LISTA PUBLICAŢIILOR

Ioana-Monica POP-CĂLIMANU

1. Lucrări ştiinţifice publicate în reviste indexate Web of Science-WoS (ISI)

1. **I.M. Pop-Calimanu**, F. Renken, "New Multiphase Hybrid Boost Converter with Wide Conversion Ratio for PV System", Hindawi Publishing Corporation International Journal of Photoenergy, vol 2014, Article ID 637468, 17 pages, Accession Number: WOS:000335769800001, ISSN: 1110-662X, elSSN: 1687-529X

2. **I.M Pop-Calimanu**, T. Anna, V. Popescu, G. Muntean, "A Low Cost System for Testing and Monitoring the Performance of Photovoltaic Module", Advances in Electrical and Computer Engineering, vol 13, issue 4, pp. 93-98, 2013, Accession Number: WOS:000331461300016, ISSN: 1582-7445, elSSN: 1844-7600

3. M. Gurbina, A. Ciresan, D. Lascu, S. Lica**, I.M. Pop-Calimanu**, "A New Exact Mathematical Approach for Studying Bifurcation in DCM Operated dc-dc Switching Converters", ENERGIES, Volume: 11 Issue: 3 Article Number: 663 Published: MAR 2018, DOI: 10.3390/en11030663, Accession Number: WOS:000428304300191, ISSN: 1996-1073.

4. **I.M. Pop-Calimanu**, S. Lica, S. Popescu, D. Lascu, I. Lie, R. Mirsu, "A New Hybrid Inductor-Based Boost DC-DC Converter Suitable for Applications in Photovoltaic Systems", ENERGIES, Volume: 12 Issue: 2 Article Number: 252, Published: JAN 2019, DOI: 10.3390/en12020252, Accession Number: WOS:000459743700053, ISSN: 1996-1073, Q2

5. **Pop-Calimanu**, **Ioana-Monica**, Maria Balint, and Dan Lascu. 2020. "A New Hybrid Ćuk DC-DC Converter with Coupled Inductors" Electronics 9, no. 12: 2188. Volume9 Issue12, Article Number 2188, DOI10.3390/electronics9122188, Published DEC 2020, Indexed 2021-01-12, Accession Number WOS:000601967600001, eISSN2079-9292, Q2

6. **Pop-Calimanu**, **Ioana-Monica**, Sorin Popescu, and Dan Lascu. 2022. "A New SEPIC-Based DC-DC Converter with Coupled Inductors Suitable for High Step-Up Applications" Applied Sciences 12, no. 1: 178.APPLIED SCIENCES-BASEL , Volume12, Issue1, Article Number 178, DOI10.3390/app12010178, Published JAN 2022, Indexed 2022-03-06, Accession NumberWOS:000758849400001, eISSN2076-3417, Q2

7. Mirsu Radu, Georgiana Simion, Catalin D. Caleanu and **Ioana M.Pop-Calimanu**. 2020. " A PointNet-Based Solution for 3D Hand Gesture Recognition " Sensors 20, no. 1:3226. Volume 20, Issue 11, Article number 3226, DOI10.3390/s20113226, Published Jun 2020, Indexed 2020-08-12, Accession Number WOS:000552737900219, PubMed ID32517141, Q1

8. Pop, GM; **Pop-Calimanu, IM**; Lascu, D,"" Fourth-Order Quadratic Buck Converter Controller Design"" , 2024, SENSORS, Volume 24, Issue 2, DOI10.3390/s24020557, Q2"

9. Botila, Delia-Anca ; **Pop-Calimanu, Ioana-Monica** ; Lascu, Dan, " Buck Converter with Cubic Static Conversion Ratio", 2024, SENSORS, Volume 24, Issue 2, DOI10.3390/s24020696, Q2

2. Lucrări ştiinţifice publicate în volumele unor manifestări ştiinţifice (Proceedings) indexate Web of Science-WoS (ISI) Proceedings

1. **I.M. Pop-Calimanu** and F. Renken, "A Comparison between Single-Phase and Two-Phase Hybrid Buck L Converter", 2016, 12th International Symposium on Electronics and Telecommunication, ISETC '16, Timisoara, Romania

2. Folker Renken, Udo Schürmann, Qingyue Chen and **Ioana-Monica Pop-Calimanu** "Novel Hybrid Buck L converter for Wide Conversion Ratios", 2016 17th International Conference on Power Electronics and Motion Control, IEEE-PEMC 2016, Varna, Bulgaria, Septembrie 2016, pp. 158-167, IEEE

