

Instituția de învățământ superior: **UTC-N**

Facultatea: **Facultatea de Inginerie Electrică**

Domeniul de licență: **Inginerie Electrică**

Programul de studii de licență:

Perioada evaluării:

TABEL PRIVIND INDEPLINIREA INDICATORULUI
Activitatea științifică în domeniul disciplinelor

„Cadrele didactice titulare* au pregătirea inițială, sunt doctori / doctoranzi și cercetează în domeniul în care se includ disciplinele din postul ocupat.”

Nr. crt.	Gradul didactic, numele și prenumele titularului vârstă / vechimea în învățământul superior	Disciplinele din cadrul programului de studii incluse în postul didactic și tipul activității desfășurate (curs, seminar, lucrări, proiect)	Competența cadrului didactic titular în disciplinele din postul didactic			Constatări privind îndeplinirea indicatorului conform Anexei 4.1
			Universitatea/facultatea/specializarea absolvită	Specializarea la masterat/doctorat	Numărul de cărți, numărul de lucrări științifice, numărul de brevete în domeniul disciplinelor din postul didactic (conform Anexelor 4.1.)	
0	1	2	3	4	5	6
2	Conf. dr. ing. Teodosescu Petre Dorel 42 / 14	Electronică, curs și proiect Electronică de putere, curs, laborator	Universitatea Tehnică din Cluj / Facultatea de Inginerie Electrică / Energetică Industrială	Doctorat în inginerie electrică	teza (A); 1 carte (B1); 4 capitole de carte (B2-B5); 28 lucrări indexate ISI/BDI (C1 - C28); 9 lucrări în rev. și vol. conf. (D1-D9); 5 brevete (E1-E5)	îndeplinit

* Din statul de funcții cumulativ al tuturor disciplinelor și tuturor activităților didactice desfășurate în cadrul programului de studii evaluat.

Rector

Persoana de contact

Teodosescu Petre Dorel

A N E X A 4 . 1

Nume Prenume: **Teodosescu Petre Dorel**

Gradul didactic: **Conf. dr. ing.**

Instituția unde este titular: **UTC-N**

Facultatea: **Facultatea de Inginerie Electrică**

Departamentul: **Mașini și Acționări Electrice**

L I S T A

lucrărilor științifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

„Cercetări privind dezvoltarea balasturilor electronice cu corectarea factorului de putere”

conducător științific : Prof.dr.ing.Richard Marschalko

Universitatea Tehnică din Cluj Napoca

Susținere publică: 22.06.2012.

B. Cărți si capitole în cărți publicate în ultimii 10 ani

CĂRȚI

1. Marschalko, R.; Fodor, D.; **Teodosescu, P.**: Electronica pentru ingineri electrotehnicieni, Volumul IV, Elemente moderne de electronică de putere, ISBN 978-973-713-315-1, 480 pag., Editura Mediamira, Cluj, România, 2014

CAPITOLE DE CARTE

2. **Teodosescu P.D.**, Marschalko R., Considerations Concerning the State of the Art and Future Trends in Compact Fluorescent Lamps, vol.*Promovarea dezvoltării durabile în spațiul dunarean prin cooperare culturala si stiintifica, Sectiunea IV- Fizica si Stiinte ingineresti*, Editura Mediamira, Cluj-Napoca, 2010, pp. 308 -315, ISBN: 978-973-713-276-5.
3. **Teodosescu Petre Dorel**, Szekely Norbert Csaba, Sabau Madalina Sabina, Bojan Mircea, Analysis of a resonant AC-AC LED driver, Intech OPTOELECTRONICS, ISBN 978-953-51-5219-4, 2017
4. Stefan Breban, Ioana Gros, Calin Marginean, **Petre Teodosescu**, Fuzzy logic energy management for a residential power system using renewable energy sources, Intech FUZZY CONTROL SYSTEMS, ISBN 978-953-51-5391-7, 2017
5. Ruba Mircea, **Teodosescu Petre Dorel**, Design, power electronics and torque control of switched reluctance machines, Intech SWITCHED RELUCTANCE MOTOR - CONCEPT, CONTROL AND APPLICATIONS, ISBN 978-953-51-5525-6, 2017.

