

## LISTA DE LUCRĂRI

a candidatului Conf. univ. dr. ing. habil CEUCA IOAN EMILIAN

### TEZA DE ABILITARE:

ANALYSIS, MODELING AND DESIGNING OF THE ELECTRONIC CIRCUITS IN AUTOMOTIVE,  
Universitatea din Pitești, 2017

### TEZA DE DOCTORAT:

*I. Emilian CEUCA – Cercetări teoretice și experimentale în simularea circuitelor electronice de putere din automobil – TEZĂ DE DOCTORAT*, Editura Universității Tehnice Cluj Napoca, Cluj-Napoca, 2005, 150 pagini. Coordonator prof. dr. ing. *SERBAN LUNGU* (perioada stagiului de doctorat 1998-2005)

### CĂRȚI ȘI CAPITOLE ÎN CĂRȚI:

- C1. I. Emilian CEUCA – Tendințe actuale în electronica auto. Simularea circuitelor electronice de putere**, Cluj-Napoca, Editura Mediamira, 2007, ISBN: 978-973-713-161-4, 245 pagini.
- C2. I. Emilian CEUCA – Dezvoltarea aplicațiilor client server**, Editura Aeternitas, Alba Iulia, 2007, ISBN 978-973-7942-74-6, 170 de pagini;
- C3. I. Emilian CEUCA – Baze de date și limbaje de programare**, Editura Aeternitas, Alba Iulia, 2009, ISBN 978-973-1890-27-2, 244 de pagini.
- C4. I. Emilian CEUCA – Circuite Electronice**, Editura Aeternitas, Alba Iulia, 2017, ISBN 978-606-613-137-7, 264 de pagini.
- C5. I. Emilian CEUCA – Modelarea Convertoarelor Electronice**, Editura Aeternitas, Alba Iulia, 2017, ISBN 978-606-613-142-1, 150 de pagini.

### Cursuri editate în Seria „DIDACTICA” pentru uzul intern

- CD1.** Remus Joldeș, Ioan Ileană, *I. Emilian CEUCA- Managementul Sistemelor Informaționale. Master MFCA*. Seria „DIDACTICA”, Universitatea „1 Decembrie 1918”, Alba Iulia, 2009; 108 pag.
- CD2. I. Emilian CEUCA – Grafică vectorială**, Seria „DIDACTICA”, Universitatea „1 Decembrie 1918”, Alba Iulia, 2007. 120 pag
- CD3. I. Emilian CEUCA – Prelucrarea imaginilor**, Seria „DIDACTICA”, Universitatea „1 Decembrie 1918”, Alba Iulia, 2007, 130 pag.
- CD4. I. Emilian CEUCA – Programare avansată Windows**, Seria „DIDACTICA”, Universitatea „1 Decembrie 1918”, Alba Iulia, 2007, 130 pagini.
- CD5.I. Emilian CEUCA – Rețele de calculatoare**, Seria „DIDACTICA”, Universitatea „1 Decembrie 1918”, Alba Iulia, 2006, 100 pagini.
- CD6. I. Emilian CEUCA, V. Bucur – Proiectarea sistemelor informatice**, Seria „DIDACTICA”, Universitatea „1 Decembrie 1918”, Alba Iulia, 2006, 150 pagini
- CD7. I. Emilian CEUCA, V. Bucur – Baze de date**, Seria „DIDACTICA”, Universitatea „1 Decembrie 1918”, Alba Iulia, 2005, 300 pagini

**CD8. I. Emilian CEUCA, Circuite Electronice**, Seria „DIDACTICA”, Universitatea „1 Decembrie 1918”, Alba Iulia, 2015, 145 pagini

### **Îndrumătoare de laborator editate în Seria „DIDACTICA”**

**ID1. I. Emilian CEUCA – Grafică pe calculator – Îndrumător de laborator** , Seria „DIDACTICA”, Universitatea „1 Decembrie 1918”, Alba Iulia, 2007, 80 pagini

**ID2. I. Emilian CEUCA – Prelucrarea imaginilor - Îndrumător de laborator**, Seria „DIDACTICA”, Universitatea „1 Decembrie 1918”, Alba Iulia, 2007 – 65 pagini

### **Lucrări publicate indexate ISI Thompson sau baze de date internaționale BDI**

#### **2005**

**B1. Emilian Ceuca**, Șerban Lungu și G. Chindris: „Increasing the electrical power of alternators for the next car - a simulation approach” Proceeding of the IASTED International Conference on Modelling Identification and Control MIC 2005, INNSBRUCK, AUSTRIA, 16-18 Februarie 2005, ISBN 0 88986-474-8 ISSN 1025 8973, pag.322-327; (<http://www.actapress.com/Abstract.aspx?paperId=19342>)

#### **2006**

**B2. Ceuca, E** ; Joldes, R; Olteanu, E Title: Simulation of automotive alternator solution for increasing electrical power, 2006 IEEE/TTC INTERNATIONAL CONFERENCE ON AUTOMATION, QUALITY AND TESTING, ROBOTICS, VOL 1, PROCEEDINGS Pages: 292-296 Published: 2006 Accession Number: WOS:000241459500054 Conference Title: IEEE/TTC , International Conference on Automation, Quality and Testing, Robotics , Conference Date: MAY 25- 28, 2006, Conference Location: Cluj Napoca, ROMANIA

