

Prof. ŞABAN ÖZDEMİR

Personal Information

Email: sabanozdemir@gazi.edu.tr

Web: <https://avesis.gazi.edu.tr/sabanozdemir>

International Researcher IDs

ScholarID: KwZJpacAAAAJ

ORCID: 0000-0003-3910-0458

Publons / Web Of Science ResearcherID: I-3273-2016

ScopusID: 35248930200

Yoksis Researcher ID: 141416

Education Information

Doctorate, Gazi University, Teknik Eğitim Fakültesi, Elektrik Eğitimi, Turkey 2008 - 2013

Postgraduate, Gazi University, Teknik Eğitim Fakültesi, Elektrik Eğitimi, Turkey 2004 - 2008

Undergraduate, Gazi University, Teknik Eğitim Fakültesi, Elektrik Eğitimi, Turkey 1999 - 2004

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Yenilenebilir enerji kaynakları için tek aşamalı MPPT denetimli çok seviyeli eviricinin gerçekleştirilmesi, Gazi University, Fen Bilimleri Enstitüsü, Elektrik Eğitimi (Dr), 2013

Postgraduate, Fotovoltaik sistemler için mikrodenetleyicili en yüksek güç noktasını izleyen bir konvertörün gerçekleştirilmesi, Gazi University, Fen Bilimleri Enstitüsü, Elektrik Eğitimi (YI) (Tezli), 2007

Research Areas

Electrical and Electronics Engineering, Engineering and Technology

Academic Titles / Tasks

Professor, Gazi University, Teknoloji Fakültesi, Elektrik - Elektronik Mühendisliği, 2023 - Continues

Associate Professor, Gazi University, Teknoloji Fakültesi, Elektrik - Elektronik Mühendisliği, 2021 - 2023

Associate Professor, Gazi University, Teknoloji Fakültesi, Elektrik - Elektronik Mühendisliği, 2017 - 2021

Associate Professor, Gazi University, Teknoloji Fakültesi, Elektrik - Elektronik Mühendisliği, 2017 - 2019

Lecturer PhD, Gazi University, Teknoloji Fakültesi, Elektrik - Elektronik Mühendisliği, 2016 - 2017

Lecturer PhD, Gazi University, Teknoloji Fakültesi, Elektrik - Elektronik Mühendisliği, 2014 - 2017

Lecturer PhD, Gazi University, Teknoloji Fakültesi, Elektrik - Elektronik Mühendisliği, 2013 - 2014

Lecturer, Gazi University, Teknoloji Fakültesi, Elektrik - Elektronik Mühendisliği, 2009 - 2013

Academic and Administrative Experience

Head of Department, Gazi University, Teknik Bilimler Meslek Yüksekokulu, Elektrik ve Enerji Bölümü, 2020 - 2021

Gazi University, Teknik Bilimler Meslek Yüksekokulu, Elektronik ve Otomasyon Bölümü, 2014 - 2016

Gazi University, Atatürk Meslek Yüksekokulu, Elektronik Ve Otomasyon Bölümü, 2014 - 2014

Gazi University, Atatürk Meslek Yüksekokulu, Elektrik Ve Enerji Bölümü, 2010 - 2011

