


## LISTA COMPLETĂ DE LUCRĂRI

Candidat:

Şef de lucrări dr. ing. Constantin UNGUREANU

### a) Lista de lucrări relevante (maximum 10 lucrări)

1. Pop, T.; **Ungureanu, C.**; Pentiu, R.D.; Afanasov, C.; Ifrim, V.C.; Atănăsoae, P.; Milici, L.D. Off-Grid Hybrid Renewable Energy System Operation in Different Scenarios for Household Consumers. *Energies* 2023, 16, 2992. Factor impact 2022: 3,2. WOS:000969557900001
2. Toader, V.E.; Milici, L.D.; **Ungureanu, C.**; Bejenar, C.; Grosu, O.V. Analysis of a Low-Speed Drive System Using Intelligent Materials. *Actuators* 2022, 11, 10. Factor impact 2022: 2,6. WOS:000747092100001
3. Popa, C. -D., **Ungureanu, C.**, "Analysis of a Hybrid Water Heating System for a Swimming Pool," 2021 International Conference on Electromechanical and Energy Systems (SIELMEN), pp. 521-526, 2021. doi:10.1109/SIELMEN53755.2021.9600361
4. Cernuşcă, D., Milici, L.D.; Pentiu, 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. *Appl. Sci.* 2022, 12, 3185. Factor impact 2022: 2,7. WOS:000775877600001
5. **Ungureanu, C.**, Graur, A., "FEM Analysis of a New Electromechanical Converter with Rolling Rotor and Axial Air-Gap," *Advances in Electrical and Computer Engineering*, vol.15, no.4, pp.69-74, 2015. Factor impact 2015: 0,529. WOS:000368499800009
6. **Ungureanu, C.**, Popa C. D. and Pentiu, R. D. "Characteristic Analysis of the USR-60 Rotary Ultrasonic Motor," 2018 International Conference and Exposition on Electrical and Power Engineering (EPE), 2018, pp. 0303-0308. WOS:000458752200057
7. Ifrim, V. -C., Milici, L. D., Pop, T., and **Ungureanu, C.**, "Electric Discharges and Dielectric Barrier Influence on Electric Field Distribution in Solar Air Heater Systems," 2023 International Conference on Electromechanical and Energy Systems (SIELMEN), Craiova, Romania, pp. 1-11, 2023. doi:10.1109/SIELMEN59038.2023.10290743
8. Cernuşcă, D., Milici L. D., and **Ungureanu, C.**, "Theoretical and experimental contribution of using special actuators and materials with shape memory," 2016 International Conference and Exposition on Electrical and Power Engineering (EPE), 2016, pp. 171-174. WOS:000390706300037
9. Georgescu, D. -Ş., Pentiu, R. -D., Niţan I., and **Ungureanu, C.**, "Contributions to conceiving, designing, and experimenting a device for connection phase adjustment (DRFC) to a limited displacement short mobile coil motor (MBMS)," 2018 International Conference and Exposition on Electrical and Power Engineering (EPE), 2018, pp. 0893-0896. WOS:000458752200174
10. **Ungureanu, C.**, Irimia, D., and Bobric, E. C., "FEM analysis and design of an electromechanical converter with dual stator windings and flexible wave rotor," 2016 International Conference on Development and Application Systems (DAS), 2016, pp. 42-49. WOS:000383222200008

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## b) Teza de doctorat

Contribuții teoretice și experimentale privind realizarea unor motoare electrice solare.  
Conducător științific: Prof. univ. dr. ing. Dorel Cernomazu, Universitatea "Ștefan cel Mare" din Suceava. Domeniul Inginerie electrică. Data susținerii publice: 14.05.2011.

## c) Brevete de invenție și alte titluri de proprietate industrială

1. Pața S. D., Milici D. L., Poienar M., **Ungureanu C.**, Olariu E. D., Irimia D., Bobric C. E., Pentiu R. D., Popa C. D., Rață M., Metodă și instalație pentru manipularea și gestionarea laptelui. Brevet RO133465B1, 28-02-2024, OSIM București.  
[https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=133465B1&KC=B1&FT=D&ND=4&date=20240228&DB=&locale=ro\\_RO](https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=133465B1&KC=B1&FT=D&ND=4&date=20240228&DB=&locale=ro_RO)
2. Toader E. V., Nitan I., Paval M., Milici D. L., Cernusca D., Milici M. R., Graur A., Dimian M., **Ungureanu C.**, Pumping system. Patent no. EP3954899, 22.11.2023, European Patent Office.  
<https://worldwide.espacenet.com/patent/search/family/072470309/publication/EP3954899A1?q=pn%3DEP3954899>
3. Nitan I., Milici D. L., Poienar M., Cernusca D., Pata D., Pianîh A., Pentiu R., Popa C., Rata M., **Ungureanu C.**, Interlocking system, Patent EP3536880, 30.09.2020, European Patent Office.  
<https://worldwide.espacenet.com/patent/search/family/065717949/publication/EP3536880A1?q=EP3536880>
4. Cernomazu D., Țanța O. M., Mandici L., Poienar M., Romanescu A. N., Nițan I., Olariu E. D., **Ungureanu C.**, Instalație pentru defectoscopia coliviei rotorice. Brevet RO130885B1, 29-04-2022, OSIM București.  
[https://ro.espacenet.com/publicationDetails/originalDocument?FT=D&date=20220429&DB=&locale=ro\\_RO&CC=RO&NR=130885B1&KC=B1&ND=4](https://ro.espacenet.com/publicationDetails/originalDocument?FT=D&date=20220429&DB=&locale=ro_RO&CC=RO&NR=130885B1&KC=B1&ND=4)
5. Nițan I., Poienar M., Romanescu A. N., Milici D. L., Pentiu R. D., **Ungureanu C.**, Sistem de orientare după soare. Brevet RO133100B1, 30-08-2022, OSIM București.  
[https://ro.espacenet.com/publicationDetails/originalDocument?FT=D&date=20220830&DB=&locale=ro\\_RO&CC=RO&NR=133100B1&KC=B1&ND=4](https://ro.espacenet.com/publicationDetails/originalDocument?FT=D&date=20220830&DB=&locale=ro_RO&CC=RO&NR=133100B1&KC=B1&ND=4)
6. Georgescu D. Ș., Poienar M., Țanța O., Nițan I., Olariu E. D., **Ungureanu C.**, Mandici L., Cernomazu D., Instalație demonstrativă pentru fenomenul de scurtcircuit brusc. Brevet RO130881B1, 27-11-2020, OSIM București.  
[https://ro.espacenet.com/publicationDetails/originalDocument?FT=D&date=20201127&DB=&locale=ro\\_RO&CC=RO&NR=130881B1&KC=B1&ND=4](https://ro.espacenet.com/publicationDetails/originalDocument?FT=D&date=20201127&DB=&locale=ro_RO&CC=RO&NR=130881B1&KC=B1&ND=4)
7. Cernomazu D., Romaniuc I., Rață M., Milici D., Milici M., Nițan I., Olariu E. D., **Ungureanu C.**, Vibromotor. Brevet RO130384B1, 28-02-2020, OSIM București.  
[https://ro.espacenet.com/publicationDetails/originalDocument?FT=D&date=20200228&DB=&locale=ro\\_RO&CC=RO&NR=130384B1&KC=B1&ND=4](https://ro.espacenet.com/publicationDetails/originalDocument?FT=D&date=20200228&DB=&locale=ro_RO&CC=RO&NR=130384B1&KC=B1&ND=4)
8. Cernomazu D., Romaniuc I., Rață M., Milici D., Milici M. R., Nițan I., Olariu E. D., **Ungureanu C.**, Poienar M., Vibromotor monofazat. Brevet RO130383B1, 30-03-2020, OSIM București.  
[https://ro.espacenet.com/publicationDetails/originalDocument?FT=D&date=20200330&DB=&locale=ro\\_RO&CC=RO&NR=130383B1&KC=B1&ND=4](https://ro.espacenet.com/publicationDetails/originalDocument?FT=D&date=20200330&DB=&locale=ro_RO&CC=RO&NR=130383B1&KC=B1&ND=4)

