

Listă lucrări

A. Articole ISI cu factor de impact:

[1] Dumitru S., Dumitru N., **Copilusi C.**, Rosca A. S. Computational Method for Dynamic Analysis of Multibody Systems with Deformable Elements. Mathematics 2025, 13(17), 2797; <https://doi.org/10.3390/math13172797>. IF: 2,2.

<https://www.webofscience.com/wos/woscc/full-record/WOS:001569939500001>

[2] **Copilusi C.**, Dumitru S., Dumitru N., Geonea I., Mic. C. An Exoskeleton Design and Numerical Characterization for Children with Duchenne Muscular Dystrophy. BIOENGINEERING-BASEL, 11/11, 2024, DOI10.3390/bioengineering11111072, pp1-19. IF: 3,8

<https://www.webofscience.com/wos/woscc/full-record/WOS:001366755700001>

[3] **Copilusi C.**, Cecarelli M., Dumitru S., Geonea I., Margine A., Popescu D. A Novel Exoskeleton Design and Numerical Characterization for Human Gait Assistance. Machines/11/10, DOI10.3390/machines11100925, pp. 1-20. IF: 2,2

<https://www.webofscience.com/wos/woscc/full-record/WOS:001089966700001>

[4] Geonea I., **Copilusi C.** Special Issue on Exoskeleton Robotic Systems. APPLIED SCIENCES-BASEL 13/17, DOI10.3390/app13179788. IF: 2,7

<https://www.webofscience.com/wos/woscc/full-record/WOS:001070059500001>

[5] Dumitru S, Constantin A, **Copilusi C.**, Dumitru N. Impact Dynamics Analysis of Mobile Mechanical Systems. Mathematics. 2021; 9(15):1776. IF: 2,592

<https://www.webofscience.com/wos/woscc/full-record/WOS:000682070900001>

[6] Calangiu A., Dumitru S., **Copilusi C.**, Rosca AS., Demian M., Dumitru N. OPTIMIZING IN A DYNAMIC MODE THE CONNECTING ROD FROM AN INTERNAL COMBUSTION ENGINE. ACTA TECHNICA NAPOCENSIS SERIES-APPLIED MATHEMATICS MECHANICS AND ENGINEERING. Vol. 65. Pp. 293-302. 2022. IF: 0,07

<https://www.webofscience.com/wos/woscc/full-record/WOS:000911249300002>

[7] **Copilusi C.**, Dumitru S., Geonea I., Ciurezu LG., Dumitru N. Design Approaches of an Exoskeleton for Human Neuromotor Rehabilitation. Applied Sciences – Basel. Vol. 12 (8). DOI10.3390/app12083952. 2022. IF: 2,921

<https://www.webofscience.com/wos/woscc/full-record/WOS:000787026200001>

[8] Nicolae Dumitru, Leonard Ciurezu-Gherghe, **Cristian Copiluși**, Ionut Geonea, Sorin Dumitru. Theoretical and experimental study methods for a robotic system with deformable elements used in minimally invasive surgery. Mechanism and Machine Theory, Volume 167, 2021, 104459, ISSN 0094-114X. IF: 4,93

<https://www.webofscience.com/wos/woscc/full-record/WOS:000696982300002>

[9] **Copilusi, C.**, Dumitru, S., Geonea, I., Colici, F., Dumitru, N. DESIGN AND NUMERICAL CHARACTERIZATION OF A NEW LEG EXOSKELETON FOR HUMAN NEUROMOTOR REHABILITATION. ACTA TECHNICA NAPOCENSIS SERIES-APPLIED MATHEMATICS MECHANICS AND ENGINEERING. Vol. 64 (1). Pp. 291-300. 2021. IF: 0,07

<https://www.webofscience.com/wos/woscc/full-record/WOS:000633446300002>

[10] **Copilusi Cristian**, Ceccarelli Marco, Carbone Giuseppe. Design and Numerical Characterization of a New Leg Exoskeleton for Motion Assistance. Robotica Cambridge University Press. pp. 1-16. Published online on 5/08/2014. **IF: 0,89**
<http://journals.cambridge.org/action/displayFulltext?type=1&fid=9697983&jid=ROB&volumeId=33&issueId=05&aid=9697981>
<https://www.webofscience.com/wos/woscc/full-record/WOS:000354363500009>

