LISTA DE LUCRĂRI (perioada 2016 – 2025)

Prof. habil. dr. ing. Eduard Laurenţiu NIŢU

A) Brevete de invenţie

1. **Niţu E.,** Costea A., Iordache M., Iacomi D., Babă Al., *Cap multiax reglabil modularizat*, RO 130221/ 2017

2. Iordache M., Costea A., **Niţu E.,** Rizea A., Babă Al., *Dispozitiv pentru controlul suprafeţelor inaccesibile*, RO - 132503/ 2020

3. Malea C.I, Costea A., Iordache M., **Niţu E.L.,** Rizea A., *Dispozitiv rotativ pentru prelucrarea pieselor cu axe încrucişate,* RO - 134622 / 2022

4. Iordache M., Costea A., Malea C.I, **Niţu E.L.,** Rizea A., *Reazem multifucţional reglabil modularizat pentru construcţia dispozitivelor,* RO - 134685/ 2022

B) Cărţi şi **capitole în cărţi de specialitate**

1. Iacomi D., **Niţu E.L.,** Gavriluţă A., *Tehnologia fabricării produselor - Ghid de proiectare a tehnologiilor de prelucrare prin aşchiere*, Editura Universităţii din Piteşti, 2016, e-ISBN 978-606-560-500-8

2. **Niţu E.L.,** Slătineanu L., Iordache M.D., Plăiaşu A.G., Dodun O., Nagîţ Gh., Stănescu N.D., Anghel D.C., Rizea A.D., Clenci A.C., Oproescu M., *Innovative Manufacturing Engineering & Energy - IManEE 2019,* Selected, peer reviewed papers from the 23th IManEE 2019 - *„50 Years of Higher Technical Education at the University of Pitesti"*, May 22-24, Piteşti, România, IOP Publishing, IOP Conf. Series: Materials Science and Engineering 564 (2019), Online ISSN: 1757-899X, doi:10.1088/issn.1757-899X

3. **NIŢU E.L.** (coord.), GAVRILUŢĂ A.C., BELU N., GAVRILUŢĂ C.A., ANGHEL D.C., RIZEA A.D., NEACŞU G.C., PASCU I.G., *Îmbunătăţirea fluxurilor de producţie: metodologie de aplicare pentru liniile de asamblare*, Editura Universităţii din Piteşti, 2021, ISBN 978-606-560-700-2

C) Materiale / lucrări didactice

1. **Niţu E.L, Malea C.I.,** *Procedee Avansate de Prelucrare prin Aşchiere - Lucrări de laborator*, Piteşti 2021

2. **Niţu E.L.**, *Tehnologia construcţiilor de maşini 2*, Piteşti, 2022

3. **Niţu E.L.**, *Gestiunea Producţiei şi a Stocurilor - Ghid de elaborare a proiectului de an*, Piteşti, 2022

4. **Niţu E.L, Malea C.I.,** *Procedee Avansate de Prelucrare prin Aşchiere*, Piteşti 2024

D) Articole în reviste cotate ISI Thomson Reuters

1. Daniela Monica IORDACHE, Marian Catalin DUCU, **Eduard Laurentiu NITU,** Doina IACOMI, Adriana Gabriela PLAIASU, Maria Minodora PASARE, *Microstructure and Properties of Copper and 5754 Aluminum Alloy Joints by Friction Stir Welding*, Revista de Chimie, ISSN: 0034-7752, vol. 68, nr. 3, 2017, pag. 459-463 (FI=1.412), WOS:000400731900007

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9. Malea, C.I.; **Niţu, E.L.***; Iordache, D.M.; Tabacu, Ş.L.; Negrea, A.D.; Bădulescu, C. *Analysis of Face Milling of Hard Steel 55NiCrMoV7 by Studying Rough and Semi-Finished Machining and the Influence of Cutting Parameters on Macroscopic Chip Dimensions*. Materials 2024, 17, 3434. https://doi.org/10.3390/ma17143434; (**FI=3.1, Q2**), WOS: 001277701300001

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14. M L Proistosescu (Necșoi), C A Gavriluță, **E L Nițu**, *A concept for implementation Kanban method in Learning Factory*, ACTA TECHNICA NAPOCENSIS Series-Applied Mathematics Mechanics And Engineering, 2025, Volume 68, Issue 1-2 Page 517-526, (FI=0.2), WOS:001591275000005 (susținută la The Joint International Conference of the 3rd International Conference on Advanced Research in Engineering, CARE 2024, and the 7th International Conference on Mechanical Engineering, ICOME 2024, 16 - 18 October 2024, Craiova)

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16. A I Toma, Y Demmouche, M Dhondt, C Bădulescu, **E L Nițu**, D M Iordache, *Numerical simulation of dissimilar friction stir welding of aluminum alloys AA7075 and AA2024: influence of tool geometry on temperature distribution*, ACTA TECHNICA NAPOCENSIS Series-Applied Mathematics Mechanics And Engineering, 2025, Volume 68, Issue 1S, Page 163-170, (FI=0.2), WOS:001612666100007 (susținută la CIE/C2I 2025 International Conference on Integrated Engineering, Timisoara, Romania, May 5-6, 2025)