9. Cernomazu D., Romaniuc I., Rață M., Milici D., Milici M. R., Nițan I., Olariu E. D., **Ungureanu C.**, Poienar M., Vibromotor cu sens de rotație reversibil. Brevet RO130382B1, 30-03-2020, OSIM București.  
<https://ro.espacenet.com/publicationDetails/originalDocument?FT=D&date=20200330&D B=&locale=ro RO&CC=RO&NR=130382B1&KC=B1&ND=4>
10. Cernomazu D., Romaniuc I., Rață M., Milici D., Milici M. R., Nițan I., Olariu E. D., **Ungureanu C.**, Vibromotor trifazat. Brevet RO130381B1, 28-02-2020, OSIM București.  
<https://ro.espacenet.com/publicationDetails/originalDocument?FT=D&date=20200228&D B=&locale=ro RO&CC=RO&NR=130381B1&KC=B1&ND=4>
11. Popa V., Nițan I., Milici M. R., Milici L. D., Romaniuc I., **Ungureanu C.**, Olariu E. D., Țanța O., Cernomazu D., Sistem de irigație cu pompe electrochimice. Brevet RO131412B1, 28-02-2019, OSIM București.  
<https://ro.espacenet.com/publicationDetails/originalDocument?FT=D&date=20190228&D B=&locale=ro RO&CC=RO&NR=131412B1&KC=B1&ND=4>
12. **Ungureanu C.**, Nițan I., Romaniuc I., Baciuc I., David C., Rață M., Milici M. R., Milici L. D., Olariu E. D., Cernomazu D., Stand de încercare. Brevet RO129122B1, 30-06-2017, OSIM București.  
<https://ro.espacenet.com/publicationDetails/originalDocument?FT=D&date=20170630&D B=&locale=ro RO&CC=RO&NR=129122B1&KC=B1&ND=4>
13. Baciuc I., Olariu E. D., Prodan C., **Ungureanu C.**, Buzduga C., Nitan I., Rata M., Milici L. D., Milici M. R., Romaniuc I., Cernomazu D., Transformator monofazat cu bobină mobilă în scurtcircuit și posturi multiple. Brevet RO128959B1, 28-07-2017, OSIM București.  
<https://ro.espacenet.com/publicationDetails/originalDocument?FT=D&date=20170728&D B=&locale=ro RO&CC=RO&NR=128959B1&KC=B1&ND=4>
14. Baciuc I., Olariu E. D., Prodan C., **Ungureanu C.**, Buzduga C., Nitan I., Rata M., Milici L. D., Milici M. R., Romaniuc I., Cernomazu D., Transformator trifazat cu bobină mobilă în scurtcircuit și posturi multiple. Brevet RO128958B1, 28-07-2017, OSIM București.  
<https://ro.espacenet.com/publicationDetails/originalDocument?FT=D&date=20170728&D B=&locale=ro RO&CC=RO&NR=128958B1&KC=B1&ND=4>
15. Leonte P., Cernomazu D., Mandici L., **Ungureanu C.**, Cujbă T., Prisacariu I., Olariu E. D., Crețu N., Gugoasă M., Sorea N., Baciuc I., Buzduga C., Releu de gaze pentru transformatoare de forță. Brevet RO125488B1, 26-02-2016, OSIM București.  
<https://ro.espacenet.com/publicationDetails/originalDocument?FT=D&date=20160226&D B=&locale=ro RO&CC=RO&NR=125488B1&KC=B1&ND=4>
16. **Ungureanu C.**, Cernomazu D., Motor solar. Brevet RO127361B1, 30-09-2015, OSIM București.  
<https://ro.espacenet.com/publicationDetails/originalDocument?FT=D&date=20150930&D B=&locale=ro RO&CC=RO&NR=127361B1&KC=B1&ND=4>
17. **Ungureanu C.**, Nitan I., Romaniuc I., Baciuc I., David C., Rata M., Milici M. R., Milici L. D., Olariu E. D., Cernomazu D., Stand de încercare. Brevet RO127919B1, 29-05-2015, OSIM București.  
<https://ro.espacenet.com/publicationDetails/originalDocument?FT=D&date=20150529&D B=&locale=ro RO&CC=RO&NR=127919B1&KC=B1&ND=4>


 06.06.2024

18. Sorea N., Olariu E. D., Baciui I., Poienar N., **Ungureanu C.**, Negru M. B., Cujba T. O., Buzduga C., Jeder M., Prisacariu I., Cernomazu D., Sistem de răcire. Brevet RO125137B1, 30-12-2013, OSIM București.  
<https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=125137B1&KC=B1&FT=D&ND=4&date=20131230&DB=&locale=ro> RO
19. **Ungureanu C.**, Mandici L., Cernomazu D., Motor solar. Brevet RO125808B1, 30-07-2012, OSIM București.  
<https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=125808A2&KC=A2&FT=D&ND=3&date=20101029&DB=&locale=ro> RO
20. Cernomazu D., Negru M. B., Irimia D., **Ungureanu C.**, Olariu E. D., Gugoasă M., Crețu N., Prisacariu I., Georgescu D. Ș., Sorea N., Baciui I., Buzduga C., Cujbă T. O., Metodă pentru studiul schimbării liniilor de câmp magnetic. Brevet RO125341B1, 28-02-2012, OSIM București.  
<https://ro.espacenet.com/publicationDetails/originalDocument?FT=D&date=20120228&DB=&locale=ro> RO&CC=RO&NR=125341B1&KC=B1&ND=4
21. **Ungureanu C.**, Cernomazu D., Motor solar. Brevet RO123264B1, 29-04-2011, OSIM București.  
<https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=123264B1&KC=B1&FT=D&ND=4&date=20110429&DB=&locale=ro> RO
22. **Ungureanu C.**, Cernomazu D., Motor solar. Brevet RO123263B1, 29-04-2011, OSIM București.  
<https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=123263B1&KC=B1&FT=D&ND=4&date=20110429&DB=&locale=ro> RO
23. Cernomazu D., **Ungureanu C.**, Leonte P., Simion A., Motor solar. Brevet RO123266B1, 29-04-2011, OSIM București.  
<https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=123266B1&KC=B1&FT=D&ND=4&date=20110429&DB=&locale=ro> RO
24. Cernomazu D., **Ungureanu C.**, Simion A., Motor solar. Brevet RO123265B1, 29-04-2011, OSIM București.  
<https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=123265B1&KC=B1&FT=D&ND=4&date=20110429&DB=&locale=ro> RO
25. Cernomazu D., **Ungureanu C.**, Sorea N., Olariu E. D., Poienar N., Negru M. B., Jeder M., Baciui I., Buzduga C., Prisacariu I., Cujbă T. O., Nițan I., Narovici M., Sistem de orientare după soare. Brevet RO125121B1, 28-02-2011, OSIM București.  
<https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=125121B1&KC=B1&FT=D&ND=4&date=20110228&DB=&locale=ro> RO
26. Cujbă T. O., **Ungureanu C.**, Mandici L., Cernomazu D., Prisacariu I., Baciui I., Buzduga C., Olariu E. D., Crețu N., Gugoasă M., Sorea N., Semnalizator pentru viteza de curgere. Brevet RO125477B1, 28-02-2011, OSIM București.  
<https://ro.espacenet.com/publicationDetails/originalDocument?FT=D&date=20110228&DB=&locale=ro> RO&CC=RO&NR=125477B1&KC=B1&ND=4
27. Cernomazu D., Mandici L., Sorea N., **Ungureanu C.**, Gugoasă M., Poienar N., Olariu E. D., Baciui I., Buzduga C., Cujbă T. O., Motor electric solar. Brevet RO125573B1, 29-04-2011, OSIM București.