[11] Rusu Ligia, Marin Mihnea, Germina Cosma, Denisa Enescu Bieru, **Cristian Petre Copilusi**, Mirela Maria Vasilescu. Correlation between neuromuscular assessment and evoked potential in the prediction of the multiple sclerosis evolution". International Journal of Clinical and Experimental Medicine. Vol 9(9) pp. 17215-17257. ISSN 1940-5901. 2016. **IF: 0,1**
<https://www.webofscience.com/wos/woscc/full-record/WOS:000386671100023>

[12] Tarniță, DANIELA., Tarniță, D. N., Hacman, L., **Copiluși, C.**, & Berceanu, C. In vitro experiment of the modular orthopedic plate based on Nitinol, used for human radius bone fractures. Rom J Morphol Embryol, 51(2), 315-20.(2010). **IF: 0,38**
<https://www.webofscience.com/wos/woscc/full-record/WOS:000278277600016>

B. Articole ISI cu factor de impact:

[1] Calangiu, A., Dumitru, N., **Copilusi, C.**, Dumitru, S., Geonea, I. (2025). Contributions Regarding the Dynamic Optimization Process of a Connecting Rod from an Internal Combustion Engine. In: Chiru, A., Covaciu, D. (eds) CONAT 2024 International Congress of Automotive and Transport Engineering. CONAT 2024. Proceedings in Automotive Engineering. Springer, Cham. https://doi.org/10.1007/978-3-031-77627-4_17
<https://www.webofscience.com/wos/woscc/full-record/WOS:001462627900017>

[2] **Copilusi C.**, Popescu D., MantaF., Roibu H., Marin M. Numerical Simulations for Designing a Human Lower Limb Rehabilitation Robotic System. 2024 25TH INTERNATIONAL CARPATHIAN CONTROL CONFERENCE, ICC 2024.
<https://www.webofscience.com/wos/woscc/full-record/WOS:001268679000038>

[3] **Copilusi C.**, Ceccarelli M., Dumitru S., Margine A., Geonea I. A Leg Exoskeleton Mechanism for Human Walking Assistance. 8th International Workshop on New Trends in Medical and Service Robots. 2023.NEW TRENDS IN MEDICAL AND SERVICE ROBOTICS, MESROB 2023 133 , pp.160-167
<https://www.webofscience.com/wos/woscc/full-record/WOS:001437421000018>

[4] **Copilusi, C.**; Dumitru, S.; Geonea, I.; Rosu E. Ceccarelli M. Numerical Simulation of a Leg Exoskeleton for Human Motion Assistance. NEW TRENDS IN MEDICAL AND SERVICE ROBOTICS: ADVANCES IN THEORY AND PRACTICE. Book Series: Mechanisms and Machine Science Volume: 65 Pages: 101-108 Published: 2019.
<https://www.webofscience.com/wos/woscc/full-record/WOS:000460759400012>

[5] Dumitru, Sorin; **Copilusi, Cristian**; Dumitru, Nicolae. A Leg Exoskeleton Command Unit for Human Walking Rehabilitation. 2018 IEEE INTERNATIONAL CONFERENCE ON AUTOMATION, QUALITY AND TESTING, ROBOTICS (AQTR) Book Series: IEEE International Conference on Automation Quality and Testing Robotics Published: 2018.

<https://www.webofscience.com/wos/woscc/full-record/WOS:000450065900033>

[6] **Copilusi, Cristian**; Ploscaru, Cristina. Exoskeleton for Children Walking Rehabilitation: Theoretical Studies and Simulation. IEEE International Conference on Automation Quality and Testing Robotics Pages: 145-150 Published: 2016.

