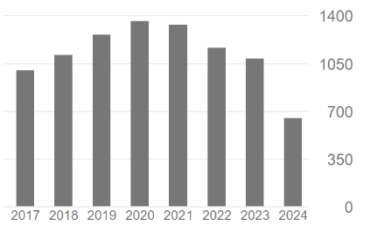




**Professor Pericle Zanchetta,  
Fellow IEEE**

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	All	Since 2019
Citations	12744	6866
h-index	49	36
i10-index	204	124



### Education

- Ph.D. in Power Electronics, Technical University of Bari, Italy, 1997
- 5 years Laurea degree in Electronic Engineering (Mark 110/110 with distinction), Technical University of Bari, Italy, 1993.

### Academic Career

- November 2018 – Present
  - *Full Professor in Power Electronics* (Full time since October 2022)  
Dept. of Electrical, Computer and Biomedical Engineering, University of Pavia, Italy
- August 2013 – September 2024
  - *Full Professor in Control and Power Electronics Systems* (0.3 FTE since October 2022)  
Dept. of Electrical and Electronic Engineering, University of Nottingham, UK
- August 2009 – July 2013:
  - *Associate professor in Control and Power Electronics Systems*  
Dept. of Electrical and Electronic Engineering, University of Nottingham, UK.
- October 2003 – July 2009:
  - *Lecturer in Control of Power Electronics Systems*  
School of Electrical and Electronic Engineering, University of Nottingham, UK.
- October 2001 – September 2003:
  - *Visiting Lecturer in Power Electronics and Control*  
School of Electrical and Electronic Engineering, University of Nottingham, UK.
- October 1998 – September 2007:
  - *Assistant Professor in Power Electronics*  
Electrical and Electronic Engineering Department, Technical University of Bari, Italy.
- November 1997 to September 1998:
  - *Research Associate* (Converters, Electrical Machines and Drives Group)  
Electrical and Electronic Engineering Department, Technical University of Bari, Italy.
- November 1994 to October 1997:
  - *Research Assistant* (Converters, Electrical Machines and Drives Group)  
Electrical and Electronic Engineering Department, Technical University of Bari, Italy.
- February 1994 to November 1994:
  - *Software Development*  
IBM Italia.

### Scientific Publications (See attached Bibliography)

- **131** Papers published in Scientific Journals
- **307** Papers Published in Refereed International Conferences

### Research Projects (*budget as Principal investigator over 6.3Million Euro*)

- **Principal Investigator:** EU – Marie Curie “Development of high reliability motor drives for next generation propulsion applications” – Dorna (University of Pavia partner around 116k Euro) 2022-2025
- **Principal Investigator:** ABB “**Apollo Split Power Electronics: AC/DC parallel connection. Analysis Control and Stability**” (around 66k Euro) 2024
- **Principal investigator:** NIDEC Italia Spa, Power electronics Multilevel converters based on Cascade H-Bridge and their control for high power applications, (around 300k Euro) 2021-2024

- **Principal investigator:** Yako China, FPGA based implementation of advanced control for electrical drives, (around 350k Euro) 2021-2024
- **Principal investigator:** ENI Italia Spa, Power conversion system for redox vanadium battery interface in PV applications, (around 200k Euro) 2020-2023
- **Principal investigator:** Phase Italia Spa, SiC Power converter for fast battery charger in automotive applications, (around 200k GBP) 2019-2021
- **Principal investigator:** Best Motion Technology Co. Ltd China: High performance PM servo drive control around 970k GBP) 2017-2022
- **Principal investigator:** Phase Italia Spa, Design and development of a 500kW Matrix converter for drives applications, (around 150k GBP) 2017-2020
- **Principal investigator:** EPSRC GCRF Institutional Sponsorship Awards “Smart Micro-grid Systems for Remote Islands in the South Pacific” (around 20k GBP) 2017-2018.
- **Principal investigator:** Nowforever Technology Co. Ltd China: Advanced high performance control of induction and PM motor drives, (around 800k GBP) 2012-2017
- **Principal investigator:** EPSRC: IeMRC-Cummins generators “Fuel consumption Optimization of diesel generator power packs” 3 years project (around 60k GBP) 2007 – 2010.
- **Principal investigator:** KTP with Water Research Centre (WRc): Non-Intrusive load and efficiency monitoring for in service induction motors, 2 years project (around 130k GBP) 2009 – 2011
- **Principal investigator:** Water Research Centre (WRc): “Controlling energy costs using non-intrusive monitoring” 2 years contract (around 20k GBP) 2006 - 2008.
- **Principal investigator:** University new lecturers fund “*Biologically Inspired System Identification for Materials Characterization in the Aerospace Industry*” (around 12k GBP) 2005 - 2006
- **Principal Investigator** of a “*Marie Curie Early Stage Training Area*” having University of Nottingham as leading partner, funded by the European Commission (around 1600k Euro) 2004 - 2008.
- **Principal investigator:** “*Investigation of the electromagnetic emissions produced by power converters in railway systems*”. Technical University of Bari, financed by the Italian Ministry of University and Scientific Research (MURST) and “Ansaldo Trasporti” Italy – (50K Euro). 1999 - 2000
- **Principal investigator:** “*Cluster 13 – Electromagnetic Compatibility*”, Technical University of Bari, financed by the Italian MURST (700K Euros).2000 – 2003
- **Co-investigator:** EPSRC Power Electronics centre. 2014-2019.  
  - **Principal investigator** for the development of a SiC open end winding PM machine drive for aircraft starter generator (value around 200k GBP).
- **Co-investigator:** “Project AMSRL-DS-E/R&D 9780-EE-01 (70-1s)” funded by US Army (180k USD yearly)  
  - **Principal investigator** for a part of the previous project: “GA optimisation of a 400kW induction motor drive using a SiC inverter” funded by US Army (about 50k USD) 2004 - 2006
- **Co-investigator:** EU JTI (CLEAN SKY) – 2009 – 2016
- **Co-investigator:** EU (MOET) – 2006 - 2009
- **Co-investigator:** EU (UNIFLEX) – 2006 - 2009
- **Co-investigator:** EPSRC: PEMC group Nottingham Platform grant – 2006 – 2009
- **Co-investigator:** “90kVA Matrix Converter Ground Power Unit” funded by AXA POWER (40k Euro) - 2004.
- **Co-Investigator/Manager** of a “*Marie Curie Early Stage Training Area*” having University of Nottingham as leading partner, funded by the European Commission (around 800k Euro) 2002 - 2006.
- **Co-investigator:** “*Low power electrical drives for home-applications*” financed at the Technical University of Bari by Italian MURST (50K Euro) 2001 - 2003.
- **Co-investigator:** “*LISAR: Development of Scientific Laboratory of Automation and Robotics*” Technical University of Bari, financed by Italian MURST (300k Euro) 2001 -2003.
- **Co-investigator** “*Development of a 40KVA matrix converter to provide aircraft ground power supply*” University of Nottingham and PEMS, financed by MOD (around 100K GBP) 2001 – 2003.
- **Other Grants:** Many travel grants from different funding bodies among which Royal society, Santander, University of Nottingham.

## Research Interests

***My general research interests are in the field of Power Electronics for transportation (Automotive and Aerospace) and Renewable energy systems, Electrical drives and Control.*** In particular:

- Power Electronics and drives for automotive and aerospace applications
- SiC and GaN converters design and implementation

- Innovative modelling and advanced control of power converters.
- Power quality, active filtering and impedance estimation
- AC power supplies
- Grid connected power converters
- Matrix and Multilevel converters
- Control design, optimization and system identification using Heuristic Algorithms.
- Model Predictive Control and Repetitive Control
- Advanced control of electrical drives systems
- Stability and control of power electronics embedded networks, both in Energy and automotive/aerospace systems
- Reliability and diagnostic in power electronics and drives

## Fellowships and Awards

- *Elevated to IEEE Fellow class 2019*
- Tarisciotti L., Chen L., Shao S., Dragicevic T., Wheeler P., Zanchetta P. “Finite Control Set Model Predictive Control for Dual Active Bridge Converter”, **IEEE Transactions on Industry Applications**, Year 2022, Volume: 58, Issue: 2.  
**Best paper IEEE-Transactions on Industry Applications 2022 for the IAS Industrial Power Converters Committee**
- Mi Tang, Stefano Bifaretti, Sabino Pipolo, Andrea Formentini, Shafiq Odhano and Pericle Zanchetta, “Disturbance rejection ability enhancement using repetitive observer in phase-locked loop for more electric aircraft”, 2020 IEEE Energy Conversion Congress and Exposition (ECCE).  
**Third prize IEEE-IAS Industrial Power Converters Committee Paper Award 2021**
- R Leuzzi, VG Monopoli, L Rovere, F Cupertino, P Zanchetta, “Effects of Electrical Ageing on Winding Insulation in High-Speed Motors: Analysis and Modelling”, 2018 IEEE Energy Conversion Congress and Exposition (ECCE).  
**Second prize IEEE-IAS Industrial Power Converters Committee Paper Award 2019**
- Tarisciotti, Luca; Lei, Jiaying; Formentini, Andrea; Trentin, Andrew; Zanchetta, Pericle; Wheeler, Patrick; Rivera, Marco “Fixed Frequency Finite-State Model Predictive Control for Indirect Matrix Converters with Optimal Switching Pattern” 2016 IEEE Energy Conversion Congress and Exposition (ECCE).  
**Third prize IEEE-IAS Industrial Power Converters Committee Paper Award 2017**
- Vazquez, S. ; Leon, J.I. ; Franquelo, L.G. ; Rodriguez, J. ; Young, H.A. ; Marquez, A. ; Zanchetta, P. “Model Predictive Control: A Review of Its Applications in Power Electronics” IEEE Industrial Electronics Magazine Volume 8, Issue 1, 2014, Page(s) 16-31.  
**Best IEEE Industrial Electronics Magazine paper award 2014**
- Trentin, A. ; Zanchetta, P. ; Wheeler, P. ; Clare, J.; “ Performance evaluation of 3-phase buck-type PWM rectifiers with integrated and symmetrical Boost converter using SiC MOSFETS for aircraft application”, 2013 IEEE Energy Conversion Congress and Exposition (ECCE 2013).  
**Second prize US Hybrid Transportation Paper Award 2013**
- November 2023  
Visiting professor at CY Cergy Paris University France
- February 2020  
Visiting professor at the University of Tampere Finland
- June 2019  
Visiting professor at the University of Talca, Chile
- May-June 2018  
Visiting professor at the University of Roma Tor Vergata, Rome Italy.
- May-July 2017  
Visiting professor at the University of Roma Tre, Rome Italy.
- April 2017  
Visiting professor at the University of Pavia, Italy
- December 2016  
Visiting professor at the University of Roma Tor Vergata, Rome Italy
- July 2016  
Visiting professor at the summer school of University of Roma Tre, Rome Italy
- May 2016  
Visiting professor at the University of Talca, Chile
- April 2016  
Visiting professor at the University of Pavia, Italy
- March 2016

- Visiting professor at the University of Talca, Chile
- December 2015  
Visiting professor at the University of Roma Tre, Rome Italy
- September 2015  
Visiting professor at NTNU, Trondheim, Norway
- July 2015  
Visiting professor at the summer school of University of Roma Tre, Rome Italy
- July 2014  
Visiting professor at the Technical University Federico Santa Maria, Valparaiso, Chile, University of Talca, Chile and University of Chile, Santiago – Chile
- May 2014  
Visiting professor at the University of Pavia, Italy
- April 2014  
Visiting professor at CPES, Virginia Tech, VA, USA
- March 2014  
Visiting professor at the University of Nottingham – Ningbo Campus China
- May-July 2013  
Visiting professor at the University of Roma Tre, Rome Italy. Period funded by the University of Roma Tre.
- April 2012  
Visiting professor at CPES, Virginia Tech, VA, USA
- May 2011  
Visiting professor at the Technical University Federico Santa Maria, Valparaiso, Chile.
- November - December 2010:  
Visiting professor at the Technical University Federico Santa Maria, Valparaiso, Chile.
- 2007-2010  
Invited lecturer every January for a 10 hours module “Control of Power Electronics Systems”, University of Rome Tor Vergata – Italy
- June – October 2000:  
Visiting Fellow at the “School of Electrical and Electronic Engineering” in the University of Nottingham, UK.
- December 1999 – March 2000:  
Visiting Fellow at the “School of Electrical and Electronic Engineering” in the University of Nottingham, UK, financed by a “Short Term Mobility” grant for researchers from the Italian CNR (National Research Council).
- July 1999:  
Research Fellow at “ANSALDO Trasporti” Naples (Italy) funded within the program “EU TRAIN”.

### **IEEE Career and Activities**

- IEEE-IAS Education Department Chair from January 2023
- Editor in Chief of the IEEE Open Journal of Industry Applications from January 2020.
- Member of the IEEE-IAS board of directors from January 2020
- IEEE IAS IPCSD chair 2020-2021
- IEEE Fellow class 2019
- IEEE –IAS IPCC Transactions chair 2018-2022
- IEEE IAS IPCSD vice-chair 2018-2019
- Technical Program Chair of the IEEE-ECCE 2018 conference, Portland USA.
- 2016-2017 Chair of the IAS Industrial Power Converter Committee (IPCC)
- 2014-2015 Vice-Chair of the IAS Industrial Power Converter Committee (IPCC)
- 2012-2013 Secretary of the IAS Industrial Power Converter Committee (IPCC)
- 2010-2011 European Liaison of the IAS Industrial Power Converter Committee (IPCC)
- Vice Chair of IEEE ECCE Conferences from 2012 to 2017
- Associate Editor for IEEE transactions on Industry Applications from 2009
- Associate Editor for IEEE transactions on Industrial Informatics from 2011
- Member of the Technical Program Committee and Track Chair for IEEE ISIE 2010
- Member of the Technical Program Committee and Track Chair for IEEE IECON 2016
- Member of the Technical Program Committee and Track Chair for “Control Systems and Applications” IEEE ISIE 2010 International Conference. Member of the organizing committee for the same conference.
- Invited speaker at the predictive control workshop, IEEE ICIT conference, Vina del Mar, Chile (March 2010)

- Session organizer and chairman at many IEEE international conferences.
- Organizer and lecturer of the Tutorial “Automated Intelligent Control design for Power Electronic Systems and Drives” IEEE IECON 2006 International Conference, Paris, France, 2006, IEEE ISIE 2007 International Conference, Vigo, Spain, 2007.
- IEEE member since 2000. IEEE Senior Member since 2015: Industrial Electronics Society, Power Electronic Society, Industry Application Society
- Member of the IAS Industrial Power Converter Committee, IAS Industrial Drives Committee and IAS Electrical machines Committee.
- Guest editor of the IEEE transactions on Industrial Electronics. Special Section on “Optimization in Power Electronics, Electrical Machines and Drives” (2010-2011).
- Guest editor of the IEEE transactions on Industrial Informatics / Industrial Electronics. Special Section on “Digital Control in Power Electronics and Drives” (2011-2012-2013).
- Topic Chair at ECCE conferences and IAS annual meetings from 2006 to 2011

### Other International Involvement

- Member of the Executive committee (Voting member) of EPE (European Power Electronics) Association 2016-now
- Member of the International Scientific Committee of EPE (European Power Electronics) Association 2016- now
- Invited talk “Co-ordinated control of power converters in power electronics embedded grids” University of Talca, Chile May 2019
- 12 hours course on Control of Power Electronics Systems, University of Pavia, Italy, April 2017
- Invited talk “Power Electronics for smart grids”, University of Talca, Chile May 2016
- 12 hours course on Control of Power Electronics Systems, University of Pavia, Italy, April 2016
- 12 hours course on Control of Power Electronics Systems, University of Talca, Chile, March 2016
- Invited talk “the importance of Power Electronics for future smart grids”, NTNU Trondheim, 9<sup>th</sup> September 2015
- Lectures at the summer school of University of Roma Tre, Italy on 1) Power Electronics in Aerospace systems and 2) Control of Power Electronics Systems. July 2016 and 2016.
- Part of the British Council funded delegation to Texas A&M University, Doha Qatar, March 2015.
- Invited talk “Power Electronics for smart grids”, University of Trento, Italy, 26<sup>th</sup> January 2015
- Invited talk “The importance of Power Electronics in future electrical networks”, University of Pavia, Italy, 16<sup>th</sup> May 2014
- Keynote speaker at the The Third IASTED Asian Conference (*AsiaMIC 2013*) on Modelling, Identification and Control, April 10 – 12, 2013, Phuket, Thailand
- Member of the Technical Program Committee of the Energycon 2012 conference, Florence, Italy, September 2012
- Invited talk on “repetitive control systems”, University of Santiago, Chile, December 2010 and May 2011.
- Session organizer and chairman at many IET and EPE international conferences.
- Research collaboration (joint publications and/or research grants) with Technical University of Turin (Italy), University of Harbin (China), Technical University of Bari (Italy), University of Zilina (Slovakia), University of Cork (Ireland), University of Malta, University and CNR of Palermo (Italy), University of Padova, (Italy), University of Rome “Tor Vergata” (Italy), University of Roma Tre, Rome Italy, University of Zagreb (Croatia), University of Pisa, Italy, Technical University Federico Santa Maria, Valparaiso, Chile, Virginia Tech, USA, Norwegian University of Science and Technology, Throndeim, Norway, University of Talca Chile, University of Chile, Santiago- Chile, University of Genova, Italy, University of Grenoble, France, University of Southampton UK, University of Exeter UK, Texas A&M University, Doha Qatar, University of Newcastle (Australia), University of Tampere, Finland.

### Teaching and Supervision

- ❖ *More than 50 Ph.D research students supervised in control, power electronics and drives (12 on-going), more than 30 Visiting Scholars, Line manager of 20 Research fellows, currently 3 research fellows.*
  - ❖ *Tutor of several BEng, MEng and MSc project students each year in control, power electronics and drives. Personal tutor to first and second year BEng and MEng students in Electrical and Electronic Engineering, University of Nottingham UK.*
  - ✓ *“Teaching Excellence Award 2015” from the Faculty of Engineering University of Nottingham*
- COURSES
- *Currently:*
    - Lecturer - 20 credit level 4 module “Advanced Control Systems Design” for MSc and MEng students in electrical and electronic engineering subjects, University of Nottingham –UK (Since 2001).
    - Lecturer - 20 credit level 3 module “Power Electronics and Control” for MSc and BEng students in electrical

- and electronic engineering subjects, University of Nottingham –UK (Since 2018)
- Lecturer – 6 credit 3<sup>rd</sup> year module “Conversione statica dell’energia” for BEng students in industrial Engineering, University of Pavia, Italy (since 2019)
- Lecturer – 6 credit 4<sup>th</sup> year module “Power Electronics” for MEng students in electrical and electronic engineering subjects, University of Pavia, Italy since 2019.
- 2003 – 2018
  - Lecturer - 10 credit course “Control systems” for BEng, MEng and MSc students in electrical and electronic engineering subjects, University of Nottingham - UK.
  - Lecturer - 15 credits level 4 module “Control design” for MSc students in electrical and electronic engineering subjects, University of Nottingham - UK.
- 2001-2003:
  - Joint lecturer - 10 credit module “Electronic Drives” for BEng and MEng students in electrical and electronic engineering, University of Nottingham (UK).
  - Laboratory supervisor - “Microprocessor Design laboratory” for first year BEng and MEng students of electrical and electronic engineering, University of Nottingham (UK).
- 1998 – 2003:
  - Lecturer – 10 credits module in Power Electronics for both the Electrical Engineering and the Electronic Engineering Diploma degrees at the Technical University of Bari (Italy).
  - Lecturer – 10 credits module “Industrial Electronics” Electrical Engineering degree at the Technical University of Bari (Italy).
- 1998 – 2001:
  - Joint lecturer – 20 credits modules in Power Electronics and Electrical Drives for the Laurea degrees in Electrical and Electronic Engineering at the Technical University of Bari (Italy).
  - Supervisor of several Ph.D. students in Power Electronics and Power Quality at the Technical University of Bari (Italy).
  - Supervisor of 12 projects (per year) for final year students in Power Electronics, Power Quality and Electrical Drives at the Technical University of Bari (Italy).
- 1994-1998
  - Teaching assistant on the courses in Power Electronics and Electrical drives for Diploma and Laurea degrees in Electrical and Electronic engineering at the Technical University of Bari (Italy).

