LISTA LUCRĂRILOR

1. Lucrări reprezentative (maximum 10)

1. **S.I.Deaconu**, Popa Gabriel Nicolae, Toma Ioan Adrian, Topor Marcel, Modeling and Experimental Analysis for Modernization of 100t EAF, IEEE Transactions on Industry Application, Vol. 46, no. 6, pp. 2259-2266, November-December 2010.
2. Lucian Nicolae Tutelea, Ion Boldea, Nicolae Muntean, **S.I.Deaconu**, Modeling and Performance of Novel Scheme Dual Winding Cage Rotor Variable Speed Induction Generator with dc Link Power Delivery, IEEE ENERGY CONVERSION CONGRESS & EXPOSITION, ECCE 2014, September 14-18, Pittsburgh, USA, pp. 271-278, ISBN 978-1-4799-5776-7/14, 2014.
3. Lucian Nicolae Tutelea, **S.I.Deaconu**, Ion Boldea, Classical DC Excited Synchronous Generator for High Power Direct Driven Wind Turbine: Optimal Design and FEM Validation, EPE'15 ECCE Europe, Geneva, 8-10 septembrie, pp. 7, ISBN: 9789075815238, 2015.
4. **S.I.Deaconu**, Marcel, Popa Gabriel Nicolae, Bistrian Diana Alina, Experimental study and comparative analysis of transients of induction motor with softstarter startup, Advanced in Electrical and Computer Engineering, Issue 3, pp. 27-33, 2010, ISSN 1582-7445.
5. Tutelea Lucian Nicolae, Boldea Ion, **S.I.Deaconu**, The Single Stator Dual Rotor PMSM for HEV: Two Windings and 4 Leg Inverter Control, EPE-PEMC ECCE Europe, 15th International Power Electronics and Motion Control Conference and Exposition, Novi Sad, Serbia, 4-6 Septembrie, 2012, pp. 6, ISBN 978-4673-1972-0.
6. Tutelea Lucian Nicolae, **S.I.Deaconu**, Boldea Ion, Fabrizzio Marignetti, Popa Gabriel Nicolae, Design and Control of a Single Stator Dual PM Rotors Axial Synchronous Machine for Hybrid Electric Vehicle, 14th European Conference on Power Electronics and Applications, EPE 2011, Birmingham, England, 1-2 September, pp. 10, ISBN 978-1-61284-167-0.
7. Boldea Ion, Tutelea Lucian, **S.I.Deaconu**, Fabrizzio Marignetti, Dual Rotor Single-Stator Axial Air gap PMSM Motor/Generator Drive for HEVs: A Review of Comprehensive Modeling and Performance Characterization, International Conference on Electrical Systems for Aircraft, Railway and Ship Propulsion, ESARS 2012, Bologna, Italy, 16-18 October, pp. 8, ISBN 978-4673-1371-1.
8. **S.I.Deaconu**, Topor Marcel, Tutelea Lucian Nicolae, Popa Gabriel Nicolae, Abrudean Cristian, Modelling and Experimental Investigations of a Reactive Homo-Heteropolar Brushless Synchronous Machine, IECON 2009 Proceedings, Porto, Portugalia, pp. 1205-1212, ISBN 978-1-4244-4659-0.
9. Tutelea Lucian Nicolae, **S.I.Deaconu**, Boldea Ion, Design and FEM Validation for an Axial Single Stator Dual Rotor PMSM, 38th Annual Conference on IEEE Industrial Electronics Society, IECON 2012, Montreal, Canada, 25-28 October, pp. 2911-2917, ISBN 978-4673-2420-5.
10. L.N.Tutelea, **S.I.Deaconu**, I.Boldea, N.Budisan, “Design, Control and 2D-FEM Validation for an Double Stator Winding Induction Generator”, 39th Annual Conference

of the IEEE Industrial-Electronics-Society (IECON), 2013, Viena, Austria, ISSN 1553-572X / ISBN 978-1-4799-0224-8, pp. 2732-2737.

2. Teza de doctorat

1. **S.I.Deaconu**, "Studiul generatorului electric reglabil fără perii", Universitatea Politehnica Timişoara, Conducător ştiinţific: Prof. dr. ing. Anton SAIMAC. Confirmată prin Ordinul ministrului Educaţiei Naţionale nr. 5182 / 10.12.1998.

3. Brevete de invenţie

1. Popa Gabriel Nicolae, Popa Iosif, **S.I.Deaconu**, "Convertor liniar tensiune continuă-semnal sinusoidal de frecvenţă variabilă", RO130458 A2, 2015.
2. Boldea Ion, **S.I.Deaconu**, Marignetti Fabrizio, Tutelea Lucian Nicolae, "Brushless electrical actuator with two independent rotors for hybrid electrical propulsion", IT 1409332-B, 2014.
3. Popa Iosif, Popa Gabriel Nicolae, **S.I.Deaconu**, "Releu electronic de timp cu toate funcţiile uzuale", RO129042 A2, 2013.