<https://www.webofscience.com/wos/woscc/full-record/WOS:000390997900024>

[7] **Copilusi, C.**; Kaur, M.; Ceccarelli, M. Lab Experiences with LARM Clutched Arm for Assisting Disabled People. 5th European Conference on Mechanism Science (EUCOMES) Location: Univ Minho, Guimaraes, PORTUGAL. Pages: 603-611 Published: 2015.

<https://www.webofscience.com/wos/woscc/full-record/WOS:000357867900064>

[8] **Copilusi, Cristian**; Margine, Alexandru; Dumitru, Nicolae. Case Study Regarding a New Knee Orthosis for Children with Locomotion Disabilities. Conference: 3rd Conference of the Mechanisms Transmissions and Applications Location: Aachen, GERMANY Date: MAY 06-08, 2015

<https://www.webofscience.com/wos/woscc/full-record/WOS:000380538400016>

[9] **Copilusi Petre Cristian**, Valentin Grecu, and Nicolae Dumitru. Human Upper Limb Robotic System Experimental Analysis by Using CONTEMPLAS Motion Software. Applied Mechanics and Materials 325–326 (June 2013): 1062–66.

<https://www.webofscience.com/wos/woscc/full-record/WOS:000400801300006>

[10] Carbone, G., **Copilusi, C.** Experimental testing of BaPaMAN 1 with a high speed motion analysis system. IEEE International Conference on Automation, Quality and Testing, Robotics (pp. 1-6). IEEE. 2014

<https://www.webofscience.com/wos/woscc/full-record/WOS:000346131600015>

[11] **Copilusi, P. C.**, Marin, M., Rusu, L., Geonea, I. Design Considerations regarding a New Knee Orthosis. In Applied Mechanics and Materials (Vol. 162, pp. 276-285). Trans Tech Publications. 2012

<https://www.webofscience.com/wos/woscc/full-record/WOS:000309782300032>

[12] **Copilusi, C.**, Marin, M., Rusu, L. A New Knee Prosthesis Design Based on Human Lower Limb Cinematic Analysis. Proceedings of the World Congress on Engineering (Vol. 3). 2011

<https://www.webofscience.com/wos/woscc/full-record/WOS:000393014000130>

[13] **Copilusi, C.**, Dumitru, N., Rusu, L., Marin, M. Cam mechanism kinematic analysis used in a human ankle prosthesis structure. In World Congress on Engineering, London, UK, June (pp. 1316-1320). 2010

<https://www.webofscience.com/wos/woscc/full-record/WOS:000394059900100>

[14] Geonea, I., **Copilusi, C.**, Dumitru, S., Rosca, A. S. Design and Motion Simulation of a New Exoskeleton Leg Mechanism. NEW TRENDS IN MEDICAL AND SERVICE ROBOTICS. Book Series Mechanisms and Machine Science. Volume 106 pp. 70-77

<https://www.webofscience.com/wos/woscc/full-record/WOS:000876846100008>

[15] Geonea, I., **Copilusi, C.**, Dumitru, N., Margine, A., Ciurezu, L., Rosca, A.S. A New Exoskeleton Robot for Human Motion Assistance. PROCEEDINGS OF 2022 IEEE INTERNATIONAL CONFERENCE ON AUTOMATION,

QUALITY AND TESTING, ROBOTICS (AQTR 2022). Book SeriesIEEE International Conference on Automation Quality and Testing Robotics. Page 245-250.

<https://www.webofscience.com/wos/woscc/full-record/WOS:000890261900040>

[16] Dumitru, N., **Copilusi, C.**, Calangiu, A., Geonea, I. An Engine Mechanism Dynamic Analysis by Considering the Kinematic Elements as Deformable Ones. 30TH SIAR INTERNATIONAL CONGRESS OF AUTOMOTIVE AND TRANSPORT ENGINEERING: SCIENCE AND MANAGEMENT OF AUTOMOTIVE AND TRANSPORTATION ENGINEERING. pp.15-25. 2020

<https://www.webofscience.com/wos/woscc/full-record/WOS:000528526600002>

[17] Geonea, I., Dumitru, N., **Copilusi, C.**, Margine, A. Experimental Determination of the Loading Capacity of the Elastic Bracelet Assembly. INTERNATIONAL CONFERENCE ON TRIBOLOGY (ROTRIB'19). Book SeriesIOP Conference Series-Materials Science and Engineering. Volume724. 2020.