### **Academic Administration**

- 2009 – 2014: Examination Officer at the .Dept. of Electrical and Electronic Engineering, University of Nottingham
- Internal PhD examiner for more than 25 candidates at the University of Nottingham
- External PhD examiner for more than 20 candidates in UK, Italy and Norway
- 2003 - 2008
  - Principal Manager of the EU “Marie Curie” FP5 ECON project and of “Marie Curie Early Stage Training Area” FP6 ECON2 project involving 5 European Universities having University of Nottingham as leading partner.
  - Member of the Professors Committee for the Ph.D. courses in Electrical Engineering at the Technical University of Bari (Italy).
- 1999 – 2003:
  - Responsible for the Power Electronics laboratory and for the Electro-Magnetic Compatibility laboratory at the Technical University of Bari (Italy).
  - Member of the scientific committee of Industrial Engineering at the Technical University of Bari (Italy).

## Bibliography

Professor Pericle Zanchetta

### Papers published in Scientific Journals (131)

- [1] Ioannis Kougioulis;Pericle Zanchetta;Pat Wheeler;Md Rishad Ahmed “On Optimized Modulation Strategies for Electric Vehicle Integrated On-board Chargers”, **IEEE Transactions on Industry Applications**, Year: 2024 Early Access Article
- [2] Boyuan Zheng;Xinyuan Wang;Yongxiang Xu;Jibin Zou;Guodong Yu;Pericle Zanchetta “Postfault Strategy for Dual three-phase PMSM with reduced current loops considering leakage inductance”, **IEEE Transactions on Power Electronics**, Year: 2024 Early Access
- [3] Zhen Huang;Rui Zhu;Shuhao Zhang;Mi Tang;Yonghong Xia;Pericle Zanchetta “Enhanced Anti-disturbance Capability of Digital Controller for the SPMSM at Low Switching to Fundamental Frequency Ratios”, **IEEE Journal of Emerging and Selected Topics in Power Electronics**, Year: 2024 Early Access Article
- [4] Samuela Rokocakau;Jacopo Riccio;Giulia Tresca;Rahul R. Kumar;Giansalvo Cirrincione;Pericle Zanchetta;Maurizio Cirrincione “Fault Diagnosis Using Shallow Neural Networks for Voltage Source Inverters in Motor Drives”, **IEEE Transactions on Industry Applications**, Year: 2024, Volume: 60, Issue: 5.
- [5] Hamed Moradmand Jazi;Ramin Rahimzadeh Khorasani;Ehsan Adib;Pericle Zanchetta;Guillermo Velasco-Quesada;Herminio Martínez-García, “A High-Efficient Single-Switch, Soft-Switching High Step-Up DC–DC Converter With a Simple Structure and Continuous Input Current for Renewable Energy Integration”, **IEEE Transactions on Power Electronics**, Year: 2024, Volume: 39, Issue: 8.
- [6] Giulia Tresca;Andrea Formentini;Jacopo Riccio;Norma Anglani;Pericle Zanchetta “A Reconfigurable Cascaded Multilevel Converter for EV Powertrain”, **IEEE Transactions on Industry Applications**, Year: 2024, Volume: 60, Issue: 2
- [7] Zhenyu Chen;Yang Liu;Pericle Zanchetta;Xuewei Fu;Jiubin Tan “A Novel Dynamic Decoupling Approach Based on Command Shaping for Overactuated Motion Systems”, **IEEE Transactions on Industrial Electronics**, Year: 2024, Volume: 71, Issue:8
- [8] Yuan Gao;Songda Wang;Tomislav Dragicevic;Patrick Wheeler;Pericle Zanchetta “Artificial Intelligence Techniques for Enhancing the Performance of Controllers in Power Converter-Based Systems—An Overview”, **IEEE Open Journal of Industry Applications**, Year: 2023, Volume: 4
- [9] Fu X., Yang X., Zanchetta P., Tang M., Liu Y., Chen Z. “An Adaptive Data-Driven Iterative Feedforward Tuning Approach Based on Fast Recursive Algorithm: With Application to a Linear Motor”, **IEEE Transactions on Industrial Informatics**, Year 2023, Volume: 19, Issue: 4.
- [10] Riccio J., Karamanakos P., Odhano S., Tang M., Di Nardo M., Tresca G., Zanchetta P. “Modulated Model-Predictive Integral Control applied to a Synchronous Reluctance Motor Drive”, **IEEE Journal of Emerging and Selected Topics in Power Electronics**, Year 2023.
- [11] Riccio J., Karamanakos P., Odhano S., Tang M., Di Nardo M., Zanchetta P. “Direct Model Predictive Control of Synchronous Reluctance Motor Drives”, **IEEE Transactions on Industry Applications**, Year 2023, Volume: 59, Issue: 1.
- [12] Zheng B., Zou J., Li B., Tang M., Xu Y., Zanchetta P. “Analysis and Fault-Tolerant Control for Dual-Three-Phase PMSM Based on Virtual Healthy Model”, **IEEE Transactions on Power Electronics**, Year 2022, Volume: 37, Issue: 12.
- [13] Huang Z., Tang M., Golovanov D., Yang T., Herring S., Zanchetta P., Gerada C. “Profiling the Eddy Current Losses Variations of High-Speed Permanent Magnet Machines in Plug-In Hybrid Electric Vehicles”, **IEEE Transactions on Transportation Electrification**, Year 2022, Volume: 8, Issue: 3.
- [14] Wen Z., Di Nardo M., Sala G., Valente G., Marfoli A., Degano M., Zanchetta P., Gerada C. “Modular Power Sharing Control for Bearingless Multithree Phase Permanent Magnet Synchronous Machine”, **IEEE Transactions on Industrial Electronics**, Year 2022, Volume: 69, Issue: 7.
- [15] Kang Li; Andrea Formentini; David Dewar; Pericle Zanchetta “Controller Design of an Active Front-End Converter Keeping in consideration Grid Dynamic Interaction” **IEEE Transactions on Industrial Electronics**, Year: 2022, Volume: 69, Issue: 5.
- [16] Rovere L., Valente G., Formentini A., Zanchetta P. “Parameters and Volt-Ampere Ratings of a Floating Capacitor Open-End Winding Synchronous Motor Drive for Extended CPSR”, **IEEE Transactions on Industrial Electronics**, Year 2022, Volume: 69, Issue: 5.
- [17] Mi Tang; Marco di Benedetto; Stefano Bifaretti; Alessandro Lidozzi; Pericle Zanchetta, “State of the Art of Repetitive Control in Power Electronics and Drive Applications”, **IEEE Open Journal of Industry Applications**, Year: 2022, Volume: 3
- [18] Granata S., Di Benedetto M., Terlizzi C., Leuzzi R., Bifaretti S., Zanchetta P. “Power Electronics Converters for the Internet of Energy: A Review”, **Energies**, Year 2022, Volume: 15, Issue: 7.
- [19] Tarisciotti L., Chen L., Shao S., Dragicevic T., Wheeler P., Zanchetta P. “Finite Control Set Model Predictive Control for Dual Active Bridge Converter”, **IEEE Transactions on Industry Applications**, Year 2022, Volume: 58, Issue: 2.
- [20] Czerniewski B., Formentini A., Dewar D., Zanchetta P., Schanen J.-L. “Interaction of AC Grid Filters in Aircraft and Influence of the System Dynamic Behavior”, **IEEE Transactions on Industry Applications**, Year 2022, Volume: 58, Issue: 2.
- [21] Sala G., Valente G., Nardo M.D., Degano M., Zanchetta P., Gerada C. “Power-Sharing Control in Bearingless Multi-Sector and Multi-Three-Phase Permanent Magnet Machines”, **IEEE Transactions on Industrial Electronics**, Year 2021, Volume: 68, Issue: 10.
- [22] Fu X., Yang X., Zanchetta P., Liu Y., Ding C., Tang M., Chen Z. “Frequency-Domain Data-Driven Adaptive Iterative Learning Control Approach: With Application to Wafer Stage”, **IEEE Transactions on Industrial Electronics**, Year 2021, Volume: 68, Issue: 10.
- [23] Pipolo S., Formentini A., Trentin A., Zanchetta P., Calvini M., Venturini M. “A Novel Matrix Converter Modulation with Reduced Number of Commutations”, **IEEE Transactions on Industry Applications**, Year 2021, Volume: 57, Issue: 5.

- [24] Bifaretti S., Bonaiuto V., Pipolo S., Terlizzi C., Zanchetta P., Gallinelli F., Alessandrini S. “Power flow management by active nodes: A case study in real operating conditions”, **Energies**, Year 2021, Volume: 14, Issue: 15.
- [25] Tang M., Bifaretti S., Pipolo S., Formentini A., Odhano S., Zanchetta P. “A Novel Low Computational Burden Dual-Observer Phase-Locked Loop with Strong Disturbance Rejection Capability for More Electric Aircraft”, **IEEE Transactions on Industry Applications**, Year 2021, Volume: 57, Issue: 4.
- [26] Odhano S., Rubino S., Tang M., Zanchetta P., Bojoi R. “Stator Current-Sensorless-Modulated Model Predictive Direct Power Control of a DFIM with Magnetizing Characteristic Identification”, **IEEE Journal of Emerging and Selected Topics in Power Electronics**, Year 2021, Volume: 9, Issue: 3.
- [27] Wen Z., Valente G., Formentini A., Papini L., Gerada C., Zanchetta P. “Open-Circuit Fault Control Techniques for Bearingless Multisector Permanent Magnet Synchronous Machines”, **IEEE Transactions on Industry Applications**, Year 2021, Volume: 57, Issue: 3.
- [28] Dewar D., Formentini A., Li K., Zanchetta P., Wheeler P. “Optimal and automated decentralised converter control design in more electrical aircraft power electronics embedded grids”, **IET Power Electronics**, Year 2021, Volume: 14, Issue: 3.
- [29] Rohten J.A., Dewar D.N., Zanchetta P., Formentini A., Muñoz J.A., Baier C.R., Silva J.J. “Multivariable deadbeat control of power electronics converters with fast dynamic response and fixed switching frequency”, **Energies**, Year 2021, Volume: 14, Issue: 2.
- [30] Wen Z., Valente G., Formentini A., Papini L., Gerada C., Zanchetta P. “A Novel Current Limitation Technique Exploiting the Maximum Capability of Power Electronic Inverter and Bearingless Machine”, **IEEE Transactions on Industry Applications**, Year 2021, Volume: 57, Issue: 6.
- [31] Cheong B., Giangrande P., Zhang X., Galea M., Zanchetta P., Wheeler P. “Evolutionary Multiobjective Optimization of a System-Level Motor Drive Design”, **IEEE Transactions on Industry Applications**, Year 2020, Volume: 56, Issue: 6.
- [32] Mi Tang; Shafiq Odhano; Andrea Formentini; Pericle Zanchetta “Reuse of a Damaged Permanent Magnet Synchronous Motor for Torque Ripple and Acoustic Noise Elimination using a Novel Repetitive Observer”, **IEEE Transactions on Industry Applications**, Year 2020, Volume: 56, Issue: 4.
- [33] David Dewar;Jaime Rohten;Andrea Formentini;Pericle Zanchetta, “Decentralised Optimal Controller Design of Variable Frequency Three-Phase Power Electronic Networks Accounting for Sub-System Interactions”, **IEEE Open Journal of Industry Applications**, Year: 2020, Volume: 1.
- [34] A. Amerise; L. Rovere; A. Formentini; M. Mengoni; L. Zarri; P. Zanchetta “Electric Drive Based on an Open-End Winding Surface PM Synchronous Machine with a Floating Capacitor Bridge”; **IEEE Transactions on Industry Applications**, Year 2020, Volume: 56, Issue: 3.
- [35] M. Tang; S. Bifaretti; S. Pipolo; S. Odhano; P. Zanchetta “A Novel Repetitive Controller Assisted Phase-Locked Loop with Self-learning Disturbance Rejection Capability for Three-phase Grids”; **IEEE Journal of Emerging and Selected Topics in Power Electronics**, Year 2020, Volume: 8, Issue: 2.
- [36] M. Tang; A. Formentini; S. A. Odhano; P. Zanchetta “Torque Ripple Reduction of PMSMs Using a Novel Angle-Based Repetitive Observer”; **IEEE Transactions on Industrial Electronics**, Year 2020, Volume 67, Issue 4.
- [37] G. Sala; G. Valente; D. Gerada; P. Zanchetta; C. Gerada “Post-Fault Operation of Bearingless Multisector SPM Machines by Space Vector Control”; **IEEE Transactions on Power Electronics**, Year 2020, Volume 35, Issue 4.
- [38] L. Bigarelli; M. di Benedetto; A. Lidozzi; L. Solero; S. A. Odhano; P. Zanchetta “PWM-Based Optimal Model Predictive Control for Variable Speed Generating Units”; **IEEE Transactions on Industry Applications**, Year 2020, Volume 56, Issue 1.
- [39] L. Chen; L. Tarisciotti; A. Costabeber; F. Gao; P. Wheeler; P. Zanchetta “Advanced Modulations for a Current-Fed Isolated DC/DC Converter With Wide-Voltage-Operating Ranges”; **IEEE Journal of Emerging and Selected Topics in Power Electronics**, 2019, vol. 7, issue 4, 2540-2552.
- [40] L. Rovere; A. Formentini; P. Zanchetta “FPGA Implementation of a Novel Oversampling Deadbeat Controller for PMSM Drives”; **IEEE Transactions on Industrial Electronics**, 2019, vol. 66, issue 5, 3731-3741.
- [41] V. Salis; A. Costabeber; S. M. Cox; F. Tardelli; P. Zanchetta “Experimental Validation of Harmonic Impedance Measurement and LTP Nyquist Criterion for Stability Analysis in Power Converter Networks”; **IEEE Transactions on Power Electronics**, 2019, vol. 34, issue 8, 7972-7982.
- [42] R. Leuzzi; V. G. Monopoli; L. Rovere; F. Cupertino; P. Zanchetta “Analysis and Detection of Electrical Aging Effects on High-Speed Motor Insulation”; **IEEE Transactions on Industry Applications**, 2019, vol 55, issue 6, 6018-6025.
- [43] L. Chen; L. Tarisciotti; A. Costabeber; Q. Guan; P. Wheeler; P. Zanchetta “Phase-Shift Modulation for a Current-Fed Isolated DC/DC Converter in More Electric Aircrafts”; **IEEE Transactions on Power Electronics**, 2019, vol. 34, issue 9, 8528-8543.
- [44] L. Rovere; A. Formentini; G. L. Calzo; P. Zanchetta; T. Cox “Zero-Sequence Voltage Elimination for Dual-Fed Common DC-Link Open-End Winding PMSM High-Speed Starter Generator Part I: Modulation”; **IEEE Transactions on Industry Applications**, 2019, vol. 55, issue 6, 7804-7812.
- [45] L. Rovere; A. Formentini; G. L. Calzo; P. Zanchetta; T. Cox “Zero-Sequence Voltage Elimination for Dual-Fed Common DC-Link Open-End Winding PMSM High-Speed Starter-Generator Part II: Deadtime Hysteresis Control of Zero-Sequence Current”; **IEEE Transactions on Industry Applications**, 2019, vol 55, issue 6, 7813-7821.
- [46] F. Stella; A. Yousefi-Talouki; S. Odhano; G. Pellegrino; P. Zanchetta “An Accurate Self-Commissioning Technique for Matrix Converters Applied to Sensorless Control of Synchronous Reluctance Motor Drives”; **IEEE Journal of Emerging and Selected Topics in Power Electronics**, 2019, vol 7, issue 2, 1342-1351.
- [47] G. Valente; A. Formentini; L. Papini; C. Gerada; P. Zanchetta “Performance Improvement of Bearingless Multisector PMSM With Optimal Robust Position Control”; **IEEE Transactions on Power Electronics**, 2019, vol 34, issue 4, 3575-3585.
- [48] C. F. Garcia; C. A. Silva; J. R. Rodriguez; P. Zanchetta; S. A. Odhano “Modulated Model-Predictive Control With Optimized Overmodulation”; **IEEE Journal of Emerging and Selected Topics in Power Electronics**, 2019, vol 7, issue 1, 404-413.