4. Cărţi şi capitole în cărţi de specialitate

1. **S.I.Deaconu**, V. Horga, M. Topor, F. Marignetti, L.N. Tutelea, I. Nucă, "Lightweight high efficiency power train propulsion with axial flux machines for electric or hybrid vehicles. Capitol în cartea: New Trends in Electrical Vehicle Powertrains", IntechOpen London, ISBN 978-953-51-6246-9, 2018, 20 pp.
2. M. A. Tir, F. Marignetti, **S.I.Deaconu**, "Passive magnetic bearings. Capitol în cartea: Advances in Engineering Research", Nova Science Publishers New York, ISBN 978-53614-218-1 (e-book), 2018, 24 pp.
3. L.N.Tutelea, N.Muntean, **S.I.Deaconu**, "Dual Stator Winding Induction Generator for Wind or Hydro Applications", Editura Politehnica Timişoara, ISBN 978-606-35-0111-1, 2017, 186 pp.
4. **S.I.Deaconu**, "Maşini electrice", Editura Politehnica Timişoara, ISBN 978-606-35-0079-4, 2016, 446 pp.
5. L.N.Tutelea, **S.I.Deaconu**, "Dual rotor single stator permanent magnet motors for hybrid electrical vehicles", Editura Politehnica Timişoara, ISBN 978-606-554-861-9, 2014, 119 pp.
6. **S.I.Deaconu**, "Elemente generale ale maşinilor electrice. Transformatorul şi maşina de curent continuu", Editura Politehnica Timişoara, ISBN 978-973-625-739-1, 2008, 141 pp.
7. **S.I.Deaconu**, "Maşini electrice de curent alternativ. Elemente fundamentale", Editura Politehnica Timişoara, ISBN 978-973-625-738-4, 2008, 154 pp.
8. G.N.,Popa, I., Popa, **S.I.Deaconu**, „Automate programabile în aplicaţii", Editura Mirton, Timişoara, 2006.

9. **S.I.Deaconu**, "Maşini şi acţionări electrice", Editura Politehnica Timişoara, ISBN 973-625-200-0, 2005, 268 pp.
10. **S.I.Deaconu**, "Maşini Electrice. Partea I", Editura Destin Deva, ISBN 973-9105-38-6, 2000, 156 pp.
11. **S.I.Deaconu**, L.N.Tutelea, A.Iagăr, "Maşini Electrice. Aplicaţii", Editura Destin Deva, ISBN 973-9105-34-3, 2000, 169 pp.

5. Articole în extenso în reviste cotate şi indexate ISI Thomson-Reuters

1. **S.I.Deaconu**, Popa Gabriel Nicolae, Toma Ioan Adrian, Topor Marcel, Modeling and Experimental Analysis for Modernization of 100t EAF, IEEE Transactions on Industry Application, Vol. 46, no. 6, pp. 2259-2266, November-December 2010.
2. **S.I.Deaconu**, Marcel, Popa Gabriel Nicolae, Bistrian Diana Alina, Experimental study and comparative analysis of transients of induction motor with softstarter startup, Advanced in Electrical and Computer Engineering, Issue 3, pp. 27-33, 2010, ISSN 1582-7445.
3. G.N.Popa, C.M. Diniş, **S.I.Deaconu**, Considerations on the Current Harmonics of Plate-Type Electrostatic Precipitators Power Supplies, ELEKTRONIKA IR ELEKTROTECHNIKA, 2013, Vol.19, Issue 5, ISSN 1392-1215, pp. 27-32.
4. G.N.Popa, I.Şora, C.M. Diniş, **S.I.Deaconu**, An Analysis on the Velocity of Dust Particles in the Plate-Type Electrostatic Precipitators Used in Thermoelectric Power Plants, Environment Protection Engineering, 2014, Vol. 40, No. 1, ISSN 0324-8828, pp. 85-102.

6. Articole în volumele unor manifestări ştiinţifice indexate ISI Proc.

1. **S.I.Deaconu**, G.N. Popa, C.D. Cuntan, Experimental Investigation of a Hydroelectric Power Plant, 2016 International Conference and Exposition on Electrical and Power Engineering, Iaşi, România, 2016, pp. 529-534.
2. G.N. Popa, C.M. Dinis, **S.I.Deaconu**, Numerical Simulations of the Electric Parameters of the Plate-Type Electrostatic Precipitators Supplied with DC Voltage, 2016 International Conference and Exposition on Electrical and Power Engineering, Iaşi, România, 2016, pp. 75-78.
3. C. Barz, **S.I.Deaconu**, T. Latinovici, A. Berdie, A. Pop-Vadean, M. Horgos, PLCs used in smart home control, IOP Conf. Series: Materials Science and Engineering 106 (2016) 012036, 2016, 7 pp.
4. L.N. Tutelea, N. Muntean, **S.I.Deaconu**, C.D. Cuntan, Dual stator winding variable speed asynchronous generator: magnetic equivalent circuit with saturation, FEM analysis and experiments, IOP Conf. Series: Materials Science and Engineering 106 (2016) 012029, 2016, 10 pp.
5. I. Popa, G.N. Popa, C.M. Dinis, **S.I. Deaconu**, Astable multivibrator circuits made with low capacity PLC, IOP Conf. Series: Materials Science and Engineering 106 (2016) 012012, 2016, 8 pp.
6. G.N. Popa, C.M. Dinis, **S.I.Deaconu**, St. Maksay, I. Popa, Modelling of some parameters from thermoelectric power plants, IOP Conf. Series: Materials Science and Engineering 106 (2016) 012011, 2016, 12 pp.