**B3. Emil Olteanu, Remus Joldeș, Emilian Ceuca:** “Matrix Shape for Rotations Operators in Graphics Mediar”, Proceedings of 2006 IEEE-TTTC International Conference on Automation, Quality&Testing, Robotics AQTR 2006 (THETA 15)- TOME II, Cluj Napoca România, 25-28 May 2006; IEEE Catalog Number:06EX1370, ISBN 1 -4244-0360-x, Library of Congress:2006924077

#### **2007**

**B4. Ceuca, E, Olteanu, E; Joldes, R,** Digital technique of circuit's analyses, 2007 30TH INTERNATIONAL SPRING SEMINAR ON ELECTRONICS TECHNOLOGY Book Series: International Spring Seminar on Electronics Technology, ISSE Pages: 571- 574, DOI: 10.1109/ISSE.2007.4432922 Published: 2007, Accession Number: WOS:000255232500112, Conference Title: 30th International Spring Seminar on Electronics Technology, Conference Date: MAY 09-13, 2007, Conference Location: Cluj Napoca, ROMANIA, ISBN: 9781424412174

**B5. Ceuca, E; Olteanu, E; Joldes, R,** Extended voltage level in automotive Simulation approach 2007 30TH INTERNATIONAL SPRING SEMINAR ON ELECTRONICS TECHNOLOGY Book Series: International Spring Seminar on Electronics Technology, ISSE Pages: 575-578 DOI: 10.1109/ISSE.2007.4432923 Published: 2007, Accession Number: WOS:000255232500113, Conference Title: 30th International Spring Seminar on Electronics Technology ,Conference Date: MAY 09- 13, 2007, Conference Location: Cluj Napoca, ROMANIA, ISBN: 9781424412174,

#### **2009**

**B6. E. Ceuca, A. Tulbure and I. Ileană,** *Experimental Research in Simulation of the Automotive Alternators and Solutions for Extend Voltage Level* Proceedings of the 2010 IEEE 16th International Symposium for Design and Technology of Electronics Packaging (SIITME), 17-20 Sep 2009, Gyula, Hungary, pag. 215-220, ISBN: 978-1-4244-50330309;

**B7. Ceuca E.;** Tulbure A., Cabulea L., Ileana I. *Educational Platform GUI for Modeling and Simulation of DC-DC Resonant Converters*, Proceedings of the MMACTEE09 - 11th

International Conference of Mathematical Methods and Computational Technique in Electrical Engineering, Athens, Greece, September 28-30, 2009 pp.753-757, ISBN 978-960- 474-124-3; ISSN 1790-2769

## 2010

- B8.** A.Tulbure, D.Turschner, M.Abrudean, **E.Ceuca**, R.Ormenisan *Experimental Comparison of Switching with IGBT and MOSFET*, 2010 IEEE International Conference on Automation, Quality and Testing, Robotics, AQTR 2010 - THETA 17 - May 28-30 2010, Cluj-Napoca, Romania ISBN 978-1-4244-6722-8, pag.190-194.
- B9.** T. Dachin, V. Iancu, C.M. Nemes, **E. Ceuca**: "Battery Charger Circuit Through Maximum Differential Voltage Tracking" Proceedings of 2010 IEEE-TTTC International Conference on Automation, Quality&Testing, Robotics AQTR 2010 (THETA 17) - TOME III, Cluj Napoca România, 28-30 May 2010; IEEE Catalog Number: CFP10 AQT-CDR, ISBN 1 -4244-6723-5, pag. 468-489
- B10.** **I. E. Ceuca**, A. Tulbure, O. Domsa and C.Covaciu *Study from implementing algorithms for face detection and recognition for embedded systems*, 2010 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR2010) - THETA 17 - TOME III, Cluj Napoca România, 28-30 May 2010; ISBN 978-1-4244-6724-2, pag. 181-185;
- B11.** **E.Ceuca**, S. Lungu, A.Tulbure, G. Brezeanu, *Experimental Stand for Research the Alternators Directions of Further Development*. Proceedings of the 12th International Conference on Optimization of Electrical and Electronic Equipment OPTIM Brasov, Romania, 19-22 May 2010, BRAȘOV, ISBN:978-973-131-080-0 ISSN: 1842-0133.
- B12.** **Ceuca E.**; Tulbure A., Cabulea L., Dalchin T. *Educational Platform GUI for Modeling and Simulation of DC-DC Half Wave Resonant Converters*, Proceedings of the 14th WSEAS International Conference on Circuits, Corfu Island, Greece, July 22-24, 2010, pp.116-121, ISBN 978-960-474-198-4; ISSN 1792-4227
- B13.** **Emilian Ceuca**, Adrian Tulbure, Ioan Ileana, Gh Brezeanu, Cosmin Covaciu: "Wind energy evaluation and solution for home applications", ATOM –N 2010 – The 5-th International Conference, Advanced Topics in Optoelectronics, Microelectronics and Nanotechnologies Constanta, Romania, 26-29 August 2010, Proc. of SPIE Vol. 7821, ISBN 978-0-8194-7670-8, pag. 78210P1-P7
- B14.** **I.E.Ceuca** A. Tulbure and M. Ristoiu *The Evaluation of Regenerative Braking Energy*. Proceedings of the 2010 IEEE 16th International Symposium for Design and Technology of Electronics Packaging (SIITME), 23-26 Sep 2010, Pitesti, Romania, pag. 65-68, ISBN: 978- 1-4244-8123-1
- B15.** A Vasile, P. Svasta, A Brodeala, C Marghescu, C. Ionescu, **Emilian Ceuca**: " EDLC Characterization Platform", SIITME 2010 - 16 TH International Szmposium for Design and Technology of Electronics Package, Pitesti, ROMANIA, 23 -26 Septembrie 2010; ISBN: 978-1-4244-50330309 pag. 186-188;

