

LISTA DE LUCRĂRI

(Profesor emerit dr. Ing. Aurelian Crăciunescu)

I. TEZA DE DOCTORAT (T)

T – Studiul procesului de magnetizare a unor materiale feromagnetice în regim variabil, cu aplicații la regimul tranzitoriu al unor elemente ale circuitelor magnetice.
Conducător științific: acad. Prof. Dr. Docent. ing. Remus Răduleț

II. CĂRȚI PUBLICATE (C)

Cb - Cărți de specialitate publicate în edituri recunoscute (autor, coautor, editor).

1. M. O. Popeescu, Claudia Popescu și **A. Crăciunescu**, Sisteme flexibile de fabricație, Editura ELECTRA, București, 1998, ISBN 973-98801-0-X.
2. Lucia Pantelimon, D. Comșa, P. Dinculescu, **A. Crăciunescu** și M. Chindriș, ”Utilizarea energiei electrice și instalații electrice. Probleme.” Editura Didactică și Pedagogică, București, 1980, 371 pag.
3. Caius Iacob, **A. Crăciunescu**, ș. a., „Matematici clasice și moderne”, Vol. 2, Capitolul VIII, ”Statistică matematică și fiabilitate”, Editura Tehnică, București, 1979.

III. ALTE MATERIALE PUBLICATE (I,D)

I - Culegeri și Îndrumare publicate (separate în edituri cu ISBN și în tipografiile locale/de instituții sau de uz intern).

1. A. Fransua, S. Bucurenciu, L. Constantinescu, **A. Crăciunescu**, R. Măgureanu and M. Sand: „Mașini și acționări electrice – Culegere de probleme”, Litografia Institutului Politehnic din București, 1970.
2. **A. Crăciunescu**, S. Bucurenciu și M. Țigler: „Mașini electrice – Lucrări de laborator”, Litografia U. P. B., 1979, 176 pag.
3. **A. Crăciunescu**, E. Jascău, D. O. Kisck, V. Manoliu și V. Năvrăpescu: „Acționări Electrice – Îndrumar de laborator”. Litografia UPB. 1997, 126 pag.

D - Alte lucrări publicate: capitole publicate în volume colective, capitole teoretice redactate, sisteme de laborator funcționale etc.

1. Mohammed Alsaadi, Stanimir Valtchev, Jose Goncalves, and **Aurelian Crăciunescu**, ”New Analytical Formulas for Coupling Coefficient of Two Inductively Coupled Ring Coils in Inductive Wireless Power Transfer System”, Lecture Notes of the Institute for Computer Sciences, In book: Green Energy and Networking (pp.117-127) DOI:10.1007/978-3-030-62483-5_13, November 2020.

2. Liviu Popescu, **Aurelian Crăciunescu** and Ovidiu Craiu, "Analysis of the Wheel Steering Influence on Energy Consumption of an EV PMSM In-Wheel Propulsion System", In book: The 17th International Conference Interdisciplinarity in Engineering (pp.235-255), April 2024, DOI:10.1007/978-3-031-54674-7_19.
3. Al. Fransua, "Mașini și Acționări Electrice", Capitolul XII – Elemente electromecanice cu acțiune discretă. Editura Didactică și Pedagogică, 1967.

IV. ARTICOLE / STUDII IN EXTENSO PUBLICATE (R,V)

Ris - Reviste de specialitate de circulație internațională recunoscute (cotate / indexate *WOS*, sau indexate în alte BDI specifice domeniului, care fac un proces de selecție a revistelor pe baza unor criterii de performanță). *Se menționează la fiecare lucrare includerea în Baza WOS [Accession Number, WOS, ultimul Factor Impact, ISSN] și/sau denumirea altei BDI.*

