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Gradul didactic: .Conf.univ.dr.ing.

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Departamentul: INGINERIE ELECTRICĂ

L I S T A

lucrărilor științifice în domeniul disciplinelor din postul didactic

A - Teza de doctorat:

„CONTRIBUȚII PRIVIND MODELAREA NUMERICĂ A FENOMENELOR ELECTROMAGNETICE DIN INSTALAȚIILE ELECTROTERMICE CU MICROUNDE” Universitatea din Oradea, Domeniul: **Inginerie Electrică**

Perioada: **1 Nov. 1997 – 3 Iulie 2004**

Data susținerii: **3 IULIE 2004**

B - Cărți și capitole în cărți publicate în ultimii 10 ani:

1. Francisc Ioan Hathazi, Vasile Darie Șoproni, Mircea Nicolae Arion, **Carmen Otilia Molnar**, *Supraconductori și sisteme supraconductoare. Fenomenul supraconductibilității și a diamagnetismului perfect*, Editura Universității din Oradea, ISBN 978 – 606 – 10 – 1854 – 3, **2016**, pp.107
2. Francisc Ioan Hathazi, Mircea Nicolae Arion, Vasile Darie Șoproni, **Carmen Otilia Molnar**, *Elemente de teoria circuitelor electrice. Note de curs*, Editura Universității din Oradea, ISBN 978 – 606 – 10 – 1855 – 0, **2016**, pp.149
3. Francisc – Ioan Hathazi, Vasile – Darie Șoproni, Mircea – Nicolae Arion, **Carmen Otilia Molnar**, *Supraconductori și sisteme supraconductoare. Aplicații practice*, Editura Universității din Oradea, ISBN 978 – 606 – 10 – 1856 – 7, pp. 56, **2016**

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

1. Daniel Rotaru; Livia Bandici; **Carmen Otilia Molnar** - *The Use of Electromagnetic Levitation in the Material Melting Process*, - 18th International Conference on Engineering of Modern Electric Systems (EMES), DOI: 10.1109/EMES65692.2025.11045605, **2025**
[The Use of Electromagnetic Levitation in the Material Melting Process | IEEE Conference Publication | IEEE Xplore](#)
2. Daiana Ioana Rus; Tudor George Muțiu; Francisc Ioan Hathazi; **Carmen Otilia Molnar**; Mircea Nicolae Arion - *About the Process of High-Frequency Pyrolysis of Printed Stationery Waste Paper at Low Temperature*, 18th International Conference on Engineering of Modern Electric Systems (EMES), DOI: 10.1109/EMES65692.2025.11045625, **2025**
[About the Process of High-Frequency Pyrolysis of Printed Stationery Waste Paper at Low Temperature | IEEE Conference Publication | IEEE Xplore](#)
3. TOMȘE Andrei-Dan, STAȘAC Claudia-Olimpia, **MOLNAR Carmen-Otilia** - *ESP32 Based Detection and Monitoring System of Power Quality in Electrical Networks* - Journal of Electrical and Electronics Engineering (JEEE), 2nd issue: Vol. 17 No. 2, pp.59-62 (**Oct 2024**)
https://electroinf.uoradea.ro/images/articles/CERCETARE/Reviste/JEEE/JEEE_V17_N2_OCT_2024/11%20paper%202410171%20Tomse.pdf
4. RUS Daiana Ioana, Szoke Adrian, MUȚIU Tudor George, SOPRONI Vasile Darie, **MOLNAR Carmen Otilia** - *Simulation of Paper Processing in High Frequency Electromagnetic Field with the Help of a Specific Software* - Journal of Electrical and Electronics Engineering (JEEE), 2nd issue: Vol. 17 No. 2, pp.43-46 (**Oct 2024**)
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5. Vasile Darie Soproni, Livia Bandici, Alin Cristian Teusdea, Francisc Ioan Hathazi, Mircea Nicolae Arion, **Carmen Otilia Molnar**, Teodor Leuca, Claudia Andrada Dalea and Simona Ioana Vicas - *Phenolic Content, Antioxidant Capacity, and Browning Impact of Apple Slices during Microwave Drying: A Chemometric Approach*, MDPI, Journal: Processes, Volume: 11, Number: 1601, Published: 23 May 2023
<https://www.mdpi.com/2227-9717/11/6/1601>