## 2011

- B16.** A.Tulbure, **E.Ceuca** and I.Ileana "Electrical Behaviour of a Power Unit at the Limits of the Nominal Range" Proceedings of the 2011 IEEE 17th International Symposium for Design and Technology of Electronics Packaging (SIITME), 20-23 Oct 2011, Timisoara, Romania, ISBN 978-1-4577-1276-0, pag 125-128
- B17.** **Emilian CEUCA**, Adrian TULBURE, Simona PLESA, "Integrated monitoring system for tracking green energy production", Proceedings of the 2011 IEEE 17th International Symposium for Design and Technology of Electronics Packaging (SIITME2011), 20-23 Oct 2011, Timisoara, Romania, ISBN 978-1-4577-1276-0, pag 145-148.

## 2012

- B18.** Ceuca, E.; Tulbure, A.; Plesa, S. *The battery management in green energy production* Proceedings of the 35-th International Spring Seminar on Electronics Technology (ISSE2012), 09-13.Mai 2012, Bad Aussee, Austria, ISSN :2161-2528, E-ISBN :978-1- 4673-2239-3, Print ISBN: 978-1-4673-2241-6, INSPEC Accession Number: 12945511 DOI: 10.1109/ISSE.2012.6273158 , Page(s): 350 – 354
- B19.** Tulbure, A., Albu, M., Ceuca E. *Standard and Customised Measurements for Wind Potential Assessment*, Proceedings of 2012 IEEE International Instrumentation and Measurement Technology Conference, 13-16.may.2012 Graz-Austria, ISSN 1091-5281, ISBN 978-1-4577-1773-4, pag.865-869,
- B20.** Emilian CEUCA, Adrian Tulbure, „Practical Behavior of DC-DC converters in Home Applications - induction hob” Proceedings of the 2012 IEEE 18th International Symposium for Design and Technology in Electronic Packaging (SIITME2012), 25-28 Oct 2012, Alba Iulia, Romania, ISBN: 978-1-4673-4757-0, pag 95- 98

## 2013

- B21.** A. Tulbure, E. Ceuca, C. Farcas and I. Farkas *The Power Quality Influence on the Reliability of PFC Capacitors*. Proceedings of the 36th International Spring Seminar on Electronics Technology International Symposium for Design and Technology in Electronic Packaging (ISSE 2013), 08-12 mai 2013, Alba Iulia, Romania, ISSN 2161-2528, PAG 295-298
- B22.** E. Ceuca, A. Tulbure, A. Taut, O. Pop, I. Farkas *Embedded System for Remote Monitoring of OBD Bus* Proceedings of the 36th International Spring Seminar on Electronics Technology International Symposium for Design and Technology in Electronic Packaging (ISSE 2013), 08-12 mai 2013, Alba Iulia, Romania, ISSN 2161-2528, PAG 305-308
- B23.** Pop, O; Taut, A; Grama, A; Ceuca, E, Analysis and Simulation of LCLR Converters, 2013 PROCEEDINGS OF THE 36TH INTERNATIONAL SPRING SEMINAR ON ELECTRONICS TECHNOLOGY (ISSE) Book Series: International Spring Seminar on Electronics Technology ISSE Pages: 286- 289 Published: 2013 Accession Number: WOS:000374113900054, Conference Title: 36th International Spring Seminar on Electronics Technology, Conference Date: MAY 08-12, 2013, Conference Location: Alba Iulia, ROMANIA, ISSN: 21612528 ISBN: 9781479900367
- B24.** Taut, A; Pop, O; Ceuca, E, System for Energy Recovering with BLDC Motor at Deceleration Momentum, 2013 PROCEEDINGS OF THE 36TH INTERNATIONAL SPRING SEMINAR ON ELECTRONICS TECHNOLOGY (ISSE) Book Series: International Spring Seminar on Electronics Technology ISSE Pages: 299- 304 Published: 2013, Accession Number: WOS:000374113900057, Conference Title: 36th International Spring Seminar on Electronics Technology, Conference Date: MAY 08- 12, 2013,Conference Location: Alba Iulia, ROMANIA,ISSN: 21612528 ISBN: 9781479900367
- B25.** Farago, P; Bogateanu, D; Ceuca, E ; Moisa, C; Hintea, S, Device Mismatch Analysis and Effect Compensation in Fundamental Analog Cells, 2013 PROCEEDINGS OF THE 36TH INTERNATIONAL SPRING SEMINAR ON ELECTRONICS TECHNOLOGY (ISSE) Book Series: International Spring Seminar on Electronics Technology ISSE Pages: 280- 285 Published: 2013, Accession Number: WOS:000374113900053, Conference Title: 36th International Spring Seminar on Electronics Technology, Conference Date: MAY 08- 12, 2013,Conference Location: Alba Iulia, ROMANIA,ISSN: 21612528 ISBN: 9781479900367