Courses

Güç Elektroniği, Undergraduate, 2021 - 2022

Temel Bilgisayar Programlama ve Matlab, Undergraduate, 2016 - 2017

Güç Elektroniği, Undergraduate, 2016 - 2017

Elektromekanik Enerji Dönüşümü, Undergraduate, 2016 - 2017

Mikrodenetleyiciler II, Undergraduate, 2016 - 2017

Elektrik Elektronik Mühendisliğine Giriş, Undergraduate, 2016 - 2017

Mesleki Yazılım Uygulamaları, Undergraduate, 2016 - 2017

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Reliability Analysis of Microgrids: Evaluation of Centralized and Decentralized Control Approaches**
Garip S., Bilgen M., ALTIN N., ÖZDEMİR Ş., SEFA İ.
Electric Power Components and Systems, vol.51, no.19, pp.2319-2338, 2023 (SCI-Expanded)
- II. **Optimization of PV and Battery Energy Storage Size in Grid-Connected Microgrid**
Garip S., ÖZDEMİR Ş.
Applied Sciences (Switzerland), vol.12, no.16, 2022 (SCI-Expanded)
- III. **A Novel Topology for Solar PV Inverter Based on an LLC Resonant Converter With Optimal Frequency and Phase-Shift Control**
ALTIN N., ÖZDEMİR Ş., Khayamy M., Nasiri A.
IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS, vol.58, no.4, pp.5042-5054, 2022 (SCI-Expanded)
- IV. **Super twisting sliding mode control of three-phase grid-tied neutral point clamped inverters**
ÖZDEMİR Ş., ALTIN N., SEFA İ., Zhang Z., Komurcugil H.
ISA Transactions, vol.125, pp.547-559, 2022 (SCI-Expanded)
- V. **Design and Implementation of a LLC Resonant Solid-State Transformer**
Rashidi M., ALTIN N., Ozdemir Ş., Bani-Ahmed A., Sabbah M., Balali F., Nasiri A.
IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS, vol.56, no.4, pp.3855-3864, 2020 (SCI-Expanded)
- VI. **Design and Development of a High-Frequency Multiport Solid-State Transformer With Decoupled Control Scheme**
Rashidi M., ALTIN N., ÖZDEMİR Ş., Bani-Ahmed A., Nasiri A.
IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS, vol.55, no.6, pp.7515-7526, 2019 (SCI-Expanded)
- VII. **Sliding-Mode Control in Natural Frame With Reduced Number of Sensors for Three-Phase Grid-Tied LCL-Interfaced Inverters**
ALTIN N., ÖZDEMİR Ş., Komurcugil H., SEFA İ.
IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, vol.66, no.4, pp.2903-2913, 2019 (SCI-Expanded)
- VIII. **An Enhanced Lyapunov-Function Based Control Scheme for Three-Phase Grid-Tied VSI With LCL Filter**
SEFA İ., ÖZDEMİR Ş., Komurcugil H., ALTIN N.

IEEE TRANSACTIONS ON SUSTAINABLE ENERGY, vol.10, no.2, pp.504-513, 2019 (SCI-Expanded)