1. Mihai Predescu, **Aurelian Craciunescu**, Andrei Bejinariu, Octavian Mitroi, Adrian Nedelcu, "Impact of the design method of permanent magnets synchronous generators for small direct drive wind turbines for battery operation", Renewable Energy & Power Quality Journal, No.5, March 2007. ISSN 2172-038X.
2. Lamia YOUB, **A. CRĂCIUNESCU**, "Etude comparative entre la commande vectorielle a flux oriente et la commande Directe du couple de la machine asynchrone", U.P.B. Sci. Bull., Series C, Vol. 69, No. 2, 2007, ISSN 1454-234x.
3. Chip Rinaldi Sabirin, Andreas Binder, Dumitru Daniel Popa, **Aurelian Crăciunescu**, "Modeling and digital control of an active magnetic bearing system", Rev. Roum. Sci. Techn. – Électrotechn. et Énerg., 52, 2, p. 157–181, Bucarest, 2007. Pp. 157-181, ISSN: 0035-4066.
4. C. O. Badea, V. Năvrănescu and **A. Crăciunescu**: „Electronica de putere și acționările electrice în sistemele domotice”, EEA – Electrotehnica, Electronica și Automatica, vol. 54, nr. 2, pp. 30-36, Edit. Electra, București, Romania. ISSN 1582-5175.
5. Lamia Youb, **Aurelian Crăciunescu**, "Commande directe du couple et commande vectorielle de la machine asynchrone", Rev. Roum. Sci. Techn.– Électrotechn. et Énerg., 53, 1, p. 87–98, Bucarest, 2008. ISSN: 0035-4066.
6. **Aurelian Crăciunescu**, Mihai Predescu, Matthias Grottko, M. O. Popescu, Popescu Claudia, and Gloria Stefania Ciumbulea, "Building integration of 30 kWp photovoltaic system at University Politehnica of Bucharest, Romania", International Journal of Energy Technology and Policy 6(4), January 2008. DOI:10.1504/IJETP.2008.019967.
7. Cornel Ovidiu BADEA, **Aurelian CRACIUNESCU**, Valentin NĂVRĂPESCU, "Synchronization schemes for spatial objects tracer systems", U.P.B. Sci. Bull., Series C, Vol. 71, Iss. 1, 2009, ISSN 1454-234x.
8. **Aurelian Crăciunescu**, Mihai Predescu, M. O. Popescu, Popescu Claudia, and Gloria Stefania Ciumbulea, "Monitoring results of the 30 kWp PV grid-connected power system installed at University POLITEHNICA of Bucharest, Romania", Renewable Energy and Power Quality Journal 1(07):682-685 April 2009.

- DOI:10.24084/repqj07.473.
9. Constantin Ghiță, **Aurelian Crăciunescu**, Valentin Năvrăpescu, Ion Dragoș Diaconu, Aurel Chirilă and Ion-Daniel Iliu, "Optimal reactive power compensation using synchronous generators", *Renewable Energy and Power Quality Journal* 1(08):747-750, April 2010. DOI:10.24084/repqj08.461
 10. Daniel Iulian Costia, M. O. Popescu, Claudia Popescu, and **Aurelian Crăciunescu**, "Photovoltaic Solar cell like Receiver for Electromagnetic Waves in VHF-UHF Bands", *Renewable Energy and Power Quality Journal* 1(08), April 2010. DOI:10.24084/repqj08.303.
 11. Aurel Chirilă, Constantin Ghiță, **Aurelian Crăciunescu**, Ion Dragoș Diaconu, Valentin Năvrăpescu, and M. Catrinou, "Rotating Electric Machine Thermal Study", *Renewable Energy and Power Quality Journal* 1(08), 9(1):1089-1093, May 2011. DOI:10.24084/repqj09.552.
 12. L. Dorobanțu, M. O. Popescu, Claudia Popescu, and **Aurelian Crăciunescu**, "The effect of surface impurities on photovoltaic panels", *Renewable Energy and Power Quality Journal* 9(1):13-15, May 2011. DOI:10.24084/repqj09.405.
 13. **Aurelian Crăciunescu**, Gloria Ciumbulea, and Marius Media, "Stator Winding Fault Diagnostic of Induction Motor Using Instantaneous Currents' Space Phasor Approach", *PRZEGLĄD ELEKTROTECHNICZNY (Electrical Review)* 88(1):108-111, January 2012. iSSN 0033-2097, R 88 NR 1a/2012.
 14. **Aurelian Crăciunescu**, Gloria Ciumbulea, and Marius Media, "Phase-Modulus Diagram of Instantaneous Current's Space Phasor as Diagnosis Tool of Induction Motor Stator Winding", *Renewable Energy and Power Quality Journal* 10(13):1693-1696, April 2012. DOI:10.24084/repqj10.809.
 15. L. Dorobanțu, M. O. Popescu, Claudia Popescu, and **Aurelian Crăciunescu**, "Simulating shadow effect on PV panels", *Renewable Energy and Power Quality Journal* 10(8):1064-1068, April 2012. DOI:10.24084/repqj10.588.
 16. **Aurelian Crăciunescu**, Gloria Ciumbulea, Cătălina Necula Dumitrică, and Mihai Predescu, "Voltage Balance Monitoring Based on Voltage's Instantaneous Space Phasor Geometrical Loci", *Renewable Energy and Power Quality Journal* 11(7):1005-1008, March 2013. DOI:10.24084/repqj11.509.
 17. H. Dumitrescu, Al. Dumitrache, Claudia Popescu, M. O. Popescu, F. Frunzulică, and **Aurelian Crăciunescu**, "Wind Tunnel Experiments on Vertical-Axis Wind Turbines with Straight Blades", *Renewable Energy and Power Quality Journal* 12(8): 1001-1004, April 2014, DOI:10.24084/repqj12.562.
 18. Bilal Babar, and **Aurelian Crăciunescu**, "Comparison of Artificial Bee Colony Algorithm with other Algorithms used for Tracking of Maximum Power Point of Photovoltaic Arrays", *Renewable Energy and Power Quality Journal* 12(8):1005-1008 April 2014, DOI:10.24084/repqj12.563.
 19. **Aurelian Crăciunescu**, Claudia Popescu, M. O. Popescu, L. Pătularu, and Mihai Predescu, "Design and Analysis of Experiments for a PEM Fuel Cell", *Renewable Energy and Power Quality Journal* 13(6): 763-767, April 2015, DOI:10.24084/repqj13.495.
 20. Laurențiu Pătularu, Stănică Enache, and **Aurelian Crăciunescu**, "Experimental