<https://www.webofscience.com/wos/woscc/full-record/WOS:000619349400006>

[18] Geonea, I., Dumitru, N., **Copilusi, C.**, Margine, A., Ciurezu, L., Didu, A. New design and motion analysis of an exoskeleton robot for assisting human locomotion. PROCEEDINGS OF 2020 IEEE INTERNATIONAL CONFERENCE ON AUTOMATION, QUALITY AND TESTING, ROBOTICS (AQTR). Book SeriesIEEE International Conference on Automation Quality and Testing Robotics. pp. 201-206. 2020.

<https://www.webofscience.com/wos/woscc/full-record/WOS:000643732600036>

[19] Dumitru, Nicolae; Geonea, Ionut; **Copilusi, Cristian**; Dumitru S., Otat O. Dynamic Models for Analyzing a Self-propelled Vehicle for People with Locomotor Disabilities. PROCEEDINGS OF THE 4TH INTERNATIONAL CONGRESS OF AUTOMOTIVE AND TRANSPORT ENGINEERING (AMMA 2018) Book Series: Proceedings in Automotive Engineering Pages: 667-675 Published: 2019

<https://www.webofscience.com/wos/woscc/full-record/WOS:000578264900078>

[20] Popescu, Dorin; **Copilusi, Cristian Petre**; Roibu, Horatiu; Marin M, Rusu L., Popescu L. Upper Limb Motions Analysis for Development of an Upper Limb Rehabilitation Robotic System. WORLD CONGRESS ON MEDICAL PHYSICS AND BIOMEDICAL ENGINEERING 2018, VOL 2 Book Series: IFMBE Proceedings Volume: 68 Issue: 2 Pages: 797-802 Published: 2019

<https://www.webofscience.com/wos/woscc/full-record/WOS:000449742700147>

[21] Popescu, Dorin; Roibu, Horatiu; **Copilusi, Cristian Petre**; Rusu, L.,Avramescu, TE., Zavaleanu, M., Popescu, LC., Marin, M. Functional Testing Procedures and Results for a Rehabilitation Robotic System. INTERNATIONAL CONFERENCE AND EXPOSITION ON ELECTRICAL AND POWER ENGINEERING (EPE) Book Series: International Conference and Exposition on Electrical and Power Engineering Pages: 512-517 Published: 2018 .

<https://www.webofscience.com/wos/woscc/full-record/WOS:000458752200098>

[22] Dumitru, N., **Copilusi, C.**, Geonea, I., & Margine, A. Kinematic and Dynamic Study of a Mechanism for a Vehicle Front and Rear Stabilizer Bars. CONAT 2016: INTERNATIONAL CONGRESS OF AUTOMOTIVE AND TRANSPORT ENGINEERING. Page1 61-169, DOI10.1007/978-3-319-45447-4_18. Published 2017, Indexed 2017-01-18.

