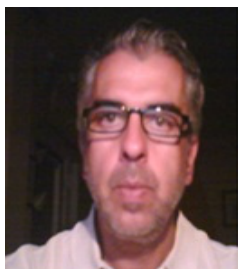


## PERSONAL INFORMATION

**Petros Karaisas**

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 karaisas@uniwa.gr

 www.uniwa.gr

**Sex** Masculine | **Date of birth** 15/02/1969 | **Nationality** Greek

## WORK EXPERIENCE

## EDUCATIONAL WORK

5/2016 - The present , UNIVERSITY OF WEST ATTICA , Department of Electrical and Electronic Engineering ,  
Associate Professor

3/2012 - 5/2016 TEI of Piraeus , Technological Education Institute of Piraeus ,  
Department of Electrical Engineering  
Assistant Professor

2010-2011 TEI of Piraeus , Technological Education Institute of Piraeus ,  
Department of Electrical Engineering  
Scientific Assistant

2009-2010 TEI of Piraeus, Technological Education Institute of Piraeus , Department  
of Electrical Engineering  
Scientific Assistant

2008-2009 TEI of Piraeus , Technological Education Institute of Piraeus ,  
Department of electrical Engineering  
Scientific Assistant

2007-2008 TEI of Chalkida, Technological Education Institute of Piraeus ,  
Department of Electrical Engineering  
Scientific Assistant

2006-2007 University of Ioannina , Economic Science Section, Guest Rapporteur:  
Business Elements II

**Other Teaching experience**

**Postgraduate courses in UNIVERSITY OF WEST ATTICA**

- **Evaluation of Energy Investments**

3/2011-2/2012 Hellenic Ministry of Economy, Development & Tourism. General Secretariat for Industry .Project Manager on investment plants.

<http://www.ggb.gr/en/about-ggb-en>

- Assessments on business plans (Bioagros S.A , European Dynamics S.A, Velti S.A

1/2006 - 2/2011 Information Society S.A . Executive of realization of computer science and communication work

<http://www.ktpae.gr>

- Coupling
- Updating of unified coordination centre of research and preservation (EKSED)( Hellenic Ministry of Mercantile Marine)
- Automatic updating of meteorological stations (Hellenic National Meteorological Service )
- Taxis net (Hellenic Ministry of Economy and Finance)
- Functional unification of subordinate informative systems(infrastructure ICT and applications)and data of TRIZINA municipality for the application of the Kallikratis Programme
- Functional unification of subordinate informative systems (Infrastructure ICT and applications)and data of LOCRA municipality for the application of the Kallikratis Programme
- Functional unification of subordinate informative systems(Infrastructure ICT and application and data of Georgios Karaiskakis municipality for the application of the Kallikratis Programme
- Functional unification of subordinate informative systems (Infrastructures ICT and Applications)and data of Vari - Vouliagmeni municipality for the application of the Kallikratis Programme
- Functional unification of subordinate informative systems - Back Office of Attica region for the application of the Kallikratis Programme
- Codification of legislative and prescriptive material which concerns A.S.E.P and its utilization for its own citizens needs
- Functional unification of subordinate informative systems (Infrastructure ICT and applications)and data of Nafpaktos Municipality for the application of the Kallikratis Programme

1/1999-12/2004 Intracom S.A Studies and Construction Department Project Manager

<http://www.intracom-telecom.com/>

- Athens 2004 Olympic Overlays (Project Manager)
- On-the -spot observation of improvement work on telecommunication network in Moldova Project manager
- On -the-spot observation of improvement work on telecommunication network in Romania - Project manager
- Installation of digital centre TDTX/LX in YEREVAN of ARMENIA GSM network in ARMENIAN cities - Project manager
- Autopsy , Installation , Measuring and activating radio connections in ALBANIA (Project Manager)
- Execution of electromechanical work for the construction of the computer room as well as other work in the offices of the BET company building - Project manager
- Construction of base stations of COSMOTE mobile telephony in SCOPIA - Project Manager
- Cable installation of optical fibre of the subordinate cable axis of the railway line PATRA-PIRAEUS-ATHENS-THESSALONIKI - Project Manager
- SDH installation system work of the internal ring of INTRACOM S.A - Project Manager
- Construction of base stations of DCS 1800 systems of COSMOTE mobile telephony - Project Manager

#### EDUCATION AND TRAINING

- 2005-2006 Postgraduate Degree in Specialization of Applicable Economics and Financial Economics  
ATHENS UNIVERSITY OF ECONOMICS AND BUSINESS
- 1992-1997 PHD in Electrical Engineering : Field Electrical Machines and Power Electronics  
TECHNICAL UNIVERSITY OF CLUJ - NAPOCA ROMANIA
- 1987-1992 Bachelor in Electrical Engineering  
TECHNICAL UNIVERSITY OF CLUJ - NAPOCA ROMANIA