- evaluation of reference values for PEM fuel cells”, U.P.B. Sci. Bull., Series C, Vol. 78, Iss. 1, 2016, ISSN 2286-3540.
21. S. D. Grigorescu, **Aurelian Crăciunescu**, Sanda V. Pațurcă, L. Codreanu, ș. a., ”Coaxial Linear Motor for Electromagnetic Launchers”, The Scientific Bulletin of Electrical Engineering Faculty, January 2016, DOI:10.1515/sbeef-2016-0016, LicenseCC BY-NC-ND 3.0
 22. **Aurelian Crăciunescu**, A. M. Croitoru, C. Colț, Claudia Popescu, and M. O. Popescu, ”Thermal Experimental Investigation on Air Cooled PV Panel”, Renewable Energy and Power Quality Journal 14(5): 630-633, May 2016, DOI:10.24084/repqj14.414.
 23. Jemaa Aymen, Ons Zarrad, **Aurelian Crăciunescu**, and M. O. Popescu, ”Comparison of Fuzzy and Neuro-Fuzzy Controllers for Maximum Power Point Tracking of Photovoltaic Modules”, Renewable Energy and Power Quality Journal 14(6): 796-800 May 2016, DOI:10.24084/repqj14.465.
 24. Ammar Ghalib Al-Gizi, Sarab Al-Chlahawi, Mohamed Louzazni, and **Aurelian Crăciunescu**, ”Genetically Optimization of an Asymmetrical Fuzzy Logic Based Photovoltaic Maximum Power Point Tracking Controller”, Advances in Electrical and Computer Engineering 17(4): 69-76, DOI:10.4316/AECE. 2017. 04009 January 2017, License CC BY-NC-ND 4.0.
 25. Sarab Al-Chlahawi, Ammar Ghalib Al-Gizi, and **Aurelian Crăciunescu**, ”The Analysis and Comparison of Multiport Converter used for Renewable Energy Sources”, Advances in Science Technology and Engineering Systems Journal 2(3): 906-912, June 2017, DOI:10.25046/aj0203113, License CC BY-SA 4.0.
 26. Lamia Youb, Farid Naceri, Belkacem Sebti, **Aurelian Craciunescu**, ”Design of adaptative fuzzy control for dual star induction motor drives”, Rev. Roum. Sci. Techn.– Électrotechn. et Énerg. Vol. 62, 1, pp. 000–000, Bucarest, 2017.
 27. Ammar Ghalib Al-Gizi, Sarab Al-Chlahawi, and **Aurelian Crăciunescu**, ”Efficiency of Photovoltaic Maximum Power Point Tracking Controller Based on a Fuzzy Logic”, Advances in Science Technology and Engineering Systems Journal 2(3): 1245-1251 July 2017. DOI:10.25046/aj0203157, License CC BY-SA 4.0.
 28. Ammar Ghalib Al-Gizi, Sarab Al-Chlahawi, and **Aurelian Crăciunescu**, ”Comparative study of some flc-based mppt methods for photovoltaic systems”, MATTER International Journal of Science and Technology 3(3):36-50 November 2017, DOI:10.20319/mijst.2017.32.3650.
 29. Mohamed Louzazni, Ahmed Khouya, Khalid Amechnoue, Alessandro Gandelli, Marco Mussetta, and **Aurelian Crăciunescu**, ”Metaheuristic Algorithm for Photovoltaic Parameters: Comparative Study and Prediction with a Firefly Algorithm”, Applied Sciences, February 2018, 8(3):339, DOI:10.3390/app8030339, LicenseCC BY 4.0
 30. Sarab Al-Chlahawi, and **Aurelian Crăciunescu**, ”Three port converters used as interface in photovoltaic energy systems”, Advances in Science Technology and Engineering Systems Journal 3(2), May 2018, DOI:10.25046/aj030231, License CC BY-SA 4.
 31. A. Al-Gizi, **A. Craciunescu**, M. A. Fadel, and M. Louzazni, "A new hybrid algorithm for PV MPPT under partial shading conditions," Rev. Roum. Sci. Techn.–