<https://www.webofscience.com/wos/woscc/full-record/WOS:000390821400018>

- [23] Dumitru, N.; **Copilusi, C.**; Ciortan, M. Kinematic and Dynamic Study Contributions on Human Jaw System. NEW TRENDS IN MEDICAL AND SERVICE ROBOTS: ASSISTIVE, SURGICAL AND EDUCATIONAL ROBOTICS Book Series: Mechanisms and Machine Science Volume: 38 Pages: 79-91 Published: 2016
<https://www.webofscience.com/wos/woscc/full-record/WOS:000429272700007>
- [24] Dumitru, N.; **Copilusi, C.**; Geonea, I.; Tarnita D., Dumitrache S. Dynamic Analysis of an Exoskeleton New Ankle Joint Mechanism. NEW TRENDS IN MECHANISM AND MACHINE SCIENCE: FROM FUNDAMENTALS TO INDUSTRIAL APPLICATIONS Book Series: Mechanisms and Machine Science Volume: 24 Pages: 709-717 Published: 2015
<https://www.webofscience.com/wos/woscc/full-record/WOS:000357867900075>
- [25] Dumitru, N., Dumitru, S., **Copilusi, C.**, Semenescu, D. & Geonea, I. Modal Dynamic Analysis of the Wicket Gate Mechanism from a Hydraulic Turbine. WORLD CONGRESS ON ENGINEERING, WCE 2015, VOL II Book Series Lecture Notes in Engineering and Computer Science, Page 1213-1218, Published 2015, Indexed 2016-09-22.
<https://www.webofscience.com/wos/woscc/full-record/WOS:000380592500102>
- [26] Silva, I.; Ceccarelli, M.; **Copilusi, C.**; Flores P. Lab Experiences with a Linkage Exoskeleton for Walking Assistance. NEW TRENDS IN MECHANISM AND MACHINE SCIENCE: FROM FUNDAMENTALS TO INDUSTRIAL APPLICATIONS Book Series: Mechanisms and Machine Science Volume: 24 Pages: 643-650 Published: 2015
<https://www.webofscience.com/wos/woscc/full-record/WOS:000357867900068>
- [27] Dumitru, N., **Copilusi, C.**, Marin, M., Rusu, L. Human Lower Limb Dynamic Analysis with Applications to Orthopedic Implants. In New Trends in Mechanism Science (pp. 327-334). Springer, Dordrecht. (2010).
<https://www.webofscience.com/wos/woscc/full-record/WOS:000395597100038>
- [28] Dumitru, N., **Copilusi, C.**, & Zuhair, A. Dynamic Modeling of a Mobile Mechanical System with Deformable Elements. In Proceedings of the World Congress on Engineering, London, UK (Vol. 2). (2009, July).
<https://www.webofscience.com/wos/woscc/full-record/WOS:000271615700291>

C. Articole si publicatii stiintifice BDI

Prim autor:

- [1] **Copilusi, C.**, Dumitru, N., & Margine, A. Children Locomotion Rehabilitation Test Bed Designed from Kinematic Considerations. In New Advances in Mechanism and Machine Science (pp. 171-179). Springer, Cham. 2018
https://link.springer.com/chapter/10.1007/978-3-319-79111-1_17
- [2] **Copilusi, C.**, & Ceccarelli, M. An application of LARM clutched arm for assisting disabled people. Int J Mech Control, 16(1), 57-66. 2015.
www.jomac.it/data/uploads/paper/2015a07.pdf
- [3] **Copilusi C.**, Dumitru N., Margine A., Geonea I., Rosca A.S., Rosu E. Method for 3D Modeling of Human Osteo-Articular System Bones. In: Rauter G., Cattin P.C., Zam A., Riener R., Carbone G., Pisla D. (eds) New Trends in Medical and Service Robotics. MESROB 2020. Mechanisms and Machine Science, vol 93. Springer, Cham. 2021.

https://link.springer.com/chapter/10.1007/978-3-030-58104-6_34

[4] **Copilusi, C.**, Dumitru, N., Margine, A., & Geonea, I. Dynamic Analysis of a Human Ankle Joint Prosthesis. In IOP Conference Series: Materials Science and Engineering (Vol. 568, No. 1, p. 012077). IOP Publishing. 2019
<https://iopscience.iop.org/article/10.1088/1757-899X/568/1/012077>

[5] **Copilusi C.**, Ploscaru C. Knee Modular Orthosis Design Based on Kinematic Considerations. World Academy of Science, Engineering and Technology. International Journal of Medical, Health, Biomedical, Bioengineering and Pharmaceutical Engineering Vol:10, No:8, pp. 389 – 398. 2016
<https://publications.waset.org/10005166/a-knee-modular-orthosis-design-based-on-kinematic-considerations>

[6] **Copilusi, C.**, Ceccarelli, M., Carbone, G., & Margine, A. Mechanism of a leg exoskeleton for walking rehabilitation purposes. In New advances in mechanisms, transmissions and applications (pp. 107-114). Springer, Dordrecht. 2014
https://link.springer.com/chapter/10.1007/978-94-007-7485-8_14

