

Prof. NECMİ ALTIN

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Education Information

Doctorate, Gazi University, Fen Bilimleri Enstitüsü, Elektrik Eğitimi (Dr), Turkey 2003 - 2009

Postgraduate, Gazi University, Fen Bilimleri Enstitüsü, Elektrik Eğitimi (YI) (Tezli), Turkey 2000 - 2003

Undergraduate, Gazi University, Teknik Eğitim Fakültesi, Elektrik Eğitimi Bölümü, Turkey 1996 - 2000

Dissertations

Doctorate, Bulanık sinirsel denetimli şebeke etkileşimli evirici tasarımı ve gerçekleştirilmesi, Gazi University, Fen Bilimleri Enstitüsü, Elektrik Eğitimi (Dr), 2009

Postgraduate, 18 darbeli doğrultucu tasarımı, Gazi University, Fen Bilimleri Enstitüsü, Elektrik Eğitimi (YI) (Tezli), 2003

Research Areas

Power Electronics, Electric Motor Drivers, Power Apparatus (transformers,reactors,switchgear,etc.), Power Converters

Academic Titles / Tasks

Professor, Gazi University, Teknoloji Fakültesi, Elektrik - Elektronik Mühendisliği, 2020 - Continues

Associate Professor, Gazi University, Teknoloji Fakültesi, Elektrik - Elektronik Mühendisliği, 2014 - 2020

Assistant Professor, Gazi University, Teknoloji Fakültesi, Elektrik - Elektronik Mühendisliği, 2012 - 2014

Assistant Professor, Gazi University, Teknik Eğitim Fakültesi, Elektrik Eğitimi, 2010 - 2012

Academic and Administrative Experience

Gazi University, Teknoloji Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2015 - Continues

Gazi University, Bilişim Enstitüsü, 2012 - 2014

Advising Theses

ALTIN N., Design Of A Two Axis Line Of Sight Stabilization System For Vessels, Postgraduate, M.Sarp(Student), 2017

ALTIN N., Design Of Inductive Magnetic Coupled Power Transmission System For Electric Vehicle, Postgraduate, Ş.KUZEY(Student), 2017

ALTIN N., Deniz araçları için iki eksenli bir görüş hattı stabilizasyon sistemi tasarımı, Postgraduate, M.SARP(Student), 2017

