

Instituția de învățământ superior: Universitatea Tehnică din Cluj-Napoca

Facultatea: Inginerie Electrică

Domeniul de licență: Inginerie Energetică

Programul de studii de licență: Managementul Energiei.

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 vârsta / 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
1.	Profesor Sorin Gheorghe Pavel 65 / 34	Introducere în Ingineria Electrică, curs Utilizarea calculatoarelor în energetică, curs și laborator Instalații electrice, curs	Universitatea Tehnică din Cluj-Napoca / Facultatea de Electrotehnică / Electrotehnică	Doctorat în Inginerie electrică	1 carte (B4) teza (A – 1 parte); 3 cărți (B2, B3, B5); 30 lucrări indexate ISI/BDI (C1-C10, C13, C16, C18-C20, C22, C25, C26, C28, C30, C32, C34-C36, C38, C40, C41, C44, C49-C51); 14 lucrări în rev. și vol. conf. (D1, D2, D4-D6, D9-D12, D14, D16-D19) teza (A – 1 parte); 1 carte (B1); 23 lucrări indexate ISI/BDI (C11, C12, C14, C15, C17, C21, C23, C24, C27, C29, C31, C33, C37, C39, C42, C43, C45-C48)	Îndeplinit
2						
3						
4						
6						

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

Rector

Persoana de contact

A N E X A 4 . 1

Nume Prenume: Pavel Sorin Gheorghe
Gradul didactic: profesor
Instituția unde este titular: UTCN
Facultatea: Inginerie Electrică
Departamentul: Electroenergetică și Management

L I S T A

lucrărilor științifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

„Contribuții la monitorizarea prin instrumentație virtuală a procesului de compensare-simetrizare a cuptoarelor de inducție cu creuzet”.

conducător științific: Prof.dr.ing Radu Munteanu

Universitatea Tehnică din Cluj-Napoca

Susținere publică: 20.12.1999.

B. Cărți și capitole în cărți publicate în ultimii 10 ani**CĂRȚI**

1. Maier, V., **Pavel, S.G.**, Beleiu, H.G. *Ghid pentru proiectarea instalațiilor electrice la consumatori* Editura UTPRESS, Cluj-Napoca 2013, ISBN 978-973-662-819-1, 159 pag.
2. Maier, V., **Pavel, S.G.**, Beleiu, H.G. *Calitatea Energiei Electrice*, Editura UTPRESS, Cluj-Napoca, 2012, ISBN 978-973-662-784-2, 197 pag.
3. **Pavel, S.G.**, Maier, V., Beleiu, H.G. *Aplicații privind Calitatea Energiei Electrice*, Editura UTPRESS, Cluj-Napoca 2012, ISBN 978-973-662-785-9, 102 pag.
4. **Pavel, S. G.**, Maier, V. *Introducere în inginerie electrică*, U.T.PRESS, Cluj-Napoca, 2008, ISBN 978-973-662-379-0, 217 pag.
5. Maier, V, **Pavel, S. G.**, Maier, C. D. *Ingineria calității și protecția mediului*. U.T.PRESS, Cluj-Napoca, 2007, ISBN 978-973-662-283-0, 140 pag.

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

1. Horia G. Beleiu, Sorin G. Pavel, Iulian M. T. Birou, Anca Miron, Pompei C. Darab & Mohammed Sallah (2022) Effects of voltage unbalance and harmonics on drive systems with induction motor, Journal of Taibah University for Science, 16:1, 381-391, DOI: 10.1080/16583655.2022.2064670.
2. V. Maier, S. G. Pavel, H. G. Beleiu and T. S. Pavel, "Harmonics of the Component Formed by Pairs of Alternative Unitary Step, Symmetrical Regarding the Central Step of the PWM Inverter Output Voltage," 2022 International Conference on Development and Application Systems (DAS), Suceava, Romania, 2022, pp. 57-61, doi: 10.1109/DAS54948.2022.9786199 [IEEE].
3. Pavel, D. Micu, S. Pavel, H. Beleiu and S. Ungureanu, "Contributions to the optimization of the Electrical Power Distribution in the Station Centru From Cluj, in the Context of Updating Its Medium Voltage Network," 2022 International Conference and Exposition on Electrical And Power