[7] **Copilusi, C.**, Ceccarelli, M., Dumitru, N., & Carbone, G. Design and simulation of a leg exoskeleton linkage for a human rehabilitation system. In The 11th IFToMM international symposium on science of mechanisms and machines (pp. 117-125). Springer, Cham. 2014
https://link.springer.com/chapter/10.1007/978-3-319-01845-4_12

[8] **Copilusi, C.**, Dumitru, N., & Margine, A. Modular knee orthosis fem analysis from kinematic considerations. In New Trends in Mechanism and Machine Science (pp. 431-439). Springer, Dordrecht. 2013
https://link.springer.com/chapter/10.1007/978-94-007-4902-3_46

[9] **Copilusi, C.**, Dumitru, N., Marin, M., & Rusu, L. Children Orthotics and Prostheses Devices Designed from Cinematic and Dynamic Considerations. Engineering Letters, 20(4). 2012
www.engineeringletters.com/issues_v20/issue_4/EL_20_4_02.pdf

[10] **Copilusi, C.** Design of a New Knee Modular Orthotic Device from Cinematic Considerations. Proceedings of the World Congress on Engineering (Vol. 3). 2012
www.iaeng.org/publication/WCE2012/WCE2012_pp2010-2015.pdf

[11] **Copilusi, C.**, Marin, M., Dumitru, N., & Rusu, L. Locomotion System Dynamic Analysis with Application on Children Orthotics and Prostheses Devices. World Congress on Engineering. 2012
www.iaeng.org/publication/WCE2012/WCE2012_pp1663-1668.pdf

[12] **Copilusi, C.**, Dumitru, N., Marin, M., & Rusu, L. Design of a new prosthetic mechanical system used in human ankle joint disarticulation. World Congress on Medical Physics and Biomedical Engineering, September 7-12, 2009, Munich, Germany (pp. 223-226). Springer, Berlin, Heidelberg.
https://link.springer.com/chapter/10.1007/978-3-642-03889-1_60

[13] **C. Copilusi**, V. Veliscu. An approach regarding windshield wiper mechanism design. Proceedings of International Congress of Science and Management of Automotive and Transportation Engineering - SMAT 2014. Published by Trans Tech Switzerland. pp. 313-318. 2016.
<https://www.scientific.net/AMM.822.112>

- [14] **C. Copilusi**, M. Ceccarelli, A. Margine. Experimental Approach Regarding the Behavior of a Human Rehabilitation Exoskeleton. Applied Mechanics and Materials, Vol. 823, pp. 125-130, 2016
<https://www.scientific.net/AMM.823.125>
- [15] **Copiluși C.**, M. Ceccarelli, N. Dumitru, G. Carbone. Design and Simulation of a Leg Exoskeleton Linkage for a Human Rehabilitation System. Mechanisms and Machine Science Vol.18. Ed. Springer. pp. 107-115. 2013.
https://link.springer.com/chapter/10.1007/978-3-319-01845-4_12
- [16] **Copiluși C.**, M. Ceccarelli, G. Carbone, A. Margine. Mechanism of a Leg Exoskeleton for Walking Rehabilitation Purposes. New Advantages in Mechanisms, Transmissions and Applications. Ed. Springer. pp. 117-125. 2013.
https://link.springer.com/chapter/10.1007/978-94-007-7485-8_14
- [17] **Cristian P. Copilusi**, Dumitru N., Marin M., Rusu L.: „Design of a new prosthetic mechanical system used in human ankle joint disarticulation”, Eds. Springer Berlin Heidelberg Publishing house. ISBN 978-3-642-03888-4 .Volume 25/9.
https://link.springer.com/chapter/10.1007/978-3-642-03889-1_60
- [18] **Copilusi C.**, Grecu V., Bogheanu M. Virtual Human Bony Models Developed through a New Modelling Alternative Based on Marching Cubes Algorithm. *Fifth International Conference on Optimization of the Robots and Manipulators – OPTIROB 2010*. 28-30 May Romania. pp. 8-12. Research Publishing Services Singapore. ISBN 978-981-08-5840-7.
http://rpsonline.com.sg/proceedings/9789810858407/978-981-08-5840-7_S1-2.xml
- [19] **Copilusi C.**, Dumitru N., Marin M., Rusu L. Human Lower Limb Kinematic Analysis with Application on Prosthesis Mechanical Systems”. *13th World Congress in Mechanism and Machine Science, Guanajuato, México. IMD-123. IFTOMM-2011. Paper ID: A22-343*. ISBN 978-607-441-131-7.
https://www.europeana.eu/mt/item/2020801/dmglb_handler_docum_22580009
- [20] **COPILUȘI C.**, Rusu Ligia, Stanca Cristina. Aspects Regarding a New Shank Orthosis Used for Human Locomotion Temporal Recovery. pp 435-443. Annual Session Of Scientific Papers IMT Oradea. ISBN 978-606-10-0128-6. 2010.
www.imt.uoradea.ro/auo.fmte/files-2010-v3/MECATRONICA/Copilusi%20Cristian%20L2.pdf
- [21] **Copiluși C.**, DUMITRU Nicolae, CIOCAN Petrică. COMPARATIVE STUDY REGARDING THE MECHANICAL SYSTEMS IMPROVEMENT USED IN HUMAN LOWER LIMB PROSTHESIS”, pp 590-599. Annual Session Of Scientific Papers IMT Oradea 2009.
http://imt.uoradea.ro/auo.fmte/files-2009/MECATRONICA_files/COPILUSI%20Cristian1.pdf