06.06.2024

- <https://ro.espacenet.com/publicationDetails/originalDocument?FT=D&date=20110429&D B=&locale=ro RO&CC=RO&NR=125573B1&KC=B1&ND=4>
28. Cernomazu D., Mandici L., Buzduga C., Negru M. B., Sorea N., **Ungureanu C.**, Baci I., Gugoasă M., Crețu N., Olariu E. D., Cujbă T. O., Motor electric solar. Brevet RO125574B1, 29-04-2011, OSIM București.  
<https://ro.espacenet.com/publicationDetails/originalDocument?FT=D&date=20110429&D B=&locale=ro RO&CC=RO&NR=125574B1&KC=B1&ND=6>
29. Buzduga C., Negru M. B., Sorea N., **Ungureanu C.**, Baci I., Gugoasă M., Crețu N., Olariu E. D., Cujbă T. O., Cernomazu D., Dispozitiv de picurare. Brevet RO125475B1, 28-02-2011, OSIM București.  
<https://ro.espacenet.com/publicationDetails/originalDocument?FT=D&date=20110228&D B=&locale=ro RO&CC=RO&NR=125475B1&KC=B1&ND=4>
30. Cernomazu D., Mandici L., Prisacariu I., **Ungureanu C.**, Jeder M., Sorea N., Buzduga C., Olariu E. D., Poienar N., Baci I., Cujbă T. O., Micromotor piezoelectric. Brevet RO125192B1, 28-01-2011, OSIM București.  
<https://ro.espacenet.com/publicationDetails/originalDocument?FT=D&date=20110128&D B=&locale=ro RO&CC=RO&NR=125192B1&KC=B1&ND=4>
31. Cernomazu D., Negru M. B., Irimia D., **Ungureanu C.**, Olariu E. D., Crețu N., Gugoasă M., Sorea N., Buzduga C., Cujbă T. O., Baci I., Georgescu D. Ș., Prisacariu I., Separator magnetic. Brevet RO125282B1, 30-11-2011, OSIM București.  
<https://ro.espacenet.com/publicationDetails/originalDocument?FT=D&date=20111130&D B=&locale=ro RO&CC=RO&NR=125282B1&KC=B1&ND=4>
32. Georgescu D. Ș., Gugoasă M., Olariu E. D., **Ungureanu C.**, Crețu N., Sorea N., Negru M. B., Prisacariu I., Baci I., Cujbă T. O., Buzduga C., Cernomazu D., Motor electric liniar, bazat pe forțe axiale. Brevet RO125492B1, 28-02-2011, OSIM București.  
<https://ro.espacenet.com/publicationDetails/originalDocument?FT=D&date=20110228&D B=&locale=ro RO&CC=RO&NR=125492B1&KC=B1&ND=4>
33. Georgescu D. Ș., Gugoasă M., Olariu E. D., **Ungureanu C.**, Sorea N., Crețu N., Negru M. B., Prisacariu I., Baci I., Cujbă T. O., Buzduga C., Cernomazu D., Motor electric pendular, cu bobină mobilă în scurtcircuit. Brevet RO125489B1, 28-02-2011, OSIM București.  
<https://ro.espacenet.com/publicationDetails/originalDocument?FT=D&date=20110228&D B=&locale=ro RO&CC=RO&NR=125489B1&KC=B1&ND=4>
34. Georgescu D. Ș., Gugoasă M., Olariu E. D., **Ungureanu C.**, Sorea N., Crețu N., Negru M. B., Prisacariu I., Baci I., Cujbă T. O., Buzduga C., Cernomazu D., Motor electric liniar, cu bobină mobilă în scurtcircuit. Brevet RO125490B1, 28-02-2011, OSIM București.  
<https://ro.espacenet.com/publicationDetails/originalDocument?FT=D&date=20110228&D B=&locale=ro RO&CC=RO&NR=125490B1&KC=B1&ND=4>
35. **Ungureanu C.**, Leonte P., Cernomazu D., Simion A., Mandici L., Motor solar. Brevet RO122796B1, 29-01-2010, OSIM București.  
<https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=122796B1&KC=B1&FT=D&ND=4&date=20100129&DB=&locale=ro RO>
36. **Ungureanu C.**, Negru M. B., Prisacariu I., Jeder M., Olariu E. D., Crețu N., Sorea N., Cernomazu D., Traductor de poziție. Brevet RO123038B1, 30-07-2010, OSIM București.

 06.06.2024

- <https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=123038B1&K C=B1&FT=D&ND=4&date=20100730&DB=&locale=ro> RO
37. **Ungureanu C.**, Negru M. B., Prisacariu I., Jeder M., Olariu E. D., Crețu N., Sorea N., Cernomazu D., Traductor de poziție solaro-optic. Brevet RO122928B1, 30-04-2010, OSIM București.  
<https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=122928B1&K C=B1&FT=D&ND=4&date=20100430&DB=&locale=ro> RO
38. **Ungureanu C.**, Negru M. B., Sorea N., Baciu I., Avrămia C., Crețu N., Jeder M., Olariu E., Țurcanu N., Cernomazu D., Traductor de poziție solaro-optic. Brevet RO122930B1, 30-04-2010, OSIM București.  
<https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=122930B1&K C=B1&FT=D&ND=4&date=20100430&DB=&locale=ro> RO
39. **Ungureanu C.**, Sorea N., Negru M. B., Baciu I., Avramia C., Crețu N., Jeder M., Olariu E., Turcanu N., Cernomazu D., Rotor flexibil. Brevet RO122923B1, 30-04-2010, OSIM București.  
<https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=122923B1&K C=B1&FT=D&ND=4&date=20100430&DB=&locale=ro> RO
40. **Ungureanu C.**, Negru M. B., Prisacariu I., Jeder M., Olariu E., Crețu N., Sorea N., Cernomazu D., Traductor de poziție solaro-optic. Brevet RO123009B1, 30-06-2010, OSIM București.  
<https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=123009B1&K C=B1&FT=D&ND=4&date=20100630&DB=&locale=ro> RO
41. **Ungureanu C.**, Negru M. B., Prisacariu I., Jeder M., Olariu E., Crețu N., Sorea N., Cernomazu D., Traductor de poziție solaro-optic. Brevet RO123008B1, 30-06-2010, OSIM București.  
<https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=123008B1&K C=B1&FT=D&ND=4&date=20100630&DB=&locale=ro> RO
42. Leonte P., **Ungureanu C.**, Cernomazu D., Motor solar. Brevet RO122827B1, 26-02-2010, OSIM București.  
<https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=122827B1&K C=B1&FT=D&ND=4&date=20100226&DB=&locale=ro> RO
43. Cernomazu D., Mandici L., **Ungureanu C.**, Sorea N., Negru M. B., Prisacariu I., Crețu N., Crețu N. C., Jeder M., Olariu E., Motor electric cu rotație redusă. Brevet RO122758B1, 30-12-2009, OSIM București.  
<https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=122758B1&K C=B1&FT=D&ND=4&date=20091230&DB=&locale=ro> RO
44. Cernomazu D., Mandici L., **Ungureanu C.**, Sorea N., Baciu I., Avrămia C., Crețu N., Jeder M., Olariu E., Crețu N. C., Țurcanu N., Prisacariu I., Negru M. B., Micromotor solar. Brevet RO122684B1, 30-11-2009, OSIM București.  
<https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=122684B1&K C=B1&FT=D&ND=4&date=20091130&DB=&locale=ro> RO
45. **Ungureanu C.**, Prisacariu I., Stand pentru studiul principiului de funcționare al motorului cu rotor rulant și flexibil. Brevet RO122746B1, 30-12-2009, OSIM București.  
<https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=122746B1&K C=B1&FT=D&ND=4&date=20091230&DB=&locale=ro> RO
46. Savu E., Negru M. B., **Ungureanu C.**, Instalație pentru determinarea indicelui de rezistență la curenți de scurgere pe suprafață. Brevet RO121617B1, 28-12-2007, OSIM București.