- Engineering (EPE), Iasi, Romania, 2022, pp. 545-549, doi: 10.1109/EPE56121.2022.9959802 [IEEE].
4. V. Maier, S. G. Pavel and H. G. Beileu, "Harmonics of the Central Component of the PWM Inverter Output Voltage," 2021 International Conference on Electromechanical and Energy Systems (SIELMEN), Iasi, Romania, 2021, pp. 527-533, doi: 10.1109/SIELMEN53755.2021.9600356 [IEEE].
 5. Darab, C.; Antoniu, T.; Beileu, H.G.; **Pavel, S.**; Birou, I.; Micu, D.D.; Ungureanu, S.; Cirstea, S.D. Hybrid Load Forecasting Using Gaussian Process Regression and Novel Residual Prediction. *Appl. Sci.* 2020, *10*, 4588, WOS:000552300000001, <https://doi.org/10.3390/app10134588>.
 6. Constantin S. Pică, Sorin G. Pavel, Horia G. Beileu, Virgil Maier and Antoniu C. Turcu. *Effects of Connecting Photovoltaic Power Plants on a Long Electrical Line*, **Published in:** 2020 International Conference and Exposition on Electrical And Power Engineering (EPE), 22-23 oct 2020, **Date Added to IEEE Xplore:** 18 February 2021, **DOI:** 10.1109/EPE50722.2020.9305591.
 7. H.G. Beileu, V. Maier, **S.G. Pavel**, I. Birou, C.S. Pică, P.C. Dărab, Harmonics Consequences on Drive Systems with Induction Motor. *Applied Sciences* 2020, vol. 10, Issue 4, pp. 1528, eISSN: 2076-3417, DOI:org/10.3390/app10041528, WOS:000525287900335, <https://doi.org/10.3390/app10041528>.
 8. **S.G. Pavel**, V. Maier, C. Ciorca, H.G. Beileu, I. Birou, Optimal Design of the Vertical Earthing with Electrodes Arranged in Line *Applied Sciences* 2020, Vol. 10, Issue 3, pp. 1177, eISSN: 2076-3417, DOI:org/10.3390/app10031177, WOS:000525305900446.
 9. H. G. Beileu, V. Maier, **S. G. Pavel**, I. Birou and C. Pică, "Synchronous Motor Behavior in Harmonics," 2019 54th International Universities Power Engineering Conference (UPEC), Bucharest, Romania, 2019, pp. 1-6. doi: 10.1109/UPEC.2019.8893511 [IEEE].
 10. V. Maier, **S. G. Pavel**, H. G. Beileu and V. Farcas, "Aspects on Harmonics Analytical Identification of a Periodic Non-Sinusoidal Wave," *2019 8th International Conference on Modern Power Systems (MPS)*, Cluj Napoca, Romania, 2019, pp. 1-6. doi: 10.1109/MPS.2019.8759685 [IEEE].
 11. V. MAIER, **S. G. PAVEL**, C. CIORCA, H. G. BELEIU and I. BIROU, "Dissipation Surface Minimization of Vertical Earth Grounding, with Rectangular Contour," *2019 11th International Symposium on Advanced Topics in Electrical Engineering (ATEE)*, Bucharest, Romania, 2019, pp. 1-6. doi: 10.1109/ATEE.2019.8724882 [IEEE – ISI proceedings].
 12. Beileu, H.G., Beileu, I.N., **Pavel, S.G.**: Management of Power Quality Issues from an Economic Point of View, in *SUSTAINABILITY*, Volume: 10, Issue: 7, 2018, DOI: 10.3390/su10072326 [ISI].
 13. Beileu, H.G., Darab, P.C., Pica, C., **Pavel, S.G.**, Coldea, T.: Impact of Different Materials Electrodes in Earth Grounding Systems, in *ACTA TECHNICA NAPOCENSIS SERIES-APPLIED MATHEMATICS MECHANICS AND ENGINEERING*, Volume: 61, Issue: 1, 2018, Pp: 65-68 [ISI].
 14. Darab, P.C., Turcu, A., Pica, C., **Pavel, S.G.**, Beileu, H.G.: Reducing Earth Grounding Electrical Resistance by Using Metallurgy Industrial Waste as Backfill Materials, in *ACTA TECHNICA NAPOCENSIS SERIES-APPLIED MATHEMATICS MECHANICS AND ENGINEERING*, Volume: 61, Issue: 1, 2018, Pp: 69-72 [ISI].
 15. Ciorca, C., Maier, V., Pavel, S.G. and Beileu, H. G., Dimensioning of the Vertical Earth Grounding with Rectangular Contour through Minimizing the Investments Costs, *2018 International Conference and Exposition on Electrical And Power Engineering (EPE)*, Iasi, 2018, pp. 0154-0158. doi: 10.1109/ICEPE.2018.8559651. [IEEE – ISI proceedings]
 16. Pica, C., Munteanu, R., Pavel S.G. and Beileu, H.G., Modeling of Photovoltaic Panels, *2018 International Conference and Exposition on Electrical And Power Engineering (EPE)*, Iasi, 2018, pp. 0769-0773. doi: 10.1109/ICEPE.2018.8559884. [IEEE – ISI proceedings]
 17. Maier, V., Ciorca, C., Pavel, S.G., Beileu, H. G. and Birou, I., Design of vertical earth grounding with rectangular outline by minimizing its total metal mass, *2018 International Conference on Development and Application Systems (DAS)*, Suceava, 2018, pp. 57-62. doi: 10.1109/DAAS.2018.8396071. [IEEE – ISI proceedings]
 18. Virgil Maier, Sorin G. Pavel, Horia G. Beileu, Constantin S. Pica, *Vertical Earth Grounding Design Using Optimal Criteria*, The 10th International Symposium on Advanced Topics in Electrical Engineering, Page(s):539 – 544, ATEE 2017, 23 – 25 martie, Universitatea Politehnica