7. L.N.Tutelea, **S.I.Deaconu**, G.N.Popa, "Dual stator winding variable speed asynchronous generator: optimal design and experiments", IOP Conf. Series: Materials Science and Engineering 85 (2015) 012010, 2015, ISSN: 1757-899X, 9 pp.
8. T. Latinovici, **S.I.Deaconu**, M T Latinović, N Malešević, C. Barz, Develop virtual joint laboratory for education like distance engineering system for robotic applications, IOP Conf. Series: Materials Science and Engineering 85 (2015) 012018, 2015, ISSN: 1757-899X, 11 pp.
9. I Popa, G N Popa, **S.I.Deaconu**, A Iagăr, Spotting the earth connection and short circuits between the electric conductors, using D.C. bridges for resistance measurements, IOP Conf. Series: Materials Science and Engineering 85 (2015) 012027, 2015, ISSN: 1757-899X, 7 pp.
10. Lucian Nicolae Tutelea, **S.I.Deaconu**, Ion Boldea, Classical DC Excited Synchronous Generator for High Power Direct Driven Wind Turbine: Optimal Design and FEM Validation, EPE'15 ECCE Europe, Geneva, 8-10 septembrie, ISBN: 9789075815238, 2015 7 pp.
11. L.N.Tutelea, **S.I.Deaconu**, I.Boldea, G.N.Popa, "Dual rotor single-stator axial air gap PMSM motor/generator drive for high torque vehicles", International Conference on Applied Sinces (ICAS2013) Book Series: IOP Conference Series-Materials Science and Engineering Vol: 57, Article No. 012009, 2014, ISSN 1757-8981, pp. 1-7.
12. Lucian Nicolae Tutelea, Ion Boldea, **S.I.Deaconu**, Parameter optimal identification of dual three phases stator winding induction machine, 14th International Conference on Optimizations on Electrical and Electronic Equipment OPTIM 2014, Braşov 22-24 Mai, ISBN 978-1-4799-5183-3/14, pp. 231-238.
13. **S.I.Deaconu**, G.N.Popa, R.Babău, "Study, Design and Industrial Implementation of Capacitive Power Factor Controller for Large Load Fluctuations in Steel Industry", 8th International Conference and Exposition on Electrical and Power Engineering, IEEE, EPE, Iaşi, România, 2014, ISBN 978-1-4799-5849-8, pp. 962-967.
14. Lucian Nicolae Tutelea, Ion Boldea, Nicolae Muntean, **S.I.Deaconu**, Modeling and Performance of Novel Scheme Dual Winding Cage Rotor Variable Speed Induction Generator with dc Link Power Delivery, IEEE ENERGY CONVERSION CONGRESS & EXPOSITION, ECCE 2014, September 14-18, Pittsburgh, USA, pp. 271-278, ISBN 978-1-4799-5776-7/14, 2014.
15. L.N.Tutelea, **S.I.Deaconu**, G.N.Popa, "Reduced cost low speed wind or hydro energy conversion system with twin stator windings induction generator", Power Electronics and Motion Control Conference and Exposition (PEMC), 2014 16th International, Antalya, Turcia, pp. 317-324.
16. Marcel Topor, Sorin Ioan Deaconu, Lucian Nicolae Tutelea, Homo-heteropolar Synchronous Machine for Low Power Variable Speed Wind or Hydro Applications: Design, 3D FEM Validation and Control, Power Electronics and Applications (EPE'14-ECCE Europe), 2014 16th European Conference on, 26-28 Aug. 2014, Lapenranta, Finlanda, ISBN 978-1-4799-3014-2 and 978-9-0758-1520-7, pp.10, 2014.
17. L.N.Tutelea, **S.I.Deaconu**, I.Boldea, N.Budisan, "Design, Control and 2D-FEM Validation for an Double Stator Winding Induction Generator", 39th Annual Conference of the IEEE Industrial-Electronics-Society (IECON), Viena, Austria, 2013, ISSN 1553-572X / ISBN 978-1-4799-0224-8, pp. 2732-2737.

