

Universitatea "Ștefan cel Mare" din Suceava
Facultatea de Inginerie Electrică și Știința Calculatoarelor
Departamentul de Electrotehnică

Lista de lucrări

Dr.ing. Eugen HOPULELE

A. Lista celor 10 lucrări considerate relevante

1. CERNUȘCĂ D., MILICI L.D., PENTIUC R.D., ATĂNĂSOAE P., UNGUREANU C., **HOPULELE E.** *Experimental Analysis on the Impact of Current on the Strength and Lifespan of a Ni-Ti Element*, APPLIED SCIENCES-BASEL, Volume 12, Issue 6, Article Number 3185, DOI10.3390/app12063185, Journal Impact Factor: 2021 - 2.838, Five Year - 2.921, SRI – 0,885, ENGINEERING, MULTIDISCIPLINARY in SCIE edition, Category Rank 39/92, Category Quartile Q2, Published MAR 2022.
<https://www.webofscience.com/wos/woscc/full-record/WOS:000775877600001>
2. CERNUȘCĂ D., MILICI L.D., PAVĂL M., **HOPULELE E.**, TOADER E.V., CERNUȘCĂ P., *Design, Implementation and Testing of a Locking System*, International Conference on Applied and Theoretical Electricity (ICATE), DOI10.1109/ICATE49685.2021.9464992, ISSN2376-4163, Web of Science Accession Number WOS:000709089900020, ISBN978-1-7281-8035-9, Published 2021.
<https://www.webofscience.com/wos/woscc/full-record/WOS:000709089900020>
3. **E. HOPULELE**, R. PENTIUC, M. GAVRILAȘ, B. NEAGU, *Optimizing the operation of a trigeneration system designed to meet energy requirements for a consumer*, 2019 IEEE PES Innovative Smart Grid Technologies Europe (ISGT-Europe), 29 Sept.-2 Oct. 2019, Bucharest, Romania, IEEE Xplore, DOI: 10.1109/ISGTEurope.2019.8905655, Electronic ISBN: 978-1-5386-8218-0, Web of Science, Accession Number: WOS:000550100400200, ISBN:978-1-5386-8218-0.
<https://www.webofscience.com/wos/woscc/full-record/WOS:000550100400200>
4. B-C. NEAGU, M. GAVRILAȘ, R-D. PENTIUC, **E. HOPULELE**, *Optimal Placement of Energy Storage Systems in Microgrids Using a PSO based Approach*, 2019 IEEE PES Innovative Smart Grid Technologies Europe (ISGT-Europe), 29 Sept.-2 Oct. 2019, Bucharest, Romania, IEEE Xplore, DOI: 10.1109/ISGTEurope.2019.8905557, Electronic ISBN: 978-1-5386-8218-0, Web of Science, Accession Number: WOS:000550100400114, ISBN:978-1-5386-8218-0.
<https://www.webofscience.com/wos/woscc/full-record/WOS:000550100400114>