- din București, Romania, **DOI:** 10.1109/ATEE.2017.7905162, Electronic ISBN: 978-1-5090-5160-1, USB ISBN: 978-1-5090-5159-5, PoD ISBN: 978-1-5090-5161-8 **[IEEE – ISI proceedings]**.
19. Virgil Maier, Sorin G. Pavel, Horia G. Beleiu and Constantin S. Pică, *Optimal Design of Vertical Earth Grounding, with Rectangular Perimeter*. International Conference on Modern Power Systems, MPS 2017, pages: 1-5, 6 – 9 iunie, Universitatea Tehnică din Cluj-Napoca, DOI: 10.1109/MPS.2017.7974458, Electronic ISBN: 978-1-5090-6565-3, Print on Demand(PoD) ISBN: 978-1-5090-6566-0 **[IEEE]**.
 20. Constantin Sorin Pică, Virgil Maier, Sorin Gh. Pavel, Horia Gh. Beleiu. Synthesis and Analysis of PWM Inverter Output Voltages. In: Proceedings of the International Conference on Electromechanical and Power Systems (SIELMEN), Chișinău, 11 – 13 octombrie, 2017 **[IEEE]**.
 21. Virgil Maier, Sorin Gh. Pavel, Iulian Birou, Horia Gh. Beleiu and Claudiu Ciorca, Methodologies Regarding the Application of Optimum Criteria to the Vertical Earth Grounding Design, with Rectangular Outline. In: Proceedings of the International Conference on Electromechanical and Power Systems (SIELMEN), Chișinău, 11 – 13 octombrie, 2017, **[IEEE]**.
 22. Virgil MAIER, Sorin G. Pavel, Horia G. Beleiu and Constantin Pică, *Considerations regarding the characterization and design of vertical earth grounding*, Conferința de Inginerie Electrică și Sisteme „Ștefan Gârlașu” - 1-3 noiembrie 2016, Universitatea Eftimie Murgu, Reșița **[Index Copernicus, Doaj, Ebscol]**.
 23. Virgil Maier, Sorin G. Pavel, Horia G. Beleiu, Vasile Fărcaș. *Additional Indicators for Short Time Overvoltages and Voltage Impulses*, 2016 International Conference and Exposition on Electrical and Power Engineering (EPE 2016), 20-22 October, Iasi, Romania, ISBN:978-1-5090-6128-0 / ISSN: 2471-6855, WOS:000390706300162 **[ISI Proceeding]**.
 24. Virgil Maier, Sorin G. Pavel, Horia G. Beleiu, Iulian Birou, Vasile Fărcaș. *Nomograms for Sizing the Vertical Earth Grounding*, 2016 International Conference and Exposition on Electrical and Power Engineering (EPE 2016), 20-22 October, Iasi, Romania, ISBN:978-1-5090-6128-0 / ISSN: 2471-6855, WOS:000390706300097 **[ISI Proceeding]**.