- [49] Q. Ni; M. Yang; S. A. Odhano; M. Tang; P. Zanchetta; X. Liu; D. Xu “A New Position and Speed Estimation Scheme for Position Control of PMSM Drives Using Low-Resolution Position Sensors”; **IEEE Transactions on Industry Applications**, 2019, vol. 55, issue 4, 3747-3758.
- [50] C. Blanco; F. Tardelli; D. Reigosa; P. Zanchetta; F. Briz “Design of a Cooperative Voltage Harmonic Compensation Strategy for Islanded Microgrids Combining Virtual Admittance and Repetitive Controller”; **IEEE Transactions on Industry Applications**, 2019, vol. 55, issue 1, 680-688.
- [51] G Sala, G Valente, A Formentini, L Papini, D Gerada, P Zanchetta, A Tani, “Space Vectors and Pseudoinverse Matrix Methods for the Radial Force Control in Bearingless Multisector Permanent Magnet Machines”, **IEEE Transactions on Industrial Electronics** 65 (9), 6912-6922, 2018
- [52] G Valente, L Papini, A Formentini, C Gerada, P Zanchetta, “Radial Force Control of Multisector Permanent-Magnet Machines for Vibration Suppression”, **IEEE Transactions on Industrial Electronics** 65 (7), 5395-5405, 2018
- [53] G Giglia, G Ala, MC Di Piazza, GC Giaconia, M Luna, G Vitale, P Zanchetta “Automatic EMI filter design for power electronic converters oriented to high power density”, **Electronics** 7 (1), 2018
- [54] R Brogna, KS Choi, P Houston, L Pasquale, P Zanchetta, “Output feedback control of flow separation over an aerofoil using plasma actuators”, **International Journal of Numerical Analysis and Modeling**, 2018
- [55] Sandro Rubino, Shafiq Odhano, Radu Bojoi, Pericle Zanchetta, “Model predictive direct flux vector control of multi three-phase induction motor drives”, **IEEE Transactions on Industry Applications**, Year: 2018.
- [56] Valerio Salis; Alessandro Costabeber; Stephen M. Cox; Andrea Formentini; Pericle Zanchetta, “Stability Assessment of High-Bandwidth DC Voltage Controllers in Single-Phase Active-Front-Ends: LTI vs LTP Models”, **IEEE Journal of Emerging and Selected Topics in Power Electronics**, Year: 2018.
- [57] Alexander L. Julian; Giovanna Oriti; Chao Ji; Pericle Zanchetta, “Single Phase Energy Management System Operating in Islanding Mode with Repetitive Control and Active Damping”, **IEEE Transactions on Industry Applications**, Vol 54, issue 5, 2018.
- [58] Valerio Salis; Nicolas Chiappinelli; Alessandro Costabeber; Pericle Zanchetta; Stefano Bifaretti; Patrizio Tomei; Cristiano M. Verrelli, “Learning Position Controls for Hybrid Step Motors: from Current-fed to Full-Order Models”, **IEEE Transactions on Industrial Electronics**, 65 (8), 6120-6130, Year: 2018.
- [59] Valerio Salis; Alessandro Costabeber; Stephen Cox; Pericle Zanchetta; Andrea Formentini, “Stability Boundary Analysis in Single-Phase Grid-Connected Inverters with PLL by LTP Theory”, **IEEE Transactions on Power Electronics**, 33 (5), 4023-4036, 2018
- [60] Shafiq Odhano; Radu Bojoi; Andrea Formentini; Pericle Zanchetta; Alberto Tenconi, “Direct flux and current vector control for induction motor drives using model predictive control theory”, **IET Electric Power Applications**, Year: 2017, Volume: 11, Issue: 8, Pages: 1483 – 1491
- [61] Seang Shen Yeoh; Tao Yang; Luca Tarisciotti; Christopher Ian Hill; Serhiy Bozhko; Pericle Zanchetta, “Permanent-Magnet Machine-Based Starter–Generator System With Modulated Model Predictive Control”, **IEEE Transactions on Transportation Electrification**, Year: 2017, Volume: 3, Issue: 4, Pages: 878 – 890
- [62] Mi Tang; Alberto Gaeta; Andrea Formentini; Pericle Zanchetta, “A Fractional Delay Variable Frequency Repetitive Control for Torque Ripple Reduction in PMSMs”, **IEEE Transactions on Industry Applications**, Year: 2017, Volume: 53, Issue: 6, Pages: 5553 – 5562
- [63] Valerio Salis; Alessandro Costabeber; Stephen M. Cox; Pericle Zanchetta, “Stability Assessment of Power-Converter-Based AC systems by LTP Theory: Eigenvalue Analysis and Harmonic Impedance Estimation”, **IEEE Journal of Emerging and Selected Topics in Power Electronics**, Year: 2017, Volume: 5, Issue: 4, Pages: 1513 – 1525.
- [64] Manjusha Vijayagopal; Pericle Zanchetta; Lee Empringham; Liliana de Lillo; Luca Tarisciotti; Patrick Wheeler, “Control of a Direct Matrix Converter With Modulated Model-Predictive Control”, **IEEE Transactions on Industry Applications**, Year: 2017, Volume: 53, Issue: 3, Pages: 2342 - 2349
- [65] Luca Tarisciotti; Andrea Formentini; Alberto Gaeta; Marco Degano; Pericle Zanchetta; Roberto Rabbeni; Marcello Pucci, “Model Predictive Control for Shunt Active Filters With Fixed Switching Frequency”, **IEEE Transactions on Industry Applications**, Year: 2017, Volume: 53, Issue: 1, Pages: 296 – 304.
- [66] Luca Tarisciotti; Jiaxing Lei; Andrea Formentini; Andrew Trentin; Pericle Zanchetta; Patrick Wheeler; Marco Rivera, “Modulated Predictive Control for Indirect Matrix Converter”, **IEEE Transactions on Industry Applications**, Year: 2017, Volume: 53, Issue: 5, Pages: 4644 - 4654
- [67] Alessandro Lidozzi; Chao Ji; Luca Solero; Pericle Zanchetta; Fabio Crescimbin, “Digital Deadbeat and Repetitive Combined Control for a Stand-Alone Four-Leg VSI”, **IEEE Transactions on Industry Applications**, Year: 2017, Volume: 53, Issue: 6, Pages: 5624 - 5633
- [68] Alessandro Lidozzi; Chao Ji; Luca Solero; Fabio Crescimbin; Pericle Zanchetta, “Load-Adaptive Zero-Phase-Shift Direct Repetitive Control for Stand-Alone Four-Leg VSI” **IEEE Transactions on Industry Applications**, Year: 2016, Volume: 52, Issue: 6, Pages: 4899 – 4908.
- [69] Luca Rovere; Andrea Formentini; Alberto Gaeta; Pericle Zanchetta; Mario Marchesoni, “Sensorless Finite-Control Set Model Predictive Control for IPMSM Drives”, **IEEE Transactions on Industrial Electronics**, Year: 2016, Volume: 63, Issue: 9, Pages: 5921 – 5931.
- [70] Andrew Trentin; Lee Empringham; Liliana de Lillo; Pericle Zanchetta; Patrick Wheeler; Jon Clare, “Experimental Efficiency Comparison Between a Direct Matrix Converter and an Indirect Matrix Converter Using Both Si IGBTs and SiC mosfets”, **IEEE Transactions on Industry Applications**, Year: 2016, Volume: 52, Issue: 5, Pages: 4135 – 4145.
- [71] Cristian Garcia; Jose Rodriguez; Cesar Silva; Christian Rojas; Pericle Zanchetta; Haitham Abu-Rub, “Full Predictive Cascaded Speed and Current Control of an Induction Machine”, **IEEE Transactions on Energy Conversion**, Year: 2016, Volume: 31, Issue: 3, Pages: 1059 – 1067.

- [72] Mi Tang; Alberto Gaeta; Andrea Formentini; Kazuhiro Ohyama; Pericle Zanchetta; Greg Asher, “Enhanced DBCC for high-speed permanent magnet synchronous motor drives”, **IET Power Electronics**, Year: 2016, Volume: 9, Issue: 15, Pages: 2880 – 2890.
- [73] Tarisciotti, L.; Lo Calzo, G.; Gaeta, A.; Zanchetta, P.; Valencia, F.; Saez, D. “A Distributed Model Predictive Control Strategy for Back-to-Back Converters”, **IEEE Transactions on Industrial Electronics**, Year: 2016, Volume: 63, Issue: 9, Pages: 5867 - 5878.
- [74] Lidozzi, A.; Chao Ji; Solero, L.; Zanchetta, P.; Crescimbeni, F. “Resonant–Repetitive Combined Control for Stand-Alone Power Supply Units”, **IEEE Transactions on Industry Applications**, Year: 2015, Volume: 51, Issue: 6, Pages: 4653 – 4663.
- [75] Arif, B.; Tarisciotti, L.; Zanchetta, P.; Clare, J.C.; Degano, M. “Grid Parameter Estimation Using Model Predictive Direct Power Control”, **IEEE Transactions on Industry Applications**, Year: 2015, Volume: 51, Issue: 6, Pages: 4614 – 4622.
- [76] Formentini, A.; Trentin, A.; Marchesoni, M.; Zanchetta, P.; Wheeler, P. “Speed Finite Control Set Model Predictive Control of a PMSM Fed by Matrix Converter”, **IEEE Transactions on Industrial Electronics**, Year: 2015, Volume: 62, Issue: 11, Pages: 6786 – 6796.
- [77] Tarisciotti, L.; Zanchetta, P.; Watson, A.; Wheeler, P.; Clare, J.C.; Bifaretti, S. “Multi-objective Modulated Model Predictive Control for a Multilevel Solid-State Transformer”, **IEEE Transactions on Industry Applications**, Year: 2015, Volume: 51, Issue: 5, Pages: 4051 – 4060.
- [78] Tarisciotti, L., Zanchetta, P., Watson, A., Clare, J.C., Degano, M., Bifaretti, S. “Modulated Model Predictive Control for a Three-Phase Active Rectifier”, **IEEE Transactions on Industry Applications**, Volume 51, Issue 2, 1 March 2015.
- [79] Mohammad Abusara, Suleiman Sharhk, P Zanchetta, “Adaptive Repetitive Control with Feedforward Scheme for Grid-Connected Inverters”, **Proceedings of IET\_ Power Electronics**, Volume 8, Issue 8, 1 August 2015, Pages 1403-1410.
- [80] Rohouma, W. ; Zanchetta, P. ; Patrick W., W. ; Empringham, L. “A Four-Legs Matrix Converter Ground Power Unit with Repetitive Voltage Control”, **IEEE Transactions on Industrial Electronics**, Volume 62, Issue 4, April 2015, Pages 2032-2040
- [81] Mohammad Abusara, Suleiman Sharhk. P Zanchetta, “Control of Grid-Connected inverters using Adaptive Repetitive and Proportional Resonant Schemes”, **Journal of Power Electronics (JPE)**, Volume 15, Issue 2, 1 March 2015, Pages 518-529.
- [82] Tarisciotti, L. ; Zanchetta, P. ; Watson, A. ; Bifaretti, S. ; Clare, J.C. ; Wheeler, P.W.; “Active DC Voltage Balancing PWM Technique for High-Power Cascaded Multilevel Converters”, **IEEE Transactions on Industrial Electronics**, Volume: 61 , Issue: 11 Publication Year: 2014 , Page(s): 6157 – 6167.
- [83] Tarisciotti, L. ; Zanchetta, P. ; Watson, A. ; Bifaretti, S. ; Clare, J.C.; “Modulated Model Predictive Control for a Seven-Level Cascaded H-Bridge Back-to-Back Converter”, **IEEE Transactions on Industrial Electronics**, Volume: 61 , Issue: 10, Publication Year: 2014 , Page(s): 5375 – 5383.
- [84] Bifaretti, S. ; Zanchetta, P. ; Lavopa, E.; “Comparison of Two Three-Phase PLL Systems for More Electric Aircraft Converters”, **IEEE Transactions on Power Electronics**, Volume: 29, Issue: 12, Publication Year: 2014, Page(s): 6810 – 6820.
- [85] Chao Ji ; Zanchetta, P. ; Carastro, F. ; Clare, J.; “Repetitive Control for High-Performance Resonant Pulsed Power Supply in Radio Frequency Applications”, **IEEE Transactions on Industry Applications**, Volume: 50, Issue: 4, Publication Year: 2014, Page(s): 2660 – 2670.
- [86] Sumner, M. ; Abusorrah, A. ; Thomas, D. ; Zanchetta, P.; “Real Time Parameter Estimation for Power Quality Control and Intelligent Protection of Grid-Connected Power Electronic Converters”, **IEEE Transactions on Smart Grid**, Volume: 5, Issue: 4, Publication Year: 2014 , Page(s): 1602 – 1607.
- [87] Wang, Xiang; Castellazzi, Alberto; Zanchetta, Pericle; “Observer based temperature control for reduced thermal cycling in power electronic cooling”, **Elsevier Applied Thermal Engineering Journal**, Vol. 64, No. 1, 2014.
- [88] Trentin, Andrew; Zanchetta, Pericle; Wheeler, Patrick; Clare, Jon; “Power conversion for a novel AC/DC aircraft electrical distribution system”, **Proceedings of IET Electrical Systems in Transportation**, Vol. 4, No. 2, 2014, Page(s): 29-37.
- [89] Sanchez, Santiago; Molinas, Marta; Degano, Marco; Zanchetta, Pericle; “Stability evaluation of a DC micro-grid and future interconnection to an AC system”, **Elsevier, Renewable energy Journal**, Vol 62, 2014, Page(s): 649-656.
- [90] Vazquez, S. ; Leon, J.I. ; Franquelo, L.G. ; Rodriguez, J. ; Young, H.A. ; Marquez, A. ; Zanchetta, P. “Model Predictive Control: A Review of Its Applications in Power Electronics” **IEEE Industrial Electronics Magazine** Volume 8, Issue 1, 2014, Page(s) 16-31.
- [91] Cárdenas, Roberto; Peña, Rubén; Clare, Jon; Wheeler, Patrick; Zanchetta, Pericle; “A repetitive control system for four-leg matrix converters feeding non-linear loads”, **Elsevier Electric Power Systems Research Journal**, Vol. 104, November 2013, Page(s): 18-27.
- [92] Rodriguez, J. ; Kazmierkowski, M.P. ; Espinoza, J. ; Zanchetta, P. ; Rivera, M. “Guest Editorial Special Section on Digital Control Systems in Power Electronics and Electrical Drives - Part III”, **IEEE Transactions on Industrial Informatics**, Volume: 9 , Issue: 2 : 2013, Page(s): 587 – 588
- [93] Biagini V, Zanchetta P, Odavic M, Sumner M, Degano M. “Control and Modulation of a Multi-Level Active Filtering Solution for Variable-Speed Constant-Frequency More-Electric Aircraft Grids”, **IEEE Transactions on industrial informatics**, Vol. 9, No 2, 2013, Page(s): 600-608.
- [94] P. Zanchetta, M. Degano, J. Liu, P. Mattavelli, “Iterative Learning Control with Variable Sampling Frequency for Current Control of Grid Connected Converters in Aircraft Power Systems”, **IEEE transactions on Industry Applications**, Volume: 49, Issue: 4, Digital Object Identifier: 10.1109/TIA.2013.2255575, Publication Year: 2013, Page(s): 1548 - 1555
- [95] Nnamdi Okaeme, Pericle Zanchetta, “Hybrid Bacterial Foraging Optimization Strategy for Automated Experimental Control Design in Electrical Drives”, **IEEE Transactions on industrial informatics**, Vol. 9, No 2, 2013, Page(s): 668-678.
- [96] Milijana Odavic, Veronica Biagini, Mark Sumner, Pericle Zanchetta and Marco Degano “Low Carrier-Fundamental Frequency Ratio PWM for Multilevel Active Shunt Power Filters for Aerospace Applications”, **IEEE transactions on Industry Applications**, Vol. 49, No 1, 2013, page(s): 159-167.

- [97] Rodriguez, J.; Kazmierkowski, M.; Espinoza, J.; Zanchetta, P.; Abu-Rub, H.; Young, H.; Rojas, C. "State of the Art of Finite Control Set Model Predictive Control in Power Electronics", **IEEE Transactions on Industrial Informatics**, 2013, Vol.9, No. 2, page(s): 1003 -1016.
- [98] Rodriguez, J.; Kazmierkowski, M. P.; Espinoza, J.; Zanchetta, P.; Rivera, M., "Introduction to the Special Section on Digital Control Systems in Power Electronics and Electrical Drives—Part II", **IEEE Transactions on Industrial Electronics**, Volume: 60 , Issue: 2, 2013, Page(s): 575 – 577
- [99] A. Trentin, P. Zanchetta, J. Clare, P. Wheeler "Performance Evaluation of High Voltage 1.2kV SiC MOSFETs for 3-phase buck-type PWM Rectifiers in Aircraft Applications", **Proceedings of IET\_ Power Electronics**, Vol. 5, No 9, 2012, Page(s): 1873-1881.
- [100] S. Bifaretti, L. Tarisciotti, A. Watson, P. Zanchetta, A. Bellini, J. Clare, "Distributed commutations pulse-width modulation technique for high-power AC/DC multi-level converters", **Proceedings of IET\_ Power Electronics**, Vol. 5, No 6, 2012, Page(s): 909-919.
- [101] Rodriguez, J.; Kazmierkowski, M.; Espinoza, J.; Zanchetta, P. "Guest Editorial Special Section on Digital Control Systems in Power Electronics and Electrical Drives—I", **IEEE Transactions on Industrial Informatics**, Volume: 8 , Issue: 3 2012 , Page(s): 435 – 436
- [102] C. Hill, P. Zanchetta, S. Bozhko, "Accelerated Electromechanical Modelling of a Distributed Internal Combustion Engine Generator Unit", *Energies* 2012, 5, 2232 – 2247.
- [103] M. Degano, P. Zanchetta, E. Lavopa, L. Empringham, J. Clare "HF Induction Motor Modeling Using Automated Experimental Impedance Measurement Matching", **IEEE Transactions. on Industrial Electronics**, Volume: 59, issue 10, pp 3789 - 3796
- [104] J. Liu, P. Zanchetta, M. Degano, E. Lavopa, "Control Design and Implementation for High Performance Shunt Active Filters in Aircraft Power Grids", **IEEE Transactions. on Industrial Electronics**, Volume: 59, issue 9, 2012, pp 3604 – 3613.
- [105] F. Cupertino, M. Liserre, P. Zanchetta, "Guest Editorial Special Section on Optimization in Power Electronics and drives", **IEEE Transactions. on Industrial Electronics**, Volume: 59, issue 7, 2012, pp 2742 - 2744.
- [106] A. Trentin, P. Zanchetta, J. Clare, P. Wheeler "Automated Optimal Design of Input Filters for Direct AC/AC Matrix Converters", **IEEE Transactions. on Industrial Electronics**, Volume: 59, issue 7, 2012, pp 2811 - 2823.
- [107] H. Wang, P. Zanchetta, J. Clare, C. Ji "Modelling and Control of ZCS High Voltage RF Sources based on Resonant Converters" **Proceedings of IET\_EPA**, Volume: 5, No. 4, 2012, page(s): 401-409.
- [108] P. Mattavelli, R.P.Venturini, P. Zanchetta, M. Sumner: "Adaptive Selective Compensation for Variable Frequency Active Power Filters in Electric Aircraft", **IEEE Transactions on Aerospace Electronic Systems**, Volume 48, issue 2, 2012, pp 1319 - 1328.
- [109] A. Castellazzi, W.J. Choy, P. Zanchetta: "Dynamic active cooling for improved power system reliability" **Elsevier Microelectronics Reliability**, Volume 51, Issues 9–11, September–November 2011, Pages 1964-1967
- [110] S. Bifaretti, P. Zanchetta, L. Tarisciotti, A. Watson, J. Clare: "Advanced Power Electronic Conversion and Control System for Universal and Flexible Power Management", **IEEE Transactions on Smart Grids**, Volume: 2, Issue: 2, 2011, Page(s): 231 - 243.
- [111] M. Odavic, V. Biagini, P. Zanchetta, M. Degano, M. Sumner: "One-Sample-Period-Ahead Predictive Current Control for High Performance Active Shunt Power Filters", **Proceedings of IET\_EPA**, Volume: 4, Issue: 4, 2011, Page(s): 414 - 423.
- [112] A. Trentin, P. Zanchetta, P. Wheeler, J. Clare: "Power Flow Analysis in Electro Mechanical Actuators for Civil Aircraft", **Proceedings of IET\_EPA**, Vol. 5, Issue 1, 2011, pp. 48-58.
- [113] F. Cupertino, E. Lavopa, P. Zanchetta, M. Sumner, L. Salvatore, "Running DFT-based PLL Algorithm for Frequency, Phase and Amplitude Tracking in Aircraft Electrical Systems", **IEEE Transactions. on Industrial Electronics**, Volume: 58, Issue: 3, 2011, Page(s): 1027 - 1035.
- [114] H. Zhang, P. Zanchetta, K. Bradley, C. Gerada, "A Low-intrusion Load and Efficiency Evaluation Method for In-Service Motors Using Vibration Tests with an Accelerometer", **IEEE Transaction on Industry Applications**, Issue 4, July/August 2010
- [115] S. Lopez-Arevalo, P. Zanchetta, P.W. Wheeler , A. Trentin, "Control and Implementation of a Matrix Converter-based AC Ground Power Unit for Aircrafts Servicing", **IEEE Transaction on Industrial Electronics**, Issue 6, June 2010
- [116] Dong, W.; Zanchetta, P.; Thomas D. W.P.; "Identification of Electrical Parameters in a Power Network Using Genetic Algorithms and Transient Measurements", **Compel Journal**, January 2010
- [117] M. Odavic, M. Sumner, P. Zanchetta and J. C. Clare "A Theoretical Analysis of the Harmonic Content of PWM Waveforms for Multiple Frequency Modulators", **IEEE Transactions on Power Electronics**, January 2010.
- [118] S. Bifaretti, P. Zanchetta, M. Ciobataru, F. Iov: "Power flow control of the UNIFLEX-PM under different network conditions", **EPE Journal**, Issue 4, December 2009
- [119] M. Ciobataru, F. Iov, S. Bifaretti, P. Zanchetta: "Analysis of the UNIFLEX-PM Faults ride through capability", **EPE Journal**, Issue 4, December 2009
- [120] Lenwari, W; Sumner, M; Zanchetta, P; "The Use of Genetic Algorithms for the Design of Resonant Compensators for Active Filters", **IEEE Transactions on Industrial Electronics**, August 2009.
- [121] E. Lavopa, P. Zanchetta, M. Sumner, F. Cupertino, "Real-time estimation of fundamental frequency and harmonics for active shunt power filters in aircraft electrical systems", **IEEE Transactions. on Industrial Electronics**, August 2009.
- [122] Zanchetta, P.; Sumner, M, Cupertino, F.; Marinelli, M.; "Modelling and Design of Shunt Active Power Filters using Genetic Algorithms", **Control Engineering Practice, Elsevier**, 2009.
- [123] A Trentin, P. Zanchetta, C. Gerada, P. W. Wheeler, J. C. Clare; "Optimized Commissioning method for Enhanced Vector Control of High Power Induction Motor Drives", **IEEE Transaction on Industrial Electronics**, Vol 56, No 5, May 2009.
- [124] P. Zanchetta, P. Wheeler, L. Empringham, J. Clare: "A Three-Phase Utility Power Supply Based on the Matrix Converter", **Proceedings of IET\_EPA**, Vol. 2, Issue 2, March 2009, pp 156-162.
- [125] T. Wijekoon, C. Klumpner, P. Zanchetta, P. Wheeler; "Predictive Current Control for a Hybrid AC/AC Direct Power Converter", **IEEE Transactions on Power Electronics**, Vol 23, No 4, July 2008.