- Électrotechn. et Énerg., vol. 63, no. 1, 2018, pp. 52-57.
32. Ammar Al-Gizi, Mohamed Louzazni, Mustafa Fadel, and **Aurelian Crăciunescu**, "Critical constant illumination time in comparison of two photovoltaic maximum power point tracking algorithms", U.P.B. Sci. Bull., Series C, Vol. 80, Iss. 2, 2018, ISSN 2286-3540.
 33. Louanasse LAGGOUN, Lamia YOUB, Sebti BELKACEM, Said BENAGGOUNE, **Aurelian CRACIUNESCU**, "Direct torque control using second order sliding mode of a double star permanent magnet synchronous machine", U.P.B. Sci. Bull., Series C, Vol. 80, Iss. 4, 2018, ISSN 2286-3540.
 34. Al-Saadi M., Al-Bahrani L., Al-Qaisi M., Al-Chlaihawi S., **Crăciunescu A.**, "Capacitive power transfer for wireless batteries charging", in Electrotehnica, Electronica, Automatica (EEA), 2018, vol. 66, no. 4, pp. 40-51, ISSN 1582-5175.
 35. Mohammed AL-SAAD, Ammar Ghalib Al-Gizi, Sadiq Ahmed, Sarab Al-Chlaihawi, and **Aurelian Crăciunescu**, "Analysis of Charge Plate Configurations in Unipolar Capacitive Power Transfer System for the Electric Vehicles Batteries Charging", Procedia Manufacturing 32: 418-425, DOI:10.1016/j.promfg.2019.02.235. License CC BY-NC-ND 4.0, January 2019.
 36. Mohammed Alsaadi, Sadiq Ahmed, Ammar Ibrahim, Mustafa Al-Qaisi, and **Aurelian Crăciunescu**, "New analytical formulas for self-inductances of inductively coupled ring coils in wireless power transfer system", UPB Scientific Bulletin, Series C: Electrical Engineering 81(2):26, January 2019. ISSN 2286-3540.
 37. Mohamed Louzazni, Ahmed Khouya, **Aurelian Crăciunescu**, Khalid Amechnoue, and Marco Mussetta, "Modelling and Parameters Extraction of Flexible Amorphous Silicon Solar Cell a-Si:H", Applied Solar Energy 56(1):1-12. May 2020. DOI:10.3103/S0003701X20010090,.
 38. Mohamed Louzazni, Ahmed Khouya, Khalid Amechnoue, Marco Mussetta, and **Aurelian Crăciunescu**, "Comparison and evaluation of statistical criteria in solar cell and photovoltaic module parameters extraction", International Journal of Ambient Energy 41(13):1482-1494, September 2020, DOI:10.1080/01430750.2018.1517678.

Rio – Alte reviste de specialitate de circulație internațională.

1. Ammar Al-Gizi, S. Al-Chlaihawi, **A. Craciunescu**, "Comparative study of some FLC-based MPPT methods for photovoltaic systems", MATTER, International Journal of Science and Technology, 3, 3, pp. 36–50 (2017).
2. Ammar. Al-Gizi, S. Al-Chlaihawi, **A. Craciunescu**, "Efficiency of Photovoltaic Maximum Power Point Tracking Controller Based on a Fuzzy Logic", Advances in Sci., Techn. and Engineering Systems Journal (ASTES), 2, 3, pp. 1245–1251 (2017).
3. A. Moraru and **A. Crăciunescu**: „Determination of the Magnetization State of a Non-uniformly Magnetized Permanent Magnet”, Rev. Roum. Sci. Techn.-Electrotehn. et Energ., vol. 19, nr. 2, Bucarest, Romania, 1974, pp. 271-281.
4. **A. Craciunescu**, Al. Fransua and S. Slaiher: „Physical Modeling of the Magnetic Field of Permanent Magnets in Axial Airgap Electrical Machines”, Rev. Roum. Sci. Techn.-Electrotehn. et Energ., vol. 19, nr. 3, Bucarest, 1974, pp. 449-460.