 25. Virgil Maier, Sorin Gh. Pavel, Horia Gh. Beleiu, Constantin Buda, *Survey regarding additional indicators for voltage sags*, 13th International Conference on Development and Application Systems, May 19-21, 2016 - Suceava, Romania, ISBN:978-1-5090-1993-9, WOS:000383222200017, **[ISI Proceeding]**.
 26. Sorin Gh. Pavel, Horia Gh. Beleiu, Iulian Birou, Constantin Pică, Constantin Buda, *DMS steady state function validation by comparative study*, 13th International Conference on Development and Application Systems, May 19-21, 2016 - Suceava, Romania, ISBN:978-1-5090-1993-9, WOS:000383222200018, **[ISI Proceeding]**.
 27. Virgil Maier, Sorin G. Pavel, Horia G. Beleiu, Vasile Fărcaș and Claudiu Ciorca, *Actual Aspects of Flicker Phenomenon*, Proceedings of the 9th International Symposium on Advanced Topics in Electrical Engineering, May 7-9, 2015, ISBN:978-1-4799-7514-3, WOS:000368159800139, **[ISI Proceeding]**.
 28. Sorin G. Pavel. Virgil Maier, Horia G. Beleiu, Vasile Fărcaș, *Updating in Open Loop Electrical Networks*, In: Acta Electrotehnica, Volume 56, Number 3, 2015, Editura Mediamira, Cluj-Napoca, ISSN 1841-3323, pp. 252 – 256, **[BDI]**.
 29. Mutu, A., Ceclan, A., Pavel, S., Micu, D.D., Vadan, I. On the implementation of a micro hydropower plant on Gersa river, Bistrita, Romania, **[SCOPUS]**.
 30. Pentiuc, R.D., Vlad, V., Lucache, D.D., Pavel, S.G. *Street Lighting Power Quality*, EPE 2014, USB ISSN: 978-1-4799-5848-1, October 16-17, 2014, Iași, ISBN:978-1-4799-5849-8 / ISSN 2471-6855, WOS:000353565300202, **[ISI Proceeding]**.
 31. Pavel, S. G., Maier, V., Birou, I., Beleiu H. G., Fărcaș, V. *Efficient Distribution through the Medium Voltage Network Belonging to Cluj-Centre electrical Power Station*, EPE 2014, USB ISSN: 978-1-4799-5848-1, Oct. 16-17, 2014, Iași, ISBN:978-1-4799-5849-8 / ISSN 2471-6855, WOS:000353565300195, **[ISI Proceeding]**.
 32. Birou, I. M.T., Rusu, C., Maier, V., PAVEL, S. G. *Real-Time Robust Controlled Driving System with Permanent-Magnet Synchronous Motor*, EPE 2014, USB ISSN: 978-1-4799-5848-1, October 16-17, 2014, Iași, ISBN:978-1-4799-5849-8 / ISSN 2471-6855, WOS:000353565300172, **[ISI Proceeding]**.
 33. Polec, Victoria F., Maier, V., Pavel, S. G., Beleiu, H. G.: *Graphic functions analytical identification at flicker evaluation*. In: Proceedings of the 16th IEEE International Conference on