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- B27.** E. Ceuca, A. Tulbure, *Modeling and Practical Strategy for PWM Control in Heating Applications*” Proceedings of the 37th International Spring Seminar on Electronics Technology (ISSE 2014), 07-11 mai 2014, Dresden, Germany, Page(s):321 - 326 ISBN 978-3-934142-49-7 INSPEC Accession Number:14562489, DOI:10.1109/ISSE.2014.6887616
- B28.** Ceuca, E; Brezeanu, G,: Practical Behavior of charging applications and command strategy in Wireless Power Supplies 2014 INTERNATIONAL SEMICONDUCTOR CONFERENCE (CAS) Book Series: International Semiconductor Conference Pages: 189- 192, Published: 2014,Accession Number: WOS:000380488300037, Conference Title: International Semiconductor Conference Conference Title: International Semiconductor Conference (CAS 2014), Conference Date: OCT 13- 15, 2014, Conference Location: Sinaia, ROMANIA,ISSN: 1545827X ISBN: 9781479939176

## 2015

- B29.** Ceuca, E ,Trifa, V, Strategy Approach for developing the Control Mode for Modern E- bike Controller developed in Laboratory at "1 DECEMBRIE 1918" University of Alba ,2015 INTERNATIONAL SEMICONDUCTOR CONFERENCE (CAS) Book Series: International Semiconductor Conference Pages: 237-240,Published: 2015,Accession Number: WOS:000380566400047,Conference Title: International Semiconductor Conference Conference Date: OCT 12- 14, 2015,Conference Location: Nat Inst for Res and Dev in Microtehnologies, Sinaia, ROMANIA, ISSN: 1545827X ISBN: 9781479988631.
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- B31.** Purdila, AG; Pristavu, G; Anghel, V; Brezeanu, G; Ceuca, E, LowVoltage Controlled Floating Buck Converter with Imbalanced Stacked MOSFETs Switch (ISMS) for High LED Driving Capability,Source: ROMANIAN JOURNAL OF INFORMATION SCIENCE AND TECHNOLOGY Volume: 18 Issue: 4 Pages: 388 – 407,Published: 2015, Accession Number: WOS:000209966200007,ISSN: 14538245

## 2016

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- B34.** Carmen Maria Mârza, Georgiana Dorina Corsiuc, Dana-Adriana Iluțiu-Varvara, Ceuca, E, Case study regarding the conversion efficiency of small horizontal axis turbines, Edited by: 1877-7058 © 2017 The Authors. Published by Elsevier Ltd. Peer-review under responsibility of the organizing committee of INTER-ENG 2016. Published: 2017 Accession Number: WOS: Conference Title: 10th International Conference Interdisciplinarity in Engineering,

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## 2017

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- B36.** Ceuca, E, Pop, O; Pocan I, New Trends of Power Electronics for Washing Machines , 2017 40TH INTERNATIONAL SPRING SEMINAR ON ELECTRONICS TECHNOLOGY (ISSE) Book Series: International Spring Seminar on Electronics Technology ISSE Pages: ,Published: 2017 Accession Number: Conference Title: 40th International Spring Seminar on Electronics Technology (ISSE) Conference Date: MAY 10-14, 2017, Conference Location: Sofia, BULGARIA,ISSN: 21612536,ISBN: 9781509013890
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- B38.** Adrian Tulbure, **Emilian Ceuca**, Adrian Ilea, Electronically Controlled Hexapod Prototype for emergency situations. 9th international conference on ELECTRONICS, COMPUTERS and ARTIFICIAL INTELLIGENCE, ECAI 2017, ROMANIA, June 29– July 01, 2017
- B39.** **Emilian Ceuca**, Adrian Tulbure, Home Automations for Increasing the Quality of Life and Integration with the Smart City. 9th international conference on ELECTRONICS, COMPUTERS and ARTIFICIAL INTELLIGENCE, ECAI 2017, ROMANIA, June 29– July 01, 2017.

## 2018

- B40.** Tulbure, A, **Ceuca, E (Ceuca, Emilian)**, Experimental Investigation of Electromagnetic Indoor Radiation within an Electronics Factory, Source: ADVANCED TOPICS IN OPTOELECTRONICS, MICROELECTRONICS, AND NANOTECHNOLOGIES V Book Series: Proceedings of SPIE, The International Society for Optical Engineering Volume: Article Number: Published: 2018 Conference Title: Conference on Advanced Topics in Optoelectronics, Microelectronics, and Nanotechnologies Conference Date: AUG 23- 26, 2018 Conference Location: Constanta, ROMANIA UNSP 109770Y DOI: 10.1117/12.2324938 ISSN: 0277-786X eISSN: 1996-756X ISBN: 978-1-5106-2614-0 Accession Number: WOS:000458717900033
- B41.** V. Trifa, Gh Brezeanu, **Ceuca, E (Ceuca, Emilian)**, Three Phase Synchronous Boost Rectifier, Book Group Author(s): 2018 INTERNATIONAL SEMICONDUCTOR CONFERENCE (CAS 2018), 41ND EDITION Book Series Title: International Semiconductor Conference Pages: 315-318 Published: 2018 Conference Date: OCT 10-12, 2018 Conference Location: IMT Bucharest, Natl Inst Res & Dev Microtechnologies, Sinaia, ROMANIA Accession Number: WOS:000514386700066
- B42.** V. Trifa, Gh Brezeanu, **Ceuca, E (Ceuca, Emilian)**, Analyzing the Efficiency of the Different Ways of Recovering Energy from a System Using a PMSM, Book Group Author(s): IEEE Source: 2018 41TH INTERNATIONAL SPRING SEMINAR ON ELECTRONICS TECHNOLOGY (ISSE) Book Series: International Spring Seminar on Electronics Technology ISSE Published: 2018 DOI: 10.1109/ISSE.2018.8000943 Conference Title: 41h International

