

Nume Prenume: CERLINCĂ Delia-Aurora
Gradul didactic: Conferențiar doctor inginer
Instituția unde este titular: Universitatea ”Ștefan cel Mare” din Suceava
Facultatea: Inginerie Mecanică, Autovehicule și Robotică
Departamentul: Mecanică și Tehnologii

LISTA lucrărilor științifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

“Efectul unor defecte de suprafață asupra distribuției de presiune, stării de tensiuni și oboselii la contactul hertzian cu rostogolire”, susținută public pe data de 10.09.2003 în domeniul Inginerie Mecanică, conducător științific Prof. dr. ing. Emanuel Diaconescu, Membru corespondent al Academiei Române, Universitatea “Ștefan cel Mare”, Suceava

B. Cărți și capitole în cărți publicate în ultimii 10 ani

1B Delia Cerlinca, Desen tehnic, Ed. MatrixRom, București, 2008, ISBN 978-973-755-348-5, 262 pg

2B Delia Cerlinca, Infografică, Ed. MatrixRom, București, 2008, ISBN 978-973-755-349-2, 137 pg

3B Delia Cerlinca, Sergiu Spinu, Influența defectelor de suprafață asupra durabilității la oboseala de contact, 2017, Editura Matrix Rom, București, 280 pagini, ISBN 978-606-25-0310-9,

4B Sergiu Spinu, Delia Cerlinca Modelarea și simularea contactului mecanic în domeniul elasto-plastic, 2017, Editura Matrix Rom, București, 146 pagini, ISBN 978-606-25-0345-1,

5B Sergiu Spinu, Delia Cerlinca, Modelarea și simularea contactului mecanic în domeniul elastic, 2017, Editura Matrix Rom, București, 210 pagini, ISBN 978-606-25-0327-7,

6B

C Lucrări indexate ISI/BDI publicate în ultimii 10 ani

1C Cerlincă, DA., Tamașag, I., Beșliu-Băncescu, I. (2025). The Influence of Interlayer Ironing on Dimensional Accuracy of ASA MEX Manufactured Parts. 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/10.1007/978-3-031-77631-1_22

2C Lupascu, C., Alaci, S., Romanu, IC., Ciornei, FC., Ciocirlan, TM., Cerlinca, DA. (2025). Method and Device for the Evaluation of the Static and Dynamic Coefficients of Friction. Part 2: Construction of the Device and Methodology. In: Doroftei, I., Lovasz, EC. (eds) New Advances in Mechanisms, Mechanical Transmissions and Robotics. MTM&Robotics 2024. Mechanisms and Machine Science, vol 178. Springer, Cham. https://doi.org/10.1007/978-3-031-87537-3_9

3C Ciocirlan, TM., Alaci, S., Romanu, IC., Ciornei, FC., Lupascu, C., Cerlinca, DA. (2025). Method and Device for the Evaluation of the Static and Dynamic Coefficients of Friction. Part 1: Proposed Method. In: Doroftei, I., Lovasz, EC. (eds) New Advances in Mechanisms, Mechanical Transmissions and Robotics. MTM&Robotics 2024. Mechanisms and Machine Science, vol 178. Springer, Cham. https://doi.org/10.1007/978-3-031-87537-3_8

4C Cerlincă, DA., Tamașag, I., Beșliu-Băncescu, I., Severin, TL., Dulucianu, C., Experimental investigation of FDM manufacturing of 316 L stainless steel. Int J Adv Manuf Technol 135, 1449–1463 (2024). <https://doi.org/10.1007/s00170-024-14602-8>

5C Alaci, S.; Lupascu, C.; Romanu, I.-C.; Cerlinca, D.-A.; Ciornei, F.-C. Some Aspects of the Effects of Dry Friction Discontinuities on the Behaviour of Dynamic Systems. Computation 2024, 12, 181. <https://doi.org/10.3390/computation12090181>