18. Tutelea Lucian Nicolae, Boldea Ion, **S.I.Deaconu**, The Single Stator Dual Rotor PMSM for HEV: Two Windings and 4 Leg Inverter Control, EPE-PEMC ECCE Europe, 15th International Power Electronics and Motion Control Conference and Exposition, Novi Sad, Serbia, 4-6 Septembrie, 2012, ISBN 978-4673-1972-0, 6 pp..
19. Tutelea Lucian Nicolae, **S.I.Deaconu**, Boldea Ion, Fabrizzio Marignetti, Popa Gabriel Nicolae, Design and Control of a Single Stator Dual PM Rotors Axial Synchronous Machine for Hybrid Electric Vehicle, 14th European Conference on Power Electronics and Applications, EPE 2011, Birmingham, England, 1-2 September, ISBN 978-1-61284-167-0, 10 pp.
20. Popa Gabriel Nicolae, Diniş Corina Maria, **S.I.Deaconu**, Numerical Modelling In Plate-Type Electrostatic Precipitator Supplied With Pulse Energization, 14th European Conference on Power Electronics and Applications, EPE 2011, Birmingham, England, 1-2 September, ISBN 978-1-61284-167-0, 8 pp.
21. Popa Gabriel Nicolae, Diniş Corina Maria, **S.I.Deaconu**, Popa Iosif, A Numerical Modeling of Electric Parameters from Industrial Plate-Type Electrostatic Precipitator, 2011 IEEE International Conference on Industrial Technology (ICIT), Auburn, Alabama, USA, ISBN 978-1-4244-9066-0, pp. 21-26.
22. Boldea Ion, Topor Marcel, Fabrizzio Marignetti, **S.I.Deaconu**, Tutelea Lucian Nicolae, A Novel, Single Stator Dual PM Rotor Synchronous Machine: Topology, Circuit model, Controlled Dynamics Simulation and 3D FEM Analysis of Torque Production, 12th Conference on Optimization of Electrical and Electronic Equipment, OPTIM 2010, Brasov, Romania, ISBN 978-4244-7020-4, pp. 343-351.
23. Popa Gabriel Nicolae, Vaida Victor, **S.I.Deaconu**, Şora Ioan, An Analysis on the Optimal Fields Number of the Plate-Type Electrostatic Precipitators used in a Thermoelectric Power Plant, 12th Conference on Optimization of Electrical and Electronic Equipment, OPTIM 2010, Brasov, Romania, ISBN 978-4244-7020-4, pp. 232-239.
24. **S.I.Deaconu**, Tutelea Lucian Nicolae, Popa Gabriel Nicolae, Latinovic Tihomir, Mathematical Models and the Control of Homopolar and Homo-heteropolar Reactive Synchronous Machine With Stator Excitation, European Conference of Systems, ECS 2010, Puerto de la Cruz, Tenerife, Spania, November 30-December 2, ISBN 978-960-474-250-9, pp. 78-83.
25. Popa Gabriel Nicolae, Abrudean Cristian, **S.I.Deaconu**, Popa Iosif , Vaida Victor, A Case Study of ESP Electrical Characteristics from a Thermal Power Station, 44th Annual Meeting of the IEEE-Industry-Applications-Society, 2009, Houston, Texas, USA, ISSN 0197-2618, ISBN 978-1-4244-3475-6, pp. 515-520.
26. **S.I.Deaconu**, Topor Marcel, Popa Gabriel Nicolae, Popa Iosif, Comprehensive Analysis for Modernization of 100t Electric Arc Furnace for Steel Production, IAS 2009, Annual Meeting, Houston Texas, SUA, CFP 09 IAS-CDR, 4-8 Octombrie, ISBN 978-1-4244-3476-3, pp. 143-148.
27. **S.I.Deaconu**, Topor Marcel, Tutelea Lucian Nicolae, Popa Gabriel Nicolae, Abrudean Cristian, Mathematical Model of a Reactive Homopolar Synchronous Machine with Stator Excitation, EPE 2009, 13th European Conference on Power Electronics and Aplications CFP 09850- CDR, Barcelona, Spania, 8-10 Septembrie, ISBN 978-9-0758-1150-09, pp.2269-2277.

