

Meno a priezvisko: doc. Ing. Michal Frivaldský, PhD.
 Študijný odbor: Silnoprúdová elektrotechnika
 Vysoká škola: Katedra mechatroniky a elektroniky, FEIT UNIZA

Zoznam najvýznamnejších vedeckých prác

Názov	Citácie
1. Frivaldsky M. , Donic T., Vavrus V., et al.: <i>Experimental research of optimization methodology for local, resistive - heating of thin molybdenum plates</i> , In: INTERNATIONAL JOURNAL OF THERMAL SCIENCES, Volume: 121, Pages: 111-123, Published: NOV 2017, ISSN: 1290-0729 Index: Q1 - CC, SCI, SCI-Exp, SCOPUS, IF (2017) = 3,361.	
2. Frivaldsky M. , Spanik P., Drgona P., et al.: <i>Algorithms for indirect investigation of heat distribution in electronic systems</i> , In: INTERNATIONAL JOURNAL OF THERMAL SCIENCES, Volume: 114, Pages: 15-34, Published: APR 2017, ISSN: 1290-0729 Index: Q1 - CC, SCI, SCI-Exp, SCOPUS, IF (2017) = 3,361.	1 (WoS)
3. Frivaldsky M. , Cuntala J., Spanik P.: <i>Simple and accurate thermal simulation model of supercapacitor suitable for development of module solutions</i> , In: INTERNATIONAL JOURNAL OF THERMAL SCIENCES, Volume: 84, Pages: 34-47, Published: OCT 2014, ISSN: 1290-0729 Index: Q1 - CC, SCI, SCI-Exp, SCOPUS, IF (2014) = 2,629.	11 (WoS) + 4 (Scopus)
4. Frivaldsky M. , Drgona P., Spanik P.: <i>Experimental analysis and optimization of key parameters of ZVS mode and its application in the proposed LLC converter designed for distributed power system application</i> , In: INTERNATIONAL JOURNAL OF ELECTRICAL POWER & ENERGY SYSTEMS, Volume: 47, Pages: 448-456, Published: MAY 2013, ISSN: 0142-0615 Index: Q1 - CC, SCI, SCI-Exp, SCOPUS, IF (5-year) = 4,262.	10 (WoS) + 8 (Scopus)
5. Frivaldsky M. , Pavelek M., Spanik P.: <i>Multilevel simulation of the influence of magnetic shield geometric alternatives on the quality factor of the wireless power transfer coils</i> , In: ELECTRICAL ENGINEERING, online article first, Springer – Verlag, 2019, ISSN: 0948-7921 Index: Q3 - CC, SCI, SCI-Exp, SCOPUS, IF (2018) = 1,296.	
6. Frivaldsky M. , Spanik P., Morgos J., et al.: <i>Control Strategy Proposal for Modular Architecture of Power Supply Utilizing LCCT Converter</i> , In: ENERGIES, Volume: 11, Issue: 12, Article Number: 3327, Published: DEC 2018, ISSN: 1996-1073 Index: Q3 - CC, SCI, SCI-Exp, SCOPUS, IF (2018) = 2,707.	