6. Daiana Ioana Rus; Adrian Szoke; Mihaela Covaciu; Bianca Florica Şimon; Francisc Ioan Hathazi; Mircea Nicolae Arion; Livia Bandici; **Carmen Otilia Molnar**; Vasile Darie Soproni - *Energetic Recovery of Straw Cereal Waste Through the Pyrolysis Process in the Microwave Field*, 17th International Conference on Engineering of Modern Electric Systems (EMES), **Electronic ISBN:** 979-8-3503-1063-4, **USB ISBN:** 979-8-3503-1062-7 **Print on Demand(PoD) ISBN:** 979-8-3503-1064-1, **INSPEC Accession Number:** 23422412. **DOI:** [10.1109/EMES58375.2023.10171633](https://ieeexplore.ieee.org/document/10171633), 2023, <https://ieeexplore.ieee.org/document/10171633>

7. Daiana Ioana Rus; Adrian Szoke; Mihaela Covaciu; Bianca Florica Şimon; Francisc Ioan Hathazi; Mircea Nicolae Arion; Livia Bandici; **Carmen Otilia Molnar**; Vasile Darie Soproni - *Study on The High-Frequency Electromagnetic Field Pyrolysis Process of Office and Stationery Waste*, 17th International Conference on Engineering of Modern Electric Systems (EMES), **Electronic ISBN:** 979-8-3503-1063-4, **USB ISBN:** 979-8-3503-1062-7 **Print on Demand(PoD) ISBN:** 979-8-3503-1064-1, **INSPEC Accession Number:** 23422487, **DOI:** [10.1109/EMES58375.2023.10171732](https://ieeexplore.ieee.org/document/10171732), 2023, <https://ieeexplore.ieee.org/document/10171732>

8. Livia Bandici, Alin Cristian Teusdea, Vasile Darie Soproni, Francisc Ioan Hathazi, Mircea Nicolae Arion, **Carmen Otilia Molnar**, and Simona Ioana Vicas - *The Influence of Microwave Treatments on Bioactive Compounds and Antioxidant Capacity of Mentha piperita L.*, MDPI, Materials 15, no. 21: 7789. November 2022
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9. ARION Mircea Nicolae, BANDICI Livia, TEUŞDEA Alin Cristian, VICAŞ Simona Ioana, **MOLNAR Carmen Otilia**, ŞOPRONI Vasile Darie, HATHAZI Francisc Ioan, GYÖRÖDI Cornelia – Aurora - *The Drying of Peppermint Plants Using Microwave Energy*, JEEE, Volume 15, Number 2, October, 2022
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10. Francisc - Ioan Hathazi, Vasile Darie Şoproni, Mircea Nicolae Arion, **Carmen Otilia Molnar**, Simina Vicaş (Coman), Olimpia Smaranda Mintas, *The Use of Microwave Drying Process to the Granular Materials*, (IJACSA) International Journal of Advanced Computer Science and Applications, Vol. 10, No.11, **2019**, p.23-29, ISSN: 2156-5570 (Online), ISSN: 2158-107X (Print), (DOI): 10.14569/IJACSA.2019.0101104, Document Type: JOURNAL Paper,
<https://www-scopus-com.am.e-nformation.ro/record/display.uri?eid=2-s2.0-85077237204&origin=resultslist&zone=contextBox>
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11. Mihaela Covaciu, Francisc-Ioan Hathazi, Mircea-Nicolae Arion, Vasile-Darie Soproni, **Carmen Otilia Molnar**, Ovidiu Popovici - *Determining the Potential for Recovery, Reuse and Recycling of Construction and Demolition Waste Assisted by High Frequency Electromagnetic Field*, 13-14 June **2019**, 15th International Conference on Engineering of Modern Electric Systems (EMES), Oradea, Romania, ISBN: 978-1-7281-0774-5, Electronic ISBN: 978-1-7281-0773-8, DOI: 10.1109/EMES.2019.8795175, Document Type: Proceedings Paper, WOS: 000503434500024,
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12. Vasile Darie Soproni, **Carmen Otilia Molnar**, Francisc Ioan Hathazi, Mircea Nicolae Arion, Marius Codrean, Liviu Moldovan - *Experimental Research on Microwave Field and Hot Air Drying of Barley Seeds*, 13-14 June **2019**, 15th International Conference on Engineering of Modern Electric Systems (EMES), Oradea, Romania, ISBN: 978-1-7281-0774-5, Electronic ISBN: 978-1-7281-0773-8, DOI: 10.1109/EMES.2019.8795175, Document Type: Proceedings Paper, WOS: 000503434500029
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13. Laurentiu Copil, Francisc-Ioan Hathazi, Mircea-Nicolae Arion, Vasile-Darie Soproni, **Carmen Otilia Molnar**, Covaciu Mihaela - *About the Use of High Frequency Ceramic Susceptors for Industrial Applications*, 13-14 June **2019**, 15th International Conference on Engineering of Modern Electric Systems (EMES), Oradea, Romania, ISBN: 978-1-7281-0774-5, Electronic ISBN: 978-1-7281-0773-8, DOI: 10.1109/EMES.2019.8795175, Document Type: Proceedings Paper, WOS: 000503434500050