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **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 (Journal Indexed in SCI)
- II. **Analysis and Design of the LLC Resonant Converter With Variable Inductor Control Based on Time-Domain Analysis**
Wei Y., Luo Q., Du X., ALTIN N., Alonso J. M., Mantooth H. A.
IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, vol.67, no.7, pp.5432-5443, 2020 (Journal Indexed in SCI)
- III. **A Dual Half-Bridge LLC Resonant Converter With Magnetic Control for Battery Charger Application**
Wei Y., Luo Q., Du X., ALTIN N., Nasiri A., Marcos Alonso J.
IEEE TRANSACTIONS ON POWER ELECTRONICS, vol.35, no.2, pp.2196-2207, 2020 (Journal Indexed in SCI)
- IV. **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 (Journal Indexed in SCI)
- V. **Comparison among different analysis methodologies for LLC resonant converter**
Wei Y., Luo Q., Chen S., Sun P., ALTIN N.
IET POWER ELECTRONICS, vol.12, no.9, pp.2236-2244, 2019 (Journal Indexed in SCI)
- VI. **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 (Journal Indexed in SCI)
- 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 (Journal Indexed in SCI)
- VIII. **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 (Journal Indexed in SCI)
- IX. **The Type-2 Fuzzy Logic Controller-Based Maximum Power Point Tracking Algorithm and the Quadratic Boost Converter for Pv System**
ALTIN N.
JOURNAL OF ELECTRONIC MATERIALS, vol.47, no.8, pp.4475-4485, 2018 (Journal Indexed in SCI)
- X. **A Combined Energy Management Algorithm for Wind Turbine/Battery Hybrid System**
ALTIN N., EYİMAYA S. E.
JOURNAL OF ELECTRONIC MATERIALS, vol.47, no.8, pp.4430-4436, 2018 (Journal Indexed in SCI)
- XI. **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 (Journal Indexed in SCI)
- XII. **Preface to the special issue on "The 4th European Conference on Renewable Energy Systems (ECRES 2016), 28-31 August 2016, Istanbul, Turkey"**
KURT E., Bizon N., ALTIN N., AKIN B.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.42, no.28, pp.17559-17560, 2017 (Journal Indexed in SCI)
- XIII. **Design and analysis of a wireless power transfer system with alignment errors for electrical vehicle applications**
KUZEY Ş., Balci S., ALTIN N.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.42, no.28, pp.17928-17939, 2017 (Journal Indexed in SCI)
- XIV. **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 (Journal Indexed in SCI)
- XV. **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 (Journal Indexed in SCI)
- XVI. **Design and analysis of a 35 kVA medium frequency power transformer with the nanocrystalline core material**
Balci S., SEFA İ., ALTIN N.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.42, no.28, pp.17895-17909, 2017 (Journal Indexed in SCI)
- XVII. **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 (Journal Indexed in SCI)
- XVIII. **Exploration of optimal design and performance of a hybrid wind-solar energy system**
Bouzelata Y., ALTIN N., Chenni R., KURT E.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.41, no.29, pp.12497-12511, 2016 (Journal Indexed in SCI)
- XIX. **An Investigation of Ferrite and Nanocrystalline Core Materials for Medium-Frequency Power Transformers**
Balci S., SEFA İ., ALTIN N.
JOURNAL OF ELECTRONIC MATERIALS, vol.45, no.8, pp.3811-3821, 2016 (Journal Indexed in SCI)
- XX. **Thermal Behavior of a Medium-Frequency Ferrite-Core Power Transformer**
Balci S., SEFA İ., ALTIN N.
JOURNAL OF ELECTRONIC MATERIALS, vol.45, no.8, pp.3978-3988, 2016 (Journal Indexed in SCI)
- XXI. **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 (Journal Indexed in SCI)
- XXII. **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 (Journal Indexed in SCI)
- XXIII. **Design and simulation of a unified power quality conditioner fed by solar energy**
Bouzelata Y., KURT E., Chenni R., ALTIN N.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.40, no.44, pp.15267-15277, 2015 (Journal Indexed in SCI)
- XXIV. **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 (Journal Indexed in SCI)
- XXV. **Design and simulation of a solar supplied multifunctional active power filter and a comparative study on the current-detection algorithms**
Bouzelata Y., KURT E., ALTIN N., Chenni R.
RENEWABLE & SUSTAINABLE ENERGY REVIEWS, vol.43, pp.1114-1126, 2015 (Journal Indexed in SCI)
- XXVI. **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 (Journal Indexed in SCI Expanded)
- XXVII. **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 (Journal Indexed in SCI)
- XXVIII. **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 (Journal Indexed in SCI Expanded)

- XXIX. **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 (Journal Indexed in SCI)
- XXX. **Interval Type-2 Fuzzy Logic Controller Based Maximum Power Point Tracking in Photovoltaic Systems**
Altin N.
ADVANCES IN ELECTRICAL AND COMPUTER ENGINEERING, vol.13, no.3, pp.65-70, 2013 (Journal Indexed in SCI)
- XXXI. **dSPACE based adaptive neuro-fuzzy controller of grid interactive inverter**
ALTIN N., SEFA İ.
ENERGY CONVERSION AND MANAGEMENT, vol.56, pp.130-139, 2012 (Journal Indexed in SCI)
- XXXII. **30 PULSE RECTIFIER DESIGN FOR GRID INTERFACES OF THE VARIABLE SPEED DRIVES**
SEFA İ., ALTIN N.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.24, no.4, pp.675-685, 2009 (Journal Indexed in SCI)
- XXXIII. **A novel approach to determine the interphase transformer inductance of 18 pulse rectifiers**
SEFA İ., ALTIN N.
ENERGY CONVERSION AND MANAGEMENT, vol.50, no.10, pp.2495-2503, 2009 (Journal Indexed in SCI)
- XXXIV. **GRID INTERACTIVE PHOTOVOLTAIC INVERTERS- A REVIEW**
SEFA İ., ALTIN N.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.24, no.3, pp.409-424, 2009 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **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 (Refereed Journals of Other Institutions)
- II. **A Multiport Bidirectional LLC Resonant Converter for Grid-Tied Photovoltaic-Battery Hybrid System**
Jean-Pierre G., El Shafei A., ALTIN N., Nasiri A.
INTERNATIONAL JOURNAL OF RENEWABLE ENERGY RESEARCH, vol.10, no.2, pp.862-870, 2020 (Journal Indexed in ESCI)
- III. **A Hybrid Overload Current Limiting and Short Circuit Protection Scheme for Voltage Mode Inverters**
Koseoglu C., ALTIN N., Zengin F., Kelebek H., SEFA İ.
INTERNATIONAL JOURNAL OF RENEWABLE ENERGY RESEARCH, vol.10, no.1, pp.407-415, 2020 (Journal Indexed in ESCI)
- IV. **Review on Vehicle-to-Grid Systems: The Most Recent Trends and Smart Grid Interaction Technologies**
Sarp M., ALTIN N.
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.33, no.2, pp.394-411, 2020 (Journal Indexed in ESCI)
- V. **Sonlu Elemanlar Metodu ile AA Hat Reaktörlerinin Tasarımı**
SEFA İ., selami b., ALTIN N.
Gazi Üniversitesi Politeknik Dergisi, vol.18, no.4, pp.257-267, 2015 (Other Refereed National Journals)
- VI. **Design of the AC Line Reactors With Finite Element Method**
SEFA İ., Balci S., ALTIN N.
JOURNAL OF POLYTECHNIC-POLITEKNİK DERGISI, vol.18, no.4, pp.257-267, 2015 (Journal Indexed in ESCI)
- VII. **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 (Refereed Journals of Other Institutions)