7. Frivaldsky M. , Cuntala J., Spanik P., et al.: <i>Investigation of thermal effects and lifetime estimation of electrolytic double layer capacitors during repeated charge and discharge cycles in dedicated application</i> , In: ELECTRICAL ENGINEERING, Volume: 100, Issue: 1, Pages: 11-25, Published: MAR 2018, ISSN: 0948-7921 Index: Q3 - CC, SCI, SCI-Exp, SCOPUS, IF (2018) = 1,296.	1 (WoS) 3 (Scopus)
8. Frivaldsky M. , Hanko B., Prazenica M., et al.: <i>High Gain Boost Interleaved Converters with Coupled Inductors and with Demagnetizing Circuits</i> , In: ENERGIES, Volume: 11, Issue: 1, Article Number: 130, Published: JAN 2018, ISSN: 1996-1073 Index: Q3 - CC, SCI, SCI-Exp, SCOPUS, IF (2018) = 2,707.	1 (WoS)
9. Spanikova G., Spanik P., Frivaldsky M. , et al.: <i>Electric model of liver tissue for investigation of electrosurgical impacts</i> , In: ELECTRICAL ENGINEERING, Volume: 99, Issue: 4, Special Issue: SI, Pages: 1185-1194, Published: DEC 2017, ISSN: 0948-7921 Index: Q3 - CC, SCI, SCI-Exp, SCOPUS, IF (2017) = 1,296.	2 (WoS)
10. Frivaldsky M. , Kozacek B.: <i>Improvement of qualitative indicators of LLC converter using the evaluation method FoM of perspective semiconductor and magnetic components</i> , In: ELECTRICAL ENGINEERING, Volume: 99, Issue: 4, Special Issue: SI, Pages: 1195-1206, Published: DEC 2017, ISSN: 0948-7921 Index: Q3 - CC, SCI, SCI-Exp, SCOPUS, IF (2017) = 1,296.	
11. Frivaldsky M. , Piri M., Spanik P., et al.: <i>Peak efficiency and peak power point operation of wireless energy transfer (WET) system-analysis and verification</i> , In: ELECTRICAL ENGINEERING, Volume: 99, Issue: 4, Special Issue: SI, Pages: 1439-1451, Published: DEC 2017, ISSN: 0948-7921 Index: Q3 - CC, SCI, SCI-Exp, SCOPUS, IF (2017) = 1,296.	1 (Scopus)
12. Frivaldsky M. , Pavelek M., Spanik P., Faktorova D., Spanikova G.: <i>Approximation of complex organic tissue for investigation of the electromagnetic impact</i> , In: COMPEL-THE INTERNATIONAL JOURNAL FOR COMPUTATION AND MATHEMATICS IN ELECTRICAL AND ELECTRONIC ENGINEERING, Article in press, 2019, ISSN: 0332-1649	

Index: Q4 - CC, SCI, SCI-Exp, SCOPUS, IF (2018) = 0,705.	
13. Friwaldsky M. , Morgos J., Kanovsky A.: <i>Dual Interleaved LLC Converter for High Power Applications and Wide Load Range</i> , In: ELEKTRONIKA IR ELEKTROTECHNIKA, Volume: 25, Issue: 3, Pages: 4-9, Published: 2019, ISSN: 1392-1215 Index: Q4 - CC, SCI, SCI-Exp, SCOPUS, IF (2018) = 0,684.	
14. Kindl V., Friwaldsky M. , Spanik P., et al.: <i>Transfer properties of various compensation techniques for wireless power transfer system including parasitic effects</i> , In: COMPEL-THE INTERNATIONAL JOURNAL FOR COMPUTATION AND MATHEMATICS IN ELECTRICAL AND ELECTRONIC ENGINEERING, Volume: 36, Issue: 4, Pages: 1198-1219, Published: 2017, ISSN: 0332-1649 Index: Q4 - CC, SCI, SCI-Exp, SCOPUS, IF (2017) = 0,705.	
15. Friwaldsky M. , Dobrucky B., Prazenica M., et al.: <i>Multi-tank resonant topologies as key design factors for reliability improvement of power converter for power energy applications</i> , In: ELECTRICAL ENGINEERING, Volume: 97, Issue: 4, Pages: 287-302, Published: DEC 2015, ISSN: 0948-7921 Index: Q4 - CC, SCI, SCI-Exp, SCOPUS, IF (2015) = 0,662.	4 (WoS) + 8 (Scopus)
16. Dobrucky B., Friwaldsky M. , Koscelnik J.: <i>Analysis of non-linear inverter circuitry of LCTLC topologie</i> , In: COMPEL-THE INTERNATIONAL JOURNAL FOR COMPUTATION AND MATHEMATICS IN ELECTRICAL AND ELECTRONIC ENGINEERING, Volume: 34, Issue: 3, Special Issue: SI, Pages: 824-839, Published: 2015, ISSN: 0332-1649 Index: Q4 - CC, SCI, SCI-Exp, SCOPUS, IF (2015) = 0,403.	