- IX. Neural Modeling of Fuzzy Controllers for Maximum Power Point Tracking in Photovoltaic Energy Systems**
Manuel Lopez-Guede J., Ramos-Hernanz J., ALTIN N., ÖZDEMİR Ş., KURT E., Azkune G.
JOURNAL OF ELECTRONIC MATERIALS, vol.47, no.8, pp.4519-4532, 2018 (SCI-Expanded)
- X. Comparative study on Lyapunov-function-based control schemes for single-phase grid-connected voltage-source inverter with LCL filter**
SEFA İ., ÖZDEMİR Ş., Komurcugil H., ALTIN N.
IET RENEWABLE POWER GENERATION, vol.11, no.11, pp.1473-1482, 2017 (SCI-Expanded)
- XI. Fuzzy logic based MPPT controller for high conversion ratio quadratic boost converter**
ÖZDEMİR Ş., ALTIN N., Sefa İ.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.42, no.28, pp.17748-17759, 2017 (SCI-Expanded)
- XII. Design and performance analysis of the three-level isolated DC-DC converter with the nanocrystalline core transformer**
ÖZDEMİR Ş., Balci S., ALTIN N., SEFA İ.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.42, no.28, pp.17801-17812, 2017 (SCI-Expanded)
- XIII. Maximum Power Point Tracking Algorithms for Partial Shaded PV Systems**
SEFA İ., ALTIN N., ÖZDEMİR Ş.
ENERGY HARVESTING AND ENERGY EFFICIENCY: TECHNOLOGY, METHODS, AND APPLICATIONS, vol.37, pp.261-292, 2017 (SCI-Expanded)
- XIV. Z-source T-type inverter for renewable energy systems with proportional resonant controller**
ÖZDEMİR Ş.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.41, no.29, pp.12591-12602, 2016 (SCI-Expanded)
- XV. Lyapunov-Function and Proportional-Resonant-Based Control Strategy for Single-Phase Grid-Connected VSI With LCL Filter**
Komurcugil H., ALTIN N., ÖZDEMİR Ş., SEFA İ.
IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, vol.63, no.5, pp.2838-2849, 2016 (SCI-Expanded)
- XVI. Sliding-Mode Control for Single-Phase Grid-Connected LCL-Filtered VSI With Double-Band Hysteresis Scheme**
Komurcugil H., ÖZDEMİR Ş., SEFA İ., ALTIN N., Kukrer O.
IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, vol.63, no.2, pp.864-873, 2016 (SCI-Expanded)
- XVII. An Extended Lyapunov-Function-Based Control Strategy for Single-Phase UPS Inverters**
Komurcugil H., ALTIN N., ÖZDEMİR Ş., SEFA İ.
IEEE TRANSACTIONS ON POWER ELECTRONICS, vol.30, no.7, pp.3976-3983, 2015 (SCI-Expanded)
- XVIII. Fuzzy PI controlled inverter for grid interactive renewable energy systems**
Sefa İ., Altin N., ÖZDEMİR Ş., KAPLAN O.
IET Renewable Power Generation, vol.9, no.7, pp.729-738, 2015 (SCI-Expanded)
- XIX. Single stage three level grid interactive MPPT inverter for PV systems**
ÖZDEMİR Ş., ALTIN N., SEFA İ.
ENERGY CONVERSION AND MANAGEMENT, vol.80, pp.561-572, 2014 (SCI-Expanded)
- XX. PV supplied single stage mppt inverter for induction motor actuated ventilation systems**
ÖZDEMİR Ş., Altin N., Sefa İ., Bal G.
Elektronika ir Elektrotehnika, vol.20, no.5, pp.116-122, 2014 (SCI-Expanded)
- XXI. Three-phase three-level grid interactive inverter with fuzzy logic based maximum power point tracking controller**
ALTIN N., ÖZDEMİR Ş.
ENERGY CONVERSION AND MANAGEMENT, vol.69, pp.17-26, 2013 (SCI-Expanded)

Articles Published in Other Journals

- I. **IEEE 14 Bara Sistemine Bağlanabilecek Maksimum Yük Seviyelerinin Belirlenmesi**
FESLİ U., ÖZDEMİR M. B., ÖZDEMİR Ş.
Gazi Üniversitesi Fen Bilimleri Dergisi Part C: Tasarım ve Teknoloji, vol.11, 2023 (Peer-Reviewed Journal)
- II. **Power System Reliability Assessment— A Review on Analysis and Evaluation Methods**
Garip S., Bilgen M., Özdemir Ş., Altın N., Sefa İ.
Journal of Energy Systems, vol.6, no.3, pp.401-419, 2022 (Scopus)
- III. **Development of a Medium Voltage, High Power, High Frequency Four-Port Solid State Transformer**
El Shafei A., Özdemir Ş., Altın N., Jean-Pierre G., Nasiri A.
CES Transactions on Electrical Machines and Systems, vol.6, no.1, pp.95-104, 2022 (Scopus)
- IV. **Review of Standards on Insulation Coordination for Medium Voltage Power Converters**
ÖZDEMİR Ş., ALTIN N., Nasiri A., Cuzner R.
IEEE Open Journal of Power Electronics, vol.2, pp.236-249, 2021 (ESCI)
- V. **32 Bit ARM İşlemci ile Hız Denetimi Yapılan Bir DA Motorun Android Arayüzü Olan Bir Cihaz Üzerinden Uzaktan Kontrolü ve İzlenmesi**
ALTIN N., SEFA İ., ÖZDEMİR Ş., zeki z.
Bilişim Teknolojileri Dergisi, vol.8, no.3, 2015 (Peer-Reviewed Journal)
- VI. **dSAPCE Based Fuzzy Logic Controlled Boost Converter**
SEFA İ., ALTIN N., ÖZDEMİR Ş.
Electronics and Computer Science, Scientific Bulletin, vol.2, no.8, pp.36-41, 2009 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **Maximum Power Point Tracking Algorithms for Partial Shaded PV Systems**
SEFA İ., ALTIN N., ÖZDEMİR Ş.
in: Energy Harvesting and Energy Efficiency, Erol Kurt, Editor, Springer International Publishing AG, pp.261-292, 2017
- II. **Alternatif Akım Devre Analizi**
BAL G., ÖZDEMİR Ş.
Semih Ofset, Ankara, 2013