5. P. ATĂNĂSOAE, R-D. PENTIUC, **E. HOPULELE**; I-C. AILOAE, C-F. IRIMIA, *Analysis of the Price Coupling Mechanism in the Day Ahead Electricity Markets*, 2019 8th International Conference on Modern Power Systems (MPS), 21-23 May 2019, Cluj Napoca, Romania, IEEE Xplore, DOI: 10.1109/MPS.2019.8759732, Electronic ISBN: 978-1-7281-0750-9, INSPEC Accession Number: 18821851, Web of Science, Accession Number: WOS:000612401900080, ISBN:978-1-7281-0750-9. <https://www.webofscience.com/wos/woscc/full-record/WOS:000612401900080>
6. M. GAVRILAȘ, B-C. NEAGU, R-D. PENTIUC, **E. HOPULELE**, *Overview on Distributed Generation Integration in Distribution Systems*, 2018 International Conference and Exposition on Electrical And Power Engineering (EPE), 18-19 Oct. 2018, Iași, România, IEEE Xplore, DOI: 10.1109/ICEPE.2018.8559657, Electronic ISBN: 978-1-5386-5062-2, INSPEC Accession Number: 18322228, Web of Science, WOS:000458752200208, ISSN: 2471-6855. <https://www.webofscience.com/wos/woscc/full-record/WOS:000458752200208>
7. **E. HOPULELE**, P. ATĂNĂSOAE, M. GAVRILAȘ, *The Influence of the Tariff Charged by Electricity Suppliers on the Optimal Running of a Trigenation Plant*, 9th International Conference and Exposition on Electrical and Power Engineering (EPE 2016), OCT 20-22, Iasi, Romania, Web of Science, Accession Number: WOS:000390706300156, ISBN:978-1-5090-6128-0, ISSN: 2471-6855. <https://www.webofscience.com/wos/woscc/full-record/WOS:000390706300156>
8. **E. HOPULELE**, M. GAVRILAȘ, *Optimization of a Combined Cool, Heat and Power Plant Based on Genetic Algorithms and Specialized Software*, 2014 International Conference and Exposition on Electrical and Power Engineering (EPE), Web of Science, Accession Number: WOS:000353565300188, ISBN:978-1-4799-5849-8. <https://www.webofscience.com/wos/woscc/full-record/WOS:000353565300188>
9. P. ATĂNĂSOAE, **E. HOPULELE**, *The Impact of the Support Scheme on the Installed Capacity in Renewable Energy Sources in Romania*, 2014 International Conference and Exposition on Electrical and Power Engineering (EPE), Web of Science, Accession Number: WOS:000353565300209, ISBN:978-1-4799-5849-8. <https://www.webofscience.com/wos/woscc/full-record/WOS:000353565300209>
10. **E. HOPULELE**, M. GAVRILAȘ, P. ATĂNĂSOAE, *Optimal Design of a Hybrid Distributed Generation System*, 49TH International Universities Power Engineering Conference (UPEC 2014), Web of Science, Accession Number: WOS:000364087800187, ISBN:978-1-4799-6557-1. <https://www.webofscience.com/wos/woscc/full-record/WOS:000364087800187>

B. Teza de doctorat

1. **E. HOPULELE**, *Contribuții la studiul și dezvoltarea sistemelor distribuite cu purtători multipli de energie*, Universitatea Tehnică "Gheorghe Asachi" din Iași, Facultatea de Inginerie Electrică, Energetică și Informatică Aplicată, Iași 2020, Conducător de doctorat: prof. univ. dr. ing. Mihai Gavrițaș. https://doctorat.tuiasi.ro/doc/SUSTINERI_TEZE/ETH/Hopulele/Rezumat%20teza.pdf



C. Cărți și capitole de cărți

1. C. AFANASOV, P. ATANASOAE, I. BACIU, N. BARBA, C.E. BOBRIC, M.F. BOSANCEANU, C. BUZDUGA, M. CENUȘĂ, D. GEORGESCU, A. GRAUR, E. HOPULELE, D. IRIMIA, M. JEDER, L. MANDICI, L.D. MILICI, M.R. MILICI, A. MIRON, M.B. NEGRU, I. NITAN, E.D. OLARIU, R.D. PENTIUC, C. POPA, V. POPA, I. PRISACARIU, C. PRODAN, G. RAȚĂ, M. RAȚĂ, A.N. ROMANESCU, I. ROMANIUC, E. SAVU, N. SOREA, O.M. ȚANȚA, C. UNGUREANU, V. VLAD, M. POIENAR (2017), *111 invenții în memoriam prof. univ. dr. ing. Dorel CERNOMAZU*, Editura Universitatii Suceava, Suceava, ISBN: 978-973-666-504-2.