- Harmonics and Quality of Power (ICHQP), May 28 – 30, București, Romania, 2014, Publisher **IEEE**, DOI: [10.1109/ICHQP.2014.6842829](https://doi.org/10.1109/ICHQP.2014.6842829), pp. 425 – 429, [ISI Proceeding].
34. Maier, V., Polec, Victoria, Pavel, S. G. and Beleiu H. G *Analytical Identification of the Fuses Protection Characteristics*, In: Buletinul AGIR no. 4, ISSN 1224-7928, ELS 2013, octombrie, pp 21 Suceava, [Google Scholar].
 35. Pavel, S. G., Maier, V., Beleiu H. G, Nedelcu Speranța and Fărcaș V., Theory and Practice in Voltage Slow Variations, In: Acta Electrotehnica, Volume 54, Number 5, 2013, Editura Mediamira, Cluj-Napoca, ISSN 1841-3323, pp. 357-364, 28 - 31 May MPS 2013 [BDI].
 36. Maier, V., Pavel, S. G., Polec, Victoria, Fărcaș, V and Beleiu H. G, *The Analytical Optimum of the Demanded Currents Total Moment for a Radial Distribution Network*, In: Acta Electrotehnica, Volume 54, Number 5, 2013, Editura Mediamira, Cluj-Napoca, ISSN 1841-3323, pp. 262-267, 28 - 31 May MPS 2013, [BDI].
 37. Maier, V., Pavel, S. G., LEȘE, D., BELEIU, H.G. Fundamentals of Slow Voltage Variations Analysis. In: *13th International Conference on Optimization of Electrical and Electronic Equipment*, May, 24-26, 2012, Optim 2012, pp 68, ISSN: 1842-0133, Brașov. [IEEE, SCOPUS]
 38. Maier, V., Polec, Victoria, Pavel, S. G., Filip Adina. Optimal Analytical Identification of the Fotometric Curves for the Indoor Direct Lighting Luminaires. In: *13th International Conference on Optimization of Electrical and Electronic Equipment*, May, 24-26, 2012, Optim 2012, pp 37, ISSN: 1842-0133, Brașov. [IEEE, SCOPUS]
 39. Maier, V, PAVEL, S. G., BELEIU H. G., Leșe D. Characteristics of Voltage Maintaining Methods for Electrical Networks. In *Proceedings of WESC 2012*, pp 41-48, ISSN: 1224-7928, Suceava. [Copernicus International, Academic Keys]
 40. Filip, Adina, Maier, V., Pavel, S. G., Beleiu H. G. Identifying the Optimal Solution by Including Predetermination Phase in Indoor Lighting System Design. In: *Proceedings of WESC 2012*, pp 701-708, ISSN: 1224-7928, Suceava. [Copernicus International, Academic Keys]
 41. Pavel, S. G., Vesa, T., Birou, I., Maier, V. Software interface for the total losses determination using paladin designbase. In: *Proceedings of WESC 2012*, pp 83-88, ISSN: 1224-7928, Suceava. [Copernicus International, Academic Keys]
 42. Birou, I. M.T., Maier, V., Pavel, S. G., Vese, Ioana Improved power quality in MV/LV power grids using power electronic converters. In: *Proceedings of WESC 2012*, pp 349-354, ISSN: 1224-7928, Suceava. [Copernicus International, Academic Keys]
 43. Maier, V., Pavel, S. G., Birou, I., Beleiu H. G. Voltage Slow Variations and Harmonics Analysis in a LV Distribution Point. In: *Proceedings of EPE 2012*, pp 909-915, ISSN: 1223-8139, October 25-27, Iași. [IEEE, SCOPUS]
 44. Polec, Victoria, Maier, V., Pavel, S. G., Beleiu H. G. Analytical Identification of the Influence Coefficient of the Receivers Equivalent Number and Applications. In: *Proceedings of EPE 2012*, pp 207-212, ISSN: 1223-8139, October 25-27, Iași. [IEEE, SCOPUS]
 45. Pavel, S. G., Tămaș, A., Maier, V. Birou, I., Drăghiciu, D., Vermeșan, C., Nedelcu Speranța. Cluj Region MV Network Modelling and Applications using Paladin Designbase. In: *Acta Electrotehnica*, Volume 52, Number 5, 2011, Editura Mediamira, Cluj-Napoca, ISSN 1841-3323, pp. 352-356. [BDI]
 46. Toma, Carmen, Maier, V. and Pavel, S. G. Protection Variants of the Low Voltage General Panel from the Power Substations. In: *Acta Electrotehnica*, Volume 52, Number 5, 2011, Editura Mediamira, Cluj-Napoca, ISSN 1841-3323, pp. 465-471. [BDI]
 47. Maier, V., Pavel, S. G. and Beleiu, H. G. Contributions to Harmonics Analysis Using Discrete Fourier Transform. In: *Acta Electrotehnica*, Volume 52, Number 5, 2011, Editura Mediamira, Cluj-Napoca, ISSN 1841-3323, pp. 247-252. [BDI]
 48. Birou, I., Pavel, S.G., Rusu, C., Wind Generator with Direct Torque Controlled Permanent Magnet Synchronous Machine. In: *Acta Electrotehnica*, Volume 52, Number 5, 2011, Editura Mediamira, Cluj-Napoca, ISSN 1841-3323, pp. 69-73. [BDI]
 49. Birou, I., Maier, V., Pavel, S.G., Rusu, C.: Indirect Vector Control of an Induction Motor with Fuzzy-Logic based Speed Controller. In: *Advances in Electrical and Computer Engineering*, Vol.10, No.1, 2010, pp. 116-120, ISSN 1582-7445 [ISI].
 50. Maier, V., Pavel, S. G., Birou I., Actual problems in achieving and equipping the power substations. In: *Proceedings of the 6th International Conference on Electrical & Power Engineering (EPE 2010)*, ISBN 978-606-13-0079-2, pp I-151 ÷ I 154, Iași, 28 - 30 octombrie, 2010 Romania. [SCOPUS]