28. **S.I.Deaconu**, Topor Marcel, Tutelea Lucian Nicolae, Popa Gabriel Nicolae, Abrudean Cristian, Modelling and Experimental Investigations of a Reactive Homo-Heteropolar Brushless Synchronous Machine, IECON 2009 Proceedings, Porto, Portugalia, ISBN 978-1-4244-4659-0, pp. 1205-1212.
29. Popa Gabriel Nicolae, Şora Ioan, **S.I.Deaconu**, Diniş Corina Maria, Popa Iosif, An Experimental Investigation of Corona Sound in Pins to Plane Electrostatic Discharge System, Proceedings ICIT 2009, Industrial Technology, IEEE International Conference, Monash University, Melbourne, Victoria, Australia, ISBN 978-1-4244-3506-7, pp. 146-149.
30. Popa Gabriel Nicolae, **S.I.Deaconu**, Diniş Corina Maria, Iagăr Angela, Implementation of a Numerical Distance Relay for the 110kV Electric Lines, Proceedings of the 13th WSEAS International Conference on SYSTEMS, WSEAS CSCC Multiconference, Insula Rodos, Grecia, Iulie 22-24, ISBN 978-960-474-097-0, ISSN 1790-2769, pp. 271-276.
31. **S.I.Deaconu**, Topor Marcel, Popa Gabriel Nicolae, Bistrian Diana Alina, Analysis of Hybrid Power System Incorporating Squirrel Cage Induction Generators, SYSTEMS 2009, 13th WSEAS International Conference on Systems, Insula Rodos, Grecia, ISSN 1790-2769, 22-24 Iulie, ISBN 978-960-474-097-0, pp. 289-294.
32. Pănoiu Manuela, Pănoiu Caius, **S.I.Deaconu**, Study about the posibility of electrodes motion control in the EAF based on adaptive impedance control, 13th International Power Electronics and Motion Control Conference, EPE-PEMC 2008, Poznan, Poland, 1-3 Septembrie, ISBN 978-1-4244-1741-4, pp. 1409-1415.
33. **S.I.Deaconu**, Tutelea Lucian , Popa Gabriel Nicolae, Popa Iosif , Abrudean Cristian , Optimizing the Designing of a Reactive Homopolar Synchronous machine with Stator Excitation , IECON 2008, 34th Annual Conference of the IEEE Industrial Electronics Society, Orlando, Florida, U.S.A. , ISBN 978-4244-1766-7, ISSN 1553-572X , pp. 1311-1318.
34. Popa Gabriel Nicolae, Şora Ioan, Vaida Victor, **S.I.Deaconu**, Popa Iosif, Solutions To Improve Dust Collection With Plate-Type Electrostatic Precipitators, Recent Advances in Electrical Engineering, Bucharest, Romania, ISBN 978-960-6766-77-0, pp. 282-287.
35. **S.I.Deaconu**, Popa Gabriel Nicolae, Popa Iosif, Optimizing the Operation of an Urban District Heating System by Means of Variable Speed Drives, New Aspects of Systems. Part I, Proceedings of the 12th WSEAS International Conference on Systems (SYSTEMS ‘08), Heraklion, Grecia, Publyshed by WSEAS Press, 22-24, iulie, ISBN 978-960-6766-83-1, ISSN 1790-2769, pp. 149-154.
36. Popa Gabriel Nicolae, **S.I.Deaconu**, Popa Iosif, Analysis of the Corona Currents from Pins to Plate Geometry, 12th WSEAS International Conference on SYSTEMS, NEW ASPECTS OF SYSTEMS, PTS I AND II. Mathematics and Computers in Science and Engineering, Heraklion, GREECE, ISBN 978-960-6766-83-1, pp. 143-148.
37. Popa Gabriel Nicolae, Şora Ioan, Vaida Victor, Popa Iosif, **S.I.Deaconu**, Analysis Of Mathematical Models Of Current-Voltage Characteristics For Plate-Type Electrostatic Precipitators, Recent Advances in Electrical Engineering, Bucharest, Romania, ISBN 978-960-6766-77-0, pp. 288-292.

7. Articole în reviste şi volumele unor manifestări ştiinţifice indexate în alte baze de date internaţionale

1. **S.I.Deaconu**, R.Babău, G.N.Popa, P.L.Gherman, Hydroelectric power plant with variable flow on drinking water adduction, International Conference on Applied Sciences (ICAS2017), IOP Publishing, IOP Conf. Series: Materials Science and Engineering 294 (2017) 012023, ISSN 1757-899X, 9 pp.
2. T.Ambros, M.Burduniuc, **S.I.Deaconu**, N.Rujanschi, Electromechanical converters for electric vehicles, International Conference on Applied Sciences (ICAS2017), IOP Publishing, IOP Conf. Series: Materials Science and Engineering 294 (2017) 012058, ISSN 1757-899X, 9 pp.
3. I.Nucă, T.Ambros, M.Burduniuc, **S.I. Deaconu**, A.Ţurcanu, Electric machines with axial magnetic flux, International Conference on Applied Sciences (ICAS2017), IOP Publishing, IOP Conf. Series: Materials Science and Engineering 294 (2017) 012059, ISSN 1757-899X, 9 pp.
4. I.Popa, G.N.Popa, C.M.Diniş, **S.I.Deaconu**, Bidirectional automatic release of reserve for low voltage network made with low capacity PLCs, International Conference on Applied Sciences (ICAS2017), IOP Publishing, IOP Conf. Series: Materials Science and Engineering 294 (2017) 012053, ISSN 1757-899X, 15 pp.
5. G.N.Popa, C.M.Diniş, A.Iagăr, **S.I.Deaconu**, I.Popa, Industrial application of low voltage bidirectional automatic release of reserve, International Conference on Applied Sciences (ICAS2017), IOP Publishing, IOP Conf. Series: Materials Science and Engineering 294 (2017) 012054, ISSN 1757-899X, 11 pp.
6. M.Topor, F.Marignetti, **S.I.Deaconu**, L.N.Tutelea, "Single Stator Dual PM Rotor Synchronous Machine with two frequency single-inverter control, for the propulsion of hybrid electric vehicles", MATEC Web of Conferences 125, 02065 (2017), CSCC 2017, Heraklion, Creta, Grecia, e-ISSN: 2261-236X, pp. 6.
7. **S.I.Deaconu**, M.Topor, L.N.Tutelea, I.Nucă, M.Burduniuc, „Wind or Hydro Homo-Heteropolar Synchronous Generators: Equivalent Magnetic Circuit and FEM Analysis" MATEC Web of Conferences 210, 02008 (2018), CSCC 2018, Majorca, Spania, pp. 7.
8. L.N.Tutelea, **S.I.Deaconu**, G.N.Popa, "Control System for Producing Electricity with Dual Stator Winding Cage-Rotor Induction Generator", Analele Universităţii „Eftimie Murgu" Reşiţa , Vol. XXI, nr. 2, 2014, ISSN 1453-7397, pp. 323-334.
9. T.Latinovic, M.Lazarevic, **S.I.Deaconu**, G.Sziebig, G.Milosevic, Fuzzy Logic Combined with Neutral Algorithm to Control Industrial Robot, Annals of Faculty Engineering Hunedoara – International Journal of Engineering, Tom XII, Fasc. 1, 2014, ISSN 1584-2665(P) 1584-2673(OL), pp. 133-136.
10. L.N.Tutelea, **S.I.Deaconu**, N.Budisan, I.Boldea, "Double stator winding induction generator for wind and hydro applications: 2D-FEM analysis and optimal design", Power Electronics and Applications (EPE), 2013 15th European Conference on, Lille, Franţa, pp. 10.
11. G.N.Popa, S.I.Deaconu, C.M.Diniş, Modeling of Electrical and Technological Parameters of Industrial Precipitators, INTELEC 2013, Hamburg, Germania, 6 pp.
12. L.N.Tutelea, **S.I.Deaconu**, I.Popa, G.N.Popa, "Control Methods of an Single Stator Dual Rotor PMSM", Buletinul AGIR, vol. XVII, no. 4, 2012, ISSN 1224-7928, pp. 15-22.