Refereed Congress / Symposium Publications in Proceedings

- I. **Development of a High Frequency/Power Three-Port SST Suitable for Solar PV/Battery Interface**
ÖZDEMİR Ş., ALTIN N., El Shafei A., Nasiri A.
38th Annual IEEE Applied Power Electronics Conference and Exposition, APEC 2023, Florida, United States Of America, 19 - 23 March 2023, vol.2023-March, pp.2313-2320
- II. **Reliability Analysis of Centralized and Decentralized Controls of Microgrid**
Garip S., Bilgen M., Özdemir Ş., Altın N., Sefa İ.
11th International Conference on Renewable Energy Research and Applications, İstanbul, Turkey, 19 - 21 September 2022, pp.8-15
- III. **Parameter Selection of an LLC Resonant Converter for PV Application**
Özdemir Ş., Altın N., El Shafei A., Nasiri A.
11th International Conference on Renewable Energy Research and Applications, İstanbul, Turkey, 18 - 21 September 2022, pp.1-7
- IV. **Comparison of Real-Time Voltage Stability Assessment Methods**
Bilgen M., ÖZDEMİR Ş.
13th International Conference on Electrical and Electronics Engineering, 25 November 2021
- V. **Second-Order Sliding Mode Control of Three-Phase Three-Level Grid-Connected Neutral Point Clamped Inverters**

ALTIN N., ÖZDEMİR Ş., SEFA İ., KÖMÜRCÜĞİL H.

International Conference on Electronics, Computers and Artificial Intelligence (ECAI), Pitesti, Romania, 01 July 2021