VIII. 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 (Refereed Journals of Other Institutions)

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

Refereed Congress / Symposium Publications in Proceedings

I. 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

II. Control and Loss Analysis of a Solid State Transformer Based DC Extreme Fast Charger

Jean-Pierre G., Beheshtaein S., ALTIN N., Nasiri A.

IEEE Transportation Electrification Conference and Expo (ITEC), ELECTR NETWORK, 21 - 25 June 2021, pp.9-14

III. Design and Implementation of a Medium Voltage, High Power, High Frequency Four-Port Transformer

El Shafei A., Özdemir Ş., Altin 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

IV. 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

V. A Hybrid Overload Current Limiting and Short Circuit Protection Scheme: A Case Study on UPS Inverter

Köseoğlu C., ALTIN N., Zengin F., Kelebek H., SEFA İ.

ICRERA 2019 8TH INTERNATIONAL CONFERENCE ON RENEWABLE ENERGY RESEARCH AND APPLICATIONS, Brasov, Romania, 3 - 06 November 2019, pp.1-6

VI. A Multiport Bidirectional LLC Resonant Converter for Grid-Tied Photovoltaic-Battery Hybrid System

Jean Pierre G., El Shafei A., ALTIN N., Nasiri A.

ICRERA 2019 8TH INTERNATIONAL CONFERENCE ON RENEWABLE ENERGY RESEARCH AND APPLICATIONS, Brasov, Romania, 3 - 06 November 2019, pp.1-6

VII. 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

VIII. Mitigating Communication Delay Impact on Microgrid Stability Using a Compensator Based on Smith Predictor

Akbari Haghighat H., ALTIN N., Nasiri A.

2019 IEEE Energy Conversion Congress and Exposition (ECCE), Baltimore, MD, USA, 29 September - 03 October 2019

- IX. A Three-Port LLC Resonant Converter for Photovoltaic-Battery Hybrid System**
JeanPierre G., ALTIN N., Nasiri A.
2019 IEEE Transportation Electrification Conference and Expo (ITEC), Detroit, MI, USA, 19 - 21 June 2019
- X. Grey Wolf Optimization Based MPPT Algorithm for Solar PV System with SEPIC Converter**
Atici K., SEFA İ., ALTIN N.
4th International Conference on Power Electronics and their Applications (ICPEA), Elazığ, Turkey, 25 - 27 September 2019
- 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 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
- XIII. 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
- XIV. 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
- XV. 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
- XVI. Control of wind-photovoltaic-battery hybrid system energy management and power fluctuation mitigation system.**
EYİMAYA S. E. , BAL G., ALTIN N.
7th International Conference on Advanced Technologies, 28 April - 01 May 2018
- XVII. 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
- XVIII. 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
- XIX. Development of a Power and Voltage Control Scheme for Multi-Port Solid State Transformers**
Khayamy M., Nasiri A., Altin N.
7th International Conference on Renewable Energy Research and Applications (ICRERA), Paris, France, 14 - 17 October 2018, pp.926-932
- XX. 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
- XXI. 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