ADDITIONAL TRAINING

- **2006 Completion of bulletins concerning technical work ( Third Community Support, INFORMATION SOCIETY S.A)**
- **2006 Complete information system of the ministry of Finance and Economics (3d Community scope support) Application of relations of the European Council for state support and fiscal checking Information Society S.A**
- **8/ 2002 Advantica Technology S.A Energy and utility network company , gas production, processing, transmission, distribution and utilization , petroleum, water and electric power - Seminars on the handling and the natural gas GDI - Training**
- **9/2002 1.1 Advantica Technology - GD2 - Training**
- **9/2002 1.2 Advantica technology - GD4 - training**

PERSONAL SKILLS

Mother tongue(s)

Greek

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
Romanian	Proficient user	Proficient user	Proficient user	Proficient user	Proficient user
Graduate of a Romanian university.					
English	Proficient user	Proficient user	Proficient user	Proficient user	Proficient user
French	Moderate	Moderate	Moderate	Moderate	Moderate

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user  
[Common European Framework of Reference for Languages](#)

Communication skills

- good communication and organizational skills gained through my experience as project manager

Organisational / managerial skills

- leadership (currently responsible for a team of 10 people)

Digital competence

	SELF-ASSESSMENT				
	Information processing	Communication	Content creation	Safety	Problem solving
Microsoft Office	Proficient user	Proficient user	Proficient user	Proficient user	Proficient user

Microsoft Publisher	Proficient user	Proficient user	Proficient user	Proficient user	Proficient user
Visio	Proficient user	Proficient user	Proficient user	Proficient user	Proficient user
AutoCAD	Proficient user	Proficient user	Proficient user	Proficient user	Proficient user
Primavera Project Planner	Proficient user	Proficient user	Proficient user	Proficient user	Proficient user
Dialux	Proficient user	Proficient user	Proficient user	Proficient user	Proficient user
Calculux	Proficient user	Proficient user	Proficient user	Proficient user	Proficient user
Lab View , Simulink, Magnet 5.1	Proficient user	Proficient user	Proficient user	Proficient user	Proficient user

Other skills **Reviewer in Scientific Journals**

- **Journal of Engineering Science and Technology Review**
- **MAYFEB Journal of Electrical and Electronic Engineering**  
<http://www.mayfeb.com/OJS/index.php/ELE>
- **International Journal of Advanced Research**  
<http://www.journalijar.com/editorial-board/>
- **International Journal of Electrical Power and Energy Systems, Elsevier Science**

**Guest Editor**

**Journal “Sensor and Transducers” Special Issues :**

- **Sensors and Metering Procedures in Power Generation, Transmission and Distribution**
- **Sensors and Measuring Procedures in Industrial Processes and Applications**

Driving licence B

ADDITIONAL INFORMATION

- **Member of unified record assessors (U.R.A) of employment and social security on thematic fields of computer studies, economy - management , technical and trainer training. I participated in assessment suggestions in business programmes <<Information Society>>, <<employment and**

professional drafting>>, <<competition>>,as well as community initiative Equal to assessment>>of interstate programmes.

- Member of technical chamber of Greece , Record number 67857/12/08/1994
- Member of business advisors record of ΙΜΕ ΓΣΕΒΕΕ (Institute of medium - sized businesses ΙΜΕ ΓΣΕΒΕΕ , 2/2014)
- Member of assessers record of ΕΦΕΠΙΑΕ(Intermediary body of business programmers competition and business skills)on cognitive objects: processing, energy, drafting, technology on computer studies and communication (9/2016)
- Member of national record of certified assessers (Ε.Μ.Π.Α) and inspectors (Ε.Μ.Π.Ε) of Ministry of Finance concerning developmental lows (11/2016)

#### EUROPEAN PROJECTS

- Member of work team (MENTOR) of ΙΜΕ ΓΣΕΒΕΕ for the work "Early Warning and Second Starters" within the scope of the European Programme COSME (12/2016)

#### RESEARCH PROJECTS

- **Seventh Framework Programme for Research and Technological Development (FP7)**

**FP7\_HPEM\_CLEANSKY\_DEVELOPMENT OF KEY TECHNOLOGY COMPONENTS FOR HIGH PERFORMANCE ELECTRIC MOTORS, Project Code: 80120**

- **ICT4GROWTH, PROGRAMME:**

**REMOTE MANAGEMENT LIGHTING SYSTEM USING M2M (MACHINE TO MACHINE) TECHNOLOGIES AND EXTENSION TO OTHER INTERACTIVE SMART NETWORKS, Project Code: 80304**