51. Maier, V., Reider, L., **Pavel, S.G.**, Nedelcu Speranța. Demand powers and voltage losses in open loop distribution networks for domestic end-users. In: *Acta Electrotehnica*, volumul 51, numărul 5/2010, pp 233-237, ISSN 1841-3323, Cluj-Napoca, Romania, 2010, Categoria B+, Cod CNCISIS 576., Cluj-Napoca, 18-21 mai 2010, Romania. [BDI]
52. **Pavel, S.G.**, Tămaș, A., Maier, V., Birou, I., Nedelcu Speranța. Medium voltage network efficiency determination for the urban zone of Cluj using Paladin DesignBase. In: *Acta Electrotehnica*, volumul 51, numărul 5/2010, pp 293-297, ISSN 1841-3323, Cluj-Napoca, Romania, 2010, Categoria B+, Cod CNCISIS 576., Cluj-Napoca, 18-21 mai 2010, Romania. [BDI]
53. Mateaș, M., Maier, V. and **Pavel, S. G.** The equivalent receiver concept. In: *Acta Electrotehnica*, MEDIAMIRA Science Publisher, Cluj-Napoca, ISSN 1841-3323, vol. 51, nr. 3, 2010, pp 221-226, Categoria B+, Cod CNCISIS 576., Cluj-Napoca, iulie 2010, Romania. [BDI]
54. Maier, V., **Pavel, S.G.**, Maier, C.D. and Birou, I. *Correct application of the Discrete Fourier Transform in Harmonics*. Advances in Electrical and Computer Engineering (AECE), Nr. 1 (29)/2008, pp 26-31, ISSN 1582-7445, Suceava, Romania [ISI].
55. Maier, V., **Pavel, S. G.** Heterogeneous receivers connecting in the low voltage distribution network, In: *Acta Electrotehnica*, volumul 49, numărul 2/2008, ISSN 1841-3323, Cluj-Napoca, Romania, 2008. [BDI]
56. **Pavel, S. Gh.**, MAIER, V. Criterion for the low voltage distribution network organisation, In: *Acta Electrotehnica*, volumul 49, numărul 2/2008, ISSN 1841-3323, Cluj-Napoca, Romania, 2008 Categoria B+, Cod CNCISIS 576. [BDI]
57. Maier, V., **Pavel, S. G.**, Birou, I.M.T. Connecting the maximum power receiver in the equivalent receivers network, In: *Acta Electrotehnica, Proceedings of the 2nd International Conference on Modern Power Systems MPS 2008*, pp 166-170, Cluj-Napoca, 12-14 noiembrie 2008, Romania. [BDI]
58. Vădan, I., **Pavel, S.G.**, Botezan, A., Ardelean, S., Mutu, A. The developing of a scientific renewable energies park. In: *Proceedings of the 2nd International Conference on Modern Power Systems MPS 2008*, pp 265-269, Cluj-Napoca, 12-14 noiembrie 2008, Romania. [BDI]
59. **Pavel, S.G.**, Maier, V., Birou, I. Compensating-Symmetrizing Process Control using Virtual Instrumentation, AQTR 2008 *IEEE Catalog Number: CFP08AQT-PRT*, IEEE Catalog Number:CFP08AQT, ISBN 978-1-4244-2577-8 (baza de date Xplore), ISBN 978-1-4244-2576-1 (Proceedings), Library of Congress 2008904446 covered by *ISI Proceedings*. [IEEE]
60. Birou, I., Rusu, C., **Pavel, S.G.** Adaptive Identification Algorithms and Robust Control Strategies used for Performant Electrical Drives with AC Machines, AQTR 2008, *IEEE Catalog Number:CFP08AQT*, ISBN 978-1-4244-2577-8 (baza de date Xplore), ISBN 978-1-4244-2576-1 (Proceedings), Library of Congress 2008904446 covered by *ISI Proceedings*. [IEEE]