6C Tămășag, I., Beșliu-Băncescu, I., Severin, T.L., Dulucianu, C., Cerlincă, D.A., 2023, Experimental Study of In-Process Heat Treatment on the Mechanical Properties of 3D Printed Thermoplastic Polymer PLA, revista „Polymers”, ISSN: 2073-4360, Volume 15, Issue 10, 2367 (pp.1 - 21), Published by MDPI, Elveția, 2023 (WOS: 000997732700001; DOI: 10.3390/polym15102367), indexat în Clarivate Analytics - Web of Science, factor de impact 5,000 (revista în zona roșie - Q1) și Scopus;

- 7C** Cerlinca, D., Spinu, S., 2023, Symmetrically distributed eigenstrains in a thin sheet of material, *International Journal of Modern Manufacturing Technologies*, Volume 15, Issue 3 Special Issue, Pages 28 – 35
- 8C** Cerlinca, D., Spinu, S., Glovnea, M., 2023, The elastic contact problem involving a bilaterally loaded thin strip, *International Journal of Modern Manufacturing Technologies*, Volume 15, Issue 1, Pages 44 – 50
- 9C** Tămășag, I., Suciu, C., Beșliu-Băncescu, I., Dulucleanu, C., Cerlincă, D.A., 2022, Experimental Study on the Possibilities of DM Direct Colour Printing and Its Implications on Mechanical Properties and Surface Quality of the Resulting Parts, revista „Polymers”, ISSN: 2073-4360, Volume 14, Issue 23, 5173 (pp.1 - 19), Published by MDPI, Elveția, 2022 (WOS: 000897411200001; DOI: 10.3390/polym 14235173), indexat în Clarivate Analytics - Web of Science, factor de impact 4,967 (revistă în zona roșie) și Scopus
- 10C** Dulucleanu, C., Severin, T.L., Cerlinca, D.A., Irimescu, L., 2022, Structure and Mechanical Properties of Some Dual-Phase Steels with Low Manganese Content, revista „Metals”, ISSN: 2075-4701, Volume 12, Issue 2, 189 (pp.1 - 12), Published by MDPI, Elveția, 2022 (WOS: 000772038000001; DOI: 10.3390/met12020189), indexat în Clarivate Analytics - Web of Science, factor de impact 2,695 (revistă în zona galbenă) și Scopus
- 11C** Cerlinca, D., Spinu, S., 2022, Numerical simulation of elastic-plastic contact with isotropic hardening, *International Journal of Modern Manufacturing Technologies* Volume 14, Issue 2, Pages 294 – 301
- 12C** Cerlinca, D., Spinu, S., 2022, Thermoelastic displacement due to transient surface heating, *International Journal of Modern Manufacturing Technologies*, Volume 14, Issue 3, Pages 319 – 325
- 13C** Dulucleanu, C., Severin, T., Cerlincă, D., Tamașag, I., Irimescu, L., 2022, Laboratory studies of a dual-phase steel with 0.53% mn structures, *TEHNOMUS – New Technologies and Products in Machine Manufacturing Technologies*”, ISSN: P - 1224-029X, E – 2247-6016, nr.29, pp. 43-49, 2022, indexat în Index Copernicus, EBSCO HOST Conexiune, Google Scholar <https://fim.usv.ro/wp-content/uploads/sites/9/2023/01/06.pdf>
- 14C** Cerlinca, D., Spinu, S., A numerical approach to the contact of nominally flat surfaces, *International Journal of Modern Manufacturing Technologies*, 2021, 13(3 Special issue), pp. 22–28, indexat Scopus
- 15C** Cerlinca, D., Spinu, S., A comparative study of FFT algorithms for convolution calculation in non-periodic elastic contacts, *International Journal of Modern Manufacturing Technologies*, 2021, 13(2), pp. 7–13, indexat Scopus
- 16C** Băncescu, I. B., Tamașag, I., Slătineanu, L., Cerlinca, D., 2021, Study of Incremental Forming Process of Polycarbonate Sheets (No. 2021-01-0835). SAE Technical Paper, Publisher: Society of Automotive Engineers (SAE), ISSN: 0148-7191, <https://doi.org/10.4271/2021-01-0835>
- 17C** Severin, T.L., Dulucleanu, C., Cerlinca, D.A., Irimescu L., 2021, Considerations Regarding the Extension Bending of Wide Bands on double Convex Surfaces, revista „TEHNOMUS – New Technologies and Products in Machine Manufacturing Technologies””, ISSN: P - 1224-029X, E – 2247-6016, nr.28, pp. 52-56, 2021, indexat în Index Copernicus, EBSCO HOST Conexiune, Google Scholar
- 18C** Dulucleanu, C., Severin, T.L., Cerlinca, D.A., Irimescu L., Javorova, J., 2021, Dual-phase steels with low manganese content. Structure and mechanical properties, revista „Bulgarian Chemical Communications” (ISSN 0324-1130), Volume 53, Special Issue B, pp. 5-11, 2021 (DOI: 10.34049/bcc.53B.0017), articol prezentat și la „Alternative Energy Sources, Materials & Technologies Conference – AESMT '21”, 14 -15 iunie 2021, Ruse, Bulgaria, indexat în Google Scholar
- 19C** Spinu, S., Cerlinca, D., 2020, The Fretting Contact of Coated Bodies. Part I-Contact Parameters, IOP Conference Series: Materials Science and Engineering, 724:012026, DOI: 10.1088/1757-899X/724/1/012026
- 20C** Spinu, S., Cerlinca, D., 2020, The Fretting Contact of Coated Bodies. Part II-The Stress State, IOP Conference Series: Materials Science and Engineering, 724:012027, DOI: 10.1088/1757-899X/724/1/012027