5. **A. Crăciunescu** and C. Ghiță: „Similarity Criteria and The Design of Ferromagnetic Frequency Tripler With Three Cores and D. C. Premagnetization”, Rev. Roum. Sci. Techn. – Electrotechn. et Energ. Vol. 16, nr. 3, 1971, pp. 465-484, Bucharest, Romania.
6. S. Bucurenciu and **A. Crăciunescu**: „Topologische Transfiguration nichtlinearer Kreise mit Elementen der Art $y = Ax_m$ ”, Wiss. Z. Elektrotechn., vol. 17, nr. 1, Leipzig, Germany, 1971, pp. 17-28.
7. S. Bucurenciu and **A. Crăciunescu**: „Expresion of the electromagnetic torque due to shape anisotropy”, Rev. Roum. Sci. Techn. – Electrotechn. Et Energ., vol. 15, nr. 2, 1970, Bucharest, Romania, pp. 259-274.
8. M. Sand, **A. Crăciunescu** and Gh. Nitu: „Cu privire la utilizarea amplificatoarelor magnetice ca generatoare unipolare de curent”, Buletinul Institutului Politehnic Gheorghe Gheorghiu-Dej, tom. XXX, nr. 2, 1968.
9. D. Niculescu and **A. Crăciunescu**: „Sur l’utilisation des graphes dans l’étude des machines électriques”, Buletinul Institutului Politehnic Gheorghe Gheorghiu-Dej, tom. XXVIII, nr. 3, 1966, pp. 142 – 150, Bucuresti, Romania.

Rns - Reviste de specialitate de circulație națională recunoscute de CNCSIS. Se mentioneaza Categoria CNCSIS.

Rno - Alte reviste de specialitate de circulație națională.

Vis- Volumele unor manifestări științifice internaționale recunoscute, organizate în țară și străinătate, indexate WOS sau indexate in alte BDI specifice domeniului, care fac un proces de selectie a publicatiilor pe baza unor criterii de performanta. *Se mentioneaza la fiecare lucrare includerea in Baza WOS [WOS Proceedings, Accession Number, WOS, ISSN] si/sau denumirea altei BDI.*

1. Liviu Popescu, **Aurelian Crăciunescu**, Ovidiu Craiu, ”Analysis of the Wheel Steering Influence on Energy Consumption of an EV PMSM In-Wheel Propulsion System” In book: The 17th International Conference Interdisciplinarity in Engineering (pp.235-255), DOI:10.1007/978-3-031-54674-7_19, April 2024.
2. Liviu Popescu, Leonard Melcescu, Ovidiu Craiu, **Aurelian Craciunescu**, and Valeriu Bostan, ”Phase Advance and Dwell Control Applied to a PM BLDC Motor for Increasing the Maximum Speed of an Electric Vehicle”, 2022 International Symposium on Power Electronics, Electrical Drives, Automation and Motion (SPEEDAM), Sorrento, Italy, 22-24 June 2022, DOI: 10.1109/SPEEDAM 53979.2022.9841974.
3. Liviu Popescu, Leonard Melcescu, L. M. Dumitran, and **Aurelian Crăciunescu**, ”Control Analysis of a Bi-motor Electric Traction System for Energy and Performance Optimization”, International Conference on Communications, Information, Electronic and Energy Systems - CIEES 2021, AIP Conference Proceedings 2570(1)At: Ruse, Bulgaria, January 2022. DOI:10.1063/5.0099663
4. Liviu Popescu, Leonard Melcescu, L. M. Dumitran, **Aurelian Crăciunescu**, Alexandru Stănescu, ”Control Analysis of a Bi-motor Electric Traction System for Energy and Performance Optimization”, Conference: International Conference on Communications, Information, Electronic and Energy Systems - DOI:10.1063/5.0099663, AIP Conference Proceedings 2570, CIEES 2021, At: Ruse, Bulgaria.