D. Alte lucrări

1. D. CERNUȘCĂ, C. UNGUREANU, R-D. PENTIUC, E. HOPULELE, T. POP, ANALYSIS OF THE OPERATION OF SOLAR MICRO-INVERTERS, WEC CENTRAL & EASTERN EUROPE REGIONAL ENERGY FORUM – FOREN 2022 13 -15 June 2022.
2. E. HOPULELE, M. GAVRILAȘ, Optimal Operation of a Trigeneration System Designed to Supply an Electricity, Heating and Cooling Consumer, 2020 BULLETIN OF THE POLYTECHNIC INSTITUTE OF IAȘI, Vol. 66 (70), No. 4 2020, ELECTROTECHNICS. ENERGETICS. ELECTRONICS, ISSN: 1223-8139 (print), 2537-2726 (online), Classified B+, (CNCSIS code 87), Indexed in Index Copernicus, CNKI Scholar, Ulrich's.
3. D. CERNUȘCĂ, L.D. MILICI, R.D. PENTIUC, E. HOPULELE, *Research on the Realization of a Nitinol Clutch Type Thermocouple*, 2020 International Conference and Exposition on Electrical And Power Engineering (EPE), 22-23 Oct. 2020, IEEE Xplore, DOI: 10.1109/EPE50722.2020.9305631, INSPEC Accession Number: 20477032, Electronic ISBN:978-1-7281-8126-4, USB ISBN:978-1-7281-8125-7, ISBN:978-1-7281-8127-1, Electronic ISSN: 2644-223X, Print on Demand(PoD) ISSN: 2471-6855.
4. D. CERNUȘCĂ, R.D. PENTIUC, E. HOPULELE, *Modeling of Distributed Generation*, Wec Central & Eastern Europe Regional Energy Forum – FOREN 2020, 7 -10 September 2020.
5. D. CERNUȘCĂ, R.D. PENTIUC, E. HOPULELE, L.D. MILICI, *Distributed Generation Modeling in Matlab-Simulink*, 2019 International Conference on Electromechanical and Energy Systems (SIELMEN), OCT 09-11, 2019, Chisinau, Republica Moldova, Web of Science, Accession Number: WOS:000630287500053, ISBN:978-1-7281-4011-7.
6. P. ATĂNĂSOAE, R-D PENTIUC, M-R MILICI, E HOPULELE, I MIHAI, *Promoting the Electricity Generation from Biomass in Romania*, 2018 International Conference and Exposition on Electrical And Power Engineering (EPE), 18-19 Oct. 2018, Iași, România, Web of Science, WOS:000458752200070, ISSN: 2471-6855.
7. P. ATĂNĂSOAE, R. PENTIUC, E. HOPULELE, V. MARTIN, A. TOMUȚ, *Determining the amount of electricity generated in high efficiency cogeneration for the access to the support scheme through green certificates*, Modern Power Systems (MPS), 6-9 June 2017, Cluj Napoca, Romania, Web of Science, WOS:000428462600034, ISBN:978-1-5090-6565-3.