## CONFERENCES

1. Experimental evaluation of the magnetic pressure in thin wire elements during fusion process, ICEFA 14-16 September 2015, **DRESDEN GERMANY.**, Assoc. Prof. Constantinos S. Psomopoulos, Assoc. Prof. George Ch. Ioannidis, Assist. Prof. Stavros D. Kaminaris, Lecturer, **Petros Karaisas**
2. Resistivity variation during fusion process of thin wire elements ICEFA 14-16 September 2015 **DRESDEN GERMANY.**, Assoc. Prof. Constantinos S. Psomopoulos, Assoc. Prof. George Ch. Ioannidis, Assist. Prof. Stavros D. Kaminaris, Lecturer, **Petros Karaisas**
3. Forced commutation Quasi - Resonant Converter in Offshore- Onshore Applications ( ACEMP - OPTIM - ELECTROMOTION JOIN CONFERENCE , Turkey 2-5 September 2015, **H. BALAN, M.I. BUZDUCAN, A.A. POP, R.A.MUNTEANU, T. VARODI, P. KARAISSAS,)**
4. EMI filters in connecting renewable energy sources. (**Japmed 9 ., H. Balan, M. Buzdugan, P. Karaisas July 5- 8 2015** , SOFIA, BULGARIA
5. Multilevel Converter with Low Distortion Factor for Connecting Renewable Energy Sources to the Power Grid (**Japmed 9 July 5- 8 2015** , SOFIA, BULGARIA., **H. Balan, M. Buzdugan, P. Karaisas**
6. Space - harmonics modeling of an axial - flux permanent - magnet machine (**APPEEC 2015) April 12 to 14, 2015, Beijing, China. P. Karaisas**
7. Series Resonance Technique for Short – circuit Current Limiting Devices in DC Grids, Horia Balan, Mircea Buzdugan, , Karaisas Petros, **JAPMED 8, 23-26 June 2013 Athens Greece**
8. Design and Test Procedures for EMI Filters Used for Nonlinear Loads, Mircea Buzdugan, Horia Balan, Karaisas Petros, **JAPMED 8, 23-26 June 2013 Athens Greece**

9. Lumped – Parameter Network Thermal Analysis of Permanent Magnet Synchronous Motor **JAPMED 8, 23-26 June 2013 Athens Greece**, Konstantinos Dimolikias, Themistoklis D. Kefalas, **Petros Karaisas**, Zachos K. Papazacharopoulos , Antonios Kladas
10. Signal Processing Software Techniques for the Monitoring and the Diagnosis of the Wind Turbines ISEEE 2013, H. Balan, M. Buzdugan, I. Cozorici, **P. Karaisas** Electrical and Electronics Engineering (ISEEE), 2013 4th International Symposium Symposium on Power Electronics, Electrical Drives, Automation and Motion, **Romania**
11. The role of the New Commission’s proposal to minimize the climate impacts of biofuel production in energy sector, C.S Psomopoulos, N. Chatziaras , G. Ioannidis, **P.Karaisas**, 4th International Conference on Environmental Management, Engineering, Planning and Economics & **SECOTOX Conference, June 24-28, 2013, Mykonos island, Greece**
12. Software Applications for wind Turbine Vibrations Analysis., I. Cozorici., H. Balan., R.A. Munteanu, **P. Karaisas**. International Conference on Condition Monitoring of Machinery in Non – Stationary Operations, **CMMNO 13., May 8-10 ,2013 Ferrara., Italy.**
13. Fault identification on Electrical Machines Based on Experimental Analysis., H Balan., M. I Buzdugan. P., **Karaisas**. C. International Conference on Condition Monitoring of Machinery in Nin – Stationary Operations, **CMMNO 13., May 8-10 ,2013 Ferrara., Italy.**
14. Fault current limiter in d.c networks using thyristor by- pass circuits. International Conference on Applied and Theoretical Electricity, **ICATE 2012** - Proceedings, art. no. 6403439 **Karaisas P.**, Balan H., Stefan E., Vaida T.,
15. A passive EMI filter for the reduction of active filter generated network distortions. International Conference on Applied and Theoretical Electricity, **ICATE 2012** - Proceedings, art. no. 6403440., **Karaisas P.**, Balan H., Buzdugan M.I., Chiorean C., Iacob A.,
16. Testing Wind Variable Speed Driving Systems For Conducted Interferences, International Symposium on power Electronics, Electrical Drives, Automation and Motion., **Speedam 2012 Italy**, H. Balan, M.I.Buzdugan., A. Botezan., R.A. Munteanu., **P. Karaisas.**, C. Psomopoulos.,