5. Leonard Cătălin DOBRE, Alexandru Țurcanu, and **Aurelian Crăciunescu**, "Floating Photovoltaic Power Plants", 2021 12th International Symposium on Advanced Topics in Electrical Engineering (ATEE), Bucharest, Romania, 25-27 March 2021. DOI: 10.1109/ATEE52255.2021.9425257.
6. Mohamed Louzazni, Ahmed Khouya, **Aurelian Crăciunescu**, Khalid Amechnoue, Marco Mussetta, "Modelling and Parameters Extraction of Flexible Amorphous Silicon Solar Cell a-Si:H", Applied Solar Energy 56(1):1-12, DOI:10.3103/S0003701X20010090, May 2020.
7. Mohammed Al-Saadi, Stanimir Valtchev, Luis Romba, José Gonçalves, and **Aurelian Craciunescu**, "Comparison of Spiral and Square Coil Configurations in Wireless Power Transfer System for Contactless Battery Charging", 2019 Electric Vehicles International Conference (EV), Bucharest, Romania, 03-04 October 2019. DOI: 10.1109/EV.2019.8892897
8. Mohammed Al-Saadi, Emad A. Hussien, and **Aurelian Craciunescu**, "Maximum Power Point Tracking and Power/Voltage Regulation for Inductive Wireless Battery Charging", 2019 Electric Vehicles International Conference (EV), Bucharest, Romania, 03-04 October 2019. DOI: 10.1109/EV.2019.8892868.
9. **Aurelian Crăciunescu**, "The Development of a New Type of Repulsion-Induction Motor", 2019 IEEE International Electric Machines & Drives Conference (IEMDC), San Diego, CA, USA, 12-15 May 2019, DOI: 10.1109/IEMDC.2019.8785265.
10. Mohammed AL-SAAD, Emad A. Hussien, Sadiq AHMED, and **Aurelian CRACIUNESCU**, "Comparative Study of Compensation Circuit Topologies in 6.6kW Capacitive Power Transfer System", 2019 11th International Symposium on Advanced Topics in Electrical Engineering (ATEE), Bucharest, Romania, 28-30 March 2019. DOI: 10.1109/ATEE.2019.8725012.
11. Adrian Semon, and **Aurelian Crăciunescu**, "Study to Increase the Efficiency of the Electric Drive System of a Vehicle at Different Speeds", 2019 11th International Symposium on Advanced Topics in Electrical Engineering (ATEE), Bucharest, Romania, 28-30 March 2019. DOI: 10.1109/ATEE.2019.8724976.
12. Ammar AL-GIZI, Basma AL-RAWE, Mohammed AL-SAAD, and **Aurelian CRACIUNESCU**, "Step by Step FPGA-Based Implementation of MPPT Fuzzy Controller for PV Systems", 2019 11th International Symposium on Advanced Topics in Electrical Engineering (ATEE), Bucharest, Romania, 28-30 March 2019. DOI: 10.1109/ATEE.2019.8724948.
13. Adrian Semon, Leonard Melcescu, Ovidiu Craiu, and **Aurelian Crăciunescu** "Design Optimization of the Rotor of a V-type Interior Permanent Magnet Synchronous Motor using Response Surface Methodology", 2019 11th International Symposium on Advanced Topics in Electrical Engineering (ATEE), Bucharest, Romania, 28-30 March 2019. DOI: 10.1109/ATEE.2019.8724856.
14. Mohammed AL-SAAD, Sarab AL-CHLAIHAWI, Mustafa AL-QAISI, and **Aurelian CRĂCIUNESCU**, "A New Analytical Formula for Coupling Capacitance of Unipolar Capacitive Coupler in Wireless Power Transfer System", 2019 11th International Symposium on Advanced Topics in Electrical Engineering (ATEE), Bucharest, Romania, 28-30 March 2019, DOI: 10.1109/ATEE.2019.8724941.
15. Mohammed AL-SAAD, Mustafa AL-QAISI, Layth AL-BAHRANI, Ali AL-OMARI, and **Aurelian CRĂCIUNESCU**, "A Comparative Study of Capacitive Couplers in Wireless Power Transfer", 2018 International Symposium on