- 21C** Cerlinca, D., Spinu, S., 2020, Acceleration of numerical solution of elastic contact problems by a dual-grid approach, IOP Conf. Ser.: Mater. Sci. Eng. 916:012017, <https://doi.org/10.1088/1757-899X/916/1/012017>
- 22C** Cerlinca, D., Spinu, S., 2020, The torsional contact of coated bodies, IOP Conf. Ser.: Mater. Sci. Eng. 916:012018, <https://doi.org/10.1088/1757-899X/916/1/012018>
- 23C** Dulucleanu, C., Severin, T.L., E., Irimescu L., Cerlinca, D.A., 2020, Influence of the Cycles of Heat Treatments on the Structure and Mechanical Properties of a Dual-Phase Steel with Low manganese Content, "20th International Multidisciplinary Scientific GeoConference SGEM 2020", 8 – 11 decembrie 2020, Viena, Austria, Conference Proceedings, Volume 20, Book 6.2, pp. 11-18, (DOI: 10.5593/sgem2020V/6.2/s07.02), indexat în Scopus, EBSCO HOST Conection, CrossRef, Springer Nature, ProQuest, RSCI (РИИЛ), Google Scholar, Mendeley, British Library
- 24C** Dulucleanu, C., Severin, T.L., Cerlinca, D.A., Irimescu L., Bazga, N., 2020, Influence of the laboratory equipment on research results on a low manganese dual-phase steel”, revista „TEHNOMUS – New Technologies and Products in Machine Manufacturing Technologies”, ISSN: P - 1224-029X, E – 2247-6016, nr.27, pp.39-45, 2020, indexat în Index Copernicus, EBSCO HOST Conection, Google Scholar
- 25C** Dulucleanu, C., Severin, T.L., Berariu, E., Irimescu L., Cerlinca, D.A., 2020, Influence of the Structure Succession on the Volume Fraction of Martensite and Ferrite Microhardness in a Dual-Phase Steel with Low Manganese Content, "20th International Multidisciplinary Scientific GeoConference SGEM 2020", 18 – 24 august 2020, Albena, Bulgaria, Conference Proceedings, Book 6.1, Volume 20, pp. 69-76, (DOI:10.5593/sgem2020/6.1/s24.010), indexat în Scopus, EBSCO HOST Conection, CrossRef, Springer Nature, ProQuest, RSCI (РИИЛ), Google Scholar, Mendeley, British Library
- 26C** Spinu, S.; Cerlinca, D., Musca, I., 2019, The frictional contact of coated bodies. Part I – The sliding contact, IOP Conference Series: Materials Science and Engineering, Vol. 591, ID 012069
- 27C** Spinu, S.; Cerlinca, D., Musca, I., 2019, The frictional contact of coated bodies. Part II – The slip-stick contact, IOP Conference Series: Materials Science and Engineering, Vol. 591, ID 012070, indexat Scopus
- 28C** Spinu, S.; Cerlinca, D., Musca, I., 2019, FRETING STRESSES IN THE CONTACT OF COATED BODIES, Tehnomus Journal Vol. 26, pp. 37-43
- 29C** Spinu, S., Cerlinca, D., 2018, Numerical simulation of elastic bilayered contact. Part I - Contact parameters, IOP Conference Series: Materials Science and Engineering, Volume 400, Issue 4, 20 September 2018, Article number 042054, indexat Scopus
- 30C** Spinu, S., Cerlinca, D., 2018, Numerical Simulation of Elastic Bilayered Contact. Part II - Stress State Analysis, IOP Conference Series: Materials Science and Engineering, Volume 400, Issue 4, 20 September 2018, Article number 042055, indexat Scopus
- 31C** Beşliu, I., Amarandei, D., Cerlincă, D., 2018, Analysis of chip formation and cutting forces in end milling AISI D2 tool steel with different cutting tool geometries, MATEC Web Conf., vol. 178, doi10.1051/mateconf/201817801016, indexat EBSCO, Pro Quest
- 32C** Spinu, S., Cerlinca, D., 2017, Numerical simulations of rough contacts between viscoelastic materials, IOP Conference Series: Materials Science and Engineering, Vol.227, 012120, 8 pp.
- 33C** Spinu, S., Cerlinca, D., 2017, Prediction of static friction coefficient in rough contacts based on the junction growth theory, IOP Conference Series: Materials Science and Engineering, Vol.227, 012119, 8pp.
- 34C** Spinu, S., Cerlinca, D., 2017, Modelling of Rough Contact between Linear Viscoelastic Materials, Modelling and Simulation in Engineering, Volume 2017, Article ID 2521903, 11 pages
- 35C** Spinu, S., Cerlinca, D., 2017, The surface contact of viscoelastic materials. part i – algorithm overview, Tehnomus Journal, Vol. 24, p. 258-265, indexed by Ebsco.
- 36C** Spinu, S., Cerlinca, D., 2017, The surface contact of viscoelastic materials. Part II – Results and discussions, Tehnomus Journal, Vol. 24, p. 266-272, indexed by Ebsco.
- 37C** Spinu, S., Cerlinca, D., 2016, A robust algorithm for the contact of viscoelastic materials, IOP Conference Series: Materials Science and Engineering, Vol. 145, 042034, 8 pp.
- 38C** Spinu, S., Cerlinca, D., 2016, A numerical solution to the Cattaneo-Mindlin problem for viscoelastic materials, IOP Conference Series: Materials Science and Engineering, Vol. 145, 042033, 8 pp.