17. Spanik P., Sedo J., Drgona P., Friwaldsky M. : <i>Real Time Harmonic Analysis of Recuperative Current through Utilization of Digital Measuring Equipment</i> , In: ELEKTRONIKA IR ELEKTROTECHNIKA, Volume: 19, Issue: 5, Pages: 33-38, Published: 2013, ISSN: 1392-1215 Index: Q4 - CC, SCI, SCI-Exp, SCOPUS, IF (5-year) = 0,646.	12 (WoS) + 6 (Scopus)
18. Dobrucky B., Benova M., Friwaldsky M. , et al.: <i>Comparative Analysis of (HF) Non-linear Circuits Modelled by Different Environments</i> , In: ELEKTRONIKA IR ELEKTROTECHNIKA, Volume: 19, Issue: 4, Pages: 25-28, Published: 2013, ISSN: 1392-1215 Index: Q4 - CC, SCI, SCI-Exp, SCOPUS, IF (5-year) = 0,646.	
19. Spanik P., Cuntala J., Friwaldsky M. : <i>Investigation of Heat Transfer of Electronic System through Utilization of Novel Computation Algorithms</i> , In: ELEKTRONIKA IR ELEKTROTECHNIKA, Volume: 123, Issue: 7, Pages: 31-36, Published: 2012, ISSN: 1392-1215 Index: Q4 - CC, SCI, SCI-Exp, SCOPUS, IF (5-year) = 0,646.	3 (WoS) + 3 (Scopus)
20. Kandrac J., Friwaldsky M. , Prazenica M., et al.: <i>Design and Verification of proposed Operation Modes of LLC Converter</i> , In: ELEKTRONIKA IR ELEKTROTECHNIKA, Volume: 18, Issue: 8, Pages: 27-30, Published: 2012, ISSN: 1392-1215 Index: Q4 - CC, SCI, SCI-Exp, SCOPUS, IF (5-year) = 0,646.	5 (WoS)
21. Radvan R., Dobrucky B., Friwaldsky M. , et al.: <i>Modelling and Design of HF 200 kHz Transformers for Hard- and Soft-Switching Application</i> , In: ELEKTRONIKA IR ELEKTROTECHNIKA, Issue: 4, Pages: 7-12, Published: 2011, ISSN: 1392-1215 Index: Q4 - CC, SCI, SCI-Exp, SCOPUS, IF (5-year) = 0,646.	7 (WoS)
22. Spanik P., Sul R., Friwaldsky M. , et al.: <i>Performance Investigation of Dynamic Characteristics of Power Semiconductor Diodes</i> , In: ELEKTRONIKA IR ELEKTROTECHNIKA, Issue: 3, Pages: 3-6, Published: 2010, ISSN: 13921215 Index: Q4 - CC, SCI, SCI-Exp, SCOPUS, IF (5-year) = 0,646.	6 (WoS) + 1 (Scopus)
23. Spanik P., Friwaldsky M. , Drgona P., et al.: <i>Efficiency Increase of Switched Mode Power Supply through Optimization of Transistor's Commutation Mode</i> , In: ELEKTRONIKA IR ELEKTROTECHNIKA, Issue: 9, Pages: 49-52, Published: 2010, ISSN: 13921215 Index: Q4 - CC, SCI, SCI-Exp, SCOPUS, IF (5-year) = 0,646.	12 (WoS) + 1 (Scopus)
24. Spanik P., Drgona P., Friwaldsky M. , et al.: <i>Design and Application of Full Digital Control System for LLC Multiresonant Converter</i> , In: ELEKTRONIKA IR ELEKTROTECHNIKA, Issue: 10, Pages: 75-78, Published: 2010, ISSN: 13921215 Index: Q4 - CC, SCI, SCI-Exp, SCOPUS, IF (5-year) = 0,646.	12 (WoS) + 3 (Scopus)