8. P. ATĂNĂSOAE, R. PENTIUC, **E. HOPULELE**, *Energy Recovery of Municipal Solid Waste for Combined Heat and Power Production*, 9th International Conference and Exposition on Electrical and Power Engineering (EPE 2016), OCT 20-22, Iasi, Romania, Web of Science, Accession Number: WOS:000390706300165, ISBN:978-1-5090-6128-0, ISSN: 2471-6855.
9. P. ATANASOAE, R. PENTIUC, C. BOBRIC, **E. HOPULELE**, *Considerations on indicators for assessing the level of competition in the balancing and ancillary services markets*, CIGRE Regional South-East European Conference - RSEEC 2016 (3rd edition) October 10th - 12th 2016, University "Politehnica" of Bucharest, Romania, ISSN 2392 – 716X.
10. P. ATANASOAE, R. PENTIUC, C. BOBRIC, **E. HOPULELE**, *The evolution of the support scheme for promoting renewable energy sources in Romania*, WREC XIV Proceedings, University POLITEHNICA of Bucharest, 2015, pag: 1-4; "Renewable Energy and Environmental Sustainability", vol.1, 2016, eISSN: 2493-9439.
11. P. ATANASOAE, R. PENTIUC, **E. HOPULELE**, *The reliability evaluation of the electrical substations with various connection schemes*, Acta Electrotehnica, Number 3, 2015, ISSN 1841-3323.
12. P. ATĂNĂSOAE, R. PENTIUC, **E. HOPULELE**, *The optimal distribution of reactive power on synchronous generators in power plants*, 8th International Conference Interdisciplinarity in Engineering, INTER-ENG 2014, 9-10 October 2014, Tirgu Mures, Romania, ELSEVIER, ScienceDirect, Procedia Technology 00 (2014) 000–000, Volume 19, 2015, Pages 637–642, Web of Science, Accession Number: WOS:000358732500089, ISSN: 2212-0173.
13. **E. HOPULELE**, *Hybrid solutions "Virtual Power Plants - systems with multiple energy carriers"*, The 12th WEC Central & Eastern Europe Energy Forum - FOREN 2014, vol: DS-3-41, 22-26 Iunie, 2014, Bucuresti, Romania, ISSN: 2284-9491.
14. P. ATĂNĂSOAE, R. PENTIUC, **E. HOPULELE**, *Support Schemes for Promoting Renewable Energy Sources*, Acta Electrotehnica, volum 54, nr. 5, 2013, ISSN 1841-3323, pag. 20-23.
15. C. AFANASOV, **E. HOPULELE**, L. MANDICI, M. RAȚĂ, *Step-Down Voltage Converter*, Acta Electrotehnica, volum 54, nr. 5, 2013, ISSN 1841-3323.
16. **E. HOPULELE**, *A modeling and optimization approach based on genetic algorithms for a hybrid trigeneration system with Stirling engine*, Buletinul AGIR nr. 3 iunie-august 2012, ISSN – L 1224-7928, ISSN (online) 2247-3548, pag. 579-586.
17. **E. HOPULELE**, L. MANDICI, C. AFANASOV, *Method and device for the study of magnetic fields in electrical machines*, Buletinul AGIR nr. 4 octombrie-decembrie 2011, ISSN – L 1224-7928, ISSN (online) 2247-3548, pag. 253-258.
18. C. AFANASOV, M. RATA, **E. HOPULELE**, AI. SIMION, *Indirect vector control of an twophase induction motor with position controller and eight-transistor inverter*, Annals of the University of Craiova, No. 34, Vol. II, 2010, Craiova, October 7-8, (ISSN: 1842-4805), pag. 153-156.
19. **E. HOPULELE**, M. GAVRILAȘ, C. AFANASOV, *Optimal design of a hybrid trigeneration system with Stirling engine*, 6-th International Conference on Electrical and Power Engineering EPE 2010, Iași, October 28 - 30, Vol. I, (ISSN: 978-606-13-0077-8), pag. 267-271.



20. C. AFANASOV, M. RATA, Al. SIMION, E. HOPULELE, S. MIHAI, *Indirect vector control of an two-phase induction motor with speed controller and three phase inverter*, 6-th International Conference on Electrical and Power Engineering EPE 2010, Iași, October 28 - 30, Vol. II, (ISSN: 978-606-13-0078-5), pag. 165-168.
21. E. HOPULELE, *Utilizarea motoarelor stirling în aplicații de cogenerare*, Primul simpozion științific studentesc național, ELSTUDIS, Vol: 1, 6-7 Octombrie, 2009, Iași, Romania, ISSB/ISBN: 987-606-520-616-8, pag: 200-209.