17. Testing electronic equipment using waveforms generated with programmable sources, CNAE 2012 Prof. Eng. Horia BALAN PhD1, Eng. Cristina CHIOREAN, PhD Stud.1, Lecturer Eng. Petros **KARAISAS, PhD2,1** Technical University of Cluj-Napoca, 2T. E. I. of Piraeus, 250th Petrou Ralli & Thivon Street, 12244 Egaleo Athens, Greece, ID98.
18. Design and simulation of a small wind – hydro power plant., 3rd International Conference on Clean Electrical Power: Renewable Energy Resources Impact, Cozorici F., Vadan I., Munteanu R. A., Cozorici I., **Karaissas P.**, ICCEP 2011 , art. no. 6036304 , pp. 308-311
19. Converters used in HVDC systems. The study of switching. 3rd International Conference on Clean Electrical Power: Renewable Energy Resources Impact., Balan H., Stefan E., Cozorici I., Botezan A., **Karaissas P.**, ICCEP 2011 , art. no. 6036318 , pp. 600-603 .,
20. Fault Identification of Rotating Electric Machines using Comparative Analysis Methods, International Aegean Conference on Electrical Machines and Power Electronics & ELECTROMOTION Joint Conference, 8-10 September 2011., Istanbul, Turkey. , pg 277-282., Balan H., Vadan I., Buzdugan M., Botezan A., **Karaissas P.**,
21. Reduction of the Current Distortion factor of the electromagnetic vibrators Supplied at the Variable Frequency, Seventh Japanese-Mediterranean and Central European Work shop on Applied Electromagnetic Engineering for Magnetic, Superconducting and Nano Materials, JAPMED 7, 6-9 July 2011, Budapest, Hungarian, Paper ID: P3, pg. 87-88., Chiorean Cristina, Balan H., Buzdugan M., Botezan A., Vadan I., **Karaissas P.**, Vernados P.,
22. Modern Solutions on the vibration faults diagnosis of the electrical machines stators OptoTech 2011 8-9 Iunie Romania  
1 Technical University of Cluj Napoca, 15th Daicoviciu Street, Cluj Napoca, Romania, email: horia.balan@eps.utcluj.ro.  
2 T.E.I of Piraeus, 250th Petrou Ralli & Thivon Street, 12244 Egaleo Athens, Greece, email: pkara@ktpae.gr.
23. Study of the DC voltage circuit breakers commutation with EMTP Works software simulation Proceedings ICATE 2010, Craiova

- Romania, October 8-9, Stefan Elena., Balan H., Buzdugan M., **Karaissas P.**, paper ID 5,4 on CD
24. Insulation Resistance Testing of the Medium Voltage switches, Proceedings ICATE 2010, Craiova Romania, October 8-9, Balan H., Buzdugan M., Munteanu A. R., Botezan A., Cozorici I., Avram V., **Karaissas P.**, paper ID 2.10., on CD.
  25. The of line diagnose of automatic circuit breakers by the time domain and frequency vibration analysis., Proceedings ICATE 2010, Craiova Romania, October 8-9 , Balan H., Botezan A., Buzdugan M., Stefan E., Pirv G., **Karaissas P.**, paper ID 2.7., ON cd
  26. Real time simulation of active filters with EMEGASIM 4508 Platform – case Study, Proceedings CNAE 2010, Balan H., Botezan A., Buzducun M., **Karaissas P.**, P., Duta., Iacob A., Craiova Romania, October 6-8 2010 , paper ID 27., on CD
  27. EMI Filters Performances Analysis. Case Study. International conference on EDPE 12-14 October 2009 , paper T01-029 , Dubrovnik, Croatia., Balan H., Vadan I., Buzdugan M., Botezan A., **Karaissas P.**,
  28. Energy losses reduction Management for non linear consumer. A case study” MTC - 2009 MANAGEMENT OF TECHNOLOGICAL CHANGES ALEXANDROUPOLIS GREECE. H. BALAN, R. MUNTEANU<sup>1</sup>, M. BUZDUGAN<sup>1</sup>, A. RICOBON<sup>1</sup>, **P. KARAISSAS<sup>2</sup>**  
<sup>1</sup> Technical University of Cluj Napoca, 15th Daicoviciu Street, Cluj Napoca, Romania, email: 1.horia.balan@eps.utcluj.ro. <sup>2</sup> T.E.I of Piraeus, 250th Petrou Ralli & Thivon Street, 12244 Egaleo Athens, Greece,.
  29. “Hybrid Commutation Converter in HVDC systems” 6TH Japanese Mediterranean workshop on APPLIED ELECTROMAGNETIC ENGINEERING FOR MAGNETIC,SUPERCONDUCTING AND NANO MATERIALS JAPMED'6 JULY 27 -29, 2009 BUCHAREST, ROMANIA Authored by: H. BALAN<sup>1</sup>, M. BUZDUGAN<sup>1</sup>, I. VADAN<sup>1</sup>, E. SIMION<sup>1</sup>, **P.KARAISSAS<sup>2</sup>**  
<sup>1</sup> Technical University of Cluj Napoca, 15th Daicoviciu Street,Cluj Napoca, Romania, email: 1.horia.balan@eps.utcluj.ro. <sup>2</sup> T.E.I of Piraeus, 250th Petrou Ralli & Thivon Street, 12244 Egaleo Athens, Greece,.