3.F. Renken, **I.M. Pop-Calimanu**, U. Schurmann "Novel multiphase hybrid Boost converter with wide conversion ratio", 2014 16th European Conference on Power Electronics and Applications, EPE'14-ECCE Europe, Lappeenranta, August 2014, pp. 1-10, IEEE

4. **I.M. Pop-Calimanu**, F. Prutianu, V. Popescu, "Design and Simulation of DC/DC Boost Converter used for a Distributed Sensing System Based on a Multidrop Sensor Network with RS485 Interface", 2012 10th International Symposium on Electronics and Telecommunication, ISETC '12, Timisoara, Romania, ISBN: 978-1-4673-1175-5(IEEE catalog number: CFP1203L-CDR), Noiembrie 2012, pp.79-82, IEEE

5. F. Prutianu, **I.M. Pop-Calimanu**, V. Popescu, "Validation system for power supply module part of automotive ECUs", 2012 10th International Symposium on Electronics and Telecommunication, ISETC '12, Timisoara, Romania, ISBN: 978-1-4673-1175-5(IEEE catalog number: CFP1203L-CDR), Noiembrie 2012, pp.75-78, IEEE

6. F. Prutianu, **I.M. Pop-Calimanu**, V. Popescu, "Semi-automated power supply efficiency measuring system", 2012 10th International Symposium on Electronics and Telecommunication, ISETC '12, Timisoara, Romania, ISBN: 978-1-4673-1175-5(IEEE catalog number: CFP1203L-CDR), Noiembrie 2012, pp.45-48, IEEE

7. M. Pop-Călimanu,T. Fleșer**, I.M. Pop-Călimanu**, "A fully coupled thermomechanical modeling of jointing process by ultrasonic welding of aluminium-based composite materials", 16th International Conference on Modern Technologies, Quality and Innovation,pp. 777-780, Book Series: International Conference ModTech Proceedings, Sinaia, ROMANIA, 2012, WOS:000392261800195, ISSN: 2069-6736

8. S. Lica, M. Gurbină, D. Lascu, **I.M. Pop-Călimanu**, A. Ciresan, "A Novel Stacked Step-Down Switching Converter", Joint International Conference OPTIM-ACEMP Optimization of Electrical&Electronic Equipment Aegean Conference on Electrical Machines&Power Electronics, pp. 549-554, 2017, WOS:000426909600083, ISBN:978-1-5090-4489-4

9. **M. Pop-Călimanu**, D. Gubencu, I.M. Pop-Călimanu, T. Fleșer, "Optimization of ultrasonic welding parameters and temperature distribution in metal matrix composite based on aluminium", 22th International Conference on Metallurgy and Materials, pp. 1211-1217, 2013, WOS:000333163100199, ISBN:978-80-87294-41-3

10. **I.M. Pop-Calimanu**, D. Lascu, S. Lica, M. Gurbină, F. Renken, "A New Hybrid Boost-L Converter", 19th International Symposium on Power Electronics (Ee), pp. 1-6, Location: NOVI SAD, SERBIA Date: OCT 19-21, 2017, WOS:000426894600012, ISBN:978-1-5386-3502-5

11. S. Lica, **I.M. Pop-Calimanu**, D. Lascu, A. Ciresan, M. Gurbină, "A New Stacked Step-Up Converter", 40th International Conference on Telecommunications and Signal Processing (TSP), pp. 315-319, Location: Barcelona, SPAIN, Date: JUL 05-07, 2017, WOS:000425229000069, ISBN:978-1-5090-3982-1

12. F. Renken,WS. Shen, C. Wang, **I.M.Pop-Calimanu**, A. Ciresan, "Multiphase Hybrid Buck-Boost Converter with Wide Conversion Ratio",19th European Conference on Power Electronics and Applications (EPE ECCE Europe) Location: Warsaw, POLAND Date: SEP 11-14, 2017, WOS:000418374406031, ISBN:978-9-0758-1527-6, ISSN: 2325-0313

13**. I.M. Pop-Calimanu**, S. Lica, D. Lascu, F. Renken, "A Novel Hybrid Buck-L Converter", 2018 20TH European Conference On Power Electronics And pplications (EPE'18 ECCE EUROPE), pp. P.1-P.10, Location: Riga, LATVIA Date: SEP 17-21, 2018, Accession Number: WOS:000450299300157, ISBN:978-9-0758-1528-3, ISSN: 2325-0313