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

- Reviste

1. V. Maier, S. G. Pavel, V. Fărcaș, H. G. Beleiu. Contributions to the Unbalanced Regime Analysis (Contribuții la analiza regimului nesimetric). *Revista Energetica* nr. 6 / 2014, ISSN: 1453-2360, volumul 62, București.
2. V. Maier, S. G. Pavel, H. G. Beleiu and D. Leșe *Analysis Methodology of Voltage Slow Variations*. *Energetica* nr. 7, Volumul 61, ISSN 1453-2360, 2013, București.
3. Maier, V., **Pavel, S. G.** and Mateaș, M. Technical and Economical Analisys for the low Voltage Electrical Network Organizing Methods. In: *Buletinul Institutului Politehnic Iași*, Tome LVI (LX), Fasc. 3, seria Electrotehnică, Energetică, Electronică, 2010, ISSN 1224-3884, pp 77-83, Categoria B+, Cod CNCISIS 87, Iași, august 2010, Romania.
4. Birou, I., Maier, V., **Pavel, S. G.**, Rusu, C. Control of ac drives; a balance between dynamic performance, energy efficiency and cost constrains. In: *Anals of the University of Craiova, Electrical Engineering series* (Analele Universității din Craiova, seria Inginerie Electrică) no. 34, 2010, vol. II, pp 42-47, ISSN 1842-4805, Craiova, Romania, 7-8 octombrie 2010, Categoria B, Cod CNCISIS 174.
5. Leach Florina, Vădan, I., Munteanu, R. A., Maier, V., **Pavel, S. G.** Assessment of wind energy potential in a Cluj-Napoca city location. In: *Scientific Bulletin of the "Politehnica" University of Timișoara*, volumul 54(68) / 2009, pp 281-288, ISSN 1582-7194, Timișoara, Romania, 2009.

6. Maier, V., **Pavel, S. G.**, Maier, C.D. Monitorizarea calității energiei electrice prin instrumente virtuale. In: *Revista Energetica nr. 4*, aprilie 2009, ISSN 1453-2360, pp 214 - 219, București, 2009.
7. Maier V., **Pavel S.G.** Luminance variation assessment in road nocturnal lighting. În: *Ingineria iluminatului*, vol 9, No 20 - Winter, 2007, Ed. Mediamira, Cluj-Napoca, ISSN 1454-5837.

