https://atna-mam.utcluj.ro/index.php/Acta/article/view/2720>

215. MARIN, M., GEONEA, I., COSMA, G., & ACATRINEI, M. (2025). EXPERIMENTAL INVESTIGATION OF THE PROPULSIVE FORCE IN TETHERED SWIMMING OF CROWL STROKE. *ACTA TECHNICA NAPOCENSIS-Series: APPLIED MATHEMATICS, MECHANICS, and ENGINEERING*, 68(1 & 2). <https://atna-mam.utcluj.ro/index.php/Acta/article/view/2732>
216. COPILUSI, C., DUMITRU, N., DUMITRU, S., GEONEA, I., & MARGINE, A. (2025). ASSISTIVE DEVICES FOR HUMAN LOCOMOTION ASSISTANCE AND REHABILITATION AT FACULTY OF MECHANICS-UNIVERSITY OF CRAIOVA. *ACTA TECHNICA NAPOCENSIS-Series: APPLIED MATHEMATICS, MECHANICS, and ENGINEERING*, 68(1 & 2). <https://atna-mam.utcluj.ro/index.php/Acta/article/view/2699>
217. Geonea, I., Dumitru, N., & Tarnita, D. (2025, June). Development of an Optimal Prototype of an Exoskeleton Robotic System for Locomotor Rehabilitation. In *International Conference on Robotics in Alpe-Adria Danube Region* (pp. 288-295). Cham: Springer Nature Switzerland. https://link.springer.com/chapter/10.1007/978-3-032-02106-9_32
218. Constantinescu, A., Trotea, M., & Geonea, I. D. (2025). Optimizing a Route of Public Passenger Transportation in the Area Drobeta Turnu Severin Municipality. *Advances in Science and Technology*, 163, 123-131. <https://www.scientific.net/AST.163.123>
219. Tarnita, D., Oncescu, T. A., Dumitru, I., Bostina, S., Geonea, I., Vladut, N. V., & Tarnita, D. N. (2025, May). Evaluations of Vibration and Comfort of an Electric Tractor Driver by Modal and Experimental Analysis. In *International Workshop IFToMM for Sustainable Development Goals* (pp. 464-473). Cham: Springer Nature Switzerland. https://link.springer.com/chapter/10.1007/978-3-031-91179-8_48
220. Geonea, I., Copilusi, C., & Tarnita, D. (2025, May). Development of a New Leg Mechanism for Exoskeleton Robots: Structural Synthesis, Dynamic Analysis, and Prototype Implementation. In *International Workshop IFToMM for Sustainable Development Goals* (pp. 310-318). Cham: Springer Nature Switzerland. https://link.springer.com/chapter/10.1007/978-3-031-91151-4_35

D. Articole publicate în reviste de specialitate, neindexate:

1. N. Dumitru, Ghe. Catrina, C. Copilusi, **I. Geonea**, „Modelarea cu elemente finite a transmisiilor melcate și diferențiale cu aplicații la roboți industriali”, pp. 84-96, Revista SASI, 2006, România.
2. **Geonea I.**, N. Dumitru, Ghe. Catrina, V. Roșca, „Structure and kinematics of mechanisms used to mowers machine”, Revista științifică a ARoTMM, Mecanisme și manipuloare, vol. 8, nr. 1, **2009**, pp. 71-76, ISSN 1583-4743.
3. **Geonea I.**, N. Dumitru, Ghe. Catrina, V. Roșca, „Dynamic answer and experimental researches concerning the mechanisms used to mowers machine”, Revista științifică a ARoTMM, Mecanisme și manipuloare, vol. 8, nr. 1, **2009**, pp. 77-82, ISSN 1583-4743.
4. **Geonea, I.**, Coltofeanu, R., Motofeanu, S., *Kinematics and dynamics modeling of plane manipulator*, Journal Mechanisms and manipulators, Vol. 8, NO. 2, p. 41-46, **2009**.
5. Antonescu O., **Geonea I.**, Antonescu P., „Modeling and Simulation of a Didactic Minirobot”, International Journal Robotica & Management, Vol. 15, No. 1, June **2010**, pp. 3-6, ISSN 1453-2069.
6. Natașa Nedelea, **Ionuț Geonea**, *Mecanisme folosite la aparatele de comutație de înaltă tensiune*, Journal Mechanisms and Manipulators, Vol. 9, No. 1, p. 51-58, **2010**, ISSN 1583-4743.
7. Radu Coltofeanu, **Ionuț Geonea**, *Analiza structural-geometrică a unui manipulator bimobil utilizat la încărcarea – descărcarea pubelelor în autogunoiere*, Journal Mechanisms and Manipulators, Vol. 9, No. 1, p. 65-76, **2010**, ISSN 1583-4743.
8. **Ionuț Geonea**, Nicolae Dumitru, Cristina Micu, *Dynamic Answer Modelling of a Manipulator Mechanism*, Journal Mechanisms and Manipulators, Vol. 9, No. 1, p. 89-94, **2010**, ISSN 1583-4743.