13. L.N.Tutelea, I.Boldea, **S.I.Deaconu**, "Optimal design of dual rotor single stator PMSM drive for automobiles", Electric Vehicle Conference (IEVC), 2012 IEEE International, Greenville, SC, USA, pp. 8.
14. I.Boldea, L.N.Tutelea, **S.I.Deaconu**, F.Marignetti, "Dual rotor single-stator axial air gap PMSM motor/generator drive for HEVs: A review of comprehensive modeling and performance characterization", Electrical Systems for Aircraft, Railway and Ship Propulsion (ESARS), 2012, Bologna, Italia, pp. 8.
15. L.N.Tutelea, **S.I.Deaconu**, I.Boldea, "Design and FEM validation for an axial Single Stator Dual Rotor PMSM", IECON 2012-38th Annual Conference on IEEE Industrial Electronics Society, Montreal, Canada, pp. 2929- 2935.
16. G.N.Popa, **S.I.Deaconu**, I.Popa, C.M.Diniş, New Trends in Detection of Back-Corona Discharges in Plate-Type Electrostatic Precipitators, Acta Technica Corviniensis - Buletin of Engineering, 2012, ISSN 2067-3809, pp. 93-96.
17. G.N.Popa, I.Popa, **S.I.Deaconu**, Collecting Efficiencies and Migration Velocities of Dust Particles from a Three Sections Electrostatic Precipitator, Annals of Faculty Engineering Hunedoara – International Journal of Engineering,Tom X, Fascicula 3, 2012, ISSN 1453-7397, pp. 203-206.
18. I.Popa, G.N.Popa, **S.I.Deaconu**, The Sizing of the Branch Three-Phase Low Voltage Power Lines Trough Superposition Method, Annals of Faculty Engineering Hunedoara – International Journal of Engineering,Tom X, Fascicula 3, 2012, ISSN 1453-7397, pp. 313-316.
19. **S.I.Deaconu**, G.N.Popa, R.Deaconu, "Commissioning, Monitoring and Control of a Low-power Hydroelectric Power Plant", Recent Researches in Circuits and Systems, Proceedings of the 16th WSEAS International Conference on SYSTEMS, Kos Island, Greece, July 14-17, 2012, ISBN: 978-1-61804-108-1, pp. 173-178.
20. A.Iagăr, **S.I.Deaconu**, C.D.Cunţan, I.Baciu, Harmonic Analysis of a high Speed Automatic Reclosing on a 400 kv Overhead Transmision Line, Recent Researches in Circuits and Systems, Proceedings of the 16th WSEAS International Conference on SYSTEMS, Kos Island, Greece, July 14-17, 2012, ISBN: 978-1-61804-108-1, pp. 219-224.
21. G.N.Popa, I.Popa, **S.I.Deaconu**, C.M.Diniş, An Overview of Current-Voltage Characteristics Estimation from Plate-Type Electrostatic Precipitator with Three Sections, Recent Researches in Circuits and Systems, Proceedings of the 16th WSEAS International Conference on SYSTEMS, Kos Island, Greece, July 14-17, 2012, ISBN: 978-1-61804-108-1, pp. 279-284.
22. G.N.Popa, **S.I.Deaconu**, I.Popa, C.M.Diniş, Experimental Analysis for Plate-Type Electrostatic Precipitators with Three Sections, OPTIM 2012 , 13 th International Conference on Optimization of Electrical and Electronic Equipment , Brasov , Romania, ISBN: 978-1-4673-1653-8, pp. 1274-1279.
23. G.N.Popa, C.M.Diniş, **S.I.Deaconu**, A.Iagăr, Prospective on Power Quality Analyse of Three Sections Plate-Type Electrostatic Precipitator Supplies, Recent Researches in Circuits and Systems,Multimedia and Automatic Control, Rovaniemi, Finland, 2012, ISBN: 978-1-61804-085-5, pp. 49-54.
24. G.N.Popa, S.I.Deaconu, C.M.Diniş, A.Iagăr, Analysis and Simulations of Three-Phase Uniform Charge Power Sources with Current Harmonic Decrease, International