- [126] P.W. Wheeler, P Zanchetta, J.C. Clare, L. Empringham, and M. Bland D. Katsis, “A Utility Power Supply Based on a Four-Output Leg Matrix Converter”, **IEEE Transaction on Industry Applications**, Vol. 44, No 1, Jan/Feb 2008, pp 174 – 186.
- [127] P. Zanchetta, J. Clare, P. Wheeler, D. Katsis, M. Bland, L. Empringham “Control Design of a Three-Phase Matrix Converter AC Power Supply Using Genetic Algorithms”, **IEEE Transaction on Industrial Electronics**, Vol 55, No 1, January 2008, pp. 209 – 217.
- [128] P. Zanchetta, V. G. Monopoli, D. Gerry, J. Clare, P. Wheeler, “High Performance Low Frequency Predictive Current Control For Multilevel Active Rectifiers”, **IEEE Transaction on Industrial Electronics**, Vol 55, No 1, January 2008, pp.163 – 172.
- [129] \* Dell’Aquila, M. Marinelli, V.G. Monopoli, P. Zanchetta: “New Power Quality Assessment Criteria for Supply Systems under Unbalanced and Non-Sinusoidal Conditions” –**IEEE Transactions on Power Delivery** July 2004.
- [130] M. Sumner, B. Paethorpe, D.W.P. Thomas, P. Zanchetta and M.C. Di Piazza: “A Technique for Power Supply Harmonic Impedance Estimation Using a Controlled Voltage Disturbance” **IEEE Transactions on Power Electronics**, Vol 17, No 2, March 2002, pp 207 – 215.
- [131] \* Dell’Aquila, A. Lassandro, P. Zanchetta: “Modeling of Line Side Harmonic Currents Produced by Variable Speed Induction Motor Drives” - **IEEE Transactions on Energy Conversion** Vol. 13, No. 3, September 1998.

## Papers Published in Refereed International Conferences (307)

- [1] Hussein T. Kadhum;Fatma Khera;Jun Xie;Rivera Marco;Alan J. Watson;Pericle Zanchetta;Patrick Wheeler “Optimized model predictive control with reduced switching states for neutral point clamped converters”, 13th International Conference on Power Electronics, Machines and Drives (PEMD 2024)
- [2] Giulia Tresca;Andrea Formentini;Samuele Granata;Carlo Magrini;Pericle Zanchetta “Kalman filter estimation method for battery cell parameters in Reconfigurable Cascaded Multilevel Converter” 2023 IEEE Energy Conversion Congress and Exposition (ECCE)
- [3] Samuele Granata;Giulia Tresca;Francesco Benzi;Pericle Zanchetta “Impact of the DC-DC Stage on Grid-Connection Stability in Solid-State Transformer”, 2023 IEEE Energy Conversion Congress and Exposition (ECCE)
- [4] Andrea Volpini;Samuele Granata;Gianluca Postiglione;Pericle Zanchetta “Negative Voltage Sequence Control for an Electric Arc Furnace Power Supply based on a Multilevel AC-AC Converter”, 2023 IEEE Energy Conversion Congress and Exposition (ECCE)
- [5] Filippo Gemma;Giulia Tresca;Salvatore Riccardo Di Salvo;Andrea Formentini;Pericle Zanchetta “A novel charging approach to Temperature and State of Charge management in BEV”, 2023 IEEE Energy Conversion Congress and Exposition (ECCE)
- [6] Jacopo Riccio;Petros Karamanakos;Michele Degano;Chris Gerada;Pericle Zanchetta “Reduced Computational Burden of Modulated Model-Predictive Control for Synchronous Reluctance Motor Drive Applications”, 2023 IEEE Energy Conversion Congress and Exposition (ECCE)
- [7] Emrah Zerdali;Marco Rivera;Pericle Zanchetta;Patrick Wheeler;Leposava Ristić “Encoderless Predictive Speed and Torque Control of an Induction Motor”, 2023 22nd International Symposium on Power Electronics (Ee)
- [8] Matias Alborno;Marco Rivera;Patrick Wheeler;Pericle Zanchetta “A Study on Molecular Dynamics of High Voltage Pulsed Electrolysis”, 2023 11th International Conference on Power Electronics and ECCE Asia (ICPE 2023 - ECCE Asia)
- [9] Hussein Kadhum;Watson Alan;Beeond M. Saleh;Rivera Marco;Zanchetta Pericle;Wheeler Patrick “Model Predictive Control of Modular Multilevel Converter with High Number of Submodules”, 2023 25th European Conference on Power Electronics and Applications (EPE’23 ECCE Europe)
- [10] Samuela Rokocakau; Giulia Tresca; Giansalvo Cirrincione; Pericle Zanchetta; Rahul Kumar; Maurizio Cirrincione; Lucia Frosini “Fault Detection in Cascaded H-Bridge Inverters using Spectrogram Analysis and Convolutional Neural Networks”, 2023 International Aegean Conference on Electrical Machines and Power Electronics (ACEMP) & 2023 International Conference on Optimization of Electrical and Electronic Equipment (OPTIM)
- [11] Shengyu Cao; Tao Yang; Yuzheng Chen; Serhiy Bozhko; Pericle Zanchetta “Model Reference Adaptive System Based Dual Three-Phase PMSM Sensorless Control with Parameter Estimation for More-Electric Aircraft Applications”, 2023 IEEE Workshop on Power Electronics for Aerospace Applications (PEASA)
- [12] G. Tresca; S. Granata; G. Postiglione; C. Finotti; P. Zanchetta “Balancing voltage algorithm for a medium voltage Cascaded H-Bridge STATCOM in zero-current mode”, 2023 11th International Conference on Power Electronics and ECCE Asia (ICPE 2023 - ECCE Asia)
- [13] Shengyu Cao; Tao Yang; Yuzheng Chen; Serhiy Bozhko; Pericle Zanchetta “Online Parameter Estimation of Dual Three-Phase Permanent-Magnet Synchronous Machine for More-Electric Aircraft Applications”, 2023 IEEE 32nd International Symposium on Industrial Electronics (ISIE)
- [14] Leuzzi R., Volpini A., Di Salvo S.R., Tresca G., Zanchetta P. “A Unified Model Predictive Control for the Grid Integration of Vanadium Redox Flow Batteries”, 2022 IEEE Energy Conversion Congress and Exposition, ECCE 2022.
- [15] Tresca G., Formentini A., Granata S., Leuzzi R., Zanchetta P. “Direct AC charging of EV Reconfigurable Cascaded Multilevel Converter”, 2022 IEEE Energy Conversion Congress and Exposition, ECCE 2022.
- [16] Riccio J., Rovere L., Odhano S., Di Nardo M., Zanchetta P. “Model-Predictive Control of Open-End Winding Synchronous Reluctance Motor Drives”, 2022 IEEE Energy Conversion Congress and Exposition, ECCE 2022.
- [17] Di Salvo S.R., Leuzzi R., Tresca G., Anglani N., Zanchetta P. “Self-Tuning Finite-State Model Predictive Control with Grid Impedance Estimation in a Grid-Tied Inverter”, 2022 IEEE Energy Conversion Congress and Exposition, ECCE 2022.
- [18] Riccio J., Kumar R.R., Cirrincione G., Zanchetta P., Cirrincione M. “Fault Diagnosis using Shallow Neural Networks for Voltage Source Inverters in SynRM Drives”, 2022 IEEE Energy Conversion Congress and Exposition, ECCE 2022.

- [19] Leuzzi R., Volpini A., Di Salvo S.R., Tresca G., Zanchetta P. “A Unified Model Predictive Control for the Grid Integration of Vanadium Redox Flow Batteries”, 2022 IEEE Energy Conversion Congress and Exposition, ECCE 2022.
- [20] Anglani N., Leuzzi R., Di Salvo S.R., Tresca G., Zanchetta P. “Integrated Control Strategy Supporting the Optimal Management of a 3-kW Vanadium Redox Flow Battery: a Case Study for an Islanded DC Microgrid”, 2022 IEEE Energy Conversion Congress and Exposition, ECCE 2022.
- [21] Guicharrousse P., Rishad Ahmed M., Wheeler P., Zanchetta P. “New approach for comparing Modular Multilevel Converter submodule losses considering IGBT and SiC MOSFET devices”, 2022 IECON Proceedings (Industrial Electronics Conference).
- [22] Tresca G., Formentini A., Gemma F., Lusardi F., Leuzzi R., Zanchetta P. “SOC governed algorithm for an EV Cascaded H-Bridge connected to a DC charger”, 24th European Conference on Power Electronics and Applications, EPE 2022 ECCE Europe.
- [23] Tresca G., Formentini A., Di Salvo S., Leuzzi R., Anglani N., Zanchetta P. “Reconfigurable Cascaded Multilevel Converter design for Battery Energy System Storage”, 2022 International Symposium on Power Electronics, Electrical Drives, Automation and Motion, SPEEDAM 2022.
- [24] Tang M., Huang Z., Wang B., Lang X., Velmurugan G., Yang T., Gerada C., Zanchetta P. “Optimised current loop design for a high speed nine-phase permanent magnet synchronous machine in more electric aircraft: A case study”, 2021 IEEE Transportation Electrification Conference and Expo, ITEC 2021.
- [25] Omar A.A., Wheeler P., Zanchetta P., Burgos-Mellado C. “A Fixed Frequency Full-Bridge Three-Level DC-DC LCL-Type Series Resonant Converter for Large Scale Solar PV Plants Applications”, 2021 23rd European Conference on Power Electronics and Applications, EPE 2021 ECCE Europe.
- [26] Rojas D., Rivera M., Wheeler P., Zanchetta P., Mirzaeva G., Rohten J. “A study of cost function selection in model predictive control applications”, 2021 IEEE International Conference on Automation/24th Congress of the Chilean Association of Automatic Control, ICA-ACCA 2021.
- [27] Murillo-Yarce D., Rivera M., Restrepo C., Munoz J., Baier C., Rodriguez R., Wheeler P., Zanchetta P., Mirzaeva G. “Common-mode voltage reduction in a VSI inverter applying sequential predictive control”, 2021 IEEE International Conference on Automation/24th Congress of the Chilean Association of Automatic Control, ICA-ACCA 2021.
- [28] Rojas D., Rivera M., Munoz J., Wheeler P., Zanchetta P., Mirzaeva G. “Effect of model parameter errors in model predictive control applications”, 2021 IEEE CHILEAN Conference on Electrical, Electronics Engineering, Information and Communication Technologies, CHILECON 2021.
- [29] Fu X., Ding C., Zanchetta P., Yang X., Tang M., Liu Y. “Cogging Force Identification Based on Self-Adaptive Hybrid Self-Learning TLBO Trained RBF Neural Network for Linear Motors”, 2021 13th International Symposium on Linear Drives for Industry Applications, LDIA 2021.
- [30] Czerniewski B., Schanen J.-L., Chazal H., Zanchetta P., Freitas C.F.D. “Identification and Validation of a Non Symmetrical System Level EMC Model for Power Electronics Converter”, 2021 IEEE Energy Conversion Congress and Exposition, ECCE 2021 - Proceedings.
- [31] Di Salvo S.R., Bulzi M., Riccio J., Leuzzi R., Zanchetta P., Anglani N. “Model predictive Control of a Double Stage AC-DC Converter for Grid-Interface of Vanadium Flow Batteries”, 2021 IEEE Energy Conversion Congress and Exposition, ECCE 2021 - Proceedings.
- [32] Riccio J., Karamanakos P., Odhano S., Tang M., Nardo M.D., Zanchetta P. “A Direct Model Predictive Control Strategy for High-Performance Synchronous Reluctance Motor Drives”, 2021 IEEE Energy Conversion Congress and Exposition, ECCE 2021 - Proceedings.
- [33] Tang M., Zanchetta P., Benedetto M.D., Lidozzi A., Solero L. “Fault Detection and Management of the Three-Phase 4-Leg Voltage Source Inverter”, 2021 IEEE Energy Conversion Congress and Exposition, ECCE 2021 - Proceedings.
- [34] Tresca G., Leuzzi R., Formentini A., Rovere L., Anglani N., Zanchetta P. “Reconfigurable Cascaded Multilevel Converter: A New Topology for EV Powertrain”, 2021 IEEE Energy Conversion Congress and Exposition, ECCE 2021 - Proceedings.
- [35] Tang M., Bifaretti S., Pipolo S., Formentini A., Odhano S., Zanchetta P. “Disturbance Rejection Ability Enhancement Using Repetitive Observer in Phase-locked Loop for More Electric Aircraft”, ECCE 2020 - IEEE Energy Conversion Congress and Exposition.
- [36] Rovere L., Pipolo S., Formentini A., Zanchetta P. “AC-DC Isolated Matrix Converter Charger: Topology and Modulation”, ECCE 2020 - IEEE Energy Conversion Congress and Exposition.
- [37] Riccio J., Odhano S., Tang M., Zanchetta P. “Sensorless Cascaded-Model Predictive Control applied to a Doubly Fed Induction Machine”, ECCE 2020 - IEEE Energy Conversion Congress and Exposition.
- [38] Loncarski J., Monopoli V.G., Leuzzi R., Zanchetta P., Cupertino F. “Efficiency, Cost and Volume Comparison of Si-IGBT Based T-NPC and 2-Level SiC-MOSFET Based Topology with dv/dt Filter for High Speed Drives”, ECCE 2020 - IEEE Energy Conversion Congress and Exposition.
- [39] Minaglia D., Rovere L., Formentini A., Leuzzi R., Pipolo S., Marchesoni M., Zanchetta P. “Control of a Dual Fed Open End Winding SPMSM with a Floating Capacitor”, ECCE 2020 - IEEE Energy Conversion Congress and Exposition.
- [40] Ariel Villalón; Carlos Muñoz; Rodrigo Aliaga; Javier Muñoz; Marco Rivera; Pericle Zanchetta “Power Sharing Control of Islanded AC Microgrid Considering Droop Control and Virtual Impedance”, 2020 IEEE International Conference on Industrial Technology (ICIT).
- [41] Luca Tarisciotti; Chen Linglin; Patrick Wheeler; Pericle Zanchetta “Moving Discretised Control Set - Model Predictive Control for Dual-Active-Bridge”, 2020 IEEE International Conference on Industrial Technology (ICIT)
- [42] M. Laterza; S. M. Cox; A. Costabeber; P. Zanchetta, “Systematic Model Reduction for a Single-Phase Active-Front-End”, IECON 2019 - 45th Annual Conference of the IEEE Industrial Electronics Society
- [43] Z. Wen; G. Valente; A. Formentini; L. Papini; P. Zanchetta; C. Gerada, “Smart Current Limitation Technique for a Multiphase Bearingless Machine with Combined Winding System” 2019 IEEE Energy Conversion Congress and Exposition (ECCE)

