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Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: AAG-4558-2019

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Education Information

Doctorate, University of Adelaide, Faculty of Sciences, Engineering and Technology, Electrical and Electronic Engineering, Australia 2005 - 2010

Postgraduate, University of Technology Sydney, UTS Faculty of Engineering and IT, Software and Information Systems Engineering, Australia 2002 - 2004

Undergraduate, Sakarya University, Faculty Of Engineering, Department Of Electrical And Electronics Engineering, Turkey 1995 - 1999

Foreign Languages

English, C2 Mastery

German, B1 Intermediate

Dissertations

Doctorate, Low-Cost Current-Source 1-ph Photovoltaic Grid-Connected Inverter, University of Adelaide, 2010

Research Areas

Electrical and Electronics Engineering, Energy, Direct Energy Conversion and Energy Storage, Generating Stations and Plants, Renewable energy, Power Electronics, Power Converters, Engineering and Technology

Academic and Administrative Experience

Bilecik Seyh Edebali University, 2013 - 2016

Courses

Temel Bilgisayar Bilimleri ve Programlama Dilleri, Undergraduate, 2013 - 2014, 2012 - 2013

Teknik İngilizce 1, Undergraduate, 2013 - 2014
Güneş Enerjisi Teknolojileri, Doctorate, 2013 - 2014
Mikroişlemciler, Undergraduate, 2013 - 2014
Girişimcilik ve İş Tasarımı, Undergraduate, 2013 - 2014, 2012 - 2013
Sayısal Elektronik, Undergraduate, 2013 - 2014, 2012 - 2013
Sayısal Devre Tasarımı, Undergraduate, 2013 - 2014, 2012 - 2013
Teknik İngilizce 2, Undergraduate, 2013 - 2014, 2012 - 2013
Güneş Enerjisi Teknolojileri, Postgraduate, 2013 - 2014
Güç Elektroniği, Associate Degree, 2012 - 2013

Advising Theses

ERTAŞGIN G., Havacılığa yönelik turboelektrik itki sistemi için matematiksel model tasarımı, Doctorate, E.ŞENER(Student), 2021
ERTAŞGIN G., Şebeke bağlantılı inverterlerde super lift lu konverter uygulanması, Postgraduate, E.ŞENER(Student), 2016

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Current-source 1-Ph inverter design for aircraft applications**
ŞENER E., ERTAŞGIN G.
Aircraft Engineering and Aerospace Technology, vol.92, no.8, pp.1295-1305, 2020 (SCI-Expanded)
- II. **Baseline architecture design for a turboelectric distributed propulsion system using single turboshaft engine operational scenario**
YAZAR I., ŞENER E., ERTAŞGIN G., YAMIK H.
International Journal of Turbo and Jet Engines, 2020 (SCI-Expanded)
- III. **Analysis of dc link energy storage for single-phase grid-connected pv inverters**
ERTAŞGIN G., Whaley D. M., Ertugrul N., Soong W. L.
Electronics (Switzerland), vol.8, no.6, 2019 (SCI-Expanded)

Articles Published in Other Journals

- I. **Design of a Half-Bridge Current-Source Inverter Topology for Avionic Systems**
Şener E., Ertaşgın G.
Aerospace, vol.9, no.7, 2022 (Scopus)
- II. **Single Turboshaft Engine Failure Analysis of an Inner Bus Tie Architecture for Turboelectric Distributed Propulsion System**
ŞENER E., YAZAR I., ERTAŞGIN G.
SAE International Journal of Aerospace, vol.13, no.2, pp.155-170, 2020 (ESCI)
- III. **An interleaved super lift Luo converter design for aircraft applications**
ERTAŞGIN G.
Bilecik Şeyh Edebali Üniversitesi Fen Bilimleri Dergisi, vol.7, no.1, pp.394-403, 2020 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **Analysis of a Piecewise Linear Model for Rapid Simulation of PV Modules**
Ertaşgın G., Şener E.
2nd International Conference on Engineering, Natural and Social Sciences ICENSOS 2023, Konya, Turkey, 4 - 06