- <https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=121617B1&KC=B1&FT=D&ND=4&date=20071228&DB=&locale=ro> RO
47. Cernomazu D., Ungureanu C., Olariu E. D., Rata M., David C., Milici M. R., Milici L. D., Nitan I., Romaniuc I., Sistem de orientare a unui panou fotovoltaic. Brevet RO127769B1, 29-12-2017, OSIM București.
- <https://ro.espacenet.com/publicationDetails/originalDocument?FT=D&date=20171229&DB=ro.espacenet.com&locale=ro> RO&CC=RO&NR=127769B1&KC=B1&ND=5
48. **Ungureanu C.**, Nitan I., Romaniuc I., Baciui I., David C., Rata M., Milici M. R., Milici L. D., Olariu E. D., Cernomazu D., Stand de încercare pentru actuator electromecanic cu silfon. Brevet RO127842B1, 28-12-2012, OSIM București.
- <https://ro.espacenet.com/publicationDetails/originalDocument?FT=D&date=20170929&DB=&locale=ro> RO&CC=RO&NR=127842B1&KC=B1&ND=5
49. Buzduga C., Baciui I., Cujba T., Mazareanu I., Jeder M., Negru M., Olariu E., Poienar N., Prisacariu I., Sorea N., **Ungureanu C.**, Cernomazu D., Model didactic. Brevet RO123515B1, 28-02-2013, OSIM București.
- <https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=123515B1&KC=B1&FT=D&ND=4&date=20130228&DB=&locale=ro> RO
50. Cernomazu D., **Ungureanu C.**, Simion A., Motor solar. Brevet RO123265B1, 24-04-2011, OSIM București.
- <https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=123265B1&KC=B1&FT=D&ND=4&date=20110429&DB=&locale=ro> RO
51. Măzăreanu I., Baciui I., Buzduga C., Cujbă T. O., Jeder M., Negru M. B., Olariu E. D., Poienar N., Prisacariu I., Sorea N., **Ungureanu C.**, Cernomazu D., Indicator de sens. Brevet RO123232B1, 30-03-2011, OSIM București.
- <https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=123232B1&KC=B1&FT=D&ND=5&date=20110330&DB=&locale=ro> RO
52. Măzăreanu I., Baciui I., Buzduga C., Cujbă T. O., Olariu E. D., Jeder M., Poienar N., Sorea N., Prisacariu I., **Ungureanu C.**, Negru M. B., Cernomazu D., Model didactic. Brevet RO125938B1, 30-12-2010, OSIM București.
- <https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=125938A2&KC=A2&FT=D&ND=4&date=20101230&DB=&locale=ro> RO
53. Baciui I., Buzduga C., Cujbă T. O., Măzăreanu I., Jeder M., Negru M. B., Olariu E. D., Poienar N., Prisacariu I., Sorea N., **Ungureanu C.**, Cernomazu D., Indicator de sens. Brevet RO123065B1, 30-08-2010, OSIM București.
- <https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=123065B1&KC=B1&FT=D&ND=4&date=20100830&DB=&locale=ro> RO
54. Olariu E. D., Cernomazu D., Mandici L., **Ungureanu C.**, Crețu N., Gugoasă M., Baciui I., Cujbă T. O., Buzduga C., Sorea N., Transformator pentru reglajul continuu al tensiunii în sarcină. Brevet RO125640B1, 30-07-2010, OSIM București.
- <https://ro.espacenet.com/publicationDetails/originalDocument?FT=D&date=20111130&DB=&locale=ro> RO&CC=RO&NR=125640B1&KC=B1&ND=4
55. Olariu E. D., Cernomazu D., Crețu N., Gugoasă M., **Ungureanu C.**, Cujbă T. O., Baciui I., Georgescu D., Ș., Sorea N., Prisacariu I., Negru M. B., Buzduga C., Aparat pentru verificarea

 06.06.2024

sensului de rotație al motoarelor electrice. Brevet RO125568B1, 30-06-2010, OSIM București.

<https://ro.espacenet.com/publicationDetails/originalDocument?FT=D&date=20110228&DB=&locale=ro RO&CC=RO&NR=125568B1&KC=B1&ND=4>

56. Buzduga C., Negru M. B., Sorea N., **Ungureanu C.**, Baciuc I., Gugoasă M., Crețu N., Olariu E. D., Cujbă T. O., Cernomazu D., Actuator cu ferofluid. Brevet RO125485B1, 28-05-2010, OSIM București.

<https://ro.espacenet.com/publicationDetails/originalDocument?FT=D&date=20101230&DB=&locale=ro RO&CC=RO&NR=125485B1&KC=B1&ND=4>

57. Cernomazu D., Mandici L., Sorea N., **Ungureanu C.**, Gugoasă M., Crețu N., Olariu E. D., Baciuc I., Buzduga C., Cujbă T., Actuator termomagnetic. Brevet RO125484B1, 28-05-2010, OSIM București.

<https://ro.espacenet.com/publicationDetails/originalDocument?FT=D&date=20101230&DB=&locale=ro RO&CC=RO&NR=125484B1&KC=B1&ND=4>

58. Prisacariu I., Strugariu C., Sorea N., Baciuc I., Avramia C., Crețu N., Olariu E., Jeder M., **Ungureanu C.**, David C., Negru M. B., Cernomazu D., Instalație pentru activarea răcirii transformatoarelor electrice cu puteri peste 10 MVA. Brevet RO122940B1, 30-04-2010, OSIM București.

<https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=122940B1&KC=B1&FT=D&ND=4&date=20100430&DB=&locale=ro RO>

59. Cernomazu D., Mandici L., Prisacariu I., **Ungureanu C.**, Jeder M., Sorea N., Buzduga C., Olariu E. D., Poienar N., Baciuc I., Cujbă T. O., Micromotor piezoelectric. Brevet RO125193B1, 29-01-2010, OSIM București.

<https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=125193A0&KC=A0&FT=D&ND=4&date=20100129&DB=&locale=ro RO>

60. Cernomazu D., Mandici L., **Ungureanu C.**, Motor solar. Brevet RO122797B1, 29-01-2010, OSIM București.

<https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=122797B1&KC=B1&FT=D&ND=4&date=20100129&DB=&locale=ro RO>

61. Buzduga C., Baciuc I., Cujbă T. O., Măzăreanu I., Jeder M., Negru M. B., Olariu E. D., Poienar N., Prisacariu I., Sorea N., **Ungureanu C.**, Cernomazu D., Indicator de sens. Brevet RO125128B1, 30-03-2011, OSIM București.

<https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=125128B1&KC=B1&FT=D&ND=4&date=20110330&DB=&locale=ro RO>

62. Cernomazu D., Mandici L., Prisacariu I., **Ungureanu C.**, Jeder M., Sorea N., Buzduga C., Olariu E. D., Poienar N., Baciuc I., Cujbă T. O., Micromotor piezoelectric. Brevet RO125144B1, 29-04-2011, OSIM București.

<https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=125144B1&KC=B1&FT=D&ND=4&date=20110429&DB=&locale=ro RO>

63. Baciuc I., Buzduga C., Cujbă T. O., Măzăreanu I., Jeder M., Negru M. B., Olariu E. D., Poienar N., Prisacariu I., Sorea N., **Ungureanu C.**, Cernomazu D., Indicator de sens. Brevet RO125054B1, 30-03-2011, OSIM București.