E. Contracte de cercetare

1. *Analiza oportunitatii unei instalatii de cogenerare/trigenerare in procesul de vopsitorie al confectiilor metalice la ELECTROALFA CM Botosani*, contract nr. 27128/24.11.2022. Director de proiect Pavel ATĂNĂSOAE.
2. *Calculul de autoevaluare si intocmire a documentatiei in vederea inregistrarii productiei de energie in cogenerare aferenta CHP AMBRO*, contract nr. 9314/02.05.2022. Director de proiect Pavel ATĂNĂSOAE.
3. *Cross-Border Cooperation Smart Energy, CBS Smart Energy*, Grant contract Joint Operational Programme Romania – Ukraine 2014-2020, financed by ENI CBC – 2SOFT/1.2/52, în parteneriat cu Universitatea National din Uzhhorod și International Association Of Regional Development Institutions "IARDI" din Ucraina. Director de proiect Radu-Dumitru PENTIUC.
4. *Analiza oportunității unei instalații de cogenerare la BALKAN PHARMACEUTICALS SRL*, contract nr. 4856/25.03.2019. Director de proiect de proiect Pavel ATĂNĂSOAE.
5. *Creșterea eficienței în operarea instalațiilor electroenergetice la BALKAN PHARMACEUTICALS SRL*, contract nr. 4855/25.03.2019. Director de proiect Pavel ATĂNĂSOAE.
6. *Holistica impactului surselor regenerabile de energie asupra mediului și climei - HORESEC*, Cod depunere, PN-III-P1-1.2-PCCDI-2017-0404 / 31PCCDI/2018, Director Proiect Cornel PANAIT, Coordonator Universitatea Maritima din Constanta, Partener 1 proiect complex (P1) - Institutul de Geografie; Partener 2 proiect complex (P2) - Universitatea "Ștefan cel Mare" din Suceava; Director de proiect component Radu-Dumitru PENTIUC; Partener 3 proiect complex (P3) - Universitatea Politehnica din Bucuresti; Partener 4 proiect complex (P4) - Institutul National de Cercetare-Dezvoltare pentru Electrochimie și Materie Condensata - INCEMC Timisoara; Partener 5 proiect complex (P5) - Institutul National de Cercetare- Dezvoltare pentru Inginerie Electrica ICPE - CA Bucuresti; Partener 6 proiect complex (P6) - Universitatea Tehnica din Cluj – Napoca.
7. *Determinarea energiei electrice produse in cogenerare de inalta eficienta, ce poate beneficia de schema de sprijin prin certificate verzi, aferenta centralei de cogenerare cu tehnologie ORC S.C. RIG BIOMASS S.R.L. Tarcau*, jud Neamt, 918/20.01.2016. Director de proiect Pavel ATĂNĂSOAE.



F. Premii pentru activitatea de cercetare

1. **E. HOPULELE** (2012), Lucrări premiate cu autori sub 35 ani - Locul I - *A modeling and optimization approach based on genetic algorithms for a hybrid trigeneration system with Stirling engine*, 9th WORLD ENERGY SYSTEM CONFERENCE JUNE 28-30 2012 SUCEAVA, ROMANIA.

G. Membru în comitete științifice

1. Membru în comitetul științific și organizatoric al *6th International Symposium on Electrical Engineering and Energy Converters - ELS 2015*, 1-2 Octombrie, 2015, Suceava, România.
2. Membru în comitetul organizatoric al *5th International Symposium on Electrical Engineering and Energy Converters - ELS 2013*, 26-27 Septembrie 2013, Suceava, România.
3. Membru în comitetul editorial al revistei B+ *Buletinul Agir nr. 2*, Aprilie-Iunie 2012.
4. Membru în comitetul organizatoric al *9th World Energy System Conference - WESC 2012*, 28-30 Iunie 2012 Suceava, România.
5. Membru în comitetul organizatoric al *Conferinței Naționale de Acționări Electrice - CNAE 2012*, 4-5 Octombrie 2012 Suceava, România.
6. Membru în comitetul organizatoric al *4th International Symposium on Electrical Engineering and Energy Converters - ELS 2011*, 22-23 Septembrie 2011, Suceava, România.