30. Vibro-Acoustic Diagnosis of the Electric Machines, Proceedings of the 2008 International Conference on Electrical Machines, Paper ID 1081; Procc.of ICEM'08- XVIII International Conference on Electrical Machines, Vilamoura (Algarve), Portugal, from 6th-9th September 2008, H. Balan, I.Vadan, A. Botezan, S. Stefanescu, **P. Karaissas**
31. Inverse Currents Injection Module For Direct Current Interrupters SPEEDAM 2008 ISCHIA ITALY H. Balan\*, R. Munteanu\*, I Vadan\*, A. Botezan\*, **P. Karaissas\*\***  
\* Technical University of Cluj-Napoca (UTCN) C. Daicoviciu str. 15, Cluj-Napoca, Romania Horia.Balan@eps.utcluj.ro <http://www.utcluj.ro/>  
\*\* 2 Technological Educational Institute of Chalkida, Department of Electrical Engineering, Greece
32. Analysis of Modern Techniques for Machining of Pieces with Cylindrical Symmetry Horia Balan, Aurel Botezan, Ioan Vadan, **Petros Karaissas**, Victor Proca (Romania) 11 INTERNATIONAL RESEARCH/EXPERT CONFERENCE 'TRENDS IN THE DEVELOPMENT OF MACHINERY AND ASSOCIATED TECHNOLOGY' TMT 2007, HAMMAMET, TUNISIA 5-9 September 2007
33. "Vibroacoustic Methods in the Diagnosis of the Electric Machines", Book of Abstracts ICEM 2006, XVII International Conference on Electrical Machines, September 2-5, Chania, Greece, 2006. H. Balan, R. Tirnovan, **P. Karaissas**.
34. "Permanent – Magnet Electrodynamic Vibrator- Parameter Identification", Electro motion 2005 6th International Symposium on Advanced Electro mechanical Motion Systems, September 27-29 2005 Switzerland. D-H Kang, J-H Chang, I. Vadan, P. Karaissas and H. Balan.
35. "Electrical Machines and Equipments Diagnosis using Virtual Instrumentation", Electromotion 1999, July 8-9 1999, Patras, Greece. **P. Karaissas.**, H. Balan, H. Hedesiu, R. Tirnovan,
36. "The Finite Element Field Analysis Application to study Magnetic-Abrasive Finishing Equipment", Electromotion 1999, July 8-9 1999, Patras, Greece. Συγγραφείς: **P. Karaissas.**, R. Tirnovan, R. Munteanu. H. Balan, I. Vadan,

37. “Computer Simulation of the Synchronous Generator steady- state and dynamic regime.  
4th International Conference on Engineering of Modern Electric Systems, May 30- June 1 1997, Oradea, Romania. Συγγραφείς: V. Adrian, M. Radu, **P. Karaissas**.
38. ‘Modelarea generatoarelor sincrone de mare putere cu teoria similitudinii’  
Prima conferinta internationala de sisteme electromecanice, Chisinau 1997, pg. 153-156 συγγραφείς: M. Radu., Viorel I.A., Iancu V., **P. Karaissas**.

## Publications in international

### Magazines

1. Lumped – Parameter Network Thermal Analysis of Permanent Magnet Synchronous Motor. Materials Science Forum Vol.792(2014) pp 233-238 , Konstantinos Dimolikas, Themistoklis D. Kefalas, **Petros Karaisas**, Zachos K. Papazacharopoulos, Antonios Kladas.  
<http://www.scientific.net/MSF.792.233>
2. Fault Identification of Rotating Electric Machines using Comparative Analysis Methods, Balan H., Buzdugan M., **Karaissas P.**, Springer(2014)pp611-630  
[http://link.springer.com/chapter/10.1007%2F978-3-642-39348-8\\_53](http://link.springer.com/chapter/10.1007%2F978-3-642-39348-8_53)
3. Software Applications for wind Turbine Vibrations Analysis., I. Cozorici., H. Balan., R. A. Munteanu, **P. Karaisas**. Springer (2014) pp689-699 [http://link.springer.com/chapter/10.1007%2F978-3-642-39348-8\\_59](http://link.springer.com/chapter/10.1007%2F978-3-642-39348-8_59)
4. The role of the New Commission’s proposal to minimize the climate impacts of biofuel production in energy sector, C.S Psomopoulos, N. Chatziaras , G. Ioannidis, **P. Karaisas**, Fresenius Environmental Bulletin (Impact Factor: 0.53). 11/2014; 23(11):2687-2694
5. Forced commutation Quasi - Resonant Converter in Offshore - Onshore Applications Balan Horia, Buzdugan Mircea, Botezan Aurel, Munteanu Radu, **karaissas Petros.**, IEEE Transactions on Power Electronics, Manuscript ID 2012-04-0463
6. The Design and Testing of an EMI Filter for a Non linear Consumer , Balan Horia, **Karaissas Petros.**, Buzdugan Mircea., IET Power Electronics , Manuscript ID DEL-2012-0103