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F) Articole în reviste şi volumele unor manifestări ştiinţifice indexate în alte baze de date internaţionale

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8. D Scirloi, M A Constantin, C Badulescu, D Negrea, M Diakhate, **E Nitu**, M Iordache, *Influence des défauts de soudage FSW sur le comportement mécanique d'un assemblage bout à bout en Cu-DHP: analyse microscopique et par corrélation d'images numériques*, 4ème Congrès Français de Mécanique Brest, 26 au 30 Août 2019, sciencesconf.org:cfm2019:244734, pag. 6459-6468

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26. E R Oprescu, M Diakhate. C Bădulescu, **E L Niţu**, *Compréhension des mécanismes de mélange dans le procédé de soudage par friction-malaxage : investigation expérimentale et numérique*, La 3ème édition du Symposium de la recherche scientifique francophone en Europe centrale et oriental, publicat în Les Actes du Symposium de la Recherche Scientifique Francophone en Europe Centrale et Orientale ISSN ONLINE 3119-8767 Tome II, https://aos.ro/wp-content/SRSF/Tome2-Art.4.pdf

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G) Articole în reviste şi volumele unor manifestări ştiinţifice naţionale/internaţionale neindexate

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H) Granturi / proiecte de cercetare câştigate prin competiţie

Director / responsabil de grant / proiect:

1. Proiect complex realizat în consorţii CDI - PN-III-P1-1.2-PCCDI-2017-0446, PCCDI 82/2018, *Tehnologii de fabricare inteligente pentru productia avansată a pieselor din industriile de automobile şi aeronautică (TFI PMAIAA)*, domeniul stiintific: Tehnologii noi şi emergente, Beneficiar UEFISCDI, anii derulării 2018-2021, (valoare UPIT=306675 lei/2018; 325181 lei/2019; 365100 lei/2020)

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2. Grant PN II – PARTENERIATE, PCCA nr. 219/2014, *Tehnologii inovative, ecologice şi eficiente de îmbinare a materialelor metalice şi polimerice folosite în industria de automobile, utilizând tehnica de sudare prin frecare cu element activ rotitor (Inova-FSW)*, Beneficiar ANCS - UEFISCDI, anii participării 2014 - 2017

3. POSCCE-A2-O2.2.1-2013-1, ID 1947-2013, *Centrul Regional de Cercetare – Dezvoltare pentru Materiale, Procese şi Produse Inovative Destinate Industriei de Automobile / CRC&D-Auto*, Solicitant UPIT, anul participării 2015

4. CNFIS-FDI-2018-0300, *Asigurarea funcționării în bune condiții a bazelor de practică pentru caracterizarea și expertizarea materialelor, proceselor și produselor, din cadrul Universității din Pitești,* Beneficiar: Universitatea din Pitesti, anul participării 2018

5. PN-III-P1-1.2-PCCDI-2017-022411, *Cercetări privind implementarea Inteligenței Artificiale în proiectarea componentelor de automobile, în vederea fabricației prin 3D Printing,* Beneficiar UEFISCDI, anul participării 2018 - 2019

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7. PN-III-P1-1.2-PCCDI-2017-0446, PCCDI 82/2018, *Prelucrarea prin deformare incrementală a pieselor din industria automotive,* Coordonator ULB Sibiu, Beneficiar: UEFISCDI, anul participării 2018 - 2021

8. PN-III-P1-1.2-PCCDI-2017-0446, PCCDI 82/2018, *Conducerea inteligentă a proceselor de fabricaţie şi inspecţie destinate reperelor utilizate în industria auto şi aeronautică,* Coordonator UDJ Galaţi, Beneficiar: UEFISCDI, anul participării 2018 – 2021

9. PN-III-P3-3.1-PM-RO-FR-2019-0048, *Modelarea şi simularea numerică a procesului de sudare prin frecare cu element activ rotitor-FSW* (Modélisation et simulation numérique du processus de soudage par friction malaxage-FSW), Beneficiar UEFISCDI, anul participării 2019-2020

10. Îmbunătăţirea fluxului de producţie din cadrul secţiei injecţie, prin implementarea unui şantier Kaizen şi a conceptului Lean Manufacturing, Beneficiar S.C GOLD PLAST PRODUCTION SRL, Anul participării 2019

11. Studiu privind îmbunătăţirea fluxului de producţie din cadrul zonei de tampografie prin implementarea conceptului Lean Manufacturing, Beneficiar S.C GOLD PLAST PRODUCTION SRL, Anul participării 2020-2021

12. Studiu privind îmbunătăţirea sistemului de producţie prin implementarea metodelor SMED şi TPM, Beneficiar S.C GOLD PLAST PRODUCTION SRL, Anul participării 2022

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