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14. Laurentiu Copil, Francisc-Ioan Hathazi, Mircea-Nicolae Arion, Vasile-Darie Soproni, **Carmen Otilia Molnar**, Mircea-Danut Pantea - *Production of Silicon Carbide in a High Frequency Electromagnetic Field. Measuring Thermal Conductivity*, 13-14 June **2019**, 15th International Conference on Engineering of Modern Electric Systems (EMES), Oradea, Romania, ISBN: 978-1-7281-0774-5, Electronic ISBN: 978-1-7281-0773-8, DOI: 10.1109/EMES.2019.8795175, Document Type: Proceedings Paper, WOS: 000503434500022
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15. Mihaela Covaciu, Vasile-Darie Soproni, Francisc-Ioan Hathazi, **Carmen Otilia Molnar**, Mircea-Nicolae Arion, Marius Codrean - *Decontamination, Drying and Sterilization Assisted by the High Frequency Electromagnetic Field for the Processing of Construction Waste Used on Driveways*, 13-14 June **2019**, 15th International Conference on Engineering of Modern Electric Systems (EMES), Oradea, Romania, ISBN: 978-1-7281-0774-5, Electronic ISBN: 978-1-7281-0773-8, DOI: 10.1109/EMES.2019.8795175, Document Type: Proceedings Paper, WOS: 000503434500023
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16. Mircea – Nicolae Arion, Francisc – Ioan Hathazi, **Molnar Carmen Otilia**, Darie Soproni Vasile, Mihaela Novac – *Study on microwave field extraction of the celery essential oils*, 2017 14TH INTERNATIONAL CONFERENCE ON ENGINEERING OF MODERN ELECTRIC SYSTEMS (EMES), Pages: 71-74, Published: **2017**, JUN 01-02, 2017, ORADEA, ROMANIA, ISBN:978-1-5090-6073-3, Document Type: Proceedings Paper, WOS:000427085200017 <http://ieeexplore.ieee.org/abstract/document/7980384/>
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17. Mircea – Nicolae Arion, Francisc – Ioan Hathazi, **Molnar Carmen Otilia**, Darie Soproni Vasile, Marius Codrean – *About the extraction in microwave field of the essential oils and beta-carotene from carrots*, 2017 14TH INTERNATIONAL CONFERENCE ON ENGINEERING OF MODERN ELECTRIC SYSTEMS (EMES), Pages: 75-78, Published: 2017, JUN 01-02, **2017**, ORADEA, ROMANIA, ISBN:978-1-5090-6073-3, Document Type: Proceedings Paper, WOS:000427085200018
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18. Francisc – Ioan Hathazi, Mircea – Nicolae Arion, Darie Soproni Vasile, **Molnar Carmen Otilia**, Ovidiu, Popovici - *Study on the Extraction in Microwave Field of the Essential Oils from Chilli*, 2017 14TH INTERNATIONAL CONFERENCE ON ENGINEERING OF MODERN ELECTRIC SYSTEMS (EMES), Pages: 63-66, Published: 2017, JUN 01-02, **2017**, ORADEA, ROMANIA, ISBN:978-1-5090-6073-3, Document Type: Proceedings Paper, WOS:000427085200015
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19. Francisc – Ioan Hathazi, Mircea – Nicolae Arion, Darie Soproni Vasile, **Molnar Carmen Otilia**, Danut Pantea Mircea – *The Extraction of Volatile Oils from Parsley Leaves in Microwave Field*, **2017** 14TH INTERNATIONAL CONFERENCE ON ENGINEERING OF MODERN ELECTRIC SYSTEMS (EMES), Pages: 67-70, Published: 2017, JUN 01-02, 2017, ORADEA, ROMANIA, ISBN:978-1-5090-6073-3, Document Type: Proceedings Paper, WOS:000427085200016
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20. **Carmen O. Molnar**, Darie V. Soproni, Mircea N. Arion, Francisc I. Hathazi - *Parameters Analysis Of The Photovoltaic Systems To The Variation Of The Inclination Angle To Horizontal Plane*, Nonconventional Technologies Review, Romania, September, 2016, pp.54-58, **2016**
21. Darie V. Şoproni, **Carmen O. Molnar**, Mircea N. Arion, Francisc I. Hathazi - *Parameters analysis of a thermal installation with heat pipe vacuum tube solar collector*, Revista de Tehnologii Neconventionale 19.3 (Sep **2015**): 43-48

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

E. Brevete obţinute în întreaga activitate