7. FAULT CURRENT LIMITER IN D.C. NETWORKS USING THYRISTOR BY-PASS CIRCUITS Journal ANNALS OF THE UNIVERSITY OF CRAIOVA Series: Electrical Engineering 2012  
Horia Balan, Elena Stefan, Teodor Vaida, **Petros Karaisas**  
<http://elth.ucv.ro/fisiere/anale/en/2012.htm>
8. A PASSIVE EMI FILTER FOR THE REDUCTION OF ACTIVE FILTER GENERATED NETWORK DISTORTIONS Journal ANNALS OF THE UNIVERSITY OF CRAIOVA Series: Electrical Engineering 2012  
Horia Balan, Mircea Buzdugan, Cristina Chiorean, Ana Iacob, **Petros Karaisas**  
<http://elth.ucv.ro/fisiere/anale/en/2012.htm>
9. Reduction of the distortion current factor of the current drawn by the electromagnetic vibrators supplied at variable frequency., Materials Science Forum 721,(2012) pp. 275-280., Balan H., Stefan E., Cozorici I., Botejan A., **Karaissas P.**  
<http://www.scientific.net/MSF.721.275>
10. Hybrid commutation converter in HVDC systems., Materials Science Forum 670 (2011) pp.415-424., Balan H., Buzdugan M., Vadan I., Simion E., **Karaissas P.**  
<http://www.scientific.net/MSF.670.415>
11. Study of the DC voltage circuit breakers commutation with EMTP Works software simulation .,Annals of the University of Craiova., Stefan Elena., Balan H., Buzdugan M., **Karaissas P.**, No34., 2010, Vol I, ISSN 1842-4805, pg 251-254
12. The of line diagnose of automatic circuit breakers with the time domain and frequency vibration analysis., Annals of the University of Craiova., Balan H., Botezan A., Buzdugan M., Stefan E., Pirv G., **Karaissas P.**, No34., 2010, Vol I, ISSN 1842-4805, pg 113-118
13. The of line diagnose of automatic circuit breakers by the time domain and frequency vibration analysis., Annals of the University of Craiova., Balan H., Buzdugan M., Munteanu A. R., Botezan A., Cozorici I., Avram V., **Karaissas P.**, No34., 2010, Vol I, ISSN 1842-4805, pg 142-147

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15. The energetic factor for simple modulated voltage supply. Analele Universitatii din Oradea. Fascicola Electrotehnica, 30 May – 01 Iunie 1997, pg.18-21, Balan H., Tirnovan Radu., Russu M., **Karaissas Petros**
16. The distortion factor of electromagnetic inverter-vibrator system. Analele Universitatii din Oradea. Fascicola Electrotehnica, 30 May-01 Iunie 1997, pg.13-17, Balan Horia., Tirnovan R., Pica C., **Karaissas P.**,
17. “Computer Simulation of the Synchronous Generator steady- state and dynamic regime. Analele Universitatii din Oradea.Fascicola Electrotehnica, 30 May – 01 Iunie 1997, Oradea, Romania., **P. Karaissas V.** Adrian, M. Radu,.

### IBD – Proceedings Papers

1. Scopus: The role of the New Commission’s proposal to minimize the climate impacts of biofuel production in energy sector, C.S Psomopoulos, N. Chatziaras , G. Ioannidis, **P.Karaisas**, Fresenius Environmental Bulletin (Impact Factor: 0.53). 11/2014; 23(11):2687-2694
2. Thomson Web of Science: Energy losses Reduction Management for non Linear Consumer. A case Study MTC - 2009 MANAGEMENT OF TECHNOLOGICAL CHANGES ALEXANDROUPOLIS GREECE. H. BALAN, R. MUNTEANU1, M. BUZDUGAN1, A. RICOBON1, **P. KARAISSAS** 2 1 Technical University of Cluj Napoca, 15th Daicoviciu Street, Cluj Napoca, Romania, email: 1.horia.balan@eps.utcluj.ro. 2 T.E.I of Piraeus, 250th Petrou Ralli & Thivon Street, 12244 Egaleo Athens, Greece,.
3. Scopus: Converters used in HVDC systems. The study of switching. 3rd International Conference on Clean Electrical Power: Renewable Energy Resources Impact., Balan H., Stefan E., Cozorici I., Botezan A., **Karaissas P.**, , ICCEP 2011 , art. no. 6036318 , pp. 600-603 .,