- VI. **Design and Implementation of a Medium Voltage, High Power, High Frequency Four-Port Transformer**
El Shafei A., Özdemir Ş., Altın N., Jean Pierre G., Nasiri A.
2020 IEEE Applied Power Electronics Conference and Exposition (APEC), California, United States Of America, 15 - 19 March 2020, pp.2352-2357
- VII. **A High Power High Frequency Transformer Design for Solid State Transformer Applications**
El Shafei A., ÖZDEMİR Ş., ALTIN N., Jean Pierre G., Nasiri A.
8TH INTERNATIONAL CONFERENCE ON RENEWABLE ENERGY RESEARCH AND APPLICATIONS (ICRERA), Brasov, Romania, 3 - 06 November 2019, pp.1-6
- VIII. **A Complete Design of a High Frequency Medium Voltage Multi-Port Transformer**
El Shafei A., ÖZDEMİR Ş., ALTIN N., Jean Pierre G., Nasiri A.
8TH INTERNATIONAL CONFERENCE ON RENEWABLE ENERGY RESEARCH AND APPLICATIONS (ICRERA), Brasov, Romania, 3 - 06 November 2019, pp.7-12
- IX. **A Modified Lyapunov-Function Based Control Scheme for Three-Phase Three-Level Two-Leg Grid-Tied NPC Inverter**
ALTIN N., SEFA İ., Komurcugil H., ÖZDEMİR Ş.
7th International Istanbul Smart Grids and Cities Congress and Fair (ICSG), İstanbul, Turkey, 25 - 26 April 2019, pp.218-222
- X. **A Decoupled Control Scheme of Four-Port Solid State Transformer**
Ozdemir Ş., ALTIN N., El Shafei A., Rashidi M., Nasiri A.
11th Annual IEEE Energy Conversion Congress and Exposition (ECCE), Maryland, United States Of America, 29 September - 03 October 2019, pp.5009-5015
- XI. **A Novel Solar PV Inverter Topology Based on an LLC Resonant Converter**
Altın N., Ozdemir Ş., Nasiri A.
11th Annual IEEE Energy Conversion Congress and Exposition (ECCE), Maryland, United States Of America, 29 September - 03 October 2019, pp.6734-6740
- XII. **A Modified Lyapunov-Function Based Control Scheme for Two-Leg Three-Level T-Type Grid-Tied Inverter with LCL Filter**
ALTIN N., ÖZDEMİR Ş., SEFA İ., Komurcugil H.
4th International Conference on Power Electronics and their Applications (ICPEA), Elazığ, Turkey, 25 - 27 September 2019
- XIII. **Sliding-mode and proportional-resonant based control strategy for three-phase two-leg T-type grid-connected inverters with LCL filter**
ALTIN N., ÖZDEMİR Ş., Komurcugil H., Sefaand İ., Biricik S.
44th Annual Conference of the IEEE Industrial Electronics Society, IECON 2018, Washington, United States Of America, 20 - 23 October 2018, pp.4492-4497
- XIV. **Mesh Quality Effects of the FEA Simulation Applied on a Transformer**
BALCI S., SEFA İ., ALTIN N., ÖZDEMİR Ş.
7th International Conference on Advanced Technologies (ICAT'xx18), Antalya, Turkey, 28 April - 01 May 2018
- XV. **Bidirectional Three-Phase Two-Leg Inverter with PR Current Controller**
ÖZDEMİR Ş., SEFA İ., BALCI S., ALTIN N.
7th International Conference on Advanced Technologies (ICAT'xx18), Antalya, Turkey, 28 April - 01 May 2018
- XVI. **An Analysis on Cooling Requirements of the High Power Medium Frequency Inductors**
Balci S., SEFA İ., ALTIN N., ÖZDEMİR Ş.
12th IEEE International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG), Doha, Qatar, 10 - 12 April 2018
- XVII. **Sliding Mode Control of Three-Phase Three-Level Two-Leg NPC Inverter with LCL Filter for Distributed Generation Systems**