Co-autor:

- [1] Dumitru, N., Craciunoiu, N., Geonea, I., & **Copilusi, C.** Elastodynamic Analysis of a Mechanism with Flexible Links. In Proceedings of the World Congress on Engineering (Vol. 2). 2017.
www.iaeng.org/publication/WCE2017/WCE2017_pp821-828.pdf

- [2] Geonea, I. D., Margine, A., Dumitru, N., & **Copiluși, C.** Design and Simulation of a Mechanism for Human Leg Motion Assistance. In Advanced Materials Research, 2014, (Vol. 1036, pp. 811-816). Trans Tech Publications.
<https://www.scientific.net/AMR.1036.811>
- [3] Geonea I., Dumitru N., **Copilusi C.**, Margine A., Racila L. Kinematics and Design of a Leg Exoskeleton for Human Motion Assistance. Panuwatwanich K., Ko CH. (eds) The 10th International Conference on Engineering, Project, and Production Management. Lecture Notes in Mechanical Engineering. Springer, Singapore. 2020
https://link.springer.com/chapter/10.1007/978-3-031-29815-8_20
- [4] Dumitru V., **Copilusi C.**, Geonea I., Dumitrache I., Marinescu G. Determining the Design Specifications for Mechanical Polyarticulated System Compatible with Minimally Invasive Surgery. In: Viadero F., Ceccarelli M. (eds) New Trends in Mechanism and Machine Science. Mechanisms and Machine Science, vol 7. Springer, Dordrecht. 2013.
https://link.springer.com/chapter/10.1007/978-94-007-4902-3_39
- [5] Geonea, I., Dumitru, N., Rosca, A., Craciunoiu, N., Racila, L., & **Copilusi, C.** 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. 2019.
<https://iopscience.iop.org/article/10.1088/1757-899X/568/1/012013>
- [6] I., Geonea., Dumitru, N., **Copilusi, C.**, Grigorie, L., & Tarnita, D. Kinematics and Design of a New Leg Exoskeleton for Human Motion Assistance. In New Advances in Mechanisms, Transmissions and Applications: Proceedings of the Sixth MeTrApp Conference 2023 (pp. 199-208). Cham: Springer Nature Switzerland.
https://link.springer.com/chapter/10.1007/978-3-031-29815-8_20
- [7] Popescu, D., **Copilusi, C.P.**, Roibu, H., Rusu, L., Marin, M.I. Human upper limb motions video analysis used for rehabilitation robotics. Lecture Notes in Electrical Engineering, 489. pp. 264-273/ 2019
https://link.springer.com/chapter/10.1007/978-3-319-75605-9_37
- [8] Dumitru N., **Copilusi C.**, Dumitru S., Rusu L., Rosu E. Design of a reconfigurable exoskeleton used on human locomotion recovery. Proceedings of the World Congress on Engineering and Computer Science 2018, 2018,USA.Vol II, WCECS 2018. pp. 552-557
www.naun.org/main/NAUN/mechanics/2018/a382003-abn.pdf
- [9] Geonea, I., Dumitru, S., **Copilusi, C.**, Margine, A., & Rinderu, P. Design and Numerical Characterization of a Leg Exoskeleton Linkage for Motion Assistance. Proceedings of the World Congress on Engineering and Computer Science (Vol. 2). 2018
www.iaeng.org/publication/WCECS2018/WCECS2018_pp594-599.pdf
- [10] Ciurezu-Gherghe, L., Dumitru, N., **Copilusi, C.** Design and Simulation of a Snake like Robot. In New Advances in Mechanism and Machine Science (pp. 263-272). Springer, Cham. 2018
https://link.springer.com/chapter/10.1007/978-3-319-79111-1_26
- [11] Dumitru, N., **Copilusi, C.**, Dumitru, S., Rusu, L., & Rosu, E. A Knee Exoskeleton Mechanism Dynamic Analysis. Proceedings of the World Congress on Engineering and Computer Science (Vol. 2). 2018
www.iaeng.org/publication/WCECS2018/WCECS2018_pp552-557.pdf