4. Scopus Web of Science Impact Factor 2005 0.39 (Journal Citation Reports 2006 published by Thomson Scientific): “Hybrid Commutation Converter in HVDC systems” 6TH Japanese Mediterranean workshop on APPLIED ELECTROMAGNETIC ENGINEERING FOR MAGNETIC, SUPERCONDUCTING AND NANO MATERIALS JAPMED'6 JULY 27 -29, 2009 BUCHAREST, ROMANIA Authored by: H. BALAN<sup>1</sup>, M. BUZDUGAN<sup>1</sup>, I. VADAN<sup>1</sup>, E. SIMION<sup>1</sup>, **P.KARAISAS**<sup>2</sup> Technical University of Cluj Napoca, 15th Daicoviciu Street, Cluj Napoca, Romania, email: 1.horia.balan@eps.utcluj.ro. 2 T.E.I of Piraeus, 250th Petrou Ralli & Thivon Street, 12244 Egaleo Athens, Greece, karaisas@teipir.gr
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6. Scopus: Testing Wind Variable Speed Driving Systems For Conducted Interferences, International Symposium on power Electronics, Electrical Drives, Automation and Motion., Speedam 2012 Italy, H. Balan, M.I.Buzdugan., A. Botezan., R.A. Munteanu., **P. Karaissas.**, C. Psomopoulos.,
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13. IEEE Xplore: A passive EMI filter for the reduction of active filter generated network distortions. International Conference on Applied and Theoretical Electricity, ICATE 2012 - Proceedings, art. no. 6403440., **Karaissas P.**, Balan H., Buzdugan M.I., Chiorean C., Iacob A.,
14. IEEE Xplore: Fault current limiter in d.c networks using thyristor bypass circuits. International Conference on Applied and Theoretical Electricity, ICATE 2012 - Proceedings, art. no. 6403439 **Karaissas P.**, Balan H., Stefan E., Vaida T.,
15. Index Copernicus International: THE OFF-LINE DIAGNOSE OF AUTOMATIC CIRCUIT BREAKERS BY THE TIME DOMAIN AND FREQUENCY VIBRATIONAN ALYSIS Horia BĂLAN, Aurel BOTEZAN, Mircea BUZDUGAN, Elena STEFAN, Gabriel PIRV, **Petros Karaissas.**, ANALELE UNIVERSITATII DIN CRAIOVA - Seria Inginerie electrica 2010; 34(34):113-118
16. Index Copernicus International: TESTING ELECTRONIC EQUIPMENT USING WAVEFORMS GENERATED WITH PROGRAMMABLE SOURCES Prof. Eng. Horia BALAN PhD, Eng. Cristina CHIOREAN, PhD Stud., Lecturer Eng. **Petros KARAISAS**, PhD (Greece)



## Citations

Over 100 citations in the scientific work

1. Study of the DC voltage circuit breakers commutation with EMTP Works software simulations

Authors

Elena Stefan, Horia Balan, Mircea BUZDUGAN, **Petros KARAISSAS**

Publication date

2010

Journal

10th International Conference on Applied and Theoretical Electricity ICATE

Pages

8-9

Description

Abstract DC voltage circuit breakers, initially intended for protecting and disconnecting the rectifiers (AC/DC converters), have a wide using in high voltage systems. This paper presents the results of turn-off LC circuit simulation with EMTP Works software, which is connected in parallel with the main contacts of a circuit breaker. The semiconductor devices, thyristors, used in the module were adopted because of the low switching frequency and the high capacity to withstand over currents, much higher than the rated.....value, close to the

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[PDF] A STUDY OF DISCONNECT A STUDY OF DISCONNECTING DC CIRCUIT BREAK ING DC CIRCUIT BREAK ING DC CIRCUIT BREAKERS WITH ERS WITH ERS ...

EE STEFAN, T ISOC, H BALAN - agir.ro

ABSTRACT. ABSTRACT. The DC circuit breakers switching problem refers to electrical switching devices and switching devices and applies differently ...

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[PDF] Isolations studie av DC/DC-omriktare

O HELLQVIST, J LARSSON - publications.lib.chalmers.se

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One

step in reducing our impact is to optimize the power transmission and invest in renewable

energy sources such as wind farms. Wind farms with direct current transmission has lower ...

Related articles Cite Save More

## 2. Analysis of modern techniques for machining of pieces with cylindrical symmetry

Authors

Horia Balan, Aurel Botezan, Ioan Vadan, **Petros Karaisas**, Victor Proca

Publication date

2007/9

Journal

11th Int. Res./Expert Conf. 'Trends in the Development of Machinery and Associated Technology' (TMT 2007)

Pages

5-9

Description

ABSTRACT Machining pieces with cylindrical symmetry are realized through classic processes for example turning, mortising, etc or recently through no conventional methods, for example vibrorolling and vibrofinishing. Solution adopted by the authors to realize vibrorolling equipment are composed of one electromagnetic vibrator with two coils out of time operating, static contactors with transistors for driving coils, one sinusoidal signal generator and one modulator which realize changing of frequency and vibrations ...

Total citations

**Cited by 2**

## 3. Commutation technique in the supply of electromagnetic actuators

H Balan, R Tirnovan, MI Buzdugan - IET Power Electronics, 2014 - IET

This study presents some specific problems concerning the DC-AC commutation of the power converters used in frequency controlled electromagnetic actuators. Starting from the initial conditions imposed for a low-cost simple inverter used for driving an ...