- [44] G. Bergna-Diaz; A. Formentini; P. Zanchetta; E. Tedeschi, "Particle Swarm Optimization Tuning of Modular Multilevel Converters in a Time-Invariant Framework" 2019 IEEE 13th International Conference on Power Electronics and Drive Systems (PEDS)
- [45] S. Pipolo; A. Formentini; A. Trentin; P. Zanchetta; M. Calvini; M. Venturini, "A New Modulation Approach for Matrix Converter" 2019 10th International Conference on Power Electronics and ECCE Asia (ICPE 2019 - ECCE Asia)
- [46] B. Czerniewski; J. Schanen; P. Zanchetta, "EMC Generation and Propagation in Embedded Grids with Multiple Converters" 2019 10th International Power Electronics, Drive Systems and Technologies Conference (PEDSTC)
- [47] B. Cheong; P. Giangrande; X. Zhang; M. Galea; P. Zanchetta; P. Wheeler, "Fast and Accurate Multi-Physics Model for Optimization-based Design of VSBBC" IECON 2019 - 45th Annual Conference of the IEEE Industrial Electronics Society
- [48] V. Vodola; S. Odhano; C. Garcia; M. Norambuena; S. Vaschetto; P. Zanchetta; J. Rodriguez; R. Bojoi, "Modulated Model Predictive Control for Induction Motor Drives with Sequential Cost Function Evaluation", 2019 IEEE Energy Conversion Congress and Exposition (ECCE)
- [49] A. Formentini; S. Pipolo; A. Trentin; P. Zanchetta, "Optimal Control of Matrix Converters", 2019 21st European Conference on Power Electronics and Applications (EPE '19 ECCE Europe)
- [50] R. Leuzzi; V. G. Monopoli; F. Cupertino; P. Zanchetta, "Automated HF Modelling of Induction Machines Considering the Effects of Aging", 2019 IEEE Energy Conversion Congress and Exposition (ECCE)
- [51] L. Rovere; A. Formentini; P. Zanchetta, "Finite Control Set-Model Predictive Control for the Dual Fed Common Dc-Link Open-End Winding PMSM Drive", 2019 IEEE International Electric Machines & Drives Conference (IEMDC)
- [52] B. Czerniewski; A. Formentini; D. Dewar; P. Zanchetta; J. Schanen, "Impact of Converters Interactions on Control Design in a Power Electronics Dense Network: Application to More Electric Aircraft" 2019 21st European Conference on Power Electronics and Applications (EPE '19 ECCE Europe)
- [53] J. Riccio; S. A. Odhano; P. Zanchetta, "Sensorless and Modulated Model-Predictive Control for a Doubly Fed Induction Machine", 2019 21st European Conference on Power Electronics and Applications (EPE '19 ECCE Europe)
- [54] R. Leuzzi; V. G. Monopoli; F. Cupertino; P. Zanchetta, "Comparison of Two Possible Solution for Reducing Over-voltages at the Motor Terminals in High-Speed AC Drives", 2019 21st European Conference on Power Electronics and Applications (EPE '19 ECCE Europe)
- [55] N. Müller; S. Kouro; P. Zanchetta; P. Wheeler; A. Marzo, "Wavelet-based ESS sizing strategy to enable power peak-shaving in PV systems", 2019 IEEE 28th International Symposium on Industrial Electronics (ISIE)
- [56] D. Dewar; J. Rhoten; A. Formentini; P. Zanchetta, "Fast Self-Tuning Decentralized Variable Frequency Optimal Controller Design for Three-Phase Embedded Grids", IECON 2019 - 45th Annual Conference of the IEEE Industrial Electronics Society
- [57] B. Cheong; P. Giangrande; X. Zhang; M. Galea; P. Zanchetta; P. Wheeler, "System-Level Motor Drive Modelling for Optimization-based Designs", 2019 21st European Conference on Power Electronics and Applications (EPE '19 ECCE Europe)
- [58] V. Vodola; S. Odhano; M. Norambuena; C. Garcia; S. Vaschetto; P. Zanchetta; J. Rodriguez; R. Bojoi, "Sequential MPC Strategy for High Performance Induction Motor Drives: a detailed analysis", 2019 IEEE Energy Conversion Congress and Exposition (ECCE)
- [59] M. Tang; S. Odhano; A. Formentini; P. Zanchetta, "Reuse of a Damaged Permanent Magnet Synchronous Motor for Torque Ripple and Acoustic Noise Elimination using a Novel Repetitive Observer", "2019 IEEE Energy Conversion Congress and Exposition (ECCE)
- [60] M. Tang; A. Formentini; P. Zanchetta, "Repetitive Observer Design for Torque Ripple Reduction in PMSM Drives", 2019 21st European Conference on Power Electronics and Applications (EPE '19 ECCE Europe)
- [61] Z. Wen; G. Valente; A. Formentini; L. Papini; P. Zanchetta; C. Gerada, "Single-Phase Open-Circuit Fault Operation of Bearingless Multi-Sector PM Machines", 2019 IEEE International Electric Machines & Drives Conference (IEMDC)
- [62] G. Mirzaeva; G. Goodwin; P. Zanchetta; L. D. Lillo; L. Empringham, "Advanced Control of Matrix Converter Drive with Active Damping of the Input Resonance", 2019 IEEE Energy Conversion Congress and Exposition (ECCE)
- [63] K. Li; D. Dewar; A. Formentini; P. Zanchetta; P. Wheeler, "Grid Impedance Identification and Structured-h2 Optimization Based Controller Design of Active Front-end in Embedded AC Networks", 2019 IEEE Energy Conversion Congress and Exposition (ECCE)
- [64] B. Cheong; P. Giangrande; X. Zhang; M. Galea; P. Zanchetta; P. Wheeler, "Fast and Accurate Model for Optimization-based Design of Fractional-Slot Surface PM Machines", 2019 22nd International Conference on Electrical Machines and Systems (ICEMS)
- [65] Effects of Electrical Ageing on Winding Insulation in High-Speed Motors: Analysis and Modelling, R Leuzzi, VG Monopoli, L Rovere, F Cupertino, P Zanchetta, 2018 IEEE Energy Conversion Congress and Exposition (ECCE), 6886-6892
- [66] Power Quality Improvement in a Single-Phase Energy Management System Operating in Islanding Mode, AL Julian, G Oriti, C Ji, P Zanchetta, 2018 IEEE Energy Conversion Congress and Exposition (ECCE), 208-214
- [67] Control System for Open-End Winding Surface PM Synchronous Machines with a Floating Capacitor Bridge, A Amerise, L Rovere, A Formentini, M Mengoni, L Zarri, P Zanchetta, 2018 IEEE Energy Conversion Congress and Exposition (ECCE), 6585-6591
- [68] Power Control Capabilities of the ROMatrix Converter, S Pipolo, P Zanchetta, S Bifaretti, A Lidozzi, L Solero, F Crescimbin, 2018 IEEE Energy Conversion Congress and Exposition (ECCE), 3955-3960
- [69] Modulated Model Predictive Direct Power Control of DFIM Considering Magnetic Saturation Effects, S Odhano, P Zanchetta, S Rubino, R Bojoi, 2018 IEEE Energy Conversion Congress and Exposition (ECCE), 5442-5449
- [70] Performance Analysis of Optimally Controlled Three-Phase Grids, D Dewar, K Li, A Formentini, P Zanchetta, P Wheeler, 2018 IEEE Energy Conversion Congress and Exposition (ECCE), 2258-2264

- [71] A Unidirectional Flying Chain-link Modular Multilevel Rectifier (FCL-MMR) with Reduced Energy Storage for Offshore Wind Integration, F Tardelli, A Costabeber, M Jankovic, J Clare, P Zanchetta, 2018 IEEE Energy Conversion Congress and Exposition (ECCE), 2931-2937
- [72] Model Predictive Control for Isolated DC/DC Power Converters with Transformer Peak Current Shaving, L Chen, L Tarisciotti, A Costabeber, P Wheeler, P Zanchetta, 2018 IEEE Energy Conversion Congress and Exposition (ECCE), 5954-5960
- [73] Non-Intrusive Online Stator Temperature Estimation for Open-End Winding PMSM, N Hunter, T Cox, P Zanchetta, SA Odhano, L Rovere, 2018 IEEE Energy Conversion Congress and Exposition (ECCE), 6845-6851
- [74] Torque Quality Improvement of an Open-End Winding PMSM, N Hunter, T Cox, P Zanchetta, SA Odhano, L Rovere, 2018 IEEE Energy Conversion Congress and Exposition (ECCE), 4254-4261
- [75] Modulated Optimal Model Predictive Control for Variable Speed Gen-Sets, L Bigarelli, A Lidozzi, M Di Benedetto, L Solero, S Odhano, P Zanchetta, 2018 IEEE Energy Conversion Congress and Exposition (ECCE), 6859-6865
- [76] MPC Using Modulated Optimal Voltage Vector for Voltage Source Inverter with LC Output Filter, S Odhano, P Zanchetta, M Tang, CA Silva, 2018 IEEE Energy Conversion Congress and Exposition (ECCE), 6865-6871
- [77] Computationally Efficient Model Predictive Control for AC-DC-AC Converter with Common Mode Voltage Elimination, M Uddin, G Mirzaeva, G Goodwin, P Zanchetta, 2018 IEEE Energy Conversion Congress and Exposition (ECCE), 6418-6423
- [78] Analysis and Design of Position and Velocity Estimation Scheme for PM Servo Motor Drive with Binary Hall Sensors, O Ni, M Yang, SA Odhano, P Zanchetta, X Liu, D Xu, 2018 IEEE Energy Conversion Congress and Exposition (ECCE), 6967-6974
- [79] Padé-based-Repetitive Learning Current-Control for Voltage Source Inverters, V Salis, A Costabeber, T Francesco, P Zanchetta, S Cox, S Bifaretti, 2018 IEEE Energy Conversion Congress and Exposition (ECCE), 1473-1477
- [80] A Novel Phase-lock Loop with Feed-back Repetitive Controller for Robustness to Periodic Disturbance in Three-phase Systems, M Tang, S Bifaretti, S Pipolo, S Odhano, P Zanchetta, 2018 IEEE Energy Conversion Congress and Exposition (ECCE), 2691-2697
- [81] Real-Time Implicit Model Predictive Control for 3-phase VSI, V Sabatini, A Lidozzi, L Solero, A Formentini, P Zanchetta, S Bifaretti, 2018 IEEE Energy Conversion Congress and Exposition (ECCE), 4015-4020
- [82] Active Ageing Control of Winding Insulation in High Frequency Electric Drives, R Leuzzi, VG Monopoli, F Cupertino, P Zanchetta, 2018 IEEE Energy Conversion Congress and Exposition (ECCE), 1-7
- [83] Disturbance-Observed Assisted Controller for Stand-Alone Four-Leg Voltage Source Inverter, M Di Benedetto, A Lidozzi, L Solero, M Tang, A Formentini, P Zanchetta, 2018 IEEE Energy Conversion Congress and Exposition (ECCE), 2265-2270
- [84] Optimized control design for power converters in power electronics embedded networks integrating grid model identification, K Li, D Dewar, A Formentini, P Zanchetta, P Wheeler, 2018 IEEE Industry Applications Society Annual Meeting (IAS), 1-6
- [85] M. Uddin; G. Mirzaeva; G. Goodwin; P. Stepien; P. Zanchetta; P. Wheeler, "Common Mode Voltage Elimination in Industrial AC-AC Converters Based on Model Predictive Control", 2018 IEEE Industry Applications Society Annual Meeting (IAS).
- [86] V. Salis; A. Costabeber; I. P. Zanchetta; S. Cox "Analysis of Low-Frequency-Oscillations in Single-Phase AC Systems by LTP Theory", 2018 20th European Conference on Power Electronics and Applications (EPE'18 ECCE Europe)
- [87] Identification of Linear Permanent Magnet Synchronous Motor Parameters and Inverter Non-Linearity Effects, S Odhano, M Tang, A Formentini, P Zanchetta, R Bojoi, 2018 SPEEDAM International Symposium on Power Electronics, Electrical Drives
- [88] Open-Circuit Fault Tolerant Study of Bearingless Multi-Sector Permanent Magnet Machines, G Valente, L Papini, A Formentini, C Gerada, P Zanchetta, 2018 International Power Electronics Conference (IPEC-Niigata 2018-ECCE Asia).
- [89] C. Garcia; J. Rodriguez; S. Odhano; P. Zanchetta; S. A. Davari; "Modulated Model Predictive Speed Control for PMSM Drives", 2018 IEEE International Conference on Electrical Systems for Aircraft, Railway, Ship Propulsion and Road Vehicles & International Transportation Electrification Conference (ESARS-ITEC).
- [90] Bidirectional partial power converter interface for energy storage systems to provide peak shaving in grid-tied PV plants, N Müller, S Kouro, P Zanchetta, P Wheeler, IEEE International Conference on Industrial Technology (ICIT), 2018.
- [91] Model predictive control for Active-Bridge-Active-Clamp (ABAC) converter, L Chen, L Tarisciotti, A Costabeber, D Gottardo, P Zanchetta, P Wheeler, 9th International Conference on Power Electronics, Machines and Drives (PEMD 2018), 17-19 April 2018, Liverpool, UK, 2018.
- [92] Linglin Chen; Luca Tarisciotti; Alessandro Costabeber; Pericle Zanchetta; Pat Wheeler; "Advanced modulation for the Active-Bridge-Active-Clamp (ABAC) converter", 2017 IEEE Southern Power Electronics Conference (SPEC), Year: 2017
- [93] S. Pipolo; S. Bifaretti; A. Lidozzi; L. Solero; F. Crescimbin; P. Zanchetta; "The ROMatrix converter: Concept and operation" 2017 IEEE Southern Power Electronics Conference (SPEC), Year: 2017
- [94] Linglin Chen; Luca Tarisciotti; Alessandro Costabeber; Pericle Zanchetta; Pat Wheeler; "Parameters mismatch analysis for the Active-Bridge-Active-Clamp (ABAC) converter" 2017 IEEE Southern Power Electronics Conference (SPEC), Year: 2017
- [95] Alessandro Lidozzi; Luca Solero; Fabio Crescimbin; Chao Ji; Stefano Bifaretti; Pericle Zanchetta, "FPGA-based direct repetitive control for high performance ground power units", 2017 IEEE Energy Conversion Congress and Exposition (ECCE), Year: 2017
- [96] David Dewar; Andrea Formentini; Pericle Zanchetta, "Automated and scalable optimal control of three-phase embedded power grids including PLL", 2017 IEEE Energy Conversion Congress and Exposition (ECCE), Year: 2017.
- [97] L. Tarisciotti; P. Zanchetta; S. Pipolo; S. Bifaretti, "Three-port energy router for universal and flexible power management in future smart distribution grids", 2017 IEEE Energy Conversion Congress and Exposition (ECCE), Year: 2017
- [98] G. Valente; L. Papini; A. Formentini; C. Gerada; P. Zanchetta, "Radial force control of Multi-Sector Permanent Magnet machines considering radial rotor displacement", 2017 IEEE Workshop on Electrical Machines Design, Control and Diagnosis (WEMDCD), Year: 2017
- [99] Benjamin Cheong; Paolo Giangrande; Michael Galea; Pericle Zanchetta; Patrick Wheeler, "Integrated motor drive design for weight optimization", 2017 IEEE Energy Conversion Congress and Exposition (ECCE), Year: 2017

- [100] Arzhang Yousefi-Talouki; Fausto Stella; Shafiq Odhano; Liliana de Lillo; Andrew Trentin; Gianmario Pellegrino; Pericle Zanchetta, "Sensorless control of matrix converter-fed synchronous reluctance motor drives", 2017 IEEE International Symposium on Sensorless Control for Electrical Drives (SLED), Year: 2017
- [101] S. Bifaretti; S. Pipolo; A. Lidozzi; L. Solero; L. Tarisciotti; P. Zanchetta, "Modulated model predictive control for active split DC-bus 4-leg power supply", 2017 IEEE Energy Conversion Congress and Exposition (ECCE), Year: 2017
- [102] S. Rubino; R. Bojoi; S. A. Odhano; P. Zanchetta, "Model predictive direct flux vector control of multi three-phase induction motor drives", 2017 IEEE Energy Conversion Congress and Exposition (ECCE), Year: 2017
- [103] Luca Rovere; Andrea Formentini; Giovanni Lo Calzo; Pericle Zanchetta; Andrea Cassia; Mario Marchesoni, "IGBT-SiC dual fed ground power unit", 2017 IEEE Energy Conversion Congress and Exposition (ECCE), Year: 2017
- [104] G. Valente; A. Formentini; L. Papini; P. Zanchetta; C. Gerada, "Position control study of a bearingless multi-sector permanent magnet machine", IECON 2017 - 43rd Annual Conference of the IEEE Industrial Electronics Society, Year: 2017
- [105] Galassini A.; G. Lo Calzo; A. Formentini; C. Gerada; P. Zanchetta; A. Costabeber, "uCube: Control platform for power electronics", 2017 IEEE Workshop on Electrical Machines Design, Control and Diagnosis (WEMDCD), Year: 2017
- [106] Luca Rovere; Andrea Formentini; Giovanni Lo Calzo; Pericle Zanchetta; Tom Cox, "IGBT-SiC dual fed open end winding PMSM drive", 2017 IEEE International Electric Machines and Drives Conference (IEMDC), Year: 2017
- [107] Mi Tang; Andrea Formentini; Shafiq Odhano; Pericle Zanchetta, "The design of a position-based repetitive control for speed ripple reduction in PMLSMs", IECON 2017 - 43rd Annual Conference of the IEEE Industrial Electronics Society, Year: 2017
- [108] Alessandro Lidozzi, Luca Solero, Fabio Crescimbeni, Chao Ji and Pericle Zanchetta, "Digital Dead-Beat and Repetitive Combined Control for Stand-Alone Four-Leg VSI", IEEE Energy Conversion Congress and Exposition (ECCE), Year: 2016.
- [109] Stefano Bifaretti, Luca Tarisciotti, Alessandro Lidozzi, Sabino Pipolo, Luca Solero and Pericle Zanchetta, "Modulated Model Predictive Control for Active Split DC-bus 4-leg Inverters", IEEE Energy Conversion Congress and Exposition (ECCE), Year: 2016
- [110] Jiaying Lei, Luca Tarisciotti, Andrew Trentin, Pericle Zanchetta, Patrick Wheeler and Andrea Formentini, "Fixed Frequency Finite-State Model Predictive Control for Indirect Matrix Converters with Optimal Switching Pattern", IEEE Energy Conversion Congress and Exposition (ECCE), Year: 2016.
- [111] Chao Ji, Jon Clare and Pericle Zanchetta, "Optimized Resonant Pulsed Power Supplies with Deadbeat – Repetitive Regulation", IEEE Energy Conversion Congress and Exposition (ECCE), Year: 2016.
- [112] Qian Li, Andrea Formentini, Arnaud Baraston, Xuning Zhang, Pericle Zanchetta, Jean-Luc Schanen and Dushan Boroyevich, "Taking Into Account Interactions Between Converters in the Design of Aircraft Power Networks", IEEE Energy Conversion Congress and Exposition (ECCE), Year: 2016.
- [113] Andrew Trentin, Liliana de Lillo, Lee Empringham, Pericle Zanchetta, Pat Wheeler and Jon Clare, "Experimental Comparison of Devices Thermal Cycling in Direct Matrix Converters (DMC) and Indirect Matrix Converters (IMC) using SiC MOSFETs", IEEE Energy Conversion Congress and Exposition (ECCE), Year: 2016.
- [114] Cristian Blanco, Francesco Tardelli, David Diaz, Pericle Zanchetta and Fernando Briz, "Design of a Cooperative Voltage Harmonic Compensation Strategy for Islanded Microgrids Combining Virtual Admittances and Repetitive Controllers", IEEE Energy Conversion Congress and Exposition (ECCE), Year: 2016.
- [115] S. Pipolo; S. Bifaretti; V. Bonaiuto; L. Tarisciotti; P. Zanchetta "Reactive power control strategies for UNIFLEX-PM Converter", IECON 2016 - 42nd Annual Conference of the IEEE Industrial Electronics Society, Year: 2016, Pages: 3570 – 3575.
- [116] Andrea Formentini; David Dewar; Pericle Zanchetta; Pat Wheeler; Dushan Boroyevich; Jean-Luc Schanen "Optimal control of three-phase embedded power grids", 2016 IEEE 17th Workshop on Control and Modeling for Power Electronics (COMPEL), Year: 2016, Pages: 1 – 6.
- [117] G. Ala; G. C. Giaconia; G. Giglia; M. C. Di Piazza; M. Luna; G. Vitale; P. Zanchetta, "Computer aided optimal design of high power density EMI filters", 2016 IEEE 16th International Conference on Environment and Electrical Engineering (EEEIC), Year: 2016, Pages: 1 – 6.
- [118] S. A. Odhano; A. Formentini; P. Zanchetta; R. Bojoi; A. Tenconi, "Finite control set and modulated model predictive flux and current control for induction motor drives", IECON 2016 - 42nd Annual Conference of the IEEE Industrial Electronics Society, Year: 2016, Pages: 2796 – 2801.
- [119] M. Tang; A. Gaeta; A. Formentini; P. Zanchetta, "A variable frequency angle-based repetitive control for torque ripple reduction in PMSMs", 8th IET International Conference on Power Electronics, Machines and Drives (PEMD 2016), Year: 2016, Pages: 1 – 6.
- [120] M. Tang; A. Formentini; S. Odhano; P. Zanchetta, "Design of a repetitive controller as a feed-forward disturbance observer", IECON 2016 - 42nd Annual Conference of the IEEE Industrial Electronics Society, Year: 2016, Pages: 78 – 83.
- [121] Seang Shen Yeoh; Tao Yang; Luca Tarisciotti; Christopher Ian Hill; Serhiy Bozhko; Pericle Zanchetta, "More electric aircraft starter-generator system with utilization of hybrid modulated model predictive control", 2016 International Conference on Electrical Systems for Aircraft, Railway, Ship Propulsion and Road Vehicles & International Transportation Electrification Conference (ESARS-ITEC), Year: 2016, Pages: 1 – 6.
- [122] Valerio Salis; Alessandro Costabeber; Pericle Zanchetta; Stephen Cox, "A generalised harmonic linearisation method for power converters input/output impedance calculation", 2016 18th European Conference on Power Electronics and Applications (EPE'16 ECCE Europe), Year: 2016, Pages: 1 – 7.
- [123] M. C. Di Piazza; M. Luna; G. Vitale; G. Ala; G. C. Giaconia; G. Giglia; P. Zanchetta, "ODEF: An interactive tool for optimized design of EMI filters", IECON 2016 - 42nd Annual Conference of the IEEE Industrial Electronics Society, Year: 2016, Pages: 4013 – 4019.