[12] N. Dumitru, S. Dumitru, **C. Copilusi**, N. Ploscaru. Modal Dynamic Analysis of a Mechanism with Deformable Elements from an Oil Pump Unit Structure. World Academy of Science, Engineering and Technology International Journal of Mechanical, Aerospace, Industrial, Mechatronic and Manufacturing Engineering Vol:10, No:8, pp. 1416 – 1430. 2016.

https://www.academia.edu/93666225/Modal_Dynamic_Analysis_Of_A_Mechanism_With_Deformable_Elements_From_An_Oil_Pump_Unit_Structure

[13] Rusu Ligia, Cosma Germina, Lica Eliana Marcelina, Marin Mihnea, Cernaianu Sorina, **Copilusi Cristian**. Myotonometry Method for assessment muscle performance, World Academy of Science, Engineering and Technology Journal- 66/2012.

https://www.academia.edu/23914067/Myotonometry_Method_for_Assessment_Muscle_Performance

[14] M. Marin, **C. Copilusi**, L. Rusu. Experimental Approach Regarding the Analysis of Human Complex Motions. Applied Mechanics and Materials, Vol. 823, pp. 119-124, 2016.

<https://www.scientific.net/AMM.823.119>

[15] Stanimir A., **Copiluși C.**, Zamfirache M. EXPERIMENTAL STUDY ON RUL1V BEARING STEEL HARDNESS, RAKE ANGLE AND TOOL MATERIAL INFLUENCE ON CUTTING FORCES”, pp 1421-1424. Annual Session Of Scientific Papers IMT Oradea 2009.

https://imt.utoradea.ro/auo.fmte/files-2009/TCM_files/STANIMIR%20Alexandru1.pdf

[16] N. DUMITRU, **Copilusi C.**, Geonea I., Al-Thahabi Zuhair. DYNAMIC RESPONSE MODELLING OF A ROBOT WITH FOUR DEGREES OF FREEDOM. pp. 143-141. Conferința Internațională PRASIC 2006. Brașov.

https://www.europeana.eu/mt/item/2020801/dmglib_handler_docum_23257009

[17] N. DUMITRU, **Copilusi C.**, Geonea I., HOANĂ E. CONSIDERATIONS ABOUT THE FINITE ELEMENT MODELLING OF TRANSMISSION FROM THE INDUSTRIAL ROBOTS STRUCTURE. pp. 134-142 Conferința Internațională PRASIC 2006. Brașov.

https://www.europeana.eu/en/item/2020801/dmglib_handler_docum_23328009

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