

Dr. Ing. Mădălina Barbu

19.09.2023

Publicatii

1. 'Performance analysis and comparison of an experimental hybrid PV, PVT and solar thermal system installed in a preschool in Bucharest, Romania' – **Madalina Barbu**, Monica Siroux, George Darie - Energies 2023, Impact Factor 3.252.
2. 'Numerical model and parametric analysis of a liquid based hybrid photovoltaic thermal (PVT) collector' - **Madalina Barbu**, Monica Siroux, George Darie – Energy Reports 2021, Impact Factor 6.87.
3. 'Analysis of a Residential Photovoltaic-Thermal (PVT) System in Two Similar Climate Conditions' - **Madalina Barbu**, George Darie, Monica Siroux – Energies 2019 12(19):3595 – RIS, Impact Factor: 3.252.
4. 'A Parametric Study of a Hybrid Photovoltaic Thermal (PVT) System Coupled with a Domestic Hot Water (DHW) Storage Tank' -**Barbu M**, Darie G, Siroux M. Energies. 2020, Impact Factor: 3.252.
5. 'A technical-economical analysis of the implementation of hybrid solar energy systems in small energy prosumer applications' -**Madalina Barbu**, Roxana Patrascu, George Darie, Diana Tutica - Quality - Access to Success 2019, Impact Factor 0.753.
6. 'Optimizing the non-reheat steam cycle of concentrated solar power plants with molten salt' - Victor-Eduard Cenușă, Mihaela Norișor, Florin-Niculae Alexe, **Mădălina Barbu**, Marian Gioantă - Rev. Roum. Sci. Techn.– Électrotechn. et Énerg. Vol. 64, 3, pp. 281–286, Bucharest, 2019 – RIS, Impact Factor 0.955.
7. 'Assessment of the quota of recuperative cooling of the compressed gas at turbocharged Reciprocating Internal Combustion Engines' - Victor-Eduard Cenușă, Mihaela Norișor, Florin-Niculae Alexe, **Mădălina Barbu** - TEM Journal 2019 8(1), 3-11 – RIS, Impact Factor 1.006.
8. 'Integration of Hybrid Photovoltaic Thermal Panels (PVT) in the District Heating System of Bucharest, Romania' - **Madalina Barbu**, Eduard Minciuc, Dorian Corneliu Frusescu, Diana Tutica - Conference Proceedings: 2021 International Conference on ENERGY and ENVIRONMENT (CIEM)
9. 'Integration of Thermal Panels in the District Heating of Bucharest, Romania' - Dorian-Corneliu Frusescu, Eduard Minciuc, George Darie, **Madalina Barbu** - Conference Proceedings: 2021 International Conference on ENERGY and ENVIRONMENT (CIEM)
10. 'Analysing the Heat and Exergy Transfer in Steam Generators of Nuclear Power Plants with Pressurized Light Water Reactors' - Cenușă Victor-Eduard, Florin-Niculae Alexe, Mihaela Norisor, **Madalina Barbu** – Conference Proceedings: 2019 International Conference on ENERGY and ENVIRONMENT (CIEM)
11. 'Assessment of reciprocating engines performances starting from manufacturers' data'- Cenușă Victor-Eduard, Florin-Niculae Alexe, Mihaela Norisor, **Madalina Barbu**, Roxana Patrascu, George Darie - Conference Proceedings: 2019 International Conference on ENERGY and ENVIRONMENT (CIEM)
12. 'A technical analysis and comparison of tubular and lattice towers for wind turbines' – **Madalina Barbu**, George Darie - Conference Proceedings EENVIRO 2020



Capitole in carti

1. Capitol in cartea Springer "Challenges and Opportunities of Distributed Renewable Power" intitulat "Challenges and Opportunities of hybrid photovoltaic thermal collectors and their integration into small-scale energy systems for prosumers" - **Madalina Barbu**, Monica Siroux, George Darie – acceptat pentru publicare

Conferinte

1. A hybrid solar powered domestic hot water system for a kindergarten in Bucharest- **Madalina Barbu**, Monica Siroux, George Darie – acceptata pentru 2023 11th International Conference on ENERGY and ENVIRONMENT (CIEM), Octombrie 2023
2. Analysis of the optimal configuration of thermal and hybrid photovoltaic-thermal panels for a conventional district heating systems - **Madalina Barbu**, Mihaela Norisor, Diana Tutica, Roxana Patrascu, Eduard Minciuc– acceptata pentru 2023 11th International Conference on ENERGY and ENVIRONMENT (CIEM), Octombrie 2023
3. ,Integration of Hybrid Photovoltaic Thermal Panels (PVT) in the District Heating System of Bucharest, Romania’ - **Madalina Barbu**, Eduard Minciuc, Dorian Corneliu Frusescu, Diana Tutica 2021 International Conference on ENERGY and ENVIRONMENT (CIEM)
4. ,Integration of Thermal Panels in the District Heating of Bucharest, Romania’ - Dorian-Corneliu Frusescu, Eduard Minciuc, George Darie, **Madalina Barbu** - 2021 International Conference on ENERGY and ENVIRONMENT (CIEM)
5. ‘Analysing the Heat and Exergy Transfer in Steam Generators of Nuclear Power Plants with Pressurized Light Water Reactors’ - Cenuşa Victor-Eduard, Florin-Niculăe Alexe, Mihaela Norisor, **Madalina Barbu** –2019 International Conference on ENERGY and ENVIRONMENT (CIEM)
6. ‘Assessment of reciprocating engines performances starting from manufacturers’ data’ - Cenuşa Victor-Eduard, Florin-Niculăe Alexe, Mihaela Norisor, **Madalina Barbu**, Roxana Patrascu, George Darie - 2019 International Conference on ENERGY and ENVIRONMENT (CIEM)
7. ‘Dynamic modelling and sensibility analysis of a hybrid photovoltaic-thermal (PVT) system’ – **Madalina Barbu**, George Darie, Monica Siroux - 7th Eur. Conf. Ren. Energy Sys. 10 June 2019, Madrid, Spain
8. ‘A technical analysis and comparison of tubular and lattice towers for wind turbines’ – **Madalina Barbu**, George Darie - EENVIRO 2020
9. ‘Cogeneration in solar energy systems: Hybrid Photovoltaic Thermal (PV/T) Panels’ - **Madalina Barbu**, George Darie - 14th WEC CENTRAL & EASTERN EUROPE REGIONAL ENERGY FORUM - FOREN 2018, Costinesti, Romania

Proiecte

1. Asistent de cercetare in cadrul proiectului ‘ Integrarea surselor de energie regenerabila in sistemele de alimentare centralizata cu energie termica - SolarHEAT’ PN-III-P1-1.2-PCCDI-2017- 0194/25PCCDI/2018.
2. Asistent de cercetare in cadrul proiectului ‘Smart and local reneWable Energy DISTRICT heating and cooling solutions for sustainable living’ H2020-LC-SC3-2019-RES-8-857801.
3. Asistent de cercetare in cadrul proiectului ‘Motorul revolutiei energetice bazate pe hidrogen - pilele de combustibil, pe drumul de la cercetare la producție prin minimizarea barierelor tehnologice-roffce’ PN-III-P1-1.2-PCCDI-2017- 0194/25PCCDI/2018.