E. Proiecte de cercetare - dezvoltare pe bază de contract/grant:

1. Contract de cercetare CNCIS, Tip TD 2007 cu titlul „Cercetări privind analiza și sinteza unor mecanisme de la mașinile agricole”. Director de proiect, Nr. contract: 234/1.10.2007, suma 15.038 RON
http://cisi01.ucv.ro/cercetare/prez_proiecte_list.php?tip_c=8&tip_g=3&an=2007
2. Contract CEEX – Modul 1 Titlul: „Tehnologie și instalație ecologică de detensionare a subsansamblelor din oțel turnate, forjate sau sudate”; anul 2006; sursa de finanțare: CNCIS, program CEEX. Director Proiect: Proca Victor, INSTITUTUL NATIONAL DE CERCETARE DEZVOLTARE SI INCERCARI PENTRU ELECTROTEHNICA ICMET DIN CRAIOVA, Suma aprobată: 274380 lei RON; poziția ocupată: membru colectiv.
http://www.cnpm.ro/ceex/comp1_2006/oferta.php?id=925, <http://www.icmet.ro/ceex1.htm>
3. Proiectul „Cursuri de perfecționare pentru tehnicienii din service-urile auto; Anul: 2007. Sursa de finanțare: Uniunea Europeană prin programul PHARE; beneficiar: S.C. RALCOREX. SRL; suma aprobată: 85550 lei RON; director: prof. dr. ing. Paul Rinderu, Universitatea din Craiova, poziția ocupată: membru.
4. Contract nr. 30C/ 16.03.2009, Studiu privind determinarea solicitărilor în mecanismul de cuplare cu ridicător hidraulic al tractorului MAT8001 – în agregat cu plugul reversibil PR3M. Beneficiar MAT SA Craiova, valoare contract 45000 RON, Director contract Prof. dr. ing. Neagoie Dumitru, perioada 2009-2010.
5. Expert, Proiectul „Consolidarea capacității instituționale a Consorțiului Regional pentru educație și formare profesională, cod contract: POSDRU/93/3.3/S/61944, Beneficiar, Agenția pentru Dezvoltare Regională Sud Vest Oltenia, 2013. Manager Proiect, Director ADR Sud Vest Oltenia, Marilena Bogheanu.
6. Membru, Proiect, Cercetarea substituției osoase cu materiale biocompozite fabricate prin tehnici specifice metalurgiei pulberilor, Contract de cercetare PN-II-PT-PCCA-2013-4-2094, nr. 244/2014, valoare proiect 1437500 RON
7. Grant de Cercetare avansată, Universitatea din Craiova 45C/27.01.2014, Sistem mecanic inovativ pentru asistarea locomotiei persoanelor cu disabilitati, Director, valoare 12 000 RON.

8. Universitatea din Craiova POSDRU/159/1.5/S/133255 Bursa postdoctorala, POSDRU/159/1.5/S/133255, Cercetări privind dezvoltarea unui cărucior motorizat pentru deplasarea persoanelor cu dizabilități locomotorii, valoare 66600 RON
9. Sistem robotic destinat reabilitării locomotiei persoanelor cu deficiente neuromotorii, Programul 2 - Creșterea competitivității economiei românești prin cercetare, dezvoltare și inovare Proiect experimental – demonstrativ, UEFISCDI - buget de stat, 239/2017. Director. Prof. Dr. Ing. Dumitru Nicolae.
10. Student azi, inginer mâine, Proiect National, Universitatea din Craiova, Proiectul privind Învățământul secundar ROSE SGU NC-Necompetitiv, Ministerul Educatiei, AG 254, director-Geonea Ionut Daniel, perioada implementare: 2019-2023, 25-11-2019, suma: 697841.00.
11. VIITOR STUDENT, National, Universitatea din Craiova, ROSE - Proiect privind Invatamantul Secundar, Ministerul Educatiei Nationale prin Unitatea de Management al Proiectelor cu Finantare Externa, nr. 303/SGU/PV/III/18.06.2020, director proiect Ionescu Adriana, perioada implementare: 2020 - 2022, semnare AG: 18-06-2020, suma 567850.00
12. Sistem robotic modular inovativ pentru recuperarea medicală a monoparezei brahiale, National, Universitatea Tehnica din Cluj Napoca, PN-III PED UEFISCDI, nr. 3022, director proiect: Pislă Doina, perioada: 2020-2022, data semnare 01-11-2020, suma: 600000.00
13. Amfiteatrul Studentiei, National, Universitatea din Craiova, ROSE-Proiect privind Invatamantul Secundar, Ministerul Educatiei Nationale prin Unitatea de Management al Proiectelor cu Finantare Externa, nr. 10/SGU/PV/I din 06.07.2107, director proiect: Tutunea Dragos, perioada implementare: 2017-2019, data semnare AG: 06-07-2017, suma: 530886.00.
14. 2014+:140783 / Start în carieră prin master didactic, director Proiect, Panea Nicu, Pozitia in proiect: Expert IT.
15. Proiect de cercetare, cu terți, "Analiza solicitărilor mecanice structurale a elementelor nodului 5, din componența podului Jiu-Bucovăț", Beneficiar DOMARCONS Craiova, contract nr. 51/14.02.2022. Suma 24 000 lei. Director contract. 2022.

F. Brevete obținute

1. Exoschelet destinat asistării mersului uman și reabilitării, Brevet de invenție nr. A 2019 – 00147, data înregistrării 05-03-2019, Oficiul de Stat pentru Invenții și Mărci, Geonea Ionut Daniel (Inventator), coautori: Dumitru Nicolae, Dumitru Sorin, Copilusi Cristian-Petre, Ciurezu-Gherge Leonard Marius.
2. **Brevet de invenție**, RO 132701 A2, Exoschelet modular cu aplicații în recuperarea locomotorie a membrilor inferioare umane, Inventatori: **Geonea Ionut Daniel**, Daniela Tarniță.

Data,
28 Octombrie 2025

Semnătura,
Prof. dr. ing. Ionuț Daniel GEONEA