14. F. Renken, D. Piwczyk, WS. Shen, **I.M. Pop-Calimanu**, R. Steinberger-Wilckens, "A Novel Concept to Control the Powertrain in Battery Fuel Cell Hybrid Vehicles", 20th European Conference on Power Electronics and Applications (EPE ECCE Europe) Location: Riga, LATVIA Date: SEP 17-21, 2018, Accession Number: WOS:000450299300185, ISBN:978-9-0758-1528-3, ISSN: 2325-0313

15. S. Lica, **I.M. Pop-Calimanu**, D. Lascu, S. Popescu, M. Tomoroga and A. Ciresan, "A New Hybrid Ćuk Converter," 13th International Symposium on Electronics and Telecommunications (ISETC), Timisoara, Nov. 2018, Pages: 133-136, WOS:000463031500030, ISBN:978-1-5386-5925-0.

16. W. Shen, **I. Pop-Calimanu** and F. Renken, "Test bench to optimize the Powertrain in Battery-Electric and Fuel-Cell Vehicles," 13th International Symposium on Electronics and Telecommunications (ISETC), Timisoara, Nov. 2018, pp. 141-144, WOS:000463031500032, ISBN:978-1-5386-5925-0.

17. **I.M Pop-Calimanu**, S. Lica, D. Lascu, F. Renken, M. Gurbina and R. Mirsu, "A Novel Hybrid Step-Down DC-DC Converter," 2018 IEEE 18th International Power Electronics and Motion Control Conference (PEMC), Budapest, 2018, pp. 34-39, WOS:000462062900004, ISBN:978-1-5386-4198-9.

18. F. Renken, W. Shen, U. Schürmann and **I, . Pop-Calimanu**, "Multiphase DC/DC Converter and its Use in the Powertrain of Fuel Cell Vehicles," 2018 IEEE 18th International Power Electronics and Motion Control Conference (PEMC), Budapest, 2018, pp. 280-286, WOS:000462062900043, ISBN:978-1-5386-4198-9.

19. M. Gurbina, **I.M. Pop-Calimanu**, D. Lascu, S. Lica and A. Ciresan, "Exact Stability Analysis of a Two-Phase Boost Converter," 2018 41st International Conference on Telecommunications and Signal Processing (TSP), Athens, Greece, 2018, pp. 334-33, WOS:000454845100075, ISBN:978-1-5386-4695-3.

20. **I.M Pop-Calimanu**, S. Lica, F. Renken, R. Mirsu, G. Simion and I. Lie, "A Comparison Between Single-Phase and Two-Phase Hybrid Boost-L Converter," 13th International Symposium on Electronics and Telecommunications (ISETC), Timisoara, 2018, pp. 129-132, WOS:000463031500029, ISBN:978-1-5386-5925-0.

21.R. Mîrșu, G.Simion, C. D. Căleanu, O. Ursulescu, **I. Pop-Călimanu**, "Deep Neural Networks vs Bag of Features for Hand Gesture Recognition", " 2019 42st International Conference on Telecommunications and Signal Processing (TSP), Budapest, Hungary, 2019, pp. 369-372

22. D. Botila**, I.M Pop-Calimanu** and D. Lascu, "A Novel Boost Converter with Two Independently Controlled Switches," 2019 International Conference on Electrical Drives & Power Electronics (EDPE), The High Tatras, Slovakia, 2019, pp. 125-130.doi: 10.1109/EDPE.2019.8883895

23. D. Botila, **I.M Pop-Calimanu**, D. Lascu and S. Lica, ""A Novel Buck-Boost Converter with Two Independently Controlled Switches,"" 2019 20th International Symposium on Power Electronics (Ee), Novi Sad, Serbia, 2019, pp. 1-6.doi: 10.1109/PEE.2019.8923275

24. G. -M. Jude, **I. -M. Pop-Calimanu** and F. Renken, "A New Step-Up Converter With Coupled Inductor," 2020 International Symposium on Electronics and Telecommunications (ISETC), 2020, pp. 1-4, doi: 10.1109/ISETC50328.2020.9301041.

25. S. Lica, I. Lie, A. N. Wegner and I. M. Pop-**Călimanu**, "A Generalized Model for Single-Switch Stacked Step-Down Converters," 2020 International Symposium on Electronics and Telecommunications (ISETC), 2020, pp. 1-4, doi: 10.1109/ISETC50328.2020.9301085.

26. **I. -M. Pop-Calimanu**, C. Alexandru-Adrian and M. Pop-Calimanu, "A New Quadratic Step-Down Converter," 2020 International Symposium on Electronics and Telecommunications (ISETC), 2020, pp. 1-4, doi: 10.1109/ISETC50328.2020.9301118.