Related articles Cite Save

A passive EMI filter for the reduction of active filter generated network distortions

Authors

Horia Balan, Mircea I Buzdugan, Cristina Chiorean, Ana Iacob, Petros Karaisas

Publication date

2012/10/25

Conference

Applied and Theoretical Electricity (ICATE), 2012 International Conference on

Pages

1-6

Publisher

IEEE

Description

Abstract—EMI—Electro Magnetic Interference filtering represents an anti-distortion measure used in the mitigation of the conducted interference, ie electromagnetic perturbations on the supply cord, data or signal lines. The paper reviews the design of the magnetic circuit of a three-phase EMI filter, neglecting the displacement current. The designed EMI filter is meant to mitigate harmonic components injected in the power grid by a perturbation source (a PWM-Pulse Width Modulation-controlled power converter).

Total citations

Cited by 1

Performances optimization and characteristics of the voltage generated by multilevel inverters

H Balan, M Buzdugan, AA Pop... - Applied and Theoretical ..., 2014 - [ieeexplore.ieee.org](http://ieeexplore.ieee.org)

Abstract—Several fixed frequency applications of multilevel converters require a very low level of distortion factor of the output voltage. Bringing the output voltage to a form as close as possible to a sine wave is usually done through linearization methods of the Newton-

4. Reduction of the Distortion Current Factor of the Current Drawn by the Electromagnetic Vibrators Supplied at Variable Frequency

Authors

Horia Balan, Mircea I Buzdugan, C Chiorean, **P Karaissas**

Publication date 2012/6/29

Journal Materials Science Forum

Volume 721 Pages 275-280

Description

Page 1. Reduction of the distortion current factor of the current drawn by the electromagnetic vibrators supplied at variable frequency H. Balan 1,a , MI Buzdugan 1 , C. Chiorean 1 , P. Karaissas 2,b 1 Technical University of Cluj Napoca, 28, Memorandumului Street, Cluj Napoca, Romania 2 TEI of Piraeus, 250th Petrou Ralli & Thivon Street, 12244 Egaleo Athens, Greece a [horia.balan@eps.utcluj.ro](mailto:horia.balan@eps.utcluj.ro) b [gildaxer@hotmail.com](mailto:gildaxer@hotmail.com) Keywords: electromagnetic vibrators, inverter, modulation. Abstract.

Total citations

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Performances optimization and characteristics of the voltage generated by multilevel inverters

H Balan, M Buzdugan, AA Pop... - Applied and Theoretical ..., 2014 - [ieeexplore.ieee.org](http://ieeexplore.ieee.org)

Abstract—Several fixed frequency applications of multilevel converters require a very low level of distortion factor of the output voltage. Bringing the output voltage to a form as close as possible to a sine wave is usually done through linearization methods of the Newton- ...

## 5. Converters used in HVDC systems. The study of switching

Authors

H Balan, ELENA Stefan, I Cozorici, A Botezan, **P Karaissas**

Publication date

2011/6/14

Conference

Clean Electrical Power (ICCEP), 2011 International Conference on

Pages600-603 Publisher IEEE

Description

Abstract This paper deals with DC–AC static converter systems, of very high voltages and currents, used for electricity power transmission. It has been analyzed three types of converters: with forced commutation, with commutation from load and the solution proposed by the authors. There are shown the advantages in hybrid switching converters, which in essence connect, constructive and as principle of operation, the advantages of the two known conversion systems. The analysis of the benefits of the proposed solution is done

Total citations

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[PDF] A STUDY OF DISCONNECT A STUDY OF DISCONNECTING DC CIRCUIT BREAK ING DC CIRCUIT BREAK ING DC CIRCUIT BREAKERS WITH ERS WITH ERS ...

EE STEFAN, T ISOC, H BALAN - agir.ro

ABSTRACT. ABSTRACT. The DC circuit breakers circuit breakers circuit breakers switching problem switching problem switching problem refers to electrical electrical switching devices and switching devices and switching devices and applies differently ...

## Awards

- Member of the International Program Committee of the 5th WSEAS Conference on Power Systems
- Member of the International Program Committee of the International Conference on Electrical Automation and Mechanical Engineering (EAME 2015)  
<http://www.eame2015.org/com.htm>
- Member of the International Program Committee of the 7th Asia - Pacific Power and Energy Engineering Conference (APPEEC 2015)  
<http://www.appeecconf.org/2015/ShowOrganizerDetails.aspx?personID=3953>
- Member of the International Program Committee of the “International Conference on Power and Energy Systems and Applications –PESA 2011”, USA
- Member of the International Program Committee of the “International Conference on Power and Energy Systems – Euro PES 2008”, Greece.
- Conference on Power and Energy Systems – Euro PES 2004”, Rhodes, Greece.

**Courses**

Electric Machines I  
Electric Machines II  
Electromechanical Energy Conversion

## ANNEXES