Spring Seminar on Electronics Technology (ISSE) Conference Date: MAY 16-20, 2018, Conference Location: Zlatibor, SERBIA ISSN: 2161-2536 ISBN: 978-1-5386-5731-7; 978-3-319-73847-5 Accession Number: WOS:000449866600080

- B43.** Stetco, EM ; Pop, OA ; Grama, A; Csipkes, D; **Ceuca, E**, Design and Simulation of a Sixth Order Band-Pass Gm-C Filter, Source: 2018 IEEE 24TH INTERNATIONAL SYMPOSIUM FOR DESIGN AND TECHNOLOGY IN ELECTRONIC PACKAGING (SIITME) Book Series Title: International Symposium for Design and Technology in Electronic Packaging Pages: 201-204 Published: 2018 Conference Title: 24th IEEE International Symposium on Design and Technology in Electronic Packaging (SIITME) Conference Date: OCT 25-28, 2018 Conference Location: Iasi, ROMANIA ISSN: 2641-287X ISBN: 978-1-5386-5577-1 Accession Number: WOS:000466960400041
- B44.** **Ceuca, E (Ceuca, Emilian)**, Tulbure, A (Tulbure, A.); The simulation and prototyping of a low power wireless charger, Source: ADVANCED TOPICS IN OPTOELECTRONICS, MICROELECTRONICS, AND NANOTECHNOLOGIES V Book Series: Proceedings of SPIE The International Society for Optical Engineering Volume: Published: 2018 Conference Title: Conference on Advanced Topics in Optoelectronics, Microelectronics, and Nanotechnologies V Conference Date: AUG 23- 26, 2018 Conference Location: Constanta, ROMANIA IArticle Number: UNSP 1097725 DOI: 10.1117/12.2325835 Published: 2018 ISSN: 0277-786X eISSN: 1996-756X ISBN: 978-1-5106-2614-0 Accession Number: WOS:000458717900076
- B45.** **Ceuca, E (Ceuca, Emilian)**, Trifa V, Pop Ovidiu, Design New Custom Interfaces for Selecting Magnetic Components in Switching Power Supplies IEEE Source: 2018 41TH INTERNATIONAL SPRING SEMINAR ON ELECTRONICS TECHNOLOGY (ISSE) Book Series: International Spring Seminar on Electronics Technology ISSE Published: 2018 DOI: 10.1109/ISSE.2018.8000943 Conference Title: 41h International Spring Seminar on Electronics Technology (ISSE) Conference Date: MAY 16-20, 2018, Conference Location: Zlatibor, SERBIA ISSN: 2161-2536 ISBN: 978-1-5386-5731-7; 978-3-319-73847-5 Accession Number: WOS:000449866600063

## 2019

- B46.** V. Trifa, Gh Brezeanu, **Ceuca, E (Ceuca, Emilian)**, Worst-Case Input Voltage in Buck, Boost and Buck-Boost converters / 2019 INTERNATIONAL SEMICONDUCTOR CONFERENCE (CAS 2019), 42ND EDITION, Book Series Title: International Semiconductor Conference Pages: 281-284 Published: 2019 Conference Title: 42nd International Semiconductor Conference (CAS), Conference Date: OCT 09-11, 2019, Conference Location: Sinaia, ROMANIA ISSN: 1545-827X ISBN: 978-1-7281-1888-8, Accession Number: WOS:000514295300059
- B47.** Draghici Florin; Brezeanu Gheorghe; Pristavu Gheorghe; Pascu Razvan; Badila Marian; Pribeanu Adriana; **Ceuca Emilian**, 400 degrees C Sensor Based on Ni/4H-SiC Schottky Diode for Reliable Temperature Monitoring in Industrial Environments /SENSORS Volume: 19 Issue: 10 Article Number: 2384 DOI: 10.3390/s19102384 Published: MAY 2 2019, Accession Number: WOS:000471014500171

## 2020

- B48.** Trifa Vasile, Brezeanu Gh, **Ceuca Emilian**, Unipolar PWM vs Bipolar PWM in Three Phase Block Commutation /CAS 2020 PROCEEDINGS: 2020 INTERNATIONAL SEMICONDUCTOR CONFERENCE Book Series: International Semiconductor Conference Pages: 169-172 Published: 2020 Accession Number: WOS:000637264600038 Conference Title: 43rd International Semiconductor Conference (CAS) Conference Date: OCT 07-09, 2020 ISSN: 1545-827X ISBN: 978-1-7281-1073-8
- B49.** Trifa Vasile, Brezeanu Gh, **Ceuca Emilian**, Block commutation vs Sinusoidal commutation for BLDC motors /CAS 2020 PROCEEDINGS: 2020 INTERNATIONAL