- Fundamentals of Electrical Engineering (ISFEE), Bucharest, Romania, 01-03 November 2018, DOI: 10.1109/ISFEE.2018.8742470.
16. Ammar AL-GIZI, Mohammed AL-SAADY, Sarab AL-CHLAIHAWI, **Aurelian CRACIUNESCU**, and Mustafa Abbas FADEL, "Experimental Installation of Photovoltaic MPPT Controller Using Arduino Board", 2018 International Conference on Applied and Theoretical Electricity (ICATE), Craiova, Romania, 04-06 October 2018. DOI: 10.1109/ICATE.2018.8551397.
 17. V. Olteanu, L. Pătularu, Claudia Popescu, M. O. Popescu, and **Aurelian Crăciunescu**, „Design of experiments with four-factors for a PEM fuel cell optimization”, International conference of numerical analysis and applied mathematics (2016), AIP Conference Proceedings 1863(1): 420006, July 2017. DOI:10.1063/1.4992594
 18. Mircea Taciuc, and **Aurelian Crăciunescu**, "Application of the Lambert W-function for a PV module parameters' estimation", International conference of numerical analysis and applied mathematics (2016), AIP Conference Proceedings 1863(1): 420007, July 2017. DOI:10.1063/1.4992595.
 19. Sarab Jwaid Al-Chlaihawi, **Aurelian Craciunescu**, Mohamed Louzazni, and Ammar Ghalib Al-Gizi, "Full bridge three port converter power flow control using fuzzy logic controller", 2017 IEEE International Conference on Environment and Electrical Engineering and 2017 IEEE Industrial and Commercial Power Systems Europe (EEEIC / I&CPS Europe), Milan, Italy, DOI: 10.1109/EEEIC. 2017.7977868. 06-09 June 2017.
 20. Ammar Al-Gizi, **Aurelian Craciunescu**, Sarab Al-Chlaihawi, "Improving the performance of PV system using genetically-tuned FLC based MPPT", 2017 International Conference on Optimization of Electrical and Electronic Equipment (OPTIM) & 2017 Intl Aegean Conference on Electrical Machines and Power Electronics (ACEMP), Brasov, Romania, 25-27 May 2017. DOI: 10.1109/OPTIM.2017.7975041.
 21. Sarab Jwaid AL-Chlaihawi, **Aurelian Craciunescu**, and Ammar Ghalib Al-Gizi, "Power flow management in three port converter using PV panel with maximum power point tracker", 2017 10th International Symposium on Advanced Topics in Electrical Engineering (ATEE), Bucharest, Romania, 23-25 March 2017, DOI: 10.1109/ATEE.2017.7905136.
 22. Mohamed Louzazni, Ahmed Khouya, Khalid Amechnoue, **Aurelian Crăciunescu**, and Marco Mussetta, "Comparative prediction of single and double diode parameters for solar cell models with firefly algorithm", 2017 10th International Symposium on Advanced Topics in Electrical Engineering (ATEE), Bucharest, Romania, 23-25 March 2017. DOI: 10.1109/ATEE.2017.7905087.
 23. Ammar Ghalib Al-Gizi, **Aurelian Craciunescu**, and Sarab Jwaid Al-Chlaihawi, "The use of ANN to supervise the PV MPPT based on FLC", 2017 10th International Symposium on Advanced Topics in Electrical Engineering (ATEE), Bucharest, Romania, 23-25 March 2017, DOI: 10.1109/ATEE.2017.7905128.
 24. Mohamed Louzazni, Ahmed Khouya, Khalid Amechnoue, and **Aurelian Crăciunescu**, "Parameter estimation of photovoltaic module using bio-inspired firefly algorithm", 2016 International Renewable and Sustainable Energy Conference (IRSEC), Marrakech, Morocco, 14-17 November 2016, DOI: 10.1109/IRSEC.2016.7983895.
 25. Jemaa Aymen, Zarrad Ons, Mansouri Mohamed Nejib, and **Aurelian Craciunescu**, "Maximum Power Point Tracking of Photovoltaic Modules: Comparison of Fuzzy Logic and Artificial Network Controllers' Performances", 2016 Third International

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V. BREVETE DE INVENȚIE / INOVAȚII SAU CREAȚII ARTISTICE (B,A)

B - Brevete de invenție.

1. **Aurelian Crăciunescu** și Sorin Bucurenciu, Brevetul de Invenție nr. 54469 din 16.12.1969 acordat pentru invenția cu titlul ”Procedeu de producere a cuplului electromagnetic și mașină electrică”
2. **Aurelian Crăciunescu** și Constantin Ghenoiu, Brevetul de Invenție nr. 71926 din 23.11.1976 acordat pentru invenția cu titlul ”Procedeu de realizare a înfășurărilor motoarelor electrice asincrone”
3. **Aurelian Crăciunescu**, Constantin Ghenoiu și Ștefan Plăcintescu, Brevetul de Invenție nr. 71943 din 20.08.1977 acordat pentru invenția cu titlul ”Convertor electromecanic de energie pentru sisteme de acționare cu viteze foarte mici”
4. **Aurelian Crăciunescu**, Brevetul de Invenție nr. 108749 B1 din 12.07.1993 acordat pentru invenția cu titlul ”Motor electric monofazat fără câmp magnetic învârtitor statoric”.
5. **Aurelian Crăciunescu** și Constantin Răduți, Brevetul de Invenție nr. 73628 din 26.01.1980 acordat pentru invenția cu titlul ”Servomotor de curent continuu cu excitație prin magneți permanenți”
6. **Aurelian Crăciunescu**, Brevetul de Invenție nr. 74722 din 03.08.1973 acordat pentru invenția cu titlul ”Traductor de câmp magnetic cu miez saturabil”
7. **Aurelian Crăciunescu** și Constantin Răduți, Brevetul de Invenție nr. 74602 din 29.03.1980 acordat pentru invenția cu titlul ”Servomotor de curent continuu cu număr mare de poli”
8. **Aurelian Crăciunescu**, Alexandru Fransua și Constantin Răduți, Brevetul de Invenție nr. 76727 din 31.12.1980 acordat pentru invenția cu titlul ”Servomotor de curent continuu cu magneți permanenți ceramici”
9. Andrei Szigeti și **Aurelian Crăciunescu**, Brevetul de Invenție nr. 123412 din 09.11.2007 acordat pentru invenția cu titlul ”Bobinaj pentru motor pas cu pas bifazat”

VI. CONTRACTE ȘI RAPOARTE ȘTIINȚIFICE (P,F)

P – Proiecte de cercetare-dezvoltare – inovare obținute prin competiție, pe bază de contract/grant, în țară/străinătate (**Pn** – naționale, **Pi** - internaționale).