27. D. -A. Botila, D. Lascu and **I. -M. Pop-Calimanu**, "A Buck Converter Suitable in Low Step-Down Applications," 2021 21st International Symposium on Power Electronics (Ee), 2021, pp. 1-6, doi: 10.1109/Ee53374.2021.9628264.

28. S. Lica, **I. -M. Pop-Calimanu** and D. Lascu, "A New High Performance Step-Down Quadratic Converter," 2021 IEEE 19th International Power Electronics and Motion Control Conference (PEMC), 2021, pp. 15-22, doi: 10.1109/PEMC48073.2021.9432613.

29. **I. -M. Pop-Calimanu,** E. -A. Raducanu, D. Lascu, M. Pop-Calimanu and S. Popescu, "A Novel Quadratic Step-Up DC-DC Converter," 2021 23rd European Conference on Power Electronics and Applications (EPE'21 ECCE Europe), 2021, pp. P.1-P.10.

30. W. Shen, **I. -M. Pop-Calimanu** and F. Renken, "Control Strategy for DC/DC Converter in Drive Train of Fuel Cell Vehicles," 2021 IEEE 19th International Power Electronics and Motion Control Conference (PEMC), 2021, pp. 243-249, doi: 10.1109/PEMC48073.2021.9432532.

31. **I. -M. Pop-Calimanu**, L. D. Jurca, D. Lascu and M. Pop-Calimanu, "A Novel Quadratic Step-Up DC-DC Converter," 2021 IEEE 19th International Power Electronics and Motion Control Conference (PEMC), 2021, pp. 23-30, doi: 10.1109/PEMC48073.2021.9432620.

32. D. -A. Botila, **I. -M. Pop-Calimanu** and D. Lascu, "A Novel Single Switch Step Down Converter," 2021 IEEE 19th International Power Electronics and Motion Control Conference (PEMC), 2021, pp. 31-38, doi: 10.1109/PEMC48073.2021.9432498.

3. Lucrări ştiinţifice publicate în volumele unor manifestări ştiinţifice (Proceedings) indexate BDI (cu specificarea BDI)

1**. I.M. Pop-Calimanu**, F. Prutianu, V. Popescu, "Boost Converter Used in Solar Energy Systems", The 11th International Conference on Engineering of Modern Electric Systems, EMES'11, Oradea, Romania, ISSN 1844 – 6035, Volum 4, Mai 2011,pp. 195-198, Index Copernicus International, Scopus

2. F. Prutianu, **I.M. Pop-Calimanu**, V. Popescu, "Power factor Correction Inductor Design From a Wind Turbine Boost Converter", The 11th International Conference on Engineering of Modern Electric Systems, EMES'11, Oradea, Romania, ISSN 1844 – 6035, Volum 4, Mai 2011, pp. 199-202, Index Copernicus International, Scopus

3. **I.M. Pop-Calimanu**, V. Popescu, "Improvement Performance of Uninterruptible Power Supply", Journal of Electrical and Electronics Engineering, Oradea, Romania, ISSN 1844 – 6035, Volum 3, Iunie 2010, pp. 163-166, Index Copernicus International, Scopus

4. Gabriela-Madalina Jude; **Ioana-Monica Pop-Calimanu**; Dan Lascu,"A Novel Fourth-Order Buck-Boost Converter", In Proceedings of the 2022 IEEE 20th International Power Electronics and Motion Control Conference (PEMC),IEEE. DOI: 10.1109/PEMC51159.2022.9962844

5. Botila, D.A.; **Pop-Calimanu, I.M**.; Lascu, D. Cubic buck-boost converter with high step-up capability. In Proceedings of the 2022 International Symposium on Electronics and Telecommunications (ISETC), Timisoara, Romania, 10–11 November 2022; IEEE.

6. Gabriela-Madalina Jude; **Ioana-Monica Pop-Calimanu**, "A Novel Hybrid Quadratic Buck Converter", In Proceedings of the 2022 International Symposium on Electronics and Telecommunications (ISETC), Timisoara, Romania, 10–11 November 2022; IEEE.