SEMICONDUCTOR CONFERENCE Book Series: International Semiconductor Conference  
Pages: 89-92 Published: 2020 Accession Number: WOS:000637264600020 Conference Title:  
43rd International Semiconductor Conference (CAS) Conference Date: OCT 07-09, 2020  
ISSN: 1545-827X ISBN: 978-1-7281-1073-8

**B50.**Emilian Ceuca, The tools and custom interfaces for simulation and fast design of the converters / CAS 2020 PROCEEDINGS: 2020 INTERNATIONAL SEMICONDUCTOR CONFERENCE Book Series: International Semiconductor Conference Pages: 85-88  
Published: 2020 Accession Number: WOS:000637264600019 Conference Title: 43rd International Semiconductor Conference (CAS) Conference Date: OCT 07-09, 2020, ISSN: 1545-827X ISBN: 978-1-7281-1073-8

## 2021

**B51. Emilian Ceuca**, Development of a Remote Patient Monitoring Device for the Detection of Fainting and Critical Condition / Proceedings of 2021 44th International Spring Seminar on Electronics Technology (ISSE) Book Series: International Spring Seminar on Electronics Technology ISSE DOI: 10.1109/ISSE51996.2021.9467632 Published: 2021 Accession Number: WOS:000853459100060 Conference Title: 44th International Spring Seminar on Electronics Technology (ISSE) Conference Date: MAY 05-09, 2021 ISSN: 2161-2536 ISBN: 978-1-6654-1477-7

**B52.** Muresan, Vlad, Unguresan Mihaela-Ligia, Abrudean Mihail, Valean Honoriu, Clitan Iulia, Motorga Roxana, **Emilian Ceuca**, Fisca Marius, AI versus Classic Methods in Modelling Isotopic Separation Processes: Efficiency Comparison / MATHEMATICS Volume: 9 Issue: 23 Article Number: 3088 DOI: 10.3390/math9233088 Published: DEC 2021, Accession Number: WOS:000734491600001, eISSN: 2227-7390

## 2022

**B53. Emilian Ceuca**, Study and Integrated Strategies for Development and Minimizing Energy Losses in Batteries / Proceedings of 2022 45th International Spring Seminar on Electronics Technology (ISSE)(ISSE) Book Series: International Spring Seminar on Electronics Technology ISSE DOI: 10.1109/ ISSE54558.2022.9812776 Published: 2022 Accession Number: WOS:000853642200024 Conference Title: 45th International Spring Seminar on Electronics Technology (ISSE) Conference Date: MAY 11-15, 2022 Conference Location: Vienna, AUSTRIA ISSN: 2161-2536 ISBN: 978-1-6654-6589-2

## 2023

**B54.** Marius Fișcă, Mihail Abrudean, Vlad Mureșan, Iulia Clitan, Mihaela-Ligia Ungureșan, Roxana Motorga, **Emilian Ceuca**, Modeling and Simulation of High Voltage Power Lines under Transient and Persistent Faults / MATHEMATICS Volume: 11 Issue: 1 Article Number: 21 DOI: 10.3390/math11010021 Published: JAN 2023 Accession Number: WOS:000908773700001, eISSN: 2227-7390

**B55.** Razvan Pascu, Gheorghe Pristavu \*, Dan-Theodor Oneata, Gheorghe Brezeanu \*, Cosmin Romanitan, Nikolay Djourellov, Andrei Enache, Florin Draghici, Andrei Mario Ivan, **Emilian Ceuca**, Thorough Wide Temperature Range Analysis of Pt/SiC and Cr/SiC Schottky Contacts Non-uniformity, / Materials (ISSN 1996-1944). Silicon Carbide: Material Growth, Device Processing and Applications. This special issue belongs to the section "Electronic Materials". Published: JAN 2024 Accession Number: WOS:000xxxxxxxxx, eISSN:



## Lucrări publicate la manifestari stiintifice recunoscute CNCSIS / international

- C1. Emilian Ceuca**, Remus Joldeș, Nicolae Crainic, Mihaela Ciortea: „**Graphical User Interface for modelation and simulation ZVS Buck resonant Converter**”, microCAD 2005 International Scientific Conference, Miskolc, Hungary, 10-11 March 2005, ISBN 963- 661-656 – 6, Section J, Electrotechnics and Electronics, pag. 7-13;
- C2. Ciortea Elisabeta Mihaela, Emilian Ceuca:** „**CAD-CAM Basics As Concerns Computer Integrated production**”, microCAD 2005, International Scientific Conference, Miskolc, Hungary, 10-11 March 2005, ISBN 963- 661-656 – 6, Section M, Production Engineering and Manufacturing System, pag. 17-21;
- C3. Nicolae Crainic, Emilian Ceuca:** „**Regular Uniform Rectangular Birkhoff Interpolation Scheme son Plane Domain and Their Numerical Characteristics**”, microCAD 2005 International Scientific Conference, Miskolc, Hungary, 10-11 March 2005, ISBN 963- 661-653 – 1, Section G, Modern Numerical Methods, pag. 19-25;
- C4. Emilian Ceuca:** „**Experimental research in simulation of a automotive power electronics circuits**”, Proceeding of The 16th International Scientific Technical Conference PROCESS CONTROL 2007 – Slovak University of Technology Bratislava, Strbske Pleso, High Tatras, Czech Republic, June 11-14 2007.