F – Alte lucrări de cercetare – dezvoltare

Obs.-a se menționa calitatea de responsabil/director sau coautor.

Pn – naționale

1. Programul RELANSIN Sistem electric de propulsie pentru vehicule rutiere.
Director de proiect UPB: 2001-2002.
2. Programul RELANSIN Vehicul electric ușor cu utilizări multiple.
Director de proiect UPB: 2001-2002.
3. Programul RELANSIN Motor electric pentru pompe solare. Director de proiect, UPB. 2001-2003.
4. Programul de Cercetare de Excelanță, CEEEX, Modul 1, Contract Nr. 90/ 2005 –

2008 “Rețea de cercetare tehnologică de dezvoltare a componentelor și a turbinelor de vânt de putere mică și medie (până la 100 kW) cuplate la rețea”; Coordonator general: ICPE S.A. Responsabil uPB..

5. Contract CEEEX – 167/2006 – Modul 3, 2006-2008 “Strategii de dezvoltare pentru sistemele fotovoltaice de generare a energiei” – „PV –development”; Coordonator general: UPB. Director de contract.
6. Contract CEEEX – 5558/2006 – Modul 1, 2006-2008 „Cercetări teoretice și experimentale demonstrative ale sistemelor de propulsie electrică și hibridă pentru dezvoltarea sistemelor de transport competitive și durabile”; Responsabil UPB.
7. Motor de curent continuu cu magneți permanenți pentru transport uzinal realizat în gabaritul motorului Ce 80-TU. Contract de cercetare științifică nr. 4-2-3/29.06.1982, beneficiar: UMEB, București. Director de proiect.
8. Acționări electrice monofazate cu performanțe de pornire îmbunătățite pentru pompe și ventilatoare, Contract de cercetare ANSTI. 1999. Director de proiect.

Pi – internationale

1. PLACTUS 98 – Placements in Leisure, Administration, Commerce and Tourism for University Students”, LEONARDO Project, Programme Strand II.1.2.(a), Coordinated by university of Birmingham, U.K. 1998 – 2001. Responsabil UPB.
2. VICO-ECOM: Virtual Corporate Learning about Electronic Commerce, LEONARDO DA VINCI Pilot Project D/01/B/F/PP-112511, Coordinator: the Berufskolleg Rheydt Mülfort für Wirtschaft und Verwaltung, 3738 Euro. 2000 – 2003. Responsabil UPB.
3. EURO-EXIST: Kooperationsvertrag „Qualifizierungskonzept(e) zur Förderung europäisch ausgerichtet Existenzgründungen”, LEONARDO-Pilotproject No. D/99/2/011081/P1/II.1.1.a/FPC, Koordinator: Bezirksregierung Düsseldorf (NRW-Deutschland). 1999 – 2000. Responsabil UPB.
4. Proiect „Leonardo da Vinci” D/98/2/05157/PI/II.1.1a/CONT „TEQUITA – Teamorientierte Qualifizierungsmodelle für Informations- und Telekommunikationsausbildung”, Koordinator: Bezirksregierung Düsseldorf (NRW-Deutschland). 1998 – 2000. Responsabil UPB.
5. PV ENLARGEMENT – Technology Transfer, Demonstration and Scientific Exchange Action for the Establishment of a Strong European PV Sector. Contract no. NNE5/736/2001, coordinated by WIP, München, Germany. 2002 – 2006. Responsabil UPB.
6. NETCAMPUS – Improving Open and Distance Learning in a Network, Socrates-Minerva Project. Coordinated by Europace Organization, Leuven, Belgique. 2000 – 2003. Responsabil UPB.
7. Transparent Simulation Programme for Electrical and Hybrid Vehicles, Associated Contract ERB-CIPDCT-930349 to the Contract ERB-JOU2-CT92-0200. Coordinated by University of Kaiserslautern, Germany. 1982 – 1983. Responsabil UPB.
8. Development and application of water pumping system for remote areas consisted of

photovoltaic (PV) modules with inverters integrated into the PV modules and a new type of a asynchronous pump motor. Contract ICOP-DEMO-2154-1996, coordinated by Agricultural University of Athens, Greece. 2000 – 2002. Responsabil UPB.

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