April 2023, pp.348-352

- II. **Implementation of a Single-Phase Half-Bridge Grid-Connected PV Inverter**
ŞENER E., ERTAŞGIN G., YAZAR I.
5h International Symposium on Multidisciplinary Studies and Innovative Technologies, ISMSIT 2021, Ankara, Turkey, 21 - 23 October 2021, pp.510-515
- III. **1.2kW Interleaved synchronous buck converter design for aviation systems**
ŞENER E., YAZAR I., ERTAŞGIN G., YAMIK H.
ISATECH 2019, 9 - 11 October 2019, vol.314, pp.2005
- IV. **270VDC-28VDC Synchronous Interleaved 1.2kW Buck Converter Design for Avionics**
ŞENER E., YAZAR I., ERTAŞGIN G., YAMIK H.
ISATECH 2019, 9 - 11 October 2019
- V. **Electrical architecture design for a turbo electric aircraft propulsion system on Matlab / Simulink**
ŞENER E., ERTAŞGIN G., YAZAR I.
ISSA 2019, Budapest, Hungary, 26 - 29 May 2019
- VI. **A 3-ph Grid-Connected Photovoltaic Inverter Utilizing Super-Lift Luo Converter**
ŞENER E., ERTAŞGIN G.
2nd International Symposium on Multidisciplinary Studies and Innovative Technologies, ISMSIT 2018, Kizilcahamam, Ankara, Turkey, 19 - 21 October 2018
- VII. **Design of a 400 Hz Current-Source Single-Phase Converter for Avionic Systems**
ŞENER E., ERTAŞGIN G., ZUBER D.
14th IEEE Vehicle Power and Propulsion Conference, VPPC 2017, Belfort, France, 14 - 17 December 2017, vol.2018-January, pp.1-6
- VIII. **DESIGN OF A 400 HZ CURRENT SOURCE 1 PH INVERTER TOPOLOGY FOR AVIONIC SYSTEMS**
ŞENER E., ERTAŞGIN G.
ICAT 2017, İstanbul, Turkey, 9 - 12 May 2017
- IX. **Low-pass filter design of a current-source 1-ph grid-connected PV inverter**
ERTAŞGIN G., WHALEY D., SOONG W., ERTUGRUL N.
57th International Scientific Conference on Power and Electrical Engineering of Riga Technical University, RTUCON 2016, Riga, Latvia, 13 - 14 October 2016
- X. **A grid-connected single-phase photovoltaic microinverter based on super-lift luo converter**
ŞENER E., ERTAŞGIN G.
ISSA 2016, İstanbul, Turkey, 29 May - 01 June 2016
- XI. **Energy storage element sizing for single-phase grid-connected photovoltaic converter**
ERTAŞGIN G., WHALEY D., ERTUGRUL N., SOONG W.
16th International Power Electronics and Motion Control Conference and Exposition, PEMC 2014, Antalya, Turkey, 21 - 24 September 2014, pp.1005-1010
- XII. **Analysis and design of single-phase current-source grid-connected PV inverter**
ERTAŞGIN G., SOONG W., ERTUGRUL N.
2013 15th European Conference on Power Electronics and Applications, EPE 2013, Lille, France, 2 - 06 September 2013
- XIII. **Implementation and performance evaluation of a low cost current source grid connected inverter for PV applications**
ERTAŞGIN G., WHALEY D. M., ERTUGRUL N., SOONG W. L.
ICSET 2008, Singapore, 24 - 27 November 2008
- XIV. **Analysis and design of energy storage for current source 1 ph grid connected PV inverters**
ERTAŞGIN G., WHALEY D. M., ERTUGRUL N., SOONG W. L.
APEC 2008, Austin, TX, United States Of America, 24 - 28 February 2008
- XV. **A current-source grid-connected converter topology for Photovoltaic systems**
ERTAŞGIN G., WHALEY D. M., ERTUGRUL N., SOONG W. L.
AUPEC 2006, Melbourne, Australia, 10 - 13 December 2006
- XVI. **Investigation of a Low Cost Grid Connected Inverter for Small Scale Wind Turbines Based on a**

Constant Current Source PM Generator

WHALEY D. M., ERTAŞGIN G., SOONG W. L., ERTUGRUL N., DARBYSHIRE J., NAYAR C. V., DEHBONEI H.
IECON 2006, Paris, France, France, 6 - 10 November 2006, pp.4297-4302

Supported Projects

ERTAŞGIN G., Project Supported by Higher Education Institutions, Fotovoltaik Uygulamaları İçin Düşük Maliyetli Gerilim Kaynaklı Şebeke Bağlantılı Mikroinverter Tasarımı, 2014 - 2016