- [124] A Lidozzi; L. Solero; F. Crescimbin; C. Ji; P. Zanchetta, "Direct repetitive control with gain scheduling feature for stand-alone generating applications", IECON 2016 - 42nd Annual Conference of the IEEE Industrial Electronics Society, Year: 2016, Pages: 3354 – 3359
- [125] Javier Muñoz; Patricio Gaisse; Carlos Baier; Marco Rivera; Raúl Gregor; Pericle Zanchetta, "Asymmetric multilevel topology for photovoltaic energy injection to microgrids", 2016 IEEE 17th Workshop on Control and Modeling for Power Electronics (COMPEL), Year: 2016, Pages: 1 – 6.
- [126] G. Valente; L. Papini; A. Formentini; C. Gerada; P. Zanchetta, "Radial force control of multi-sector permanent magnet machines", 2016 XXII International Conference on Electrical Machines (ICEM), Year: 2016, Pages: 2595 – 2601.
- [127] Mohamed Trabelsi; Sertac Bayhan; Haitham Abu-Rub; Lazhar Ben-Brahim; Pericle Zanchetta, "Finite control set model predictive control for grid-tied quasi-Z-source based multilevel inverter", "2016 IEEE International Conference on Industrial Technology (ICIT), Year: 2016, Pages: 299 – 304.
- [128] Jaime Rohten; Pericle Zanchetta; Marco Rivera; Javier Muñoz; José Espinoza; José Silva, "Multivariable control for a three-phase rectifier based on deadbeat algorithm, IECON 2016 - 42nd Annual Conference of the IEEE Industrial Electronics Society, Year: 2016, Pages: 5977 – 5982.
- [129] Valerio Salis; Alessandro Costabeber; Pericle Zanchetta; Stephen Cox, "Stability analysis of single-phase grid-feeding inverters with PLL using Harmonic Linearisation and Linear Time Periodic (LTP) theory", 2016 IEEE 17th Workshop on Control and Modeling for Power Electronics (COMPEL), Year: 2016, Pages: 1 – 7.
- [130] J. L. Schanen; A. Baraston; M. Delhommais; P. Zanchetta; D. Boroyevitch, "Sizing of power electronics EMC filters using design by optimization methodology", 2016 7th Power Electronics and Drive Systems Technologies Conference (PEDSTC), Year: 2016, Pages: 279 – 284.
- [131] Luca Rovere; Andrea Formentini; Pericle Zanchetta, "Oversampled deadbeat current control strategy for PMSM drives", IECON 2016 - 42nd Annual Conference of the IEEE Industrial Electronics Society, Year: 2016, Pages: 2868 – 2872.
- [132] Cristian Garcia; Cesar Silva; Jose Rodriguez; Pericle Zanchetta, "Cascaded model predictive speed control of a permanent magnet synchronous machine", IECON 2016 - 42nd Annual Conference of the IEEE Industrial Electronics Society, Year: 2016, Pages: 2714 – 2718.
- [133] Rabbeni, R.; Tarisciotti, L.; Gaeta, A.; Formentini, A.; Zanchetta, P.; Pucci, M.; Degano, M.; Rivera, M. "Finite states modulated model predictive control for active power filtering systems", IEEE Energy Conversion Congress and Exposition (ECCE), Year: 2015 Pages: 1556 – 1562.
- [134] Arif, B.; Tarisciotti, L.; Zanchetta, P.; Wheeler, P.; Rivera, M. "Online predictive model fitting algorithm for supply inductance estimation", IEEE Energy Conversion Congress and Exposition (ECCE), Year: 2015, Pages: 1595 – 1602.
- [135] Vijayagopal, Manjusha; Empringham, Lee; de Lillo, Liliana; Tarisciotti, Luca; Zanchetta, Pericle; Wheeler, Patrick "Current control and reactive power minimization of a direct matrix converter induction motor drive with Modulated Model Predictive Control", IEEE International Symposium on Predictive Control of Electrical Drives and Power Electronics (PRECEDE), Year: 2015, Pages: 103 – 108.
- [136] Rivera, M.; Tarisciotti, L.; Wheeler, P.; Zanchetta, P. "Predictive control of an indirect matrix converter operating at fixed switching frequency and without weighting factors", IEEE 24th International Symposium on Industrial Electronics (ISIE), Year: 2015, Pages: 1027 – 1033.
- [137] Rivera, M.; Tarisciotti, L.; Wheeler, P.; Zanchetta, P. "Predictive control of an indirect matrix converter operating at fixed switching frequency", IEEE 5th International Conference on Power Engineering, Energy and Electrical Drives (POWERENG), Year: 2015, Pages: 635 – 640.
- [138] Rivera, M.; Uribe, C.; Tarisciotti, L.; Wheeler, P.; Zanchetta, P. "Predictive control of an indirect matrix converter operating at fixed switching frequency and unbalanced AC-supply", IEEE International Symposium on Predictive Control of Electrical Drives and Power Electronics (PRECEDE), Year: 2015, Pages: 38 – 43.
- [139] Trentin, A.; Zanchetta, P.; Empringham, L.; de Lillo, L.; Wheeler, P.; Clare, J. "Experimental comparison between direct matrix converter and indirect matrix converter based on efficiency", IEEE Energy Conversion Congress and Exposition (ECCE), Year: 2015, Pages: 2580 – 2587.
- [140] Rivera, M.; Perez, M.; Yaramasu, V.; Wu, B.; Tarisciotti, L.; Zanchetta, P.; Wheeler, P. "Modulated model predictive control (M<sup>2</sup>PC) with fixed switching frequency for an NPC converter", IEEE 5th International Conference on Power Engineering, Energy and Electrical Drives (POWERENG), Year: 2015, Pages: 623 – 628.
- [141] Lidozzi, A.; Solero, L.; Crescimbin, F.; Chao Ji; Zanchetta, P. "Load adaptive zero-phase-shift direct repetitive control for stand-alone four-leg VSI", IEEE Energy Conversion Congress and Exposition (ECCE), Year: 2015, Pages: 4330 – 4336.
- [142] Rivera, M.; Perez, M.; Baier, C.; Munoz, J.; Yaramasu, V.; Wu, B.; Tarisciotti, L.; Zanchetta, P.; Wheeler, P. "Predictive Current Control with fixed switching frequency for an NPC converter", IEEE 24th International Symposium on Industrial Electronics (ISIE), 2015, Year: 2015, Pages: 1034 – 1039.
- [143] Vijayagopal, M.; Empringham, L.; de Lillo, L.; Tarisciotti, L.; Zanchetta, P.; Wheeler, P. "Control of a direct matrix converter induction motor drive with modulated model predictive control", IEEE Energy Conversion Congress and Exposition (ECCE), Year: 2015, Pages: 4315 – 4321.
- [144] Vijayagopal, M.; Zanchetta, P.; Empringham, L.; de Lillo, L.; Tarisciotti, L.; Wheeler, P. "Modulated model predictive current control for direct matrix converter with fixed switching frequency", 17th European Conference on Power Electronics and Applications (EPE'15 ECCE-Europe), Year: 2015, Pages: 1 – 10.
- [145] Calzo, G.L.; Zanchetta, P.; Gerada, C.; Gaeta, A.; Crescimbin, F. "Converter topologies comparison for more electric aircrafts high speed Starter/Generator application", IEEE Energy Conversion Congress and Exposition (ECCE), Year: 2015, Pages: 3659 – 3666.

- [146] Rivera, M., Morales, F., Baier, C., Muñoz, J., Tarisciotti, L., Zanchetta, P., Wheeler, P. "A modulated model predictive control scheme for a two-level voltage source inverter", IEEE International Conference on Industrial Technology, ICIT 2015; Seville; Spain; March 2015.
- [147] Gaeta, A., Zanchetta, P., Tinazzi, F., Zigliotto, M. "Advanced self-commissioning and feed-forward compensation of inverter non-linearities", IEEE International Conference on Industrial Technology, ICIT 2015; Seville; Spain; March 2015.
- [148] Yeoh, Seang Shen; Yang, Tao; Tarisciotti, Luca; Bozhko, Serhiy; Zanchetta, Pericle; "Hybrid modulated model predictive control for the more electric aircraft generator system", International Conference on Electrical Systems for Aircraft, Railway, Ship Propulsion and Road Vehicles (ESARS), 2015.
- [149] Bo Wen, Xuning Zhang, Francis Effah, Arnaud Baraston, Dushan Boroyevich, Pericle Zanchetta, Jean Luc Schanen, Rolando Burgos, Patrick Wheeler, Alain Tardy "Integrated Design by Optimization of Power Systems for More Electric Aircraft", MEA 2015 More Electric Aircraft International conference, Toulouse, France, February 2015
- [150] Alain Tardy, Xavier Roboam, Pericle Zanchetta, Dushan Boroyevich, Rolando Burgos, Jean-Luc Schanen, Frederic Wurtz, Bruno Sareni, Patrick Wheeler "Towards More Optimization for Aircraft Energy Conversion Systems", MEA 2015 More Electric Aircraft International conference, Toulouse, France, February 2015
- [151] Xiang Wang, Alberto Castellazzi, Pericle Zanchetta; "Full-Order Observer Based IGBT Temperature Online Estimation", 40th Annual Conference of the IEEE Industrial Electronics Society, IECON 2014
- [152] Cristian Garcia, Jose Rodriguez, Cesar Silva, Christian Rojas, Pericle Zanchetta, Haitham Abu-Rub; "Cascaded Predictive Speed Control", 40th Annual Conference of the IEEE Industrial Electronics Society, IECON 2014
- [153] Giovanni Lo Calzo, Pericle Zanchetta, Christopher Gerada, Alessandro Lidozzi, Marco Degano, Fabio Crescimbin, Luca Solero; "Performance evaluation of converter topologies for high speed Starter/Generator in aircraft applications", 40th Annual Conference of the IEEE Industrial Electronics Society, IECON 2014
- [154] Tardy, Alain; Boroyevich, Dushan; Burgos, Rolando P; Wen, Bo; Wheeler, Patrick W; Rottach, Michael; Zanchetta, Pericle; Roboam, Xavier; Sareni, Bruno; Schanen, Jean-Luc; "Towards More Optimization for Aircraft Energy Conversion Systems", SAE 2014 technical conference, Cincinnati USA, Sep. 2014.
- [155] Buticchi Giampaolo, Davide Barater, Luca Tarisciotti, Pericle Zanchetta, "High-dynamic Single-phase Hilbert-based PLL for Improved Phase-jump Ride-through in Grid-connected Inverters", IEEE Energy Conversion Congress and Exposition (ECCE 2014), Publication Year: 2014, Page(s): 1 – 6.
- [156] Luca Tarisciotti, Pericle Zanchetta, Alan Watson, Jon Clare, Stefano Bifaretti; "Improving Power Quality with Multi-objective Modulated Model Predictive Control", IEEE Energy Conversion Congress and Exposition (ECCE 2014), Publication Year: 2014, Page(s): 1 – 6.
- [157] Bilal Arif, Luca Tarisciotti, Pericle Zanchetta, Jon Clare, Marco Degano; "Integrated Grid Inductance Estimation Technique for Finite Control Set Model Predictive Control in Grid Connected Converters", IEEE Energy Conversion Congress and Exposition (ECCE 2014), Publication Year: 2014, Page(s): 1 – 6.
- [158] Alessandro Lidozzi, Chao Ji, Luca Solero, Pericle Zanchetta, Fabio Crescimbin; "Resonant-repetitive Combined Control for Stand-alone Power Supply Units", IEEE Energy Conversion Congress and Exposition (ECCE 2014), Publication Year: 2014, Page(s): 1 – 6.
- [159] Hill, C.I. ; Zanchetta, P. ; Okaeme, N.A. ; Bozhko, S.V.; "Continuous, non-linear, optimal speed control of a Distributed Generation Power Pack using Artificial Neural Networks", IEEE International Energy Conference (ENERGYCON 2014), Publication Year: 2014, Page(s): 1050 – 1055.
- [160] Formentini, A. ; De Lillo, L. ; Marchesoni, M. ; Trentin, A. ; Wheeler, P. ; Zanchetta, P.; "A new mains voltage observer for PMSM drives fed by matrix converters", 16th European Conference on Power Electronics and Applications (EPE'14-ECCE Europe), Publication Year: 2014, Page(s): 1 – 10.
- [161] Arif, B.; Tarisciotti, L.; Zanchetta, P.; Clare, J.; "Finite Set Model Predictive Control with a novel online grid inductance estimation technique" 7th IET International Conference on Power Electronics, Machines and Drives (PEMD) 2014
- [162] Rivera, M.; Rodriguez, J.; Espinoza, J.; Olloqui, A.; Wheeler, P.; Zanchetta, P.; Baier, C.; Munoz, J., "Two predictive control techniques for output voltage control and improvement of the source currents in an indirect matrix converter" IEEE 23rd International Symposium on Industrial Electronics (ISIE), 2014 , Page(s): 1420 - 1426
- [163] Ji, C. ; Watson, A. ; Zanchetta, P. ; Bland, M. ; Clare, J. ; Wheeler, P. ; Reass, W.; "Development and investigation of two optimized soft switching pulsed power resonant converters for RF applications", 19th IEEE Pulsed Power Conference (PPC 2013), Publication Year: 2013, Page(s): 1 – 6.
- [164] Ragusa, A. ; Zanchetta, P. ; Empringham, L. ; De Lillo, L. ; Degano, M.; "High frequency modelling method of EMI filters for hybrid Si - SiC matrix converters in aerospace applications", IEEE Twenty-Eighth Annual Applied Power Electronics Conference and Exposition (APEC 2013), Publication Year: 2013, Page(s): 2610 – 2617.
- [165] Chao Ji ; Watson, A. ; Zanchetta, P. ; Bland, M. ; Clare, J. ; Wheeler, P. ; Reass, W.; "Development and investigation of two optimized soft switching pulsed power resonant converters for RF applications", IEEE International Conference on Plasma Science (ICOPS 2013), Publication Year: 2013.
- [166] Trentin, A. ; Zanchetta, P. ; Wheeler, P. ; Clare, J.; "Performance evaluation of 3-phase buck-type PWM rectifiers with integrated and symmetrical Boost converter using SiC MOSFETS for aircraft application", IEEE Energy Conversion Congress and Exposition (ECCE 2013), Publication Year: 2013, Page(s): 1 – 6.
- [167] Ji, C. ; Watson, A. ; Zanchetta, P. ; Clare, J. ; Wheeler, P. ; Bland, M. ; Reass W.; "Optimization and comparison of two soft switched high voltage converter modulator topologies", IEEE Energy Conversion Congress and Exposition (ECCE 2013), Publication Year: 2013 , Page(s): 3027 – 3033
- [168] Rivera, M. ; Rodriguez, J. ; Espinoza, J. ; Olloqui, A. ; Wheeler, P. ; Zanchetta, P. ; Baier, C. ; Munoz, J.; "Two predictive control techniques for output voltage control and improvement of the source currents in an indirect matrix converter" IEEE 23rd International Symposium on Industrial Electronics (ISIE 2014), Publication Year: 2014, Page(s): 1420 – 1426.