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

C.1. Articole / studii publicate în reviste de specialitate de circulație internațională recunoscute (cotate ISI)

1. **Teodosescu, P.D.**, Bojan, M., Marschalko, R., Resonant LED driver with inherent constant current and power factor correction, *IET Electronics Letters* , vol.50, no.15, pp.1086,1088, ISSN: 0013-5194, July 17, 2014

2. **Teodosescu, P.D.**, Bojan, M., Vese I.C., Marschalko, R., Research Concerning Unified Electronic Lighting Devices, *Proceedings of the Romanian Academy - series A: Mathematics, Physics, Technical Sciences, Information Science*, ISSN : 1454-9069, Vol. 16, No.2, 2015
3. Chirca, M.; Dranca, M.; Oprea, C.A.; **Teodosescu, P.-D.**; Pacuraru, A.M.; Neamtu, C.; Breban, S. Electronically Controlled Actuators for a Micro Wind Turbine Furling Mechanism. *Energies* **2020**, *13*, 4207.
4. V. M. Suciuc, S. I. Salcu, A. M. Pacuraru, L. N. Pintilie, N. C. Szekely, and **P. D. Teodosescu**, "Independent Double-Boost Interleaved Converter with Three-Level Output," *Applied Sciences*, vol. 11, no. 13, p. 5993, Jun. 2021.
5. S. Breban, M. Dranca, M. Chirca, A.-M. Pacuraru, **P.D. Teodosescu**, and C.-A. Oprea, "Experimental Tests on a Spoke-Type Permanent Magnets Synchronous Machine for Light Electric Vehicle Application," *Applied Sciences*, vol. 12, no. 6, p. 3019, Mar. 2022
6. N. C. Szekely, S. I. Salcu, V. M. Suciuc, L. N. Pintilie, G. I. Fasola, and **P. D. Teodosescu**, "Power Factor Correction Application Based on Independent Double-Boost Interleaved Converter (IDBIC)," *Applied Sciences*, vol. 12, no. 14, p. 7209, Jul. 2022
7. S. I. Salcu, V. M. Suciuc, **P. D. Teodosescu**, and Z. Mathe, "The Condition Number Perspective in Modeling and Designing an Electronic IDBIC Converter," *Electronics*, vol. 13, no. 7, p. 1302, Mar. 2024, doi: 10.3390/electronics13071302.

C.2. Studii publicate la conferințe indexate în baze de date internaționale de referință în domeniul (DBLP, ACM, IEEE, SCOPUS)¹