Review on Modelling and Simulations October 2012, Vol. 5, no. 5, Napoli, Italia, ISSN 1974-9821, pp. 2281-2290.
25. L.N.Tutelea, I.Boldea, **S.I.Deaconu**, G.N.Popa, "Single Stator Dual Rotor PMSM: Design and Optimization with Matlab", International Conference and Exposition on Electrical and Power Engineering, EPE 2012, Iasi, Romania, ISBN: 978-1-4673-1172-4, pp. 349-354.
26. **S.I.Deaconu**, G.N.Popa, "Experimental Survey For Reducing The Flicker Effect And The Deforming Regime Produced By EAFs", Recent Researches in Circuits, Systems, Communications and Computers, Proceedings of the 2th European Conference of Systems ECS 2011, Puerto de la Cruz, Tenerife, Spain, ISBN 978-1-61804-056-5, 2011, pp. 149-154.
27. A.I.Toma, G.N.Popa, A.Iagăr, **S.I.Deaconu**, "Experimental Analysis Of Electric Parameters Of A 100 T UHP Electric Arc Furnace", 2010 IEEE International Conference on Industrial Technology (ICIT), Vina del Mar, Chile, ISBN 978-1-4244-5695-6, 2010-03-14, pp. 919-924.
28. L.N.Tutelea, **S.I.Deaconu**, I.Boldea, F.Marignetti, G.N.Popa, "Quasi-3D FEM Analysis of an Single Stator Dual PM Rotors Axial Synchronous Machine for Hybrid Vehicles", ELECTRIMACS, Cergy-Pontoise, France, 2011, ISBN 978-2-7466-3454-1, 7 pp.
29. G.N.Popa, C.M.Diniş, **S.I.Deaconu**, A.Iagăr, An analyze on a wood processing automatic machine, WSEAS Transactions on Circuits and Systems, Volume 10 Issue 3, March , 2011, ISSN:1109-2734, pp. 83-92.
30. G.N.Popa, **S.I.Deaconu**, On the Dust Particles Electrical Charging Models from Plate-Type Electrostatic Precipitators, Buletinul Institutului Politehnic din Iaşi secţia: Electrotehnică, Energetică, Electronică, vol./nr. 57 (6), 2011, ISSN 1223-8139, 279-287.
31. I.Boldea, L.N.Tutelea, **S.I.Deaconu**, F.Marignetti, "Dual rotor single stator brushless PMSM motor/generator system for full HEVs", Proceedings of the International Conference on ELECTRONICS, COMPUTERS and ARTIFICIAL INTELLIGENCE – ECAI-2011, Vol.4, no.1/2011, Piteşti, România, ISSN 1843–2115, pp. 95-102.
32. I.Baciu, C.D.Cunţan, **S.I.Deaconu**, A.Iagăr, The Study of Quality Indicators of Electrical Energy in Electrical Railway Transport, Annals of Faculty Engineering Hunedoara – International Journal of Engineering,Tom IX, Fascicula 4, 2011, ISSN 1453-7397, pp. 239-243.
33. **S.I.Deaconu**, G.N.Popa, T.Latinovic, "Comparative Study For EAF's Reactive Energy Compensation Methods And Power Factor Improvement", WSEAS TRANSACTIONS on SYSTEMS, 2010, Issue 9, Volume 9, September, ISSN: 1109-2777, pp. 979-989.
34. G.N.Popa, **S.I.Deaconu**, C.M.Diniş, A.Iagăr, A Case Study of An Analogical Distance Relay for the 110kV Electric Power Lines, WSEAS TRANSACTIONS on SYSTEMS, 2010, Issue 10, Volume 9, September, ISSN: 1109-2777, pp. 1063-1072.
35. **S.I.Deaconu**, G.N.Popa, M.Topor, T.Latinovic, "Improvement Of The EAF Energetic Parameters Using Capacitive-Inductive Filters", Last Trends on Systems, Proceedings of the 14th WSEAS International Conference on Systems, Corfu Island, Greece, 2010, ISBN 978-960-474-199-1, ISSN 1792-4235, pp. 474-479.
36. G.N.Popa, **S.I.Deaconu**, C.M.Diniş, A.Iagăr, An Analogical Distance Relay for the 110kV Electric Lines, Last Trends on Systems, Proceedings of the 14th WSEAS