- [169] Buticchi, G. ; Barater, D. ; Tarisciotti, L. ; Zanchetta, P.; “A simple deadbeat current control for single-phase transformer-less inverters with LCL filter” IEEE Energy Conversion Congress and Exposition (ECCE 2013), Publication Year: 2013, Page(s): 4214 – 4220.
- [170] Tarisciotti, L. ; Zanchetta, P. ; Watson, A. ; Clare, J. ; Bifaretti, S.; “A comparison between dead-beat and predictive control for a 7-level back-to-back Cascaded H-Bridge under fault conditions”, IEEE Energy Conversion Congress and Exposition (ECCE 2013), Publication Year: 2013, Page(s): 2147 – 2154.
- [171] Xiang Wang ; Castellazzi, A. ; Zanchetta, P.; “Temperature control for reduced thermal cycling of power devices”, 15th European Conference on Power Electronics and Applications (EPE 2013), , Publication Year: 2013, Page(s): 1 – 10.
- [172] Arif, B. ; Tarisciotti, L. ; Zanchetta, P. ; Clare, J.; “Finite Set Model Predictive Control with a novel online grid inductance estimation technique”, 7th IET International Conference on Power Electronics, Machines and Drives (PEMD 2014), Publication Year: 2014, Page(s): 1 – 6.
- [173] Tarisciotti, L. ; Zanchetta, P. ; Watson, A. ; Clare, J. ; Degano, M. ; Bifaretti, S.; “Modulated model predictive control (M<sup>2</sup>PC) for a 3-phase active front-end”, IEEE Energy Conversion Congress and Exposition (ECCE 2013), Publication Year: 2013, Page(s): 1062 – 1069.
- [174] Petrowitsch, P. ; Rivera, M. ; Rodriguez, J. ; Olloqui, A. ; Elizondo, J.L. ; Macias, M. ; Micheloud, O. ; Espinoza, J. ; Wheeler, P. ; Zanchetta, P. “Predictive voltage control with imposed source current waveforms in an indirect matrix converter” 39th Annual Conference of the IEEE Industrial Electronics Society, IECON 2013 - Page(s): 4907 – 4912
- [175] Tarisciotti, L. ; Zanchetta, P. ; Watson, A. ; Clare, J. ; Bifaretti, S. ; Rivera, M. “A new predictive control method for cascaded multilevel converters with intrinsic modulation scheme”, 39th Annual Conference of the IEEE Industrial Electronics Society, IECON 2013 - Page(s): 5764 – 5769
- [176] *Giampaolo Buticchi, Carlo Concarì, Giovanni Franceschini, Emilio Lorenzani, Pericle Zanchetta* “A Nine-Level Grid-Connected Photovoltaic Inverter based on Cascaded Full-Bridge with Flying Capacitor”, IEEE Energy Conversion Congress and Exposition, ECCE 2012, Raleigh NC, USA, September 2012
- [177] *L. Tarisciotti, A.J. Watson, P. Zanchetta, J.C. Clare, P. Wheeler, S. Bifaretti* “A Novel Pulse Width Modulation Technique with Active DC Voltage Balancing and Device Voltage Falls Compensation for High-Power Cascaded Multilevel Active Rectifiers”, IEEE Energy Conversion Congress and Exposition, ECCE 2012, Raleigh NC, USA, September 2012
- [178] Yusoff S., De Lillo L., Zanchetta P., Wheeler P., “Predictive Control of A Direct AC/AC Matrix Converter power supply Under Non-Linear Load Conditions”, EPE-PEMC (ECCE Europe) International Conference, Novi Sad, Serbia, September 2012.
- [179] M. Shukr, D. Thomas and P. Zanchetta, “VSC-HVDC Transmission Line Faults Location Using Active Line Impedance Estimation”, Energycon 2012 International Conference, Florence, Italy, September 2012.
- [180] Castellazzi, A.; Onifade, M.; Xiang Wang; Zanchetta, P., “State-space modeling of power assemblies for advanced thermal management solutions”, IEEE 13th Workshop on Control and Modeling for Power Electronics (COMPEL), 2012 Digital Object Identifier: 10.1109/COMPEL.2012.6251774
- [181] Wang, Xiang; Castellazzi, Alberto; Zanchetta, Pericle; “Regulated cooling for reduced thermal cycling of power devices”, 7th International Power Electronics and Motion Control Conference (IPEMC), 2012, Digital Object Identifier: 10.1109/IPEMC.2012.6258837
- [182] S Yusoff, L De Lillo, P Zanchetta, P Wheeler, P Cortes, J Rodriguez, “Predictive control of a direct AC/AC matrix converter for power supply applications”, 6th IET International Conference on Power Electronics, Machines and Drives (PEMD 2012), Bristol, UK, April 2012
- [183] M Onifade, A Castellazzi, P Zanchetta, “Advances in the dynamic active cooling of power electronics modules”, 6th IET International Conference on Power Electronics, Machines and Drives (PEMD 2012), Bristol, UK, April 2012
- [184] Tarisciotti, L.; Watson, A. J.; Zanchetta, P.; Bifaretti, S.; Clare, J. C.; Wheeler, P. “An improved Dead-Beat current control for Cascaded H-Bridge active rectifier with low switching frequency” 6th IET International Conference on Power Electronics, Machines and Drives (PEMD 2012), Bristol, UK, April 2012, Digital Object Identifier: 10.1049/cp.2012.0219
- [185] Zanchetta, P.; Cortes, P.; Perez, M.; Rodriguez, J.; Silva, C “Finite States Model Predictive Control for Shunt Active Filters”, IECON 2011 - 37th Annual Conference of the IEEE Industrial Electronics Society, Melbourne, Australia, November 2011 Digital Object Identifier: 10.1109/IECON.2011.6119375
- [186] P. Zanchetta, “Heuristic Multi-Objective Optimization for Cost Function Weights Selection in Finite States Model Predictive Control”, Proceedings of PRECEDE workshop, Munich, Germany, October 2011.
- [187] He Zhang, Wenping Cao, Pericle Zanchetta and Jing Li; “Thermal Analysis of a Balanced Calorimeter for Testing Electrical Machines”, IEEE Energy Conversion Congress and Exposition, ECCE 2011, Phoenix AZ, USA, September 2011
- [188] Wesam Rohouma, Lee Empringham, Pericle Zanchetta and Patrick Wheeler, “A Four Legs Matrix Converter Based Ground Power Unit with Selective Harmonic Control”, IEEE Energy Conversion Congress and Exposition, ECCE 2011, Phoenix AZ, USA, September 2011
- [189] Milijana Odavic, Veronica Biagini, Mark Sumner, Pericle Zanchetta and Marco Degano, “ Multi-Sampled Carrier-Based PWM for Multilevel Active Shunt Power Filters for Aerospace Applications”, IEEE Energy Conversion Congress and Exposition, ECCE 2011, Phoenix AZ, USA, September 2011
- [190] Chao Ji, Pericle Zanchetta, Fabio Carastro and Jon Clare, “High Performance Pulsed Power Resonant Converter for Radio Frequency Applications”, IEEE Energy Conversion Congress and Exposition, ECCE 2011, Phoenix AZ, USA, September 2011
- [191] Pericle Zanchetta, Jun Yi Liu, Marco Degano and Paolo Mattavelli, “Variable Sampling Frequency in Iterative Learning Current Control for Shunt Active Filter in Aircraft Power Systems”, IEEE Energy Conversion Congress and Exposition, ECCE 2011, Phoenix AZ, USA, September 2011

- [192] Rohouma, Wesam M.; de Lillo, Liliana; Lopez, Saul; Zanchetta, Pericle; Wheeler, Patrick W; "A single loop repetitive voltage controller for a four legs matrix converter ground power unit", Proceedings of the 2011-14th European Conference on Power Electronics and Applications (EPE 2011), Birmingham, UK
- [193] Cox, Stephen M.; Zanchetta, Pericle; "Matrix converter systems stability analysis taking into account switching effects", Proceedings of the 2011-14th European Conference on Power Electronics and Applications (EPE 2011), Birmingham, UK
- [194] Hill, C. I.; Zanchetta, P.; Bozhko, S. V.; Li, J.; "Optimisation of a distributed generation power pack using a novel dynamic system model including efficiency characteristics, Proceedings of the 2011-14th European Conference on Power Electronics and Applications (EPE 2011), Birmingham, UK
- [195] Choy, W. J.; Castellazzi, A.; Zanchetta, P.; "Adaptive cooling of power modules for reduced power and thermal cycling", Proceedings of the 2011-14th European Conference on Power Electronics and Applications (EPE 2011), Birmingham, UK
- [196] J. Y. Liu, P. Zanchetta, M. Degano "Active Filters control solutions for improved power quality in Aircraft Power Networks", PCIM 2011, Shangai, China June 2011.
- [197] He Zhang; Zanchetta, P.; Gerada, C.; Bradley, K.; Junyi Liu; "Performance evaluation of induction motor efficiency and in-service losses measurement using standard test methods", Proceedings of the 2011 IEEE International Electric Machines & Drives Conference (IEMDC), Niagara Falls, Canada.
- [198] Hill, C.I.; Zanchetta, P.; Bozhko, S.V.; "Accelerated electromechanical dynamic modelling of a distributed generation power pack", Proceedings of the 2011 IEEE International Electric Machines & Drives Conference (IEMDC), Niagara Falls, Canada
- [199] G. Stamatiou, K. Srivastava, M. Reza, P. Zanchetta; "Economics of DC wind collection grid as affected by cost of key components", Proceeding of World Renewable Energy Congress WREC 2011, May 2011, Sweden.
- [200] He Zhang; Zanchetta, P.; Gerada, C.; Wenping Cao; Bradley, K.; "Design of a calorimeter for induction machine efficiency measurement by CFD modelling" IECON 2010, IEEE Industrial Electronics Society 36th Annual Conference, 2010.
- [201] Junyi Liu; Zanchetta, P.; Degano, M.; He Zhang; "High performance iterative learning control for Active Filters in aircraft power networks", IECON 2010, IEEE Industrial Electronics Society 36th Annual Conference, 2010.
- [202] Bifaretti, S.; Zanchetta, P.; Watson, A.; Tarisciotti, L.; Clare, J.; "Predictive control for universal and flexible power management", IEEE Energy Conversion Congress and Exposition (ECCE), 2010.
- [203] Bifaretti, S.; Zanchetta, P.; Watson, A.; Tarisciotti, L.; Bellini, A.; Clare, J.; "A modulation technique for high power AC/DC multilevel converters for power system integration", IEEE Energy Conversion Congress and Exposition (ECCE), 2010.
- [204] Chao Ji, Pericle Zanchetta, Fabio Carastro, Jon Clare, "An Improved Resonant Converter for Long-Pulse Generation in High-Energy Physics Applications", IEEE International Symposium on Industrial Electronics (ISIE), Bari, Italy, July 2010.
- [205] Marco Degano, Pericle Zanchetta, Jon Clare, Lee Empringham, "HF induction motor modelling using Genetic Algorithms and experimental impedance measurement", IEEE International Symposium on Industrial Electronics (ISIE), Bari, Italy, July 2010.
- [206] Veronica Biagini, Milijana Odavic, Pericle Zanchetta, Marco Degano, Paolo Bolognesi, "Improved Dead Beat Control of a Shunt Active Filter for Aircraft Power Systems", IEEE International Symposium on Industrial Electronics (ISIE), Bari, Italy, July 2010.
- [207] Lavopa, E.; Zanchetta, P.; Sumner, M.; Bolognesi, P.; "Improved voltage harmonic control for sensorless shunt active power filters", International Symposium on Power Electronics Electrical Drives Automation and Motion (SPEEDAM), 2010
- [208] Rohouma, Wesam M.; Arevalo, Saul Lopez; Zanchetta, Pericle; Wheeler, Patrick W; "Repetitive control for a four leg matrix converter", 5th IET International Conference on Power Electronics, Machines and Drives (PEMD), Brighton, UK April 2010
- [209] Marcello Pucci, Pericle Zanchetta: "Model Parameters Estimation of PEM Fuel-Cell Systems using Genetic Algorithms" IEEE International Conference on Industrial Technology (ICIT), Vina del Mar, Chile, March 2010
- [210] Trentin A., P. Zanchetta, P.W. Wheeler and J. C. Clare "Performance Evaluation of Two Stage Matrix Converters for EMA in aircraft applications", IEEE Energy Conversion Conference Expo, ECCE 09, S. Jose (CA) USA, Sep. 2009.
- [211] V. Biagini, P. Bolognesi, P. Zanchetta "Vector Control of a 1-Phase to 3-Phase Mains Supply Extender", European Power Electronics International Conference, EPE09, Barcelona, Spain, Sep. 2009.
- [212] M. Odavic, M. Sumner, P. Zanchetta "Control of a Multi-Level Active Shunt Power Filter for More Electric Aircraft", European Power Electronics International Conference, EPE09, Barcelona, Spain, Sep. 2009.
- [213] Cupertino, F.; Salvatore, L.; Lavopa, E.; Sumner, M.; Zanchetta, P.; "A DFT based Phase Locked Loop for Phase and Amplitude Tracking in Aircraft Electrical Systems", IEEE IEMDC 2009 annual conference, Miami, FL, 3-6 May 2009.
- [214] Okaeme, N.; Zanchetta, P.; "Heuristic Optimization Strategies for Automated Experimental Control Design in Variable Speed Drives", IEEE IEMDC 2009 annual conference, Miami, FL, 3-6 May 2009.
- [215] Wang, H.; Clare, J.; Zanchetta, P.; Wheeler, P.; Cook, D.; Bland, M.; "State space ZCS control for three-phase resonant converter", Industrial Electronics, 2008. IECON 2008. 34th Annual Conference, IEEE 10-13 Nov. 2008
- [216] Zhang, H.; Bradley, K.; Zanchetta, P.; "A Non-Intrusive Load and Efficiency Evaluation Method for In-Service Motors Using Vibration Tests with an Accelerometer", Industry Applications Society Annual Meeting, 2008. IAS '08. IEEE, 5-9 Oct. 2008
- [217] Kampisios, K; Zanchetta, P; Gerada, C, Trentin, A, "Identification of Induction Machine Electrical Parameters using Genetic Algorithms Optimization" IEEE Industry-Applications-Society Annual Meeting, OCT 05-09, 2008 Alberta CANADA
- [218] Carastro, F; Sumner, M; Zanchetta, P "An Enhanced Shunt Active Filter with Energy Storage for Microgrids" IEEE Industry-Applications-Society Annual Meeting, OCT 05-09, 2008 Alberta CANADA
- [219] Dong, W; Zanchetta, P; Thomas, DWP "Identification of Electrical Parameters in a Power Network Using Genetic Algorithms and Transient Measurements" 13th International Power Electronics and Motion Control Conference, SEP 01-03, 2008

Poznan POLAND

- [220] Bifaretti, S; Zanchetta, P.; Iov, F.; Clare J.; "Predictive Current Control of a 7-level AC-DC back-to-back Converter for Universal and Flexible Power Management System", 13th International Power Electronics and Motion Control Conference, SEP 01-03, 2008 Poznan POLAND
- [221] Kampisios, K; Zanchetta, P; Gerada, C, Trentin, A.; Jasim, O.; "Induction Motor Parameters Identification using Genetic Algorithms for Varying Flux Levels", 13th International Power Electronics and Motion Control Conference, SEP 01-03, 2008 Poznan POLAND
- [222] Bifaretti, S; Zanchetta, P; Fan, Y, Iov, F., Clare, J.; "Power Flow Control through a Multi-Level H-Bridge based Power Converter for Universal and Flexible Power Management in Future Electrical Grids", 13th International Power Electronics and Motion Control Conference, SEP 01-03, 2008 Poznan POLAND
- [223] Ciobotaru, M; Iov, F; Zanchetta, P, De Novaes, Y.; Clare, J.; "A Stationary Reference Frame Current Control for a Multi-Level H-Bridge Power Converter for Universal and Flexible Power Management in Future Electricity Network", 39th IEEE Power Electronic Specialists Conference (PESC 08), JUN 15-19, 2008 Rhodes GREECE
- [224] Ciobotaru, M; Iov, F; Zanchetta, P.; De Novaes, Y.; Blaabjerg, F.; "Study and Analysis of a Natural Reference Frame Current Controller for a Multi-Level H-Bridge Power Converter", 39th IEEE Power Electronic Specialists Conference (PESC 08), JUN 15-19, 2008 Rhodes GREECE
- [225] Trentin, A; Zanchetta, P; Wheeler, P, Clare, J. "Performance Assessment of Matrix Converter and Two Stage Matrix Converter for EMA in Aircraft Application" 39th IEEE Power Electronic Specialists Conference (PESC 08), JUN 15-19, 2008 Rhodes GREECE
- [226] R P Venturini, P Mattavelli, P Zanchetta, M Sumner: "Variable Frequency Adaptive Selective Compensation for Active Power Filters" Proc. of IET - PEMD'08 conference, York, UK, April 2008.
- [227] Lenwari, W.; Sumner, M.; Zanchetta, P.; "Automated Design and Implementation of Resonant Controllers for Current Control of Shunt Active Filters", 7th International Conference on Power Electronics and Drive Systems, 2007. PEDS '07 27-30 Nov. 2007 Page(s):239 – 243
- [228] M. Odavic, P. Zanchetta, M. Sumner: "A Low Switching Frequency High Bandwidth Current Control for Active Shunt Power Filter in Aircrafts Power Networks", Proc. of IECON'07, Taipei, Taiwan Nov. 2007
- [229] S. Lopez-Arevalo, P. Zanchetta, P.W. Wheeler: "Control of a Matrix Converter-based AC Power Supply for Aircrafts under Unbalanced Conditions" Proc. of IECON'07, Taipei, Taiwan Nov. 2007
- [230] N. Okaeme, P. Zanchetta, M. Sumner; "Robust Control Design through Experimental Load Identification for variable speed drives", Proc. of Industry Applications Society conference, IAS'07, New Orleans, USA, Sep. 2007
- [231] C. Klumpner, M. Lee, C. Pitic, P. Wheeler, P. Zanchetta "A New Three-Level Indirect Matrix Converter with Reduced Number of Switches", Proc. of Industry Applications Society conference, IAS'07, New Orleans, USA, Sep. 2007
- [232] Trentin, A.; Zanchetta, P.; Wheeler, P.; Clare, J., R. Wood, W. Typton: "Performance Assessment of SVM Modulation Techniques for Losses Reduction in Induction Motor Drives" Proc. of Industry Applications Society conference, IAS'07, New Orleans, USA, Sep. 2007
- [233] Trentin, A.; Zanchetta, P.; Wheeler, P.; Clare, J.; "Improved vector control of induction motor drives using genetic algorithms-based machine and control parameters estimation", European Conference on Power Electronics and Applications, EPE 2007, 2-5 Sept. 2007 Page(s):1 – 8
- [234] E. Lavopa, M. Sumner, P. Zanchetta, C. Ladisa, F. Cupertino: "Real-time estimation of fundamental frequency and harmonics for active power filters applications in aircraft electrical systems", Proc. of EPE'07, Aalborg, Denmark, Sep. 2007
- [235] Ladisa, C.; Zanchetta, P.; Sumner, M.: "Improved Voltage Harmonic Control for Shunt Active Power Filters Using Multiple Reference Frames" IEEE International Symposium on Industrial Electronics, ISIE 2007, 4-7 June 2007 Page(s):844 – 849
- [236] Odavic, M.; Zanchetta, P.; Sumner, M.: "A Genetic Algorithm Design Method for A Current Controller Employing "Two Ahead" Prediction" IEEE International Conference on Industrial Technology, ICIT 2006, 15-17 Dec. 2006 Page(s):812 – 817
- [237] N. Okaeme, P. Zanchetta, M. Sumner; "Automated Online Design of Robust Position and Speed Digital Controllers For Variable Speed Drives", IECON 2006 conference proceedings, Paris, France, November 2006.
- [238] W. Lenwari, M. Sumner and P. Zanchetta; "A High Performance Harmonic Current Control for Shunt Active Filters Based on Resonant Compensators", IECON 2006 conference proceedings, Paris, France, November 2006.
- [239] M. Odavic, P. Zanchetta, M. Sumner, C. Ladisa and Z. Jakopovic "A Two Ahead Predictive Controller For Active Shunt Power Filters" IECON 2006 conference proceedings, Paris, France, November 2006.
- [240] F. Carastro, M. Sumner, P. Zanchetta; "Mitigation of voltage dips and voltage harmonics within a micro-grid, using a single shunt active filter with energy storage", IECON 2006 conference proceedings, Paris, France, November 2006.
- [241] A Trentin, P. Zanchetta, P. W. Wheeler, "A New Investigation on Space Vector Modulation Technique for Voltage Source Inverter in AC Drive" IECON 2006 conference proceedings, Paris, France, November 2006.
- [242] A Trentin, P. Zanchetta, P. W. Wheeler, J. C. Clare, R. Wood, D. Katsis; "A New Method for Induction Motors Parameter Estimation Using Genetic Algorithms and Transient Speed measurements", IAS 2006 Conference Proceedings, Tampa USA, October 2006.
- [243] N. Okaeme, P. Zanchetta, M. Sumner; "Automated Online Robust Control Design for Variable Speed Drives Using Genetic Algorithms" IAS 2006 Conference Proceedings, Tampa USA, October 2006.
- [244] M. Sumner, D. Thomas, P. Zanchetta and A. Abusorrah; "Improved Power Quality Control and Intelligent Protection for Grid Connected Power Electronic Converters, using Real Time Parameter Estimation", IAS 2006 Conference Proceedings, Tampa USA, October 2006.
- [245] F. Carastro, M. Sumner, P. Zanchetta; "Shunt Active Filter for voltage and power improvements within a micro-grid",