- XXII. **A High Efficiency, Decoupled On-board Battery Charger with Magnetic Control**
Wei Y., Altin N., Luo Q., Nasiri A.
7th International Conference on Renewable Energy Research and Applications (ICRERA), Paris, France, 14 - 17 October 2018, pp.920-925
- XXIII. **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
- XXIV. **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
- XXV. **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
- XXVI. **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
- XXVII. **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
- XXVIII. **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
- XXIX. **A QUADRATIC BOOST CONVERTER WITH TYPE-2 FUZZY LOGIC CONTROLLER BASED MAXIMUM POWER POINT TRACKING ALGORITHM FOR PV SYSTEMS**
ALTIN N.
Fifth European Conference on Renewable EnergySystems (ECRES 2017), Saraybosna, Bosnia And Herzegovina, 27 - 30 August 2017
- XXX. **CONTROL OF THE BATTERY ENERGY STORAGE SYSTEM TO MITIGATE THE WINDPOWER FLUCTUATIONS**
ALTIN N., EYİMAYA S. E.
Fifth European Conference on Renewable EnergySystems (ECRES 2017), Saraybosna, Bosnia And Herzegovina, 27 - 30 August 2017
- XXXI. **ANALYSIS OF THE COMBINED RESPONSE OF FLC AND BOOST CONVERTER FOR MPPT IN PV SYSTEMS**
Hernanz J. R. , Guede J. M. L. , ALTIN N., Zulueta E., Fernndez U.
Fifth European Conference on Renewable EnergySystems (ECRES 2017), Saraybosna, Bosnia And Herzegovina, 27 August 2107 - 30 August 2017
- XXXII. **A fuzzy logic control study for the mitigation of power fluctuations in the wind turbines.**
EYİMAYA S. E. , BAL G., ALTIN N.
VI. European Conference on Renewable Energy Systems, 25 - 27 June 2017
- XXXIII. **Inductance and Loss Behaviors of Medium Frequency High Power Gapped Core Inductors**
BALCI S., Bayram M. B. , ALTIN N., SEFA İ.
5th International Conference on Advanced TechnologySciences (ICAT), İstanbul, Turkey, 9 - 12 May 2017
- XXXIV. **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

XXXV. 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

XXXVI. Erasmus Innovative European Studies

Lopez-Guede J. M. , KURT E., ALTIN N., Grana M., Ionescu V.

Int Joint Conf on Int Conference on Soft Comp Models in Ind and Environm Applicat / Int Conf on Computat Intelligence in Secur Informat Syst / Int Conf on European Transnat Educ, San Sebastian, Spain, 19 - 21 October 2016, vol.527, pp.758-765

XXXVII. 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

XXXVIII. 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

XXXIX. DESIGN OF THE MEDIUM FREQUENCY POWER TRANSFORMERWITH SOFT MAGNETIC MATERIAL

Balci S., SEFA İ., ALTIN N.

ECRES – 4. European Conference on Renewable Energy Systems, İstanbul, Turkey, 28 - 31 August 2016, pp.832-840

XL. An Introduction to Vehicle to Grid Systems

Sarp M., ALTIN N.

4th European Conference on Renewable Energy Systems, ECRES 2016, İstanbul, Turkey, 28 - 31 August 2016, pp.1-7

XLI. Electromagnetic Analysis of a Single Phase Grid Interactive Inverter

KURT E., Sarikahya M. N. , Sarikahya M., ALTIN N.

4th European Conference on Renewable Energy Systems, ECRES 2016, İstanbul, Turkey, 28 - 31 August 2016, pp.1-7

XLII. High Frequency Inductively Coupled Power Transfer System with Large Air Gap for Electrical Vehicles

KUZEY Ş., balcı s., ALTIN N.

4th European Conference on Renewable Energy Systems, ECRES 2016, İstanbul, Turkey, 28 - 31 August 2016, pp.1-7

XLIII. EXPLORATION OF POWER QUALITY WITH A UPQC FED BY