- Selecție cu maximum 20 lucrări în volume de conferințe

8. Maier, V, Pavel, S. G., Birou, I., Beleiu H. G. *Technical and Economic Analysis of Soft Starter Providing in LV Electrical Installations*, In: Proceedings of the 17th national conference on electrical drives CNAE 2014, pp 137 - 147, Analele Universității "Eftimie Murgu" ISSN: 1453-7397, Reșița 9 - 10 octombrie 2014.
9. Pavel, S.G., Maier, V., Birou, I. and Beleiu, H.G. *Harmonics Analysis Using DFT*, SIELMEN 2013, ISBN 978-606-13-1560-4, October 15-18, Chișinău, Republic of Moldova.
10. BIROU, I. M.T., MAIER, V., PAVEL, S. G., *Power Quality in Low Voltage Power Grids by Using Electronic Power Converters*, SIELMEN 2013, ISBN 978-606-13-1560-4, October 15-18, Chișinău, Republic of Moldova.
11. Maier, V., **Pavel, S. G.**, Birou I., Differentiate Definition of Harmonics Indicators for the AC and DC Waves. In: *Proceedings of the 8th International Conference on Electromechanical and Power Systems* (SIELMEN 2011), pp 216 ÷ 222, Chișinău, 13 - 15 octombrie 2011, Moldova.
12. Maier, V., Turcu, A., **Pavel, S. G.**, Birou I., Analysis and simulation of unbalanced systems, In: *Proceedings of the 10th International Conference on Development and Application Systems* (DAS 2010), ISSN 1844 - 5020, pp 37, Suceava, May 27-29, 2010, Romania.
13. Maier, V., **Pavel, S. G.** Flicker dose in the road lighting. In: *Proceedings of the 5th International Conference ILUMINAT 2009*, Cluj-Napoca, 20 February, 2009, ISBN 978-973-713-232-1, p L9/1 - L9/9.
14. Birou I. M.T., Maier, V., **Pavel, S. G.**, Rusu, C. Indirect Vector Control of an Induction Motor with Fuzzy-Logic based Speed Controller. In: *Proceedings of the 3rd International Symposium on Electrical Engineering and Energy Converters*, ISSN 2066-835X, pp 149-154, Suceava, September 25-26, 2009.
15. Maier, V., **Pavel, S. G.**, Birou I., Cojan, N. Comparative analysis of methods for the end-users low voltage power distribution organizing. In: *Proceedings of the 7th International Conference of Electromechanical and Power Systems*, ISBN 978-606-520-617-5 (vol. 1), pp 71-76, Iași, 8-9 October, 2009.
16. Birou I. M.T., **Pavel S. G.** Sensorless AC Driving Systems based on Adaptive Identification Algorithms and Robust Control Strategies. In: *Proceedings of 9th International Conference on Development and Application Systems*, ISSN 1844-5020 și ISSN 1844-5039, Suceava, May 22-24, 2008.
17. Maier V., Turcu, A.C., **Pavel, S.G.** Control system design of a single phased power receiver for the compensating-symmetrizing process. In: In: Proceedings of 11th IEEE International Research / Expert Conference TMT 2007, pp 1099-1103, Hammamet, Tunisia, 05-09 September, 2007, ISBN 978-9958-617-34-8.
18. Turcu, A.C., Maier V., **Pavel, S.G.** Testing algorithm for negative asymmetry coefficient calculus for a Steinmetz symmetrizing circuit. In: In: Proceedings of 11th IEEE International Research / Expert Conference TMT 2007, pp 1095-1099, Hammamet, Tunisia, 05-09 September, 2007, ISBN 978-9958-617-34-8.
19. Ardelean, Simona, Vădan, I., **Pavel, S.G.**, Căpățână, D și Călărașu, Alina. Cantrală hibridă hidro-eoliană. În : *Buletinul științific al celei de a 7-a Conferințe Internaționale de Electroenergetică - The Power Systems Conference PSC2007*, pp. 15-20, noiembrie 2007, Timișoara, ISSN 1582-7194.

E. Brevete obținute în întreaga activitate

1.

Data: octombrie 2024

Semnătura:

Prof. dr. ing. Sorin Gheorghe PAVEL