- EPE-PEMC 2006 European Conference on Power Electronics and Applications, Portoroz, Slovenia, 30 Aug. - 1 Sept. 2006
- [246] M.Odavic, P. Zanchetta, M. Sumner and Z. Jakopovic "High Performance Predictive Current Control for Active Shunt Filters", EPE-PEMC 2006 European Conference on Power Electronics and Applications, Portoroz, Slovenia, 30 Aug. - 1 Sept. 2006
- [247] W. Lenwari , M. Sumner and P. Zanchetta; "A Novel High Performance Current Control for Shunt Active Filters", EPE-PEMC 2006 European Conference on Power Electronics and Applications, Portoroz, Slovenia, 30 Aug. - 1 Sept. 2006
- [248] Sumner, M.; Thomas, D.W.P.; P Zanchetta P.; "Power System Impedance Estimation for Improved Active Filter Control, using Continuous Wavelet Transforms", PES conference proceedings, Dallas, USA, May 21-24, 2006
- [249] W. Lenwari , M. Sumner and P. Zanchetta; "Design and Analysis of High Performance Current Control for Shunt Active Filters" PEMD 2006, IET Power Electronics Machines and Drives International Conference, Dublin, Ireland, 4 – 6 April 2006.
- [250] T. Wijekoon, C. Klumpner, P. Zanchetta, P. Weheeler; "A Predictive Current Control Scheme for a Hybrid AC/AC Direct Power Converter", PEMD 2006, IET Power Electronics Machines and Drives International Conference, Dublin, Ireland, 4 – 6 April 2006.
- [251] Cupertino, F.; Marinelli, M.; Zanchetta, P.; Sumner, M.; "Modelling and Design of Shunt Active Power Filters using Genetic Algorithms" EPE 2005 European Conference on Power Electronics and Applications, Dresden, Germany, 11-14 Sept. 2005
- [252] Bland, M.J.; Clare, J.C.; Zanchetta, P.; Wheeler, P.W.; Pryzbyla, J.S.; "A high frequency resonant power converter for high power RF applications" EPE 2005 European Conference on Power Electronics and Applications, Dresden, Germany, 11-14 Sept. 2005
- [253] Marinelli, M.; Dell'Aquila, A.; Zanchetta, P.; "New assessing criteria for the contribution of nonlinear loads to the supply voltage harmonic distortion", EPE 2005 European Conference on Power Electronics and Applications, Dresden, Germany, 11-14 Sept. 2005
- [254] Zanchetta, P.; Clare, J.C.; Wheeler, P.; Katsis, D.; Bland, M.; Empringham, L.; "Control Design of a Three-phase Matrix Converter Mobile AC Power Supply using Genetic Algorithms", PESC 2005 IEEE 36th Conference on Power Electronics Specialists, Recife, Brazil, 11-14 Sept. 2005
- [255] P. Zanchetta, M. Sumner, F. Cupertino, M. Marinelli, E. Mininno, "On-line and Off-line Control Design in Power Electronics and Drives Using Genetic Algorithms", IAS 2004 Conference Proceedings, Seattle USA, October 2004.
- [256] D. Katsis, P. Wheeler, J. Clare, P. Zanchetta, "A Three-Phase Utility Power Supply Based on the Matrix Converter", IAS 2004 Conference Proceedings, Seattle USA, October 2004.
- [257] M. Marinelli, P. Zanchetta, A. Dell'aquila, "A New Performance Factor for Weighted Harmonic Distortion Evaluation" ICHQP 2004 Conference Proceedings, Lake Placid, NY, USA, September 2004.
- [258] V. G. Monopoli, D. Gerry, P. Zanchetta, J.C. Clare, P.W. Wheeler "A Low Frequency Predictive Current Control For Multilevel Active Rectifiers", PESC 2004 Conference Proceedings, Aachen, Germany, June 2004.
- [259] P. Zanchetta, M. Sumner, J. C. Clare, P. W. Wheeler, "Control Of Matrix Converters For Ac Power Supplies Using Genetic Algorithms", ISIE 2004 Conference Proceedings, Ajaccio, France, May 2004.
- [260] P. Zanchetta, M. Sumner, "Non Invasive Power System Impedance Monitoring For Improved Power Quality", PEMD 2004 Conference Proceedings, Edimburgh UK, April 2004.
- [261] Clare J.C., Zanchetta P., Wheeler P.W. and Empringham L. "Modeling and design of Matrix Converter solutions for shipboard applications", IMarEST Electric Warship Seminar, December 2003.
- [262] V. Diana, M. Sumner, P. Zanchetta, M. Marinelli: "The Use of Genetic Algorithms for the Design of Current Controller for Shunt Active Filters" IECON 2003 Conference Proceedings, Roanoke, USA, November 2003.
- [263] P. Zanchetta, J.C. Clare, P.W. Wheeler: "CAD of Matrix Converter Systems and their Control for AC Power Supplies", Accepted for publication on the EPE 2003 Conference Proceedings, Toulouse France, September 2003.
- [264] P. Zanchetta, J.C. Clare, P.W. Wheeler: "Control of Static Frequency Changers for Aircraft Ground Power Supplies with Stringent Performance Requirements", EPE 2003 Conference Proceedings, Toulouse France, September 2003.
- [265] S. Large, A. Green, S.C. Mason, S. Bhatia, J.C. Clare, P. Zanchetta, L. Empringham, P.W. Wheeler: "Matrix Converter Solution for Aircraft Starting" IEE Seminar on Matrix Converters, Birmingham UK, April 2003.
- [266] S. Large, A. Green, S.C. Mason, S. Bhatia, J.C. Clare, P. Zanchetta, L. Empringham, P.W. Wheeler: "Matrix Converter Solution for Aircraft Starting" AES 2003 Conference Proceedings, Edimburgh UK, February 2003.
- [267] M. Sumner, B. Palethorpe, P. Zanchetta, and D.W.P. Thomas: "Experimental Evaluation Of Active Filter Control Incorporating On-Line Impedance Measurement" Proc. of IEEE International Conference on Harmonics and Quality of Power ICHQP, Rio de Janeiro, Brasil, October 2002.
- [268] Dell'Aquila A., M. Marinelli, P. Zanchetta: "Three-Phase Four-Wire Active Filter for Unbalanced Distorting Load" - proceedings of the second Iasted International Conference on Power and Energy Systems (EuroPES), Crete, Greece, June 25-28, 2002 \*.
- [269] P. Zanchetta, M. Sumner, B. Palethorpe, A. Dell'Aquila, A. Lecci,: "A Novel Voltage Control for Active Shunt Power Filters", Proc. of IEEE International Conference ISIE'02, L'Aquila, Italy, June 2002 \*.
- [270] Dell'Aquila A., M. Marinelli, V. Monopoli, P. Zanchetta: " A New Index To Measure Unbalance Conditions in Three-phase Four-wire Systems" - Proc. of International Conference SPEEDAM '02 - Symposium on Power Electronics, Electrical Drives, Advanced Machines, Power Quality – Ravello, Italy, June 2002 \*.
- [271] Dell'Aquila A., A. Lecci, M. Liserre, P. Zanchetta: "Fuzzy Active Filter Performance in Transient Conditions" Proc. of International Conference EPE '01, Graz, Austria, August 2001 \*.
- [272] Dell'Aquila A, M. Marinelli, V. Monopoli, P. Zanchetta: "Indices to Evaluate the Quality of Power Absorbed by Non-Linear Load" Proc. of International Conference EPE '01, Graz, Austria, August 2001 \*.

- [273] P. Zanchetta, A. Dell'Aquila, E de Vanna, M. Sumner: "Direct Harmonic Voltage Control for Active Shunt Power Filters", Proc. Of the 6<sup>th</sup> IASTED International Conference on Power and Energy Systems, Rhodes, Greece, July 2001.
- [274] Dell'Aquila A, P. Zanchetta, M. Marinelli, M. Liserre, L. Manelli: "A Novel Dead-Beat Current Control for Shunt Active Power Filters", Proc. Of the 6<sup>th</sup> IASTED International Conference on Power and Energy Systems, Rhodes, Greece, July 2001.
- [275] P. Zanchetta, M.C. Di Piazza, M. Sumner, Ben Palethorpe, D. W. P. Thomas: "Estimation of Power Supply Harmonic Impedance Using a Controlled Voltage Disturbance", Proc. Of IEEE International Power Electronics Specialist Conference, Vancouver, Canada, June 2001.
- [276] Dell'Aquila A, A. Lecci, M. Liserre, P. Zanchetta: "Design of the Optimum Duty Cycle for a Fuzzy Controlled Active Filter", Proc. of International Conference ISIE '00, Puebla, Mexico, December 2000 \*.
- [277] P. Zanchetta, M.C. Di Piazza, M. Sumner, D. W. P. Thomas: "Estimation of Load Impedance in a Power System", Proc. of International Conference on Harmonics and Quality of Power ICHQP, Orlando, Florida USA, October 2000.
- [278] Dell'Aquila, G. Delvino, M. Liserre, P. Zanchetta: "A New Fuzzy Logic Strategy for Active Power Filter", Proc. of International Conference PEVD '00, London, United Kingdom, September 2000 \*.
- [279] Dell'Aquila, M. Liserre, P. Zanchetta: "A New Low Cost CC-PWM Inverter Based on Fuzzy Logic", Proc. of International Conference PEVD '00, London, United Kingdom, September 2000 \*.
- [280] Dell'Aquila, F. Louidice, M. Marinelli, P. Zanchetta "A Complete Analysis of Harmonic Distortion due to Workstations through a Virtual Instrument", Proc. of International Conference "EMC 2000", 4<sup>th</sup> European Symposium on Electromagnetic Compatibility Brugge, Belgium, September 2000 \*.
- [281] Dell'Aquila, M. Marinelli, E. Menolascina, P. Zanchetta "Power Quality Long Term Monitoring in Non-Sinusoidal Conditions", Proc. of International Conference "EMC 2000", 4<sup>th</sup> European Symposium on Electromagnetic Compatibility Brugge, Belgium, September 2000 \*.
- [282] Cataliotti, V. Cecconi, A. Dell'Aquila, M.C. Di Piazza, P. Zanchetta "Investigation of Low Frequency EMI Produced by Inverter-Fed Linear Induction Motor Drives in Railway Systems", Proc. of International Conference "EMC 2000", 4<sup>th</sup> European Symposium on Electromagnetic Compatibility Brugge, Belgium, September 2000 \*.
- [283] Cataliotti, V. Cecconi, A. Dell'Aquila, M.C. Di Piazza, P. Zanchetta "Investigation of Conducted EMI in a High Power Railway PWM Linear Induction Motor Drive", Proc. of International Conference "EMC 2000", 4<sup>th</sup> European Symposium on Electromagnetic Compatibility Brugge, Belgium, September 2000 \*.
- [284] Dell'Aquila, M. Liserre, M. Marinelli, P. Zanchetta: "Fault Conditions Analysis of an Induction Motor Drive Supplied by a CC-PWM", Proc. of International Conference IECM '00, Helsinki, Finland, August 2000 \*.
- [285] Dell'Aquila, M. Liserre, P. Zanchetta: "A Study on the Influence of the Induction Motor Emf in the Inverter Current Control", Proc. of International Conference IECM '00, Helsinki, Finland, August 2000 \*.
- [286] Dell'Aquila, A. Lecci, M. Liserre, P. Zanchetta: "Fuzzy Control of Energy Storage in Active Filter Capacitor", Proc. of International Conference to SPEEDAM '00 - Symposium on Power Electronics, Electrical Drives, Advanced Machines, Power Quality – Ischia, Italy, June 2000 \*.
- [287] Dell'Aquila, F. Girardi, M. Marinelli, P. Zanchetta: "A Predictive-Fuzzy Controlled PWM AC/DC Converter", Proc. of International Conference SPEEDAM '00 - Symposium on Power Electronics, Electrical Drives, Advanced Machines, Power Quality – Ischia, Italy, June 2000 \*.
- [288] A Amendolara, A. Cataliotti, M.C. Di Piazza, P. Zanchetta, "Investigation of Electromagnetic Emissions Produced by Power Converters in Railway Systems", Final Report of EU Project TRAIN, November 1999 \*.
- [289] Dell'Aquila, F. Louidice, M. Liserre, M. Marinelli P. Zanchetta: "Performances evaluation of different active filters for compensation of distorted line currents produced by induction motor drives" Proc. of International Conference ELECTRIMACS '99, Lisboa, Portugal, September 1999 \*.
- [290] Dell'Aquila, M. Abbattista, M. Liserre, P. Zanchetta: "Space-Vector and Each Phase Fuzzy Logic Control of CRPWM" Proc. of International Conference ELECTRIMACS '99, Lisboa, Portugal, September 1999 \*.
- [291] Dell'Aquila, M. Liserre, P. Zanchetta: "A Fuzzy Logic Calculation of the Duty Cycle for the Space-Vector CRPWM" Proc. of International Conference EPE '99, Lausanne, Switzerland, September 1999 \*.
- [292] Dell'Aquila, N. Rotondale, C. Cecati, M. Liserre, P. Zanchetta: "An Overview on Nonoptimal, Optimal, Preoptimized and Fuzzy Current Regulated PWM techniques" Proc. of International Conference ISIE '99, Bled, Slovenia, July 1999 \*.
- [293] Dell'Aquila, M. Liserre, P. Zanchetta: "On the Performance of Space-Vector and Each-Phase PWM VSI Control Techniques for Induction Motor Drives" Proc. of International Conference ELECTROMOTION'99, Patras, Greece, July 1999 \*.
- [294] Dell'Aquila, F. Cupertino, M. Liserre, P. Zanchetta: "Dynamic Behaviour Analysis of a Fuzzy Logic Controlled Stand-Alone Wind Power System" Proc. of International Conference UEES '99, St. Petersburg, Russia, June 1999 \*.
- [295] Dell'Aquila, S. Lospalluti, S. Stasi, P. Zanchetta: "Fuzzy Logic Controlled DC/DC Boost Converter for Wind Power Applications" - Proc. of International Conference "PEMC '98, Praha, Czech Republic, September 1998 \*.
- [296] Dell'Aquila, P. Ceci, P. Zanchetta: "Modeling and Simulation of Induction Motor Drive Line Side Low Frequency EMI" - Proc. of International Conference "ICEM '98, Istanbul, Turkey, September 1998 \*.
- [297] Dell'Aquila, G. Carbone, F. Louidice, P. Zanchetta: "A Powerful System for Low Frequency EMI Monitoring and Power Filter Design" - Proc. of International Conference "SPEEDAM '98, Sorrento, Italy, June 1998 \*.
- [298] Dell'Aquila, R. Formosa, E. Montaruli, P. Zanchetta: "New Multilevel PWM Inverter Implementation" - Proc. of International Conference "IECON '97 – 23<sup>rd</sup> International Conference on Industrial Electronics, Control and Instrumentation", New Orleans, (USA), November 1997 \*.
- [299] Dell'Aquila, A. Di Lorenzo, P. Zanchetta: "A Space Vector Based Active Power Filter for the Compensation of Harmonic Distortion and Fundamental Reactive Power" - Proc. of International Conference "EPE '97 – 7<sup>th</sup> International Conference on Power Electronics and Applications", Trondheim, Norway, September 1997 \*.

- [300] Dell'Aquila, P. Zanchetta: "*A Modelization of Distorted Currents Produced by Generic P-Pulse A.C./D.C. Converters*" - Proc. of International Conference "EMT'97 – 1<sup>st</sup> International Conference on Electromechatronics", S. Petersburg, Russia, May 1997 \*.
- [301] Dell'Aquila, E. Montaruli, P. Zanchetta: "*Pulse Width Modulation for Three-Phase A.C./D.C. Converters: State of the Art*" - Proc. of International Conference "EMT'97 – 1<sup>st</sup> International Conference on Electromechatronics", S. Petersburg, Russia, May 1997 \*.
- [302] Dell'Aquila, A. Lassandro, P. Zanchetta: "*Predetermination Methods of Harmonic Currents Produced by 6-Pulse A.C./D.C. Converters: a Detailed Comparison*" - Proc. of International Conference "MEPCON '97 – 5<sup>th</sup> International Middle East Power Conference", Alessandria, Egypt, January 1997 \*.
- [303] Dell'Aquila, E. Montaruli, P. Zanchetta: "*A Comparison among the Main PWM Strategies for VSI Inverters in Respect to Harmonic Distortion*" - Proc. of International Conference "MEPCON '97 – 5<sup>th</sup> International Middle East Power Conference", Alessandria, Egypt, January 1997 \*.
- [304] Dell'Aquila, A. Lassandro, P. Zanchetta: "*An Extended Analysis of 6-Pulse A.C./D.C. Converters Taking Account of Commutation*" - Proc. of International Conference "PEVD '96 – 6<sup>th</sup> International Conference on Power Electronics and Variable Speed Drives", Nottingham, United Kingdom, September 1996 \*.
- [305] Dell'Aquila, E. Montaruli, P. Zanchetta: "*DSP Based Multilevel PWM Method*" - Proc. of International Conference "PEMC '96 – 7<sup>th</sup> International Power Electronics & Motion Control Conference", Budapest, Hungary, September 1996 \*.
- [306] Dell'Aquila, V. Giliberti, E. Montaruli, P. Zanchetta: "*Least Square High Voltage Modulation Strategy for PWM Inverters*" - Proc. of International Conference "EPE '95 - 6<sup>th</sup> European Conference on Power Electronics", Sevilla, Spain, September 1995 \*.
- [307] Dell'Aquila, V. Giliberti, P. Zanchetta: "*Comparison Between the Harmonic Pollution Produced by 6-Pulse and 12-Pulse Fully Controlled Rectifiers*" – Proc. of International Conference "Stockholm Power Tech", Stockholm, Sweden, June 1995 \*

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