39C Alaci, S., Cerlincă, D., Ciornei, F., Filote, C., Frunză, G., 2015, Experimental Highlight of Hysteresis Phenomenon in Rolling Contact, Journal of Physics: Conference Series 585 (2015) 012010 doi:10.1088/1742-6596/585/1/012010, 1-9<http://iopscience.iop.org/1742-6596/585/1/012010>

40C Alaci, S., Cerlincă, D., Ciornei, F., Filote, C., Frunză, G., 2015, Method of Integration for Equation of Two Balls in Dumped Collision, Journal of Physics: Conference Series 585 (2015) 012008 doi:10.1088/1742-6596/585/1/012008, 1-9<http://iopscience.iop.org/1742-6596/585/1/012008>

D Lucrări publicate în ultimii 10 anii în reviste și volume de conferințe cu referenți
(neindexate)

- Selecție cu maximum 20 lucrări în volume de conferințe

1D Dulucheanu, C., Severin, T.L., Cerlinca, D.A., Irimescu L., Javorova, J., “Mechanical properties of some dual-phase steels with low manganese content”, „Alternative Energy Sources, Materials & Technologies Conference – AESMT '21”, 14 - 15 iunie 2021, Ruse, Bulgaria, Proceeding of short papers, Volume 3, ISSN 2603-364X, pp.85 – 86, 2021

E. Brevete obținute în întreaga activitate

Nu este cazul

Data:

24.09.2025

Semnătura:

