

## **LISTA DE LUCRĂRI**

### **a) Teza de doctorat**

*Conducerea integrată a sistemelor utilizând platforme deschise de comandă.*  
Conducător științific: Prof. dr. ing. Liviu Morar.  
Teză susținută la Universitatea Tehnică din Cluj-Napoca, 15 iulie 2008.

### **b) Cărți și capitole în cărți**

1. **Ciupan, E.** Design industrial și inginerie economică. Editura UTPRESS, Cluj-Napoca, 2020. ISBN 978-606-737-430-8, 264 pagini.
2. **Ciupan, E.** Informatică aplicată. Baze de date relaționale, Editura UTPRESS, Cluj-Napoca, 2014. ISBN 978-973-662-946-4, 338 pagini.
3. Ciupan, C., **Ciupan, E.** Proprietate intelectuală. Brevete de invenție. Editura UTPRESS, Cluj-Napoca, 2014. ISBN 978-973-662-945-7, 618 pagini.
4. **Ciupan, E.** Rețele neuronale. Teorie și aplicații, Editura UTPRESS, Cluj-Napoca, 2010. ISBN 978-973-662-599-2, 168 pagini.
5. **Ciupan, E.** Bazele proiectării asistate de calculator. Baze de date relaționale. Editura UTPRESS, Cluj-Napoca, 2008. ISBN 978-973-662-417-9, 178 pagini.
6. F. Lungu, I. Abrudan (coordonatori), 8 autori, Ingineria sistemelor de producție, Îndrumător de laborator, Editura Todesco, Cluj-Napoca 2013, ISBN 978-605-595-025-2, 220 pagini
7. F. Lungu, I. Abrudan (coordonatori), 8 autori, Managementul operațiilor, Îndrumător de laborator, Editura Todesco, Cluj-Napoca 2013, ISBN 978-606-595-026-9, 158 pagini.

### **c) Articole indexate în reviste ISI Thomson Reuters și în volumele unor manifestări științifice indexate ISI Thomson Reuters, vizibile în baze de date**

1. **Ciupan, E.**, Ciupan, C., Câmpean, E.M., Stelea, L., Policsek, C.E., Lungu, F., Jucan, D.C. Opportunities of Sustainable Development of the Industry of Upholstered Furniture in Romania. A Case Study. Sustainability. 2018; 10(9). DOI: 10.3390/su10093356. (WoS, Q2).
2. **Ciupan, E.**, Lungu, F., Ciupan, C. ANN Training Method With A Small Number Of Examples Used For Robots Control. International Journal of Computers,

- Communications & Control. 2015; 10(5): 643-653. DOI: 10.15837/ijccc.2015.5.2027. (WoS).
3. **Ciupan, E.**, Lungu, F., Ciupan, C. ANN Method for Control of Robots to Avoid Obstacles. International Journal of Computers, Communications & Control. 2014; 9(5): 540-555. DOI: 10.15837/ijccc.2014.5.813. (WoS).
  4. Ciupan, M., **Ciupan, E.** Comparison of machine-tool structures made of cast iron or mineral casting. 2016 International Conference On Production Research - Regional Conference Africa, Europe And The Middle East (ICPR-AEM 2016) And 4th International Conference On Quality And Innovation In Engineering And Management (QIEM 2016). 2016. Pages: 309-316. (WoS).
  5. Ciupan, C., Pop, E., Filip, I., **Ciupan, E.**, Câmpean, E., Cionca, I., Hereș, V. A new approach of the design process for replacing wooden parts of furniture. Modern Technologies in Manufacturing (MTeM 2017 - AMaTUC). MATEC Web of Conferences. 2017; 137. DOI: 10.1051/mateconf/201713706002. (WoS).
  6. **Ciupan, E.**, Lăzărescu, L., Filip, I., Ciupan, C., Câmpean, E., Cionca, I., Pop, E. Characterization of a thermoforming composite material made from hemp fibers and polypropylene. Modern Technologies in Manufacturing (MTeM 2017 - AMaTUC). MATEC Web of Conferences. 2017; 137. DOI: 10.1051/mateconf/201713708003. (WoS).
  7. Ciupan, C., Steopan, M., Pop, E., Câmpean, E., Filip, I., **Ciupan E.** Comparative analysis of different ribs used to rigidize the resistance structure of a sofa side made of composite materials based on vegetable fibers. Acta Technica Napocensis, Series: Applied Mathematics, Mechanics and Engineering. 2018; 61(1): 39-44. (WoS).
  8. Ciupan, C., Comșa, D.-S., **Ciupan, E.** Simulating the Thermoforming Process of a Box for Upholstered Furniture. Acta Technica Napocensis, Series: Applied Mathematics, Mechanics and Engineering. 2018; 61(3): 21-28. (WoS).
  9. Ciupan, M., Popa, M., Sosa, I.P., Contiu, G., **Ciupan, E.** Development and Testing of Mineral Casting for Use in Structural Elements and Mold Making, Acta Technica Napocensis, Series: Applied Mathematics, Mechanics and Engineering. 2018; 61(3):29-34. (WoS).
  10. Ciupan, C., **Ciupan, E.** A Case Study Related to the Repair or Reconstruction of a Patented Product. 2016 International Conference on Production Research - Regional Conference Africa, Europe, and The Middle East (ICPR-AEM 2016) and 4th International Conference on Quality and Innovation in Engineering and Management (QIEM 2016). 2016. Pages: 130-135. (WoS).
  11. **Ciupan, E.**, Bojan, I. Own Software Used in the Modelling of An Economic Supplying Activity. 6th International Conference on the Management of Technological Changes. 2009; 1: 209-212. (WoS).
  12. **Ciupan E.**, A Model for the Management of a Supply Activity, Based on Statistical Data. 1st International Conference on Quality and Innovation in Engineering and Management (QIEM). 2011. Pages: 249-252. (WoS).
  13. **Ciupan, E.**, Ciupan, M. Thermo-mechanical Analysis of a Mountain Bike Disc Brake Rotor. 2014 International Conference On Production Research - Regional Conference Africa, Europe And The Middle East And 3rd International Conference On Quality And

Innovation In Engineering And Management (ICPR-AEM 2014). 2014. Pages: 79-83. (WoS).

14. Ciupan C., **Ciupan, E.**, Lungu, F. Adapting your teaching of IP rights to the audience. 2014 International Conference on Production Research - Regional Conference Africa, Europe and the Middle East and 3rd International Conference on Quality and Innovation in Engineering and Management (ICPR-AEM 2014). 2014. pp 84-88. (WoS).

#### **d) Articole în reviste și în volumele unor manifestări științifice indexate în alte baze de date internaționale**

1. Ciupan, M., **Ciupan, E.** New Solution for Waterjet Cutting and Milling Machine, Proceedings of 2018 International Conference on Hydraulics and Pneumatics – HERVEX November 7-9, Băile Govora, Romania, ISSN 1454 – 8003. 2018. Pages: 38-44. <http://hervex.ro/hervex-2018-proc-toc/>. (EBSCO).
2. Ciupan, C., **Ciupan, E.** A Case Study Related to Counterfeiting a Patented Product. Proceedings of 2018 International Conference on Hydraulics and Pneumatics – HERVEX November 7-9, Băile Govora, Romania, ISSN 1454 – 8003, 2018. Pages: 284-289. <http://hervex.ro/hervex-2018-proc-toc/>. (EBSCO).
3. **Ciupan, E.**, Ciupan, C., Lungu, F. The Cost Estimation of a Water Jet Cutting Process Using Artificial Neural Networks. Nonconventional Technologies Review. 2018; 22, No 4: 26-30. (Index Copernicus, ProQuest, EBSCO).
4. Ciupan, C., **Ciupan, E.**, Redesigning the Resistance Structure of a Sofa Side to Be Made of Composite Material. Nonconventional Technologies. 2018; 22, No 4: 31-35. (Index Copernicus, ProQuest, EBSCO).
5. **Ciupan, E.** Metodologia de înregistrare a unei cereri naționale de brevet de invenție. Revista de Management și Inginerie Economică, ISSN 1583-624X. 2018. 17(4): 751-764. (Index Copernicus).
6. **Ciupan, E.** Studiu de caz privind examinarea unor cereri de brevet de invenție. Revista de Management și Inginerie Economică, ISSN 1583-624X. 2018; 17(4): 775-784. (Index Copernicus).
7. **Ciupan, E.**, Ciupan, M., Jucan, D.-C. Determining the Mechanical Properties of a New Composite Material using Artificial Neural Networks. International Journal of Engineering Trends and Technology (IJETT), ISSN: 2231–5381. 2018; 66(2): 103-108. (SCOPUS).
8. Ciupan, C., **Ciupan, E.**, Pop, E. Algorithm for designing a hydraulic scissor lifting platform. Modern Technologies in Manufacturing (MTEM 2019), Book Series: MATEC Web of Conferences. 2019; Vol. 299. <https://doi.org/10.1051/mateconf/201929903012>. (DOAJ, Crossref).
9. Ciupan, M., Popa, M., Ciupan, E. Method and program for the interpolation of experimental results of determining the mechanical properties of mineral composites for modern machine-tools. Modern Technologies in Manufacturing (MTEM 2019), Book Series: MATEC Web of Conferences. 2019; Vol. 299. <https://doi.org/10.1051/mateconf/201929905009>. (DOAJ, Crossref).

10. **Ciupan, E.**, A Model for the Kinematical Analysis of a Six Degrees of Freedom Parallel Robot. Proceeding of 2010 IEEE International Conference on Automation, Quality and Testing, Robotics, ISBN 978-1-4244-6724-2. 2010. DOI: [10.1109/AQTR.2010.5520875](https://doi.org/10.1109/AQTR.2010.5520875). (IEEE Xplore).
11. **Ciupan, E.** Modelling a handling robot to avoid an obstacle. 2012 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR 2012), ISBN 978-1-4673-0701-7. 2012. DOI: [10.1109/AQTR.2012.6237741](https://doi.org/10.1109/AQTR.2012.6237741). (IEEE Xplore).
12. Ciupan, C., Steopan, M., **Ciupan, E.** The influence of the load on the behaviour of the electromechanical variator. 2012 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR 2012), ISBN 978-1-4673-0701-7. 2012. DOI: [10.1109/AQTR.2012.6237715](https://doi.org/10.1109/AQTR.2012.6237715). (IEEE Xplore).
13. Ciupan, C, **Ciupan, E**, Ferent-Pipas, S. Neural Model for Abrasive Water Jet Cutting Machine. Nonconventional Technologies Review, ISSN 1454-3087. 2013. Pages: 25-29. (EBSCO).
14. **Ciupan, E.** A Study Regarding the Possibility of Optimizing the Supply Batch using Artificial Neural Networks. 24th DAAAM International Symposium on Intelligent Manufacturing and Automation, 2013. Procedia Engineering. 2014; 69: 141-149. (Elsevier).
15. Ferent-Pipaș, S., Dindelegan, M., Pădurean, B., **Ciupan, E.**, Ciupan, C. Cost Calculator for Waterjet, Laser and Plasma Machining. Acta Technica Napocensis, Series: Applied Mathematics and Mechanics, Vol. 57, Issue I, March 2014, Pages: 73-76. <https://atnamam.utcluj.ro/index.php/Acta/article/view/183>. 2014. (Index Copernicus).
16. Petruș, R., **Ciupan, E.** The Influence of Water Compressibility of The Efficiency of a New Solution for Water Jet Cutting Machine. Acta Technica Napocensis, Series: Applied Mathematics and Mechanics, Vol. 57, Issue II, June 2014. Pages: 277-280. (Index Copernicus).

#### **e) Articole in extenso în reviste, volumele unor manifestări științifice naționale sau internaționale neindexate**

1. **Ciupan, E.**, Lungu, F., Ciupan, C., Pop, E. A New Approach to the Design Process of Innovative Products. Canadian International Journal of Science and Technology, Vol. 8, ISSN 2356-9085. 2017. Pages: 7-18.
2. Filip, I., **Ciupan, E.**, Cionca, I., Ciupan, M., Pop, E., Câmpean, E., Hereș, V, Raț, F. Furniture parts made of composite materials based on vegetable fibers. The 21th International Exhibition of Inventics INVENTICA and International Conference of Inventics, Iasi, 28-30.06.2017, Proceedings of the XXIth International Scientific Conference "INVENTICA 2017", Editura Performantica, ISSN 1844-7880. 2017. Pages: 38-45.
3. Steopan, M., Pop, E., **Ciupan, E.**, Filip, I. Numerical Research on a Hemp Reinforced Composite Material Sofa Side Model. The XXIIth International Conference "INVENTICA 2018", June 28-29, 2018, Iasi, Romania. 2018. Pages: 1-7.
4. Ciupan, C., Galiș M., Crețu M., Leția T., **Ciupan E.** The mathematical model of a kinematic axis with servodrive variator. 5Th International Conference "Modern

- Technologies in Manufacturing”, Cluj-Napoca, ISBN 973-9087-83-3. 2001. Pages: 143-146.
5. Ciupan, C., Ispas, V., Damian, M., **Ciupan E.**, Marcu, C. Driving system for a simulation platform used for a transport vehicle. Annals of the Oradea University, Fascicle of Management and Technological Engineering, ISSN 1583-0691, Vol IV, CD-ROM Edition, 2005. Pages: 67-70.
  6. **Ciupan, E.** Model of inventory for a distribution company. Annals of the Oradea University, Fascicle of Management and Technological Engineering, ISSN 1583-0691, Vol IV, CD-ROM Edition. 2005. Pages: 172-175.
  7. **Ciupan, E.** A model of inventory management. Proceedings of 7<sup>th</sup> International Conference MTeM 2005, Cluj-Napoca, ISBN 973-9087-83-3, 2005. Pages: 145-148.
  8. Pop, A., Morar, L., Ciupan, C., **Ciupan, E.** The control of the standoff distance depending on the focus nozzle wear size for the AWJ cutting using a fuzzy neuronal network with back propagation learning algorithm. Proceedings of the 7<sup>th</sup> International Conference MTeM 2005, Cluj-Napoca, ISBN 973-9087-83-3. 2005. Pages: 333-336.
  9. Morar, L., **Ciupan, E.** Model de management al stocurilor. Revista de Management și Inginerie Economică, Vol. 5, nr. 4(20). 2006. Pag: 177-182.
  10. **Ciupan, E.** Program pentru simulare utilizând rețele neuronale cu trei straturi. A șasea Conferință tehnico-științifică “Profesorul D. Pavel – fondatorul hidroenergeticii românești”, Sebeș. 2006. Pag: 165-172.
  11. **Ciupan, E.**, Morar, L., Ciupan, C. A model of inventory management using neural network. Annals of DAAAM for 2007 & Proceedings of the 18<sup>th</sup> International DAAAM Symposium “Intelligent Manufacturing and Automatization”, ISSN 1726-9679. 2007. Pages: 157-158.
  12. **Ciupan, E.** Software designed for modelling and simulating using three-layer neural network. Annals of DAAAM for 2008 & Proceedings of the 19<sup>th</sup> International DAAAM Symposium, ISSN 1726-9679. 2008. Pages: 138-139.
  13. **Ciupan, E.** Itul, T., Morar, L., Ciupan, C. A model for the kinematical analysis of a three degrees of freedom mechanism. Annals of DAAAM for 2008 & Proceedings of the 19<sup>th</sup> International DAAAM Symposium, ISSN 1726-9679. 2008. Pages: 139-140.
  14. Ciupan, C., Morar, L., **Ciupan, E.** Innovative system with abrasive water jet. Annals of DAAAM for 2008 & Proceedings of the 19<sup>th</sup> International DAAAM Symposium, ISSN 1726-9679. Pages: 137-138.
  15. **Ciupan, E.**, Morar, L., Ciupan, C. Prods program destinat instruirii rețelelor neuronale de tip perceptron multistrat. A opta Conferință tehnico-științifică “Profesorul D. Pavel – fondatorul hidroenergeticii românești”, Sebeș. 2008. Pag: 421-428.
  16. **Ciupan, E.**, Morar, L., Ciupan, C. Analiză comparativă a programului MLP de instruire a unei rețele neuronale cu trei straturi și programul MATLAB. A opta Conferință tehnico-științifică - “ Profesorul D. Pavel – fondatorul hidroenergeticii românești”, Sebeș. 2008. Pag: 413-420.
  17. Ciupan, C., **Ciupan, E.** Metode și mijloace simple pentru măsurători complexe. Ediția a III a Simpozionului „Cucuteni 5000 redivivus: Științe exacte și mai puțin exacte”, Chișinău. 2008.

18. **Ciupan, E.** The Artificial Neural Network – a Modelling Tool in Engineering. Annals of MTeM for 2009 & Proceedings of the 9th International Conference Modern Technologies in Manufacturing, ISBN 973-7937-07-04. 2009. Pages: 49-52.
19. **Ciupan, E.** Modelling Handling Robots using Neural Networks. The 14-th International Conference „INVENTICA 2010”, ISBN 978-973-730-719-4. 2010. Pages: 395-400.
20. **Ciupan, E.** Training Method of a Handling Robot to Avoid an Obstacle. THE 15-th International Conference „INVENTICA 2011”, ISBN 1844-7880. 2011. Pages: 453-460.
21. Ciupan, C., **Ciupan, E.** De la unelte la mașini unelte. Simpozionul International „CUCUTENI-5000 Redivivus: Științe exacte și mai puțin exacte”, Ediția a VII-a. Culegere de lucrări, Chișinău. 2012.
22. **Ciupan, E.**, Ciupan, C., Petruș, R. The control of the abrasive water jet processing using a neuronal network model. Proceedings of 2012 International Salon of Hydraulics and Pneumatics – HERVEX, 7 - 9 November, Călimănești-Căciulata, România, ISSN 1454 – 8003. 2012.
23. Petruș, R., Ciupan, C., **Ciupan, E.** A new solution for water jet cutting machine tool. Proceedings of 2012 International Salon of Hydraulics and Pneumatics – HERVEX, 7 - 9 November, Călimănești-Căciulata, România, ISSN 1454 – 8003. 2012.
24. Ciupan, C., **Ciupan, E.** Dezvoltarea spiritului creativ al studenților din învățământul superior tehnic. Revista științifico-metodică „Tehnocopia”, Nr. 2(9), ISSN 1857-4904, Chișinău. 2013 . Pag: 5-8.
25. **Ciupan, E.** Aplicații ale calculului neuronal în inginerie. Revista științifico-metodică „Tehnocopia”, Nr. 2(9), ISSN 1857-4904, Chișinău. 2013. Pag: 23-29.
26. Ciupan, C., **Ciupan, E.** Transmiterea cunoștințelor de proprietate industrială către diferite categorii de cursanți, Al IX-lea Simpozion Internațional Cucuteni 5000 redivivus, „Științe exacte și mai puțin exacte”, 24-26 oct 2014, ISSN 978-9975-63-3437, Chișinău. Pag: 143-150.

## **f) Brevete de invenție și cereri de brevet de invenție**

### **Brevete de invenție**

1. Aștilean, A., Folea, S., Avram, C., Hulea, M., Miron, R. F., Leția, Ș.T., **Ciupan, E.** Sistem și metodă de securizare a comunicațiilor între dispozitive fixe și mobile. 2014. RO127706.
2. **Ciupan, E.**, Morar, L., Ciupan, C. Metodă de instruire a roboților pentru ocolirea obstacolelor. Brevet de invenție. 2016; RO 125210.
3. **Ciupan, E.**, Morar, L., Ciupan, C. Metodă de conducere a roboților industriali. Brevet de invenție. 2016; RO 125211.
4. Ciupan, C., **Ciupan, E.**, Petruș R. A. Sistem de amplificare pentru presiuni înalte. Brevet de invenție. 2019. RO131458.
5. Ciupan, C., Ciupan, M., **Ciupan, E.** Metodă de producere a lucrului mecanic și motor rotativ pentru aplicarea acesteia. 2020. RO129731.

**Cereri de brevet de invenție**

1. Ciupan, C., Filip, I., Hereș, V., Cionca, I., **Ciupan, E.**, Gherghel, C.R., Raț F. Laterală de canapea realizată prin termoformare și procedeu pentru realizarea acesteia. Cererea de brevet nr. a 2017 01012/04.12.2017. RO-BOPI 6/2019 din 28.06.2019.
2. Ciupan, C., Filip, I., **Ciupan, E.**, Steopan, M., Pop, E.S., Câmpean, E.M., Cionca, I., Hereș, V. Metodă de proiectare a pieselor din structura unui mobilier tapițat. Cererea de brevet nr. a 2017 00820/12.10.2017. RO-BOPI 4/2019 din 30.04.2019.

Candidat abilitare,  
Conf.dr.ing. Emilia Ciupan