- ÖZDEMİR Ş., ALTIN N., Komurcugil H., SEFA İ.
44th Annual Conference of the IEEE Industrial-Electronics-Society (IECON), Washington, Kiribati, 20 - 23 October 2018, pp.3895-3900
- XVIII. Three-Phase Three-Level T-type Grid-Connected Inverter with Reduced Number of Switches**
ALTIN N., SEFA İ., Komurcugil H., ÖZDEMİR Ş.
6th International Istanbul Smart Grids and Cities Congress and Fair (ICSG), İstanbul, Turkey, 25 - 26 April 2018, pp.58-62
- XIX. Two-Stage Grid-Connected Inverter for PV Systems**
ALTIN N., ÖZDEMİR Ş., Komurcugil H., SEFA İ., Biricik S.
12th IEEE International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG), Doha, Qatar, 10 - 12 April 2018
- XX. Loss Behaviour of the Dry-type Power Transformer According to the Load Type**
BALCI S., BATTAL F., SEFA İ., Bayram M. B., ÖZDEMİR Ş., ALTIN N.
European Conference on Renewable Energy Systems, Saraybosna, Bosnia And Herzegovina, 27 - 30 August 2017, pp.49
- XXI. Series-Parallel Resonant Converter With Current Limiting Ability For Renewable Energy Source**
ALTIN N., ÖZDEMİR Ş., BALCI S., SEFA İ.
European Conference on Renewable Energy Systems, Saraybosna, Bosnia And Herzegovina, 27 - 30 August 2017, pp.483-488
- XXII. An Investigation On Coupled Inductors of Quadratic Boost Converters**
BALCI S., SEFA İ., ÖZDEMİR Ş., ALTIN N.
European Conference on Renewable Energy Systems, Saraybosna, Bosnia And Herzegovina, 27 - 30 August 2017, pp.507-513
- XXIII. Preliminary Modeling of FLC Dealing with MPPT Problem**
Lopez Guede J. M., Ramos Hernanz J., ALTIN N., ÖZDEMİR Ş., KURT E., Azkune G.
European Conference on Renewable Energy Systems, Saraybosna, Bosnia And Herzegovina, 27 - 30 August 2017, pp.239-244
- XXIV. Three-Phase Three-Level Inverter with Reduced Number of Switches for Stand-Alone PV Systems**
SEFA İ., Komurcugil H., DEMİRBAŞ Ş., ALTIN N., ÖZDEMİR Ş.
6th IEEE International Conference on Renewable Energy Research and Applications (ICRERA), California, United States Of America, 5 - 08 November 2017, pp.1115-1120
- XXV. Design and Loss Analysis of LCL Filter Inductors for Two-Level and Three-Level Inverters**
SEFA İ., ALTIN N., ÖZDEMİR Ş., Balci S., Bayram M. B., Kelebek H.
International Conference on Applied Electronics (AE), Pilsen, Czech Republic, 5 - 06 September 2017, pp.211-215
- XXVI. MPPT Capable Quadratic Boost Converter for PV Systems**
ÖZDEMİR Ş., ALTIN N., SEFA İ.
ECRES – 4. European Conference on Renewable Energy Systems, İstanbul, Turkey, 28 - 31 August 2016, pp.826-831
- XXVII. Three Level Isolated DC DC Converter For High Power Applications**
ÖZDEMİR Ş., Balci S., ALTIN N., SEFA İ.
ECRES – 4. European Conference on Renewable Energy Systems, İstanbul, Turkey, 28 - 31 August 2016, pp.872-877
- XXVIII. Sliding-Mode and Proportional-Resonant Based Control Strategy for Three-Phase Grid-Connected LCL-Filtered VSI**
Komurcugil H., ALTIN N., ÖZDEMİR Ş., SEFA İ.
42nd Annual Conference of the IEEE-Industrial-Electronics-Society (IECON), Florence, Italy, 24 - 27 October 2016, pp.2396-2401
- XXIX. A Modified Lyapunov-Function Based Control Strategy for Three-Phase Grid-Connected VSI with LCL Filter**
Komurcugil H., ÖZDEMİR Ş., ALTIN N., SEFA İ.
42nd Annual Conference of the IEEE-Industrial-Electronics-Society (IECON), Florence, Italy, 24 - 27 October 2016,