8. **Teodosescu, P.D.**, Bojan, M., Pop, A.A., Marschalko, R. - Buck-Boost Corrector Implementing for Compact Fluorescent Lamp Applications, *Proceedings of the 13th International Conference on Optimization of Electrical and Electronic Equipments OPTIM 2012*, May 24-26, 2012, Brasov, Romania, pp. 833 – 838, ISBN: 978-1-4673-1650-7, [IEEE].
9. **Teodosescu, P.D.**, Bojan, M., Denes, F., Marschalko, R. - Research concerning appropriate PFC methods for classic CFL lighting devices, *Proceedings of the 15th International Power Electronics and Motion Control Conference, EPE-PEMC 2012*, ECCE Europe, Sept. 4-6, 2012, Novi Sad, Serbia, DS3c.11-1 - DS3c.11-7, ISBN: 978-1-4673-1970-6, [IEEE].
10. Vese I.C, Radulescu M.M., Marginenan C.I, **Teodosescu P.D.** , Hardware-in-the-Loop Simulation and Implementation of Direct Thrust-Force Control of Two Phase Tubular Permanent-Magnet Actuator, *Proceedings of 2012 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR 2012), THETA 18th edition*, May 24-27, 2012, Cluj-Napoca, Romania, pp. 156 – 160, ISBN: 978-1-4673-0701-7, [IEEE].
11. **Teodosescu, P.D.**, Negrea, S.T., Bojan, M., Marschalko, R., Local grid power quality improvements by the use of a high power factor LED device, *Proceedings of IEEE 2014 49th International Universities Power Engineering Conference (UPEC)*, vol., no., pp.1,6, 2-5 Sept. 2014, [IEEE].
12. Gros, I.-C.; Radulescu, M.; **Teodosescu, P.D.**; Marginean, C., "Implementation of SVM-based Direct Thrust Control of two-phase permanent magnet tubular synchronous actuators," in *Advanced Topics in Electrical Engineering (ATEE)*, 2015 9th International Symposium on , vol., no., pp.236-239, 7-9 May 2015[IEEE].
13. **P. D. Teodosescu**, T. Rusu, C. S. Martis, A. C. Pop and I. Vintiloiu, "Considering half bridge converters for switched reluctance motor drive applications," 2015 Intl Aegean Conference on Electrical Machines & Power Electronics (ACEMP), 2015 Intl Conference on Optimization of Electrical & Electronic Equipment (OPTIM) & 2015 Intl Symposium on Advanced Electromechanical Motion Systems (ELECTROMOTION), Side, Turkey, 2015, pp. 186-191. WOS:000382957000034
14. Chirca M., Oprea C.A. , **Teodosescu P.D.** , Breban S., Optimal Design of a Radial Flux Spoke-Type Interior Rotor Permanent Magnet Generator for Micro-Wind Turbine Applications, ICATE 2016, [IEEE].

¹ indexate în:

[IEEE] - IEEE Xplore (<http://ieeexplore.ieee.org/Xplore/guesthome.jsp>)

[ACM] - ACM portal (<http://portal.acm.org>)

[DBLP] - (<http://www.informatik.uni-trier.de>)

[SCOPUS] - (<http://www.scopus.com>)