<https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=125054B1&KC=B1&FT=D&ND=4&date=20110330&DB=&locale=ro RO>



64. Cernomazu D., Mandici L., **Ungureanu C.**, Tarnovetchi M., Micromotor solar. Brevet RO119563B1, 30-12-2004, OSIM București.  
[https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=119563B1&KC=B1&FT=D&ND=4&date=20041230&DB=&locale=ro\\_RO](https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=119563B1&KC=B1&FT=D&ND=4&date=20041230&DB=&locale=ro_RO)
65. Tarnovetchi M., **Ungureanu C.**, Micromotor solar. Brevet RO119564B1, 30-09-2005, OSIM București.  
[https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=119564B1&KC=B1&FT=D&ND=4&date=20041230&DB=&locale=ro\\_RO](https://ro.espacenet.com/publicationDetails/originalDocument?CC=RO&NR=119564B1&KC=B1&FT=D&ND=4&date=20041230&DB=&locale=ro_RO)

**d) Cărți și capitole în cărți**

1. **Ungureanu C.**, Cernomazu D. Motoare electrice solare de construcție specială. București: Editura MATRIXROM, 350 p., ISBN: 978-973-755-795-7, 2012
2. Olariu E.-D., **Ungureanu C.**, Ilie M., Cernomazu D., Memorator pentru proiectarea transformatoarelor de putere, ISBN: 978-973-0-15481-8, 362 p., 2013
3. Afanasov C., Atănăsoae P., **Ungureanu C.**, Vlad V. et al. 111 invenții în Memoriam Profesor Cernomazu Dorel. ISBN 978-973-666-504-2, Editura Universității Ștefan cel Mare din Suceava, 259 p., 2017
4. **Ungureanu C.**, Rață M., Rață G., Încercarea echipamentelor electrice – Îndrumar de laborator. Editura Universității Suceava, ISBN: 978-973-666-308-6, 250 p., 2009

**e) Articole/studii in extenso, publicate în reviste din fluxul științific internațional principal**

1. Pop T., **Ungureanu C.**, Pentiuc R. D., Afanasov C., Ifrim V. C., Atănăsoae P., Milici L.D., Off-Grid Hybrid Renewable Energy System Operation in Different Scenarios for Household Consumers. Energies 2023, 16, 2992. Factor impact 2022: 3,2. WOS:000969557900001  
<https://doi.org/10.3390/en16072992>
2. Toader V.E., Milici L.D., **Ungureanu C.**, Bejenar C., Grosu O.V., Analysis of a Low-Speed Drive System Using Intelligent Materials. Actuators 2022, 11, 10. Factor impact 2022: 2,6. WOS:000747092100001  
<https://doi.org/10.3390/act11010010>
3. 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. Appl. Sci. 2022, 12, 3185. Factor impact 2022: 2,7. WOS:000775877600001  
<https://doi.org/10.3390/app12063185>
4. **Ungureanu C.**, Graur A., "FEM Analysis of a New Electromechanical Converter with Rolling Rotor and Axial Air-Gap," Advances in Electrical and Computer Engineering, vol.15, no.4, pp.69-74, 2015. Factor impact 2015: 0,529. WOS:000368499800009  
<https://doi.org/10.4316/AECE.2015.04009>  
<https://aece.ro/abstractplus.php?year=2015&number=4&article=9>
5. Cernușcă D., **Ungureanu C.**, Pentiuc R. D., Hopulele E., Pop T., Analysis of the operation of solar micro-inverters. EMERG Energy. Environment. Efficiency. Resources. Globalization, Volume VIII, Issue 4/2022, pp 93 – 102, 2022. doi:10.37410/EMERG.2022.4.06  
<https://emerg.ro/wp-content/uploads/2023/01/6.-ANALYSIS-OF-THE-OPERATION-OF-SOLAR.pdf>

 06.06.2024

6. Pop T., Pentiu R. D., Milici L. D., Popa C. D., **Ungureanu C.**, Cernușcă D., Ifrim V. C., Current hybrid systems of producing electric and thermal energy. EMERG: Energy. Environment. Efficiency. Resources. Globalization; 2023, Vol. 9 Issue 1, p24-34, 11p. EMERG, Volume IX, Issue 1/2023 ISSN 2668-7003, ISSN-L 2457-5011, 2023. doi:10.37410/EMERG.2023.1.02 <https://emerg.ro/wp-content/uploads/2023/05/2.-CURRENT-HYBRID-SYSTEMS-OF-PRODUCING-ELECTRIC-AND-THERMAL-ENERGY.pdf>
7. Nitani I., **Ungureanu C.**, Milici M. R., Milici L. D., Cernomazu D., Experimental study of the influence of operating position on the behaviour of an electromechanical actuator with volatile liquid, Journal of electrical and electronics engineering, JEEE (Copernicus Master List Journal), Oradea, ISSN: 1844-6035, vol: 6, nr: 1, pag. 91-94, 2013. [https://electroinf.uoradea.ro/images/articles/CERCETARE/Reviste/JEEE/JEEE V6 N1 MAY 2013/Nitan\\_may2013.pdf](https://electroinf.uoradea.ro/images/articles/CERCETARE/Reviste/JEEE/JEEE V6 N1 MAY 2013/Nitan_may2013.pdf)
8. **Ungureanu C.**, Rață M., Graur A., PLC control of an electromechanical converter with rolling rotor and axial air-gap. Acta Electrotehnica, nr. 4, Mediamira Science Publisher, 2015, Vol. 56, p. 137-142, ISSN 2344-5637. <https://research.ebsco.com/c/ylm4lv/search/details/lpdeyofwuv?limiters=RV%3AY&q=PLC%20control%20of%20an%20electromechanical%20converter%20with%20rolling%20rotor%20and%20axial%20air-gap>  
[https://ie.utcluj.ro/files/acta/2015/Number4/paper01\\_Ungureanu.pdf](https://ie.utcluj.ro/files/acta/2015/Number4/paper01_Ungureanu.pdf)
9. Romanescu A.D., Țanța O. M., Poienar M., Nițan I., **Ungureanu C.**, Mandici L., Cernomazu D., Current State of Research at the EMAD Research Centre from „Ștefan cel Mare“ University in Connection with Actuators and Solar Motors with Solid Heating Medium. Analele Universității „Eftimie Murgu“ Reșița, Anul XXI, NR. 2, 2014, p. 123-134, ISSN 1453 – 7397 <http://anale-ing.uem.ro/2014/211.pdf>
10. **Ungureanu C.**, Rata M., Milici, M., Nitani I., Experimental analysis and FEM simulation of a electrically controllable thermal state actuator, Buletinul Institutului Politehnic din Iași, Volumul 62 (66), Numărul 3, 2016. Secția Electrotehnică. Energetică. Electronică, p. 71-84, 2016. <https://journals.indexcopernicus.com/search/article?articleId=2541688>

**f) Publicații in extenso, apărute în lucrări ale principalelor conferințe internaționale de specialitate**

1. Popa C. -D., **Ungureanu C.**, "Analysis of a Hybrid Water Heating System for a Swimming Pool," 2021 International Conference on Electromechanical and Energy Systems (SIELMEN), pp. 521-526, 2021. doi:10.1109/SIELMEN53755.2021.9600361 <https://ieeexplore.ieee.org/document/9600361>
2. **Ungureanu C.**, Popa C. D. and Pentiu R. D. "Characteristic Analysis of the USR-60 Rotary Ultrasonic Motor," 2018 International Conference and Exposition on Electrical and Power Engineering (EPE), 2018, pp. 0303-0308. WOS:000458752200057 <https://ieeexplore.ieee.org/document/8559601>
3. Ifrim V. -C., Milici L. D., Pop T., **Ungureanu C.**, "Electric Discharges and Dielectric Barrier Influence on Electric Field Distribution in Solar Air Heater Systems," 2023 International Conference on Electromechanical and Energy Systems (SIELMEN), Craiova, Romania, pp. 1-11, 2023. doi:10.1109/SIELMEN59038.2023.10290743


*Am* 06.06.2024

- <https://ieeexplore.ieee.org/document/10290743>
4. Cernușcă D., Milici L. D., and **Ungureanu C.**, "Theoretical and experimental contribution of using special actuators and materials with shape memory," 2016 International Conference and Exposition on Electrical and Power Engineering (EPE), 2016, pp. 171-174. WOS:000390706300037  
<https://ieeexplore.ieee.org/document/7781327>
  5. Georgescu D. -Ș., Pentiuc R. -D., Nițan I., **Ungureanu C.**, "Contributions to conceiving, designing, and experimenting a device for connection phase adjustment (DRFC) to a limited displacement short mobile coil motor (MBMS)," 2018 International Conference and Exposition on Electrical and Power Engineering (EPE), 2018, pp. 0893-0896. WOS:000458752200174  
<https://ieeexplore.ieee.org/document/8559751>
  6. **Ungureanu C.**, Irimia D., Bobric E. C., "FEM analysis and design of an electromechanical converter with dual stator windings and flexible wave rotor," 2016 International Conference on Development and Application Systems (DAS), 2016, pp. 42-49. WOS:000383222200008  
<https://ieeexplore.ieee.org/document/7492546>
  7. Toader V., **Ungureanu C.**, Milici L. D. Contributions to the Development of a Low-Speed Gadolinium Actuator System. IOP Conference Series: Materials Science and Engineering, 877. 2020. doi:10.1088/1757-899X/877/1/012041  
<https://iopscience.iop.org/article/10.1088/1757-899X/877/1/012041>
  8. Bobric E. C., Irimia D., **Ungureanu C.**, Lupu E. D., "Web - Based Laboratory for Modeling and Simulation of Power System," 2019 17th International Conference on Emerging eLearning Technologies and Applications (ICETA), Starý Smokovec, Slovakia, 2019, pp. 83-86, doi:10.1109/ICETA48886.2019.9040002  
<https://ieeexplore.ieee.org/document/9040002>
  9. Irimia D., Bobric E. C., Olariu E. D., **Ungureanu C.**, "Web-based training for magnetic suspension study," 2015 13th International Conference on Emerging eLearning Technologies and Applications (ICETA), 2015, pp. 1-4, doi:10.1109/ICETA.2015.7558474.  
<https://ieeexplore.ieee.org/document/7558474>
  10. **Ungureanu C.**, Graur A., "A novel design of a rolling rotor actuator with axial air gap," 2014 International Symposium on Fundamentals of Electrical Engineering (ISFEE), 2014, pp. 1-6, doi:10.1109/ISFEE.2014.7050557.  
<https://ieeexplore.ieee.org/document/7050557>
  11. Prodan C., Poienar N., **Ungureanu C.**, Cernomazu D., "Conclusions about the study of the special connections at the three-phase transformers," 2012 International Conference and Exposition on Electrical and Power Engineering, 2012, pp. 468-471, doi:10.1109/ICEPE.2012.6463887.  
<https://ieeexplore.ieee.org/document/6463887>
  12. Milici M. R., **Ungureanu C.**, Chatziathanasiou V., Cernomazu D., Milici L. D., Experimental study of volatile liquid influence on behaviour of an electromechanic actuator with volatile liquid. In Proceedings of the 11th WSEAS international conference on Instrumentation, Measurement, Circuits and Systems, and Proceedings of the 12th WSEAS International Conference on Robotics, Control and Manufacturing Technology, and Proceedings of the

- 12th WSEAS International Conference on Multimedia Systems; Signal Processing (IMMURO'12). World Scientific and Engineering Academy and Society (WSEAS), Stevens Point, Wisconsin, USA, 164–169, 2012. doi:10.5555/2230656.2230686. <https://dl.acm.org/doi/10.5555/2230656.2230686>  
<http://www.wseas.us/e-library/conferences/2012/Rovaniemi/IMMURO/IMMURO-27.pdf>
13. **Ungureanu C.**, Bobric C. Irimia D., "Fuzzy logic control of a new type of electromagnetic converter with rolling rotor," 2014 International Conference on Applied and Theoretical Electricity (ICATE), Craiova, Romania, 2014, pp. 1-4, doi: 10.1109/ICATE.2014.6972602. <https://ieeexplore.ieee.org/document/6972602>
  14. **Ungureanu C.**, Rață M., Milici M. R., Nitani I., "Simulation and PLC control of an electromechanical actuator with volatile liquid," 2016 International Conference and Exposition on Electrical and Power Engineering (EPE), Iasi, Romania, 2016, pp. 445-450, doi:10.1109/ICEPE.2016.7781380. <https://ieeexplore.ieee.org/document/7781380>
  15. Pop T., Buzduga C., Pentiuc R.-D., Ifrim V.-C., **Ungureanu C.**, "Mathematical modeling in MATLAB of a photovoltaic panel," in Materials Science and Engineering Conference Series, vol. 1256, no. 1, 2022. doi:10.1088/1757-899X/1256/1/011001. [https://imt.uoradea.ro/auo.fmte/files-2022-v2/11\\_ID%2070\\_Pop%20T\\_Mathematical%20modeling%20in%20MATLAB%20of%20a%20photovoltaic%20panel.pdf](https://imt.uoradea.ro/auo.fmte/files-2022-v2/11_ID%2070_Pop%20T_Mathematical%20modeling%20in%20MATLAB%20of%20a%20photovoltaic%20panel.pdf)

**g) Alte lucrări și contribuții științifice sau, după caz, din domeniul creației artistice**

1. **Ungureanu C.**, Nemțoi L., Peak Voltage Measurements Using Standard Sphere Gap Method, Journal of Advances in Electrical Engineering , Hindawi Corporation, Cairo, ISSN: 2356-6655, vol: 1, nr: 1, pag. 1-5, 2014. doi:10.1155/2014/980913. <https://www.hindawi.com/journals/aee/2014/980913/>
2. Cernomazu, D., Mandici, L., Sorea, N., **Ungureanu, C.**, Actual stage of the solutions in the field of the solar engines developed at the „Ștefan cel Mare” University of Suceava. In: The 3th International Conference on Modern Power System, MPS 2010, Acta Electrotehnica, Nr. 5, Cluj-Napoca: 18-21 Mai, 2010, Romania, ISSN: 1841-3323, p.73-78. [https://ie.utcluj.ro/files/acta/2010/Number5/MPS\\_2010\\_Cernomazu.pdf](https://ie.utcluj.ro/files/acta/2010/Number5/MPS_2010_Cernomazu.pdf)
3. Nitani I., **Ungureanu C.**, Olariu E.-D., Cernomazu D., Analysis of an new electromechanical actuator type with limited movement. MPS 2013, 28-31 mai 2013, ACTA ELECTROTEHNICA, ISSN: 1841-3323, nr: 5, pag. 330-336. [https://oldie.utcluj.ro/files/acta/2013/Number5/e-journalsummary\\_MPS2013.pdf](https://oldie.utcluj.ro/files/acta/2013/Number5/e-journalsummary_MPS2013.pdf)
4. Prodan C., Rață G., Rață M., **Ungureanu C.**, Study on harmonic analysis of hourly index code signals. MPS 2013, 28-31 mai 2013, ACTA ELECTROTEHNICA, ISSN: 1841-3323, vol: 54, nr: 5, pag. 390-393. [https://oldie.utcluj.ro/files/acta/2013/Number5/e-journalsummary\\_MPS2013.pdf](https://oldie.utcluj.ro/files/acta/2013/Number5/e-journalsummary_MPS2013.pdf)
5. Milici L. D., Milici M. R., Keersebilck P., Bouters A., Flore W., **Ungureanu C.**, Design a Guidance System for Solar Panels Using Virtual Instrumentation. In: Proceedings of the 4th International Conference on Modern Power Systems, MPS 2011, Acta Electrotehnica,


 06.06.2024

Cluj-Napoca: 17-20 Mai, 2011, Romania, p. 440-443. ISSN: 1841-3323, Vol. 52, nr. 5, p.281-284.

<https://oldie.utcluj.ro/files/acta/2011/Number5/Cuprins%20Proceedings%20MPS%202011.pdf>

6. Sorea N., Nitan I., **Ungureanu C.**, Mandici L., Cernomazu D., Contributions regarding the solar engines based on thermo-magneto-mechanical conversion realized at "Ștefan cel Mare" University of Suceava. In: Proceedings of the 4th International Conference on Modern Power Systems, MPS 2011, Acta Electrotehnică, Cluj-Napoca: 17-20 Mai, 2011, Romania, p. 440-443. ISSN: 1841-3323.  
<https://oldie.utcluj.ro/files/acta/2011/Number5/Cuprins%20Proceedings%20MPS%202011.pdf>
7. Sorea N., **Ungureanu C.**, Cernomazu D., Considerations regarding the solar engines based on the thermo-magneto-mechanical conversion. In: 8th World Energy System Conference WESC 2010, The Scientific Bulletin of Electrical Engineering Faculty, Tîrgoviște: 1-3 July, 2010, No 1 (12), Romania, p. 43-48, ISSN: 1843-6188.
8. Sorea N., **Ungureanu C.**, Cernomazu D., Transducers used in solar engines with reduced speed. In: Analele Universitatii din Craiova, Seria Inginerie Electrica, Anul 34, No. 34, 2010, vol. I, 15th National Conference on Electrical Drives, CNAE 2010, Craiova, October 7-8, 2010, ISSN 1842-4805, Editura Universitaria, Craiova, 2010. p. 242-247.
9. Olariu E. D., Jeder M., Poienar N., Crețu N. C., Negru B., Prisacariu I., Sorea N., **Ungureanu C.**, Contributions regarding the realization and the experimentation of the special sliding contacts used in case of electrical transformers with revolving secondary winding. In: The 5-th International Conference on Electrical and Power Engineering, EPE 2008, Tomul LIV (LVIII), ISSN: 1223-8139, Iași: 03-05 Octombrie 2008, Romania, p. 875-878.
10. **Ungureanu C.**, Cernomazu D., Georgescu D., Olariu D. E., Magnetic position transducer used in solar electric engine with reduced speed. In: The 4-th International Conference on Electrical and Power Engineering, EPE 2006, Buletinul Institutului Politehnic Iasi, Tomul LII (LVI), Fasc. 5A, 12-14 Octombrie 2006, Iași, Romania, ISSN: 1223-8139, p. 477-482.
11. **Ungureanu C.**, Cernomazu D., Prisacariu I., Solar-optic position transducers used in solar-electric engines with reduced speed construction. In: The 4-th International Conference on Electrical and Power Engineering, EPE 2006, Buletinul Institutului Politehnic Iasi, Tomul LII (LVI), 12-14 Octombrie 2006, Iași, Romania, ISSN: 1223-8139, p. 483-490.
12. Georgescu D., **Ungureanu C.**, The experimental study concerning the transitory regime of an electric motor with limited translational motion. In: The 4-th International Conference on Electrical and Power Engineering, EPE 2006, Buletinul Institutului Politehnic Iasi, Vol: Tomul LII, 12-14 Octombrie 2006, Iași, Romania, ISSN/ISBN: 1223-8139, 2006, p. 317-322.
13. Olariu E. D., Simioniuc M., Jeder M., Prisacariu I., **Ungureanu C.**, Theoretical and experimental contributions regarding the V connection of the three-phased transformers. In: The 4-th International Conference on Electrical and Power Engineering, EPE 2006, Buletinul Institutului Politehnic Iasi, Vol: Tomul LII, 12-14 Octombrie 2006, Iasi, Romania, ISSN/ISBN: 1223-8139, 2006, p. 395-400.
14. Prisacariu I., **Ungureanu C.**, PC software for the calculation of specific parameters of progressive-wave rotating piezoelectric micromotors-piezomotor-C. In: The 4-th International Conference on Electrical and Power Engineering, EPE 2006, Buletinul

- Institutului Politehnic Iasi, Vol: tomul LII, 12-14 Octombrie 2006, Iași, Romania, ISSN/ISBN: 1223-8139, 2006, p.407-410.
15. **Ungureanu C.**, Rata M., Milici M., Nitan I., Experimental Analysis And Fem Simulation Of A Electrically Controllable Thermal State Actuator, Buletinul Institutului Politehnic Din Iași, Volumul 62 (66), Numărul 3, 2016. Secția Electrotehnică. Energetică. Electronică, p. 71-84, 2016
  16. **Ungureanu C.**, Cernușcă D., Prodan C., Mandici L., System for Converting Heat Energy into Mechanical Energy, Buletinul AGIR, vol: XVIII, nr: 3, pag. 95-99, 2013.  
<https://www.agir.ro/buletine/1835.pdf>
  17. **Ungureanu C.**, Cernomazu D., Experimental analysis and operating optimization of solar electric motors. In: Buletinul AGIR, anul XVII, nr. 3, aprilie-iunie 2012, ISSN 1224-7928, p.213-218.  
<https://www.agir.ro/buletine/1386.pdf>
  18. **Ungureanu C.**, Operating analysis of solar electric motors, Buletinul AGIR, Bucuresti, ISSN: 1224-7928, vol: XVII, nr: 4, pag. 222-228, 2012.  
<https://www.buletinulagir.agir.ro/articol.php?id=1543>
  19. **Ungureanu C.**, Ababii C.-S., Research on the development of azimuthal tracking systems used for photovoltaic panel orientation, Buletinul AGIR, Bucuresti, ISSN: 1224-7928, vol: XVII, nr: 4, pag. 285-290, 2012.  
<https://www.agir.ro/buletine/1554.pdf>
  20. Milici M., **Ungureanu C.**, Milici L. D., Chatziathanasiou C., "Experimental analysis of transient regime of an electromechanical actuator with volatile liquid using the unit step response", 9th World Energy System Conference (WESC 2012), Suceava, Romania, June 28-30, 2012, Buletinul AGIR, nr.3/2012, pp. 355-359.  
<https://www.agir.ro/buletine/1407.pdf>
  21. **Ungureanu C.**; Rață M., Nițan I., Milici M., Cernomazu D., Study of the electromechanical actuators used in construction of solar electric engines with rolling rotor and axial gap. In: Buletinul AGIR, anul XVI, nr. 4, octombrie-decembrie 2011, ISSN 1224-7928, p.81-86.  
<https://www.agir.ro/buletine/1051.pdf>
  22. Minescu D., Cernomazu D., Graur A., Mandici L., **Ungureanu C.**, Le modele mathematique de l'indice horaire - une possible solution pour la diagnose des erreurs des connexions d'un transformateur de puissance. Advances in Electrical and Computer Engineering, Volume 1, Issue 1, Year 2001, p. 32 – 36, ISSN: 1582-7445, e-ISSN: 1844-7600  
<https://aece.ro/abstractplus.php?year=2001&number=1&article=5>
  23. **Ungureanu C.**, Cernomazu D., Graur A., Mandici L., Minescu D., Problemes particuliers dans le fonctionnement des changeurs de prises en charge pour les transformateurs de grande puissance. Advances in Electrical and Computer Engineering, Volume 1, Issue 1, Year 2001, p. 37 – 43, ISSN: 1582-7445, e-ISSN: 1844-7600  
<https://aece.ro/abstractplus.php?year=2001&number=1&article=6>
  24. Prodan C., Olariu E.D., Cernomazu D., **Ungureanu C.**, Contributions concerning oscilloscopic method for checking the index of hours at three-phased electric transformers – 5th International Conference on electromechanical and power systems, vol.1, 6-8 Octombrie, 2005, Chisinau, Moldova, ISSB/ISBN 973-716-208-0, pag.420-423

 06.06.2024

25. Prodan C., Cernomazu D., **Ungureanu C.**, The mathematical pattern of the hour index at the three-phase transformers. Considerations on the dephasing matrix – 5th International Conference on Electromechanical and Power System, vol.1, 6-8 Octombrie, 2005, Chisinau, Moldova, ISSB/ISBN 973-716-208-0, pag. 417-419.
26. Prodan C., Olariu E.D., Cernomazu D., **Ungureanu C.**, Contributions concerning errors identification for performing the connections at three-phased electric transformers – 5th International Conference on electromechanical and power systems, vol.1, 6-8 Octombrie, 2005, Chisinau, Moldova, ISSB/ISBN 973-716-208-0, pag. 424-427.
27. **Ungureanu C.**, Cernomazu D., Mandici L., Considerații și contribuții privind micromotoare solare, Volumul Conferinței Internaționale SIELMEN'2001, Chișinău, 4-6 octombrie 2001, vol.I, ISBN 9975-9638-6-2, pag. 83-88.
28. **Ungureanu C.**, Mandici L., Cernomazu D., Consideration regarding the achievement of the solar-electric engines, The 2004 International World Energy System Conference - A Reliable World Energy System, University of Oradea, 17-19 May, 2004.
29. Cernomazu D., **Ungureanu C.**, Savu E., Minescu D., Contribuții privind realizarea și experimentarea unor motoare neconvenționale la universitatea Suceava, Salonul Ecotehnologii 2003, 19-22 Iunie, 2003, Iasi, Romania, ISSN/ISBN: 973-8075-90-4, pag. 174-181.
30. Cernomazu D., **Ungureanu C.**, Tarnovetchi M., Minescu D., Contribuții la realizarea și experimentarea unor motoare solare, Salonul ECOTEHNOLOGII 2003, 19-22 Iunie, 2003, Iasi, Romania, ISSN/ISBN: 973-8075-90-4, pag. 182-184.
31. Cernomazu D., Mandici L., **Ungureanu C.**, Lungu C., Contributions concerning the improvement of some solar engines with flexible wave-rotor. In: ELS 2005 - Symposium on Unconventional Electrical Machines, 22-23 Septembrie, 2005, Suceava, Romania, ISBN: 973-666-162-8, pg. 68-73.
32. Leonte P., **Ungureanu C.**, Contribution concerning the building of some solar-electric engines. In: ELS 2005 - Symposium on Unconventional Electrical Machines, 22-23 Septembrie, 2005, Suceava, Romania, ISBN: 973-666-162-8, pg. 46-51.
33. **Ungureanu C.**, Minescu D., Prodan C., Negru B., Cernomazu D., Stadiul actual al cercetărilor în domeniul motoarelor solare. In: Conferința Națională a Energiei, Regional Energy Foren 2002, 9-13 iunie, Neptun-Olimp, România.
34. **Ungureanu C.**, Minescu D., Prodan C., Negru B., Cernomazu D., Contribuții la realizarea și experimentarea unor motoare solare. In: Conferința Națională a Energiei, Regional Energy Foren 2002, 9-13 iunie, Neptun-Olimp, România.
35. Cernomazu D., Minescu D., **Ungureanu C.**, Negru B., Prodan C., Contribuții la realizarea și experimentarea unor motoare neconvenționale. In: Conferința Națională a Energiei, Regional Energy Foren 2002, 9-13 iunie, Neptun-Olimp, România.
36. Savu E., **Ungureanu C.**, Prisacariu I., Study on transient process of the electromechanical actuators with liquid. In: ELS 2005 - Symposium on Unconventional Electrical Machines, 22-23 Septembrie, 2005, Suceava, Romania, ISSN/ISBN: 973-666-162-8, pg. 36-41.
37. Savu E., **Ungureanu C.**, Study on static characteristics of the electromechanical actuators with liquid. In: ELS 2005 - Symposium on Unconventional Electrical Machines, 22-23 Septembrie, 2005, Suceava, Romania, ISSN/ISBN: 973-666-162-8, pg. 58-63.

*Cluj 06.06.2024*

38. Prodan C., **Ungureanu C.**, Cernomazu D., The mathematical pattern of the hour index at the three-phased transformers. Consideration on the dephasing matrix. In: ELS 2005 - Symposium on Unconventional Electrical Machines, 22-23 Septembrie, 2005, Suceava, Romania, 2005, ISSN/ISBN: 973-666-162-8, pg. 97-100.
39. Prodan C., Olariu E. D., Cernomazu D., **Ungureanu C.**, Contributions concerning errors identification for performing the connections at three-phased electric transformer. In: ELS 2005 - Symposium on Unconventional Electrical Machines, 22-23 Septembrie, 2005, Suceava, Romania, ISSN/ISBN: 973-666-162-8, pg. 87-91.
40. Prodan C., Olariu D. E., Cernomazu D., **Ungureanu C.**, Contributions concerning oscilloscopic method for checking the index of hours at three-phased electric transformer. In: ELS 2005 - Symposium on Unconventional Electrical Machines, 22-23 Septembrie, 2005, Suceava, Romania, 2005, ISSN/ISBN: 973-666-162-8, pg. 92-96.
41. Prodan C., Cernomazu D., **Ungureanu C.**, Contribution to an graphic analytical variant of a method of continuous current destined to the identification of the hour index at the three-phase transformers. In: ELS 2005 - Symposium on Unconventional Electrical Machines, 22-23 Septembrie, 2005, Suceava, Romania, ISSN/ISBN: 973-666-162-8, pg. 84-86.


#### **h) Contracte de cercetare-dezvoltare**

##### **Director de proiect:**

1. Grant HUSKROUA/1702/6.1/0014, Hungary-Slovakia-Romania-Ukraine ENI CBC Programme 2014-2020, New Energy Solution in Carpathian Area - NESICA. Director proiect partener USV, mai 2020- mai 2023, Durata: 37 luni. Valoare totala proiect: 1.104.707,30 Euro. Valoare partener USV: 138.126,36 Euro.
2. Grant CNCSIS TD – Contribuții teoretice și experimentale privind realizarea unor motoare electrice solare. Grant nr. 33361/29.06.2004, cod CNCSIS 62, tip proiect TD: Tema nr. 2. Etapa 2004 – Trecerea de la modelele demonstrative deja realizate, la modele experimentale și prototipuri în domeniul motoarelor solare electrice de viteză medie și de viteză redusă (cu rotor rulant și cu rotor flexibil) care să facă posibilă trecerea la realizări cu aplicabilitate industrială. Universitatea "Ștefan cel Mare" Suceava, Facultatea de Inginerie Electrică, Suceava, 2004. Coordonator doctorat: prof. univ. dr. ing. Dorel Cernomazu. Valoare grant: 35000 lei. 2004

##### **Membri în echipă:**

1. Cross-Border Cooperation Smart Energy (CBCSmartEnergy), număr de proiect 2SOFT/1.2/52, The Joint Operational Programme Romania-Ukraine 2014-2020.
2. PN-III-P1-1.2-PCCDI-2017-0404/ 31PCCDI/2018, cu tema „Holistica impactului surselor regenerabile de energie asupra mediului și climei” - Adaptarea surselor de producere a energiei fotovoltaice și eoliene la dinamica creșterii energiei regenerabile în producția totală de energie. Contract nr. 435/02.03.2018, 2018.
3. Contract de cercetare nr. 360/03.04.2023, Studii și cercetări privind prognoza orară de energie electrică. Beneficiar HeidelbergCement România S.A.

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4. Contract de cercetare dezvoltare nr. 27128/24.11.2022. Analiza oportunității unei instalații de cogenerare trigenerare în procesul de vopsitorie al confecțiilor metalice la Electroalfa CM Botoșani. Beneficiar SC Electro Alfa CM SRL Botosani.
5. Contract de cercetare dezvoltare inovare nr. 4855/25.03.2019, Creșterea eficienței în operarea instalațiilor electroenergetice la SC Balkan Pharmaceuticals SRL, Chișinău, Republica Moldova.
6. Contract de cercetare nr. 1292/5.05.2022, Calculul de autoevaluare și întocmire documentație în vederea înregistrării producției de energie în cogenerare aferentă CHP Ambro. Beneficiar Ambro SA Suceava.
7. Contract de cercetare nr. 662/10.08.2017, Studiu privind analiza și optimizarea consumurilor tehnologice în stațiile electrice de transport. Beneficiar C.N.T.E.E TRANSELECTRICA SA București.
8. Contract de cercetare nr. 2497/22.02.2016, Creșterea eficienței energetice a consumului de energie termică pe platforma industrială SC Forestar SA și evaluarea energetică pentru o nouă capacitate de uscare rumeguș.
9. Contract de cercetare nr. 718/19.06.2017 cu Act aditional nr. 2/27.06.2018 - Studii și cercetări privind prognoza orară de energie electrică. Program de prognoză consumuri medii orare pentru locurile de consum din cadrul societății. Beneficiar HeidelbergCement România S.A., București.
10. Contract de cercetare nr. 1839/25.04.2023. Urmărirea în exploatare a eficienței energetice pentru centrala de cogenerare AMBRO Suceava. Beneficiar Ambro SA Suceava.
11. Contract de cercetare nr. 2753/03.02.2021. Dispozitiv de blocare electromagnetică – DBE-01. Beneficiar Electroalfa International SRL Botoșani.

Data,

06.06.2024

Șef de lucrări dr. ing. Constantin UNGUREANU