pp.2218-2223

- XXX. **Z Source T Type Inverter for Renewable Energy Systems**
ÖZDEMİR Ş.
ECRES-3. European Conference on Renewable Energy Systems, Antalya, Turkey, 7 - 10 October 2015, pp.1-6
- XXXI. **Three-Phase Multilevel Grid Interactive Inverter for PV Systems with Reactive Power Support Capability**
ÖZDEMİR Ş., Bayhan S., SEFA İ., ALTIN N.
First Workshop on Smart Grid and Renewable Energy (SGRE), Doha, Qatar, 22 - 23 March 2015
- XXXII. **Three-Phase Three-Level Inverter Based Shunt Active Power Filter**
ALTIN N., KAPLAN O., ÖZDEMİR Ş.
16th International Power Electronics and Motion Control Conference and Exposition (PEMC), Antalya, Turkey, 21 - 24 September 2014, pp.799-804
- XXXIII. **Z Source Inverter for Renewable Energy Systems**
SEFA İ., ALTIN N., ÖZDEMİR Ş.
II. The European Workshop & Conference on Renewable Energy Systems, EWRES & ECRES, Antalya, Turkey, 20 - 30 November 2013, pp.1-6
- XXXIV. **FEM based parametric analysis of AC line reactors**
BALCI S., ALTIN N., ÖZDEMİR Ş., SEFA İ.
4th International Conference on Power Engineering, Energy and Electrical Drives, Istanbul, Turkey, 13 - 17 May 2013, pp.1328-1333
- XXXV. **FEM based parametric analysis of AC line reactors Power Engineering**
balcı s., ALTIN N., ÖZDEMİR Ş., SEFA İ.
IEEE 4. International Conference on Energy and Electrical Drives (POWERENG'2013), İstanbul, Turkey, 13 - 17 May 2013, pp.1328-1333
- XXXVI. **A Comparison of Single and Three Phase DC/DC Converter Structures for Battery Charging**
ALTIN N., Balci S., ÖZDEMİR Ş., SEFA İ.
International Conference on Renewable Energy Research and Applications (ICRERA), Madrid, Spain, 20 - 23 October 2013, pp.1228-1233
- XXXVII. **A Comprehensive Analysis of Inductors for Interleaved Buck Converter**
SEFA İ., balcı s., ALTIN N., ÖZDEMİR Ş.
IEEE 15th International Power Electronics and Motion Control Conference and Exposition, Novi-Sad, Serbia, 4 - 06 November 2012, pp.1-6
- XXXVIII. **Three Phase Three Level Grid Interactive Inverter with Fuzzy Logic Based MPPT Controller**
ALTIN N., ÖZDEMİR Ş.
The European Workshop & Conference on Renewable Energy Systems, EWRES & ECRES, Antalya, Turkey, 1 - 03 October 2012, pp.1-8
- XXXIX. **Single Stage Three Level MPPT Inverter for Solar Supplied Systems**
ÖZDEMİR Ş., ALTIN N., SEFA İ.
IEEE 21th International Symposium on Power Electronics, Electrical Drives, Automation and Motion, Sorrento, Italy, 20 - 22 June 2012, pp.103-108
- XL. **Dynamic Reactive Power Compensation System for Wind Turbines**
SEFA İ., özsan a., ALTIN N., GÖRGÜNOĞLU S., ÖZDEMİR Ş.
7. International Conference and Exhibition on Ecological Vehicles and Renewable Energies, EVER'12, manako, FRANSA GÜNEY BÖLGESİ, 22 - 24 May 2012, pp.1-6
- XLI. **Comprehensive Analysis of Inductors for an Interleaved Buck Converter**
Sefa I, Balci S., ALTIN N., ÖZDEMİR Ş.
15th International Power Electronics and Motion Control Conference and Exposition (EPE-PEMC ECCE Europe), Novi-Sad, Serbia, 4 - 06 September 2012
- XLII. **A Three-Level MPPT Capability Rectifier For High Power Direct Drive WECS**
ALTIN N., ÖZDEMİR Ş.
1st International Conference on Renewable Energy Research and Applications (ICRERA), Nagasaki, Japan, 11 - 14