15. I. C. Gros, D. C. Popa, P. D. Teodosescu and M. M. Radulescu, "A survey on green energy harvesting applications using linear electric generators," *2017 International Conference on Modern Power Systems (MPS)*, Cluj-Napoca, 2017, pp. 1-5 [IEEE].
16. N. C. Szekely, M. Bojan, S. I. Salcu and P. D. Teodosescu, "LED performance analysis under various current waveforms," *2018 10th International Conference on Electronics, Computers and Artificial Intelligence (ECAI)*, Iasi, Romania, 2018, pp. 1-4. [IEEE].
17. V. M. Suci, S. I. Salcu, L. N. Pintilie, P. D. Teodosescu and Z. Mathe, "Theoretical efficiency analysis of a buck-boost converter for wide voltage range operation," *2018 10th International Conference on Electronics, Computers and Artificial Intelligence (ECAI)*, Iasi, Romania, 2018, pp. 1-4. [IEEE].
18. M. Chirca, M. Dranca, P. Teodosescu and S. Breban, "Limited-Angle Electromechanical Actuator for Micro Wind Turbines Overspeed Protection," *2019 11th International Symposium on Advanced Topics in Electrical Engineering (ATEE)*, Bucharest, Romania, 2019, pp. 1-6. [IEEE].
19. P. Teodosescu, N. C. Szekely and M. Bojan, "Flexible System for Practical Hands-On Power Electronics Teaching," *2019 8th International Conference on Modern Power Systems (MPS)*, Cluj Napoca, Romania, 2019, pp. 1-6. [IEEE].
20. N. C. Szekely, M. Sabău, A. -M. Iuoraș, M. Bojan and Petre-Teodosescu, "Overall performance analysis of a resonant driver with different LED output stages," *2020 International Symposium on Power Electronics, Electrical Drives, Automation and Motion (SPEEDAM)*, Sorrento, Italy, 2020, pp. 757-762 [IEEE].
21. A. M. Iuoraș, S. I. Salcu, C. G. Rusu, C. Marginean and P. D. Teodosescu, "Power factor compensation for a single-phase AC-DC Hybrid Micro-Grid," *2020 IEEE 11th International Symposium on Power Electronics for Distributed Generation Systems (PEDG)*, Dubrovnik, Croatia, 2020, pp. 455-458 [IEEE].
22. A. M. Iuoras, N. C. Szekely, L. D. Vitan, M. Bojan and **P. D. Teodosescu**, "AC home appliances retrofitting for DC microgrids," *2020 12th International Conference on Electronics, Computers and Artificial Intelligence (ECAI)*, 2020, pp. 1-6 [IEEE].
23. V. M. Suci, L. N. Pintilie, S. I. Salcu, P. D. Teodosescu, T. Pana, Z. Mathe, Analysis Of an Independent Double Boost Interleaved Converter in A Renewable Energy Application, *7th International Congress on Information & Communication Technology ICICT 2022 [INSPEC, Scopus]*.
24. V. M. Suci, L. N. Pintilie, P. D. Teodosescu, Z. Mathe, Analysis Of an Independent Double Boost Interleaved Converter Operating as Power Optimizer in A PV Application, *7th International Congress on Information & Communication Technology ICICT 2022, [INSPEC, Scopus]*.
25. A.M. Iuoras. S.I. Salcu, V.M. Suci, L.N.Pintile, N.C.Szekely, M. Bojan, P.D.Teodosescu, AC-DC Microgrid Analyses using a hybrid Real-Time HiL approach, *7th International Congress on Information & Communication Technology ICICT 2022, [INSPEC, Scopus]*.
26. A. M. Păcuraru, V. M. Suci, L. N. Pintilie, S. I. Salcu, A. B. Cristian and **P. D. Teodosescu**, "Analysis and Practical Implementation of an Independent Double Buck Interleaved Converter," *2022 International Conference and Exposition on Electrical And Power Engineering (EPE)*, Iasi, Romania, 2022, pp. 472-477, [IEEE].
27. A. M. Păcuraru, S. I. Salcu, M. A. Iuoraș, Ș. Breban, Z. Mathe and **P. D. Teodosescu**, "Practical Implementation of an Electronic Controlled Actuator for Micro Wind Turbine Overspeed Protection," *2022 International Conference and Exposition on Electrical And Power Engineering (EPE)*, Iasi, Romania, 2022, pp. 478-483, [IEEE].
28. L. N. Pintilie, H.C. Hedeșiu, C.G. Rusu, P.D. Teodosescu, C.I. Mărginean, S.I. Salcu, V.M. Suci, N.C. Szekely, A.M. Păcuraru, "Energy Conversion Optimization Method in Nano-Grids Using Variable Supply Voltage Adjustment Strategy Based on a Novel Inverse Maximum Power Point Tracking Technique (iMPPT)," *Electricity*, vol. 4, no. 4, pp. 277–308, Oct. 2023 [Scopus].

D. Lucrări publicate în ultimii 10 anii în reviste și volume de conferințe cu referenți (neindexate)

- Reviste

Notă personală: atenție lucrările de mai jos sunt indexate în BDI dar nu sunt cotate ISI

1. Gros I.C, Radulescu M.M., Marginenan C.I, **Teodosescu P.D.**, Electromagnetic and Dynamic Performance Analysis of a Two-Phase Permanent-Magnet Tubular Linear Actuator, *Acta*