### 2010

- C5. Ceuca, IE; Tulbure, A; Manavis, C;** *Survey Research About Analog Versus Digital Control. Smart Applications & Technologies for Electronic Engineering SATEE 2010*, Alba Iulia, 09-11.09.2010, pag.78-80, Ed. Aeternitas, ISBN 978-973-1890-27-2.
- C6. Tulbure, A; Tarnovan, I; Ceuca, IE;** *Energy Consumption Analysis of Common Computer Applications. Smart Applications & Technologies for Electronic Engineering SATEE 2010*, Alba Iulia, 09-11.09.2010, pag.35-37, Ed. Aeternitas, ISBN 978-973-1890-27-2
- C7. Emilian Ceuca, Adrian Tulbure, Ioan Ileana:** “ **Energy evaluation and lightning for the new fluorescent lamps** ”, ATOM –N 2010 – The 5-th International Conference, Advanced Topics in Optoelectronics, Microelectronics and Nanotechnologies Constanta, Romania,26-29August 2010 ISSN: 2067-158X;
- C8. Ioan Ileana, C. Rotar, Maria Munteanu, Emilian Ceuca:** “ **The recognition of graphical patterns invariant to geometrical transformation of the models**”, ATOM –N 2010 – The 5-th International Conference, Advanced Topics in Optoelectronics, Microelectronics and Nanotechnologies Constanta, Romania,26-29August 2010 ISSN: 2067-158X ;

### 2011

- C9. Tulbure, A., Albu, M., Ceuca E.** *Assessing Wind Energy Potential for Power Grid Injections. Revista Energetica. Series: Smart Grid, No.1-2/2011. Vol.59, ISSN 1453- 2360, pag. 12-17.*

### 2012

- C10. Pocan, I; Morar, R; Tulbure, A; Ceuca, E; Muntean, O;** Procedure to Reduce Conducted Emissions Generated by Corona Electroseparator. *Smart Applications & Technologies for Electronic Engineering SATEE 2012*, Alba Iulia, 26-27.10.2012, pag. 33-35, Editura Aeternitas, ISBN 978-606-613-051-6

### 2015

- C11. Emilian Ceuca, Manuella Kadar, Paul Borza** „**Minimizing Energy Losses in Hybrid Storage Sysytems for e-bicycles by using Optimized Adaptive Control**”, 5th European Symposium on Super Capacitors & Hybrid Solutions , Brasov, 23-25 Aprilie, 2015,

## Proiecte CDI pe baza de contract sau grant

- D1.** Contractul de Cercetare – Dezvoltare si Consultanta nr. Contractul de Cercetare – Dezvoltare si Consultanta nr. **102 /22.03.2018** CONTINENTAL AUTOMOTIVE & RESEARCH CENTER CONTINENTAL TOULOUSE / Act Aditional 1 („DFMEA Design and FMEDA- element diagnose analyze”)NISSAN - BCM (Body control module C1\_HS\_run1) - 2018,2019,2020- valoare 186592 RON , (aprox 40.000 Euro) **Emilian Ceuca - director contract**
- D2.** Contractul de Cercetare – Dezvoltare si Consultanta nr. **185 /25.03.2016** CONTINENTAL AUTOMOTIVE RESEARCH CENTER TOULOUSE, CONTINENTAL AUTOMOTIVE ROMANIA / Act Aditional 1 + Act Aditional Nr. 2 + Act Aditional 3 + Act Aditional Nr. 4 („FMEDA-failure mode and element diagnose analyze”) RENAULT - BCM (Body control module C1\_A ) - *perioada desfasurare 2016-2018*- valoare **226500 RON** , (aprox 54.000 Euro).  
**Emilian Ceuca - director contract**
- D3.** Contractul de Cercetare – Dezvoltare si Consultanta nr. **8602 /15.05.2015** (BC 213/15.04.2015 + Act Aditional Nr. 2 („FMEDA-failure mode and element diagnose analyze”) *perioada desfasurare 2015-2016* (Platforma Nissan NewCMF1) valoare **50000 RON** , (15000 Euro) **Emilian Ceuca - director contract**
- D3.** Contract de Cercetare Dezvoltare si Consultanță **MIELE TEHNICA 378/2017** *perioada desfasurare 2016-2021* , valoare **12000 Euro**, **Emilian Ceuca - director contract**.  
**Obiectul contractului:** **O1.** Dezvoltare experimentală a unui circuit pentru recuperarea energiei din masinile de spalat Miele utilizând supercapacitori.  
**O2.** Realizarea unui sistem Automat/ Manual de testare si inregistrare stare a unității de comandă EDW 8503, EDW8513 si EDW8503/81 fără carcasă
- D4.** *Number of imaging technology for embedded applications.* Contract nr.**243/4.10.2007** incheiat cu ISEE Media Ontario, CANADA. , valoare **2500 Euro**, **Emilian .Ceuca - director contract**.
- D5.** Contract de Cercetare și Consultanta 22379/8.11.2006, cu partener extern: CONTINENTAL AG Nurenberg, GERMANIA 2006-2014, *Testarea si intretinerea echipamentelor electronice din industria auto, perioada desfasurare 2006-2014* , valoare de **150000 EURO/an**, **Emilian Ceuca – membru in echipa**.
- D6.** Consultanta si asistenta tehnica pentru modernizarea, extinderea si gestionarea sistemului de iluminat public in Mun. Alba Iulia, Contract nr. 25533/01.09.2009 incheiat cu Primaria Municipiului ALBA IULIA, Valoare.12.000 RON, **Emilian Ceuca – membru in echipa**.
- D7.** *Experimental research for estimating the wind energetic potential in Alba County (location indicated by beneficiary).* Contract nr.285/04.09.2009 incheiat cu compania IWC Germania Val. 21.500 EURO, **Emilian Ceuca – membru in echipa**.
- D8.** *Masurari experimentale, bilantare si audit energetic complex pentru consumatorii importanti din cadrul SC SIEMENS SIBIU SRL locatia Sibiu*”. Contract nr. 01/04.01.2010, încheiat cu agentul economic *SIEMENS Industrial Manufacturing Engineering and Applications SIMEA Srl*, valoare 14.137,20 lei, , **Emilian Ceuca – membru in echipa**
- D9.** *Experimental study concerning the wind potential estimation using the telecommunication tower in Alba Region*, Act additional nr. 1/12.04.2010 la Contract nr.285/04.09.2009, **Emilian CEUCA**, membru in echipa de cercetare. (val.15.800 euro).
- D10.** Servicii tehnice de întocmire a bilanțului energetic complex (electric, termic și mecanic) pentru instalațiile aferente ale SC CAA SA. (Stația de epurare). Contract nr. 112/31.10.2011, incheiat cu , *S.C. Compania de Apa Arad SA*, valoare 24.335 RON. **Emilian Ceuca – membru**
- D11.** Contract 125/323 2009 **RAeL – Retea Academica de e-Learning**, POS CCE Axa 3 Domeniu Major de Interventie 2 Operatiunea 3 - **Emilian CEUCA**, responsabil achizitiei. (val.5400000 ron).
- D12.** Contractul cadru 128/7.04.2008 – *Traseul celor 3 Fortificații – Studiarea și promovarea folosind tehnici 3D*, Beneficiar: *Administrația FONDULUI NAȚIONAL CULTURAL* – **Emilian Ceuca**, membru in echipa;
- D13.** Contract de cercetare nr. 45/30.03.2007 – *„Realizarea unui sistem inteligent de diagnoza pentru monitorizarea de la distanță a parametrilor auto” – pentru WSCOMM Cluj Napoca,-* , **Emilian CEUCA**, responsabil proiect;