November 2012

- XLIII. Core losses of pwm excited inverter transformers with finite element method**
SEFA İ., balcı s., ALTIN N., ÖZDEMİR Ş.
7th International Conference on Technical and Physical Problems of Power Engineering TPE-2011, Lefkoşa, Cyprus (Kkct), 7 - 09 July 2011, pp.1-6
- XLIV. An Implementation of Grid Interactive Inverter with Reactive Power Support Capability for Renewable Energy Sources**
SEFA İ., ALTIN N., ÖZDEMİR Ş.
III. IEEE International Conference on Power Engineering Energy and Electrical Drives, Malaga, Spain, 11 - 13 May 2011, pp.1-6
- XLV. A Three Level Inverter for Grid Connected Renewable Energy Systems**
SEFA İ., ALTIN N., ÖZDEMİR Ş.
5. International Conference and Exhibition on Ecological Vehicles and Renewable Energies, monako grimaldi, FRANSA GÜNEY BÖLGESİ, 25 - 27 March 2010, pp.10-334
- XLVI. Multifunctional Interleaved Boost Converter for PV Systems**
SEFA İ., ÖZDEMİR Ş.
IEEE International Symposium on Industrial Electronics (ISIE), Bari, Italy, 4 - 07 July 2010, pp.951-956
- XLVII. Three Phase Grid Interactive Inverter for Renewable Energy Sources**
SEFA İ., ALTIN N., ÖZDEMİR Ş.
5th International Advanced Technologies Symposium (IATS'09), Karabük, Turkey, 13 - 15 May 2009, pp.226-230
- XLVIII. Experimental Study of Interleaved MPPT Converter for PV Systems**
SEFA İ., ÖZDEMİR Ş.
35th Annual Conference of the IEEE-Industrial-Electronics-Society, Porto, Portugal, 3 - 05 November 2009, pp.422-423
- XLIX. 18 PULSE CONTROLLED RECTIFIER: A CASE STUDY ON UPS**
SEFA İ., ALTIN N., Colak I., ÖZDEMİR Ş.
13th European Conference on Power Electronics and Applications (EPE 2009), Barcelona, Spain, 8 - 10 September 2009, pp.2935-2936
- L. dSPACE based control of voltage source utility interactive inverter**
Sefa İ., Altin N., ÖZDEMİR Ş., DEMİRTAŞ M.
SPEEDAM 2008 - International Symposium on Power Electronics, Electrical Drives, Automation and Motion, Ischia, Italy, 11 - 13 June 2008, pp.662-666
- LI. dSPACE Based Fuzzy Logic Controlled Boost Converter**
SEFA İ., ALTIN N., ÖZDEMİR Ş.
International Conference on Technical and Physical Problems of Power Engineering, Pitesti, Romania, 4 - 06 September 2008, pp.36-41

Supported Projects

ALTIN N., SEFA İ., HİSAR Ç., ÖZDEMİR Ş., Project Supported by Higher Education Institutions, Doğrudan OG Bağlantıya Uygun Şebeke Etkileşimli Evirici Tasarımı, 2022 - 2023

Duran F., Derici S., Özarslan Yatak M., Özdemir Ş., Fesli U., Industrial Thesis Project, Buzlanma Önleyici Otomatik Püskürtme Sistemi, 2014 - 2016

ÖZDEMİR Ş., Project Supported by Higher Education Institutions, Yenilenebilir Enerji Kaynakları İçin Çok Seviyeli Şebeke Etkileşimli Evirici, 2011 - 2012

ÖZDEMİR Ş., SEFA İ., Project Supported by Higher Education Institutions, Sonlu Elemanlar Yöntemi (SEY) Yazılımları Kullanılarak Evirici Çıkış Transformatörlerinin Modellenmesi ve Analizi, 2010 - 2011

Activities in Scientific Journals

IEEE Transactions On Industry Applications, Assistant Editor/Section Editor, 2018 - Continues

Metrics

Publication: 81

Citation (WoS): 1026

Citation (Scopus): 1296

H-Index (WoS): 15

H-Index (Scopus): 18

Scholarships

A RESEARCH ON GRID INTERACTIVE INVERTERS FOR RENEWABLE ENERGY SOURCES AT UNIVERSITY OF WISCONSIN-MILWAUKEE, TUBITAK, 2017 - 2019

Non Academic Experience

Özel Elektronik San. ve Tic. Ltd. Şti.

Elin Mühendislik San. ve Tic. Ltd. Şti.