International Conference on Systems, Corfu Island, Greece, 2010, ISBN 978-960-474-199-1, ISSN 1792-4235, pp. 165-170.
37. G.N.Popa, C.M.Diniş, **S.I.Deaconu**, A.Iagăr, Study upon a Wood Processing Automatic Machine, Proceedings of the 11st WSEAS International Conference on AUTOMATION & INFORMATION (ICAI '10), Iaşi, România, 13-15 iunie, Published by WSEAS Press, ISBN 978-960-474-193-9, ISSN 1790-5117, pp. 189-194.
38. I.Baciu, C.D.Cunţan, **S.I.Deaconu**, A.Iordan, Study of the D.C. motors behavior from the componency of electric traction systems in short-circuit regime, Last Trends on Systems, Proceedings of the 14th WSEAS International Conference on Systems, Corfu Island, Greece, 2010, ISBN 978-960-474-199-1, ISSN 1792-4235, pp. 331-335.
39. **S.I.Deaconu**, M.Topor, G.N.Popa, "Study of the Induction Generators with Short-Circuited Rotor in Autonomous Regime", Buletinul Universităţii din Craiova, vol. 34, no. 2, 2010, ISSN 1842- 4805, pp. 111-116.
40. **S.I.Deaconu**, M.Topor, G.N.Popa, D.Bistrian, Application of the Squirell Cage Asynchronous Machine Working as Single Phase Generator in Microhydro Power Plant, Annals of Faculty Engineering Hunedoara – International Journal of Engineering, Tom VII, Fascicula 3, 2009, ISSN 1584-2673, pp. 324-331.
41. G.N.Popa, I.Popa, **S.I.Deaconu**, C.D.Cunţan, A Study about a Rezistive Stepped Transducer used for Water Level Measurement, Annals of Faculty Engineering Hunedoara – International Journal of Engineering, Tom VII, Fascicula 3, 2009, ISSN 1584-2673, pp. 394-399.
42. G.N.Popa, **S.I.Deaconu**, On the Dust Particles Electrical Charging Models from Plate-Type Electrostatic Precipitators, Buletinul Ştiinţific al Institutului Politehnic Iaşi, Sectia Electrotehnica, Energetica, Electronica, Tomul LVII, Fasc. 6, 2008, ISSN 1223-8139, pp. 279-287.
43. G.N.Popa, I.Şora, V.Vaida, I.Popa, **S.I.Deaconu**, Analysis Of Some Solutions That Improve Performances Of Plate-Type Electrostatic Precipitators, WSEAS Transactions on Circuits and Systems, 2008, Issue 7, Volume 8, August, ISSN 1109-273, pp. 843-854.
44. **S.I.Deaconu**, G.N.Popa, I.Popa, "Increasing The Energetic Efficiency In Producing Of Electric And Thermal Power In Thermal Power Plants By Using Of Variable Speed", WSEAS Transaction on SYSTEMS, 2008, Issue 9, Volume 7, Septembrie, ISSN 1109-2777, pp. 834-843.
45. G.N.Popa, I.Popa, **S.I.Deaconu**, Analysis Of The Corona Currents In An Electrostatic Discharge System In Normal Atmospheric Pressure And Temperature, WSEAS Transaction on SYSTEMS, 2008, Issue 9, Volume 7, Septembrie, ISSN 1109-2777, pp. 814-823.
46. I.Boldea, N.Muntean, **S.I.Deaconu**, S.A.Nasar, Z.Fu, "Distributed anisotropy rotor synchronous (DARSYN) drives—Motor indentification and performance", Proc. Int. Conf. Electrical Machines, 1992, vol.2, pp. 542-546.

8. Contracte/granturi de cercetare naţionale şi internaţionale

8.1. Granturi naţionale câştigate prin competiţie

8.1.A Director

1. Sisteme performante de acţionare a vehiculelor hibride şi electrice cu o maşină sincronă axială cu două rotoare, un stator şi un singur invertor, UEFISCDI, Programul PN III/ Cooperare Europeană şi Internaţională/ Proiect bilateral România-Moldova, număr contract 17 BM/19.09.2016.
2. Sistem de putere pentru conversia energiei eoliene cu generator asincron cu două înfăşurări statorice la viteză variabilă în limite largi, UEFISCDI, Programul PN III/ Cooperare Europeană şi Internaţională/ Proiect bilateral România-China, număr contract 8 BM/02.07.2018.

8.1 B Membru în echipă

1. Microgrid integrated small power renewable energy hybrid systems, UEFISCDI, Proiect PCCA 36/2012, PN-II-PT-PCCA-2011-3.2-1519, 2012-2016, Coordonator Universitatea Politehnica Timişoara, partener Universitatea Tehnică Cluj-Napoca.
2. Tehnologii noi de actuatoare electrice pentru automobile, Proiect CEEX, număr proiect X2C33, 2006-2008, Coordonator Universitatea Politehnica Timişoara, partener Universitatea Tehnică Cluj-Napoca.
3. Sistem inteligent pentru diagnoza automată a liniei de contact din transportul electric feroviar, Programul PNCD III, P2, număr proiect 59BG/2016, 2016-2018.
4. Releu complex pentru protecţia liniei de contact împotriva regimurilor anormale de funcţionare, CNCSIS, număr proiect 27688/14.03.2005, 2005-2006.

8.2. Granturi şi contrate de cercetare internaţionale

8.2 B Membru în echipă

1. Dezvoltarea si sustinerea de programe postdoctorale multidisciplinare in domenii tehnice prioritare ale strategiei nationale de cercetare - dezvoltare - inovare 4D-POSTDOC, Programul POS DRU /89/1.5/S/52603, 2010-2013.
2. Parteneriat pentru efectuarea stagiului de practică în domeniul tehnologiei informaţiei şi a comunicaţiei, Programul POS DRU /22/2.1/G/40356, 2010-2012.