- D14.** Contract de cercetare nr. 69/.04.2007 – „*Studiul privind fluxul tehnologic în stația de tratare Sebeșel*” – pentru S.C. APA C.T.T.A. S.A., **Emilian CEUCA**, responsabil proiect;
- D15.** Contractul cadru 62/4.04.2007 - *Muzeul Virtual 3D – Studierea și promovarea de artefactelor romane folosind tehnici 3D* Beneficiar: Administrația FONDULUI NAȚIONAL CULTURAL **Emilian Ceuca** – membru in echipa;
- D16.** Contract nr. 270/20.11.2006 (06.139/20.11.2006) „*Măsurători topo-geodezice în incinta S.E. Mureș*”,– (Sef pr: drd. ing. Koncsag Eva Magdolna Coordonatori: dr. ing. Palamariu Maricel; **Emilian Ceuca**, membru in echipa;

#### **Proiecte si granturi educationale (www.hightechalba.ro)**

- E1.** *Creșterea performanțelor absolvenților HIGHTECH (electronica-informatica) în viața activă, prin programe de pregătire practică la agenții economici.* Beneficiar: Universitatea „1 Decembrie 1918” Alba Iulia cu partenerii: BOSCH Rexroth Blaj, Continental Automotive Sibiu si Siemens SIMEA Sibiu. Contract nr. POSDRU/22/2.1/G/24926. Perioada implementare 2009-11. **Emilian CEUCA** – Responsabil practica studenti la companii
- E2.** *Stagiile de pregătire practică la agenții economici – o poartă de acces pe piața muncii.* Beneficiar: Universitatea „1 Decembrie 1918”Alba Iulia, Contract nr. POSDRU/109/2.1/G/81578. Perioada implementare 2011-13. **CEUCA Emilian.**- membru in echipa
- E3.** *Oameni inteligenți pentru orașe inteligente!-Adaptarea programelor de studiu în domeniile electronicii aplicate, informaticii și ingineriei mediului la cerințele secolului 21.* Beneficiar: Universitatea „1 Decembrie 1918” Alba Iulia. Contract nr. POSDRU/ 156/ 1.2/ G/ 137166. Perioada implementare 2014-15. **CEUCA E** .- responsabil activitatea de laboratoare SMART CITY

#### **RECUNOAȘTEREA ȘI IMPLICAREA ÎN COMUNITATEA ACADEMICĂ, ȘTIINȚIFICĂ, PROFESIONALĂ, CULTURALĂ**

- R1.** Organizator Conferinta ISI &IEEE, Conferința ISSE 2013 International Spring Seminar, Alba Iulia, **Emilian CEUCA** -Conference Chair
- R2.** Organizator Conferinta ISI&IEEE , Conferința SIITME 2012 - Alba Iulia, **Emilian CEUCA** - Conference Chair
- R3.** Organizator Conferinta, SATEE 2010 - Alba Iulia, **Emilian CEUCA** -Conference Chair

Alba Iulia,  
14.01.2024

**Conf. univ. dr. ing. habil Ioan Emilian CEUCA**