- Electrotehnica Journal, Mediamira Science Publisher, Volume 56, No.4, 2015, Cluj-Napoca, România, pp. 171-174, ISSN 1841-3323*
2. Paku R., Bojan M., **Teodosescu, P.D.**, Marschalko, R., Performances of PWM ac-to-dc converters provided with active line conditioning control strategy under non-sinusoidal mains voltage conditions, *Acta Electrotehnica Journal, Mediamira Science Publisher, Volume 54, No.3-4, 2013, Cluj-Napoca, România, pp. 230-237, ISSN 1841-3323.*
 3. **Teodosescu, P.D.**, Bojan, M., Vese, I.C., Marschalko, R., Study of the improvement of a CFL's power factor by using a valley fill filter, *Acta Electrotehnica Journal, Mediamira Science Publisher, Volume 53, No.1, 2012, Cluj-Napoca, România, pp. 74-80, ISSN 1841-3323.*
 4. **Teodosescu, P.D.**, Bojan, M., Vese, I.C., Marschalko, R., LED Drive Technology Based on CFL Ballast Topology, *Acta Electrotehnica Journal, Mediamira Science Publisher, Volume 53, No.3, 2012, Cluj-Napoca, România, pp. 235-241, ISSN 1841-3323.*
 5. Marschalko, R., Fodor, D., **Teodosescu, P.D.**, Bojan, M. Influence of DC-Link Capacitor Aging on the PWM Converters Operation, *Acta Electrotehnica Journal, Mediamira Science Publisher, Volume 52, No.4, 2011, Cluj-Napoca, România, pp. 197-202, ISSN 1841-3323*
 6. Vese I.C., Radulescu M.M., **Teodosescu P.D.**, Marginenan C.I., Tubular permanent-magnet actuators for linear direct-drive systems, *Electromotion Journal, Vol 18, 2011, Cluj-Napoca, Romania, pp. 259-267, ISSN 1223-057X*
 7. Rusu T., **Teodosescu P.D.**, Pop A.C., Practical implementation of a half-bridge SRM converter for low power applications, Proceedings of the 18th national conference on electrical drives "CNAE 2016", *Acta Electrotehnica Journal, Mediamira Science Publisher, Volume 57, No.3-4, 2016, Cluj-Napoca, România, pp. 473-477, ISSN 1841-3323*
 8. **Teodosescu P.D.**, Sabau S.M., Szekeley N.C., Bojan M., Marschalko R., Theoretical Analysis of the Commutation Frequency Range for a PWM AC-to-DC Converter with Current Hysteresis Modulation, Proceedings of the 18th national conference on electrical drives "CNAE 2016", *Acta Electrotehnica Journal, Mediamira Science Publisher, Volume 57, No.3-4, 2016, Cluj-Napoca, România, pp. 473-477, ISSN 1841-3323*

- Selecție cu maximum 20 lucrări în volume de conferințe

9. **Teodosescu, P.D.**, Bojan M., Vese, I.C., Marschalko R., Practical Implementation of a LC Resonant Converter for LED Lighting Applications, *Proceedings of The 16th National Conference on Electrical Drives CNAE 2012, 10-12 Oct. 2012, Suceava, Romania, pp. 124 – 129, ISSN 1224-7928.*

E. Brevete obținute în întreaga activitate

1. **Teodosescu, P.D.**; Sabău, M.S.; Szekely, N.C.; Bojan, M.; Marschalko, R.: - “*Electronic device for LED lighting systems,*” Romanian State Office for Inventions and Trademarks (OSIM), RO131169B1, Priorities 2015-11-23.
2. Breban Ștefan, Chirca Mihai, Neag Adriana Voica, **Teodosescu Petre Dorel**: *Electro-mechanical actuator with electronic control device*, Romanian State Office for Inventions and Trademarks (OSIM), RO131166B1, Priorities 2016-01-06.
3. **Teodosescu Petre Dorel**, Pop Adrian Cornel, Rusu Tiberiu, Vintiloiu Ioana: *Switched reluctance motor with a driver circuit and method for operating a switched reluctance motor*, European Patent Office, EP3121952-B1, Priorities 2015-07-21.
4. **Teodosescu P D**, Vintiloiu I, Pop A C, Rusu T, Pop-Piglesan F, Daramus M: *Capacitor DC-Link Arrangement*, European Patent Office, EP3300462-B1, Priorities 2016-09-21.
5. **Teodosescu P. D.**, Suci V. M., Szekely N. C., Pacurar A. M., Bojan M., Mathe Z., „*Interleaved voltage step-up/step-down electronic converter*”, Romanian State Office for Inventions and Trademarks (OSIM), RO134350B1, Priorities 2019-12-19.

Data: 19.11.2024

Semnătura:
Conf. dr. ing. Teodosescu Petre Dorel