7. Gabriela–Madalina Pop; Lucia-Daniela Jurca; **Ioana–Monica Pop–Calimanu**; Dan Lascu," A New Highly Step-Down Quadratic Converter", 2023 22nd International Symposium on Power Electronics (Ee), IEEE, Novi Sad, Serbia,IEEE. DOI: 10.1109/Ee59906.2023.10346185 ISBN:979-8-3503-4318-2

8. ŞA Albu, **IM Pop-Calimanu**, "A Step-Down Hybrid Converter With Unequal Inductor", 2022 International Symposium on Electronics and Telecommunications (ISETC), Timisoara, Romania, 10–11 November 2022; IEEE

9. DA Botila, **IM Pop-Calimanu**, D Lascu,"" Switched-Capacitor Boost Converter for Low Step-Up Applications"", 2022 IEEE 20th International Power Electronics and Motion Control Conference (PEMC), Pages 301-306, IEEE"

10. G. -M. Pop, A. -A. Cauc, **I. -M. Pop-Calimanu** and D. Lascu, "A Buck-Boost Converter with Asymmetric Static Conversion Ratio," *2024 International Symposium on Electronics and Telecommunications (ISETC)*, Timisoara, Romania, 2024, pp. 1-6, doi: 10.1109/ISETC63109.2024.10797242.

11. G. -A. Perneac, **I. -M. Pop-Calimanu** and D. Lascu, "A New Step-Up/Down DC-DC Converter," *2024 International Symposium on Electronics and Telecommunications (ISETC)*, Timisoara, Romania, 2024, pp. 1-4, doi: 10.1109/ISETC63109.2024.10797252.

12. D. -A. Botila, G. -C. Zaharia and **I. -M. Pop-Calimanu**, "A Buck-Boost Converter with Coupled Inductors for High Voltage Boosting Performance," *2024 International Symposium on Electronics and Telecommunications (ISETC)*, Timisoara, Romania, 2024, pp. 1-5, doi: 10.1109/ISETC63109.2024.10797370.

4. Lucrări ştiinţifice publicate în volumele unor manifestări ştiinţifice

1. F. Renken, **I.M. Pop-Calimanu**, "Hybrid Hochsetzsteller mit weitem Stellbereich", Chapter Meeting des IEEE Joint IAS/PELS/IES, German Chapters Verden, 20.11-21.11.2014

2. **I.M Pop-Calimanu**, O.A. Ciurdar, D. A. Dinca, V. Malcoci, A. Radu, "Solar energy used in buildings", IP „Materials Energy and sustainable Growth", Vilnius, Lituania, 27.02-12.03.2011

3. **I.M Pop-Calimanu**, "Converters Used in Solar Energy Systems", Workshop-ul numarul 1, din cadrul proiectului „Spre cariere de cercetare prin studii doctorale", Timisoara, Romania, Noiembrie 2011.

4. **I.M Pop-Calimanu**, "Design and Simulation of DC/DC Boost Converter used for a Distributed Sensing System Based on a Multidrop Sensor Network with RS485 Interface", Workshop-ul nr. 2, „Interdisciplinaritatea si Managementul cercetarii in studiile doctorale, Oradea, Romania, 7-8 iunie 2012.

5. **I.M Pop-Calimanu**, „Designing a distributed sensing system based on a multidrop sensor network with RS 485 interface", în anul 2010, la Conferinţa Internaţională Zilele Tehnice Studenţesti, ediţia a XIV-a.

5. Carte

1. **Ioana Monica Pop-Călimanu,** Aurel Cireșan, Dan Lascu - Electronică de putere.Experimente, Ed. Politehnica, 2016, ISBN 978-606-35-0113-5

2. **Ioana Monica Pop-Călimanu**, Aurel Filip, Radu Mîrșu, Cătălin-Daniel Căleanu-Circuite electronice fundamentale. Teorie și probleme, Ed. Politehnica, 2019, ISBN 978-606-35-0332-0

3. **Ioana Monica Pop-Călimanu**, Aurel Filip, Radu Mîrșu, Cătălin-Daniel Căleanu-ELECTRONIC CIRCUITS FUNDAMENTALS. THEORY AND PROBLEMS, EDITURA POLITEHNICA TIMIȘOARA, 2024, ISBN 978-606-35-0603-1

4. **Ioana Monica Pop-Călimanu**, Aurel Cireșan, Dan Lascu - ANALYSIS, DESIGN, EXPERIMENTS, EDITURA POLITEHNICA TIMIȘOARA, 2024, ISBN 978-606-35-0604-8

6. Teza de doctorat

1. **Ioana-Monica Pop**, "A New Class of High Efficiency Multiphase DC-DC Converters" - Teza de doctorat, Ed. Politehnica, 2015, ISBN: 978-606-554-972-2, 208 pagini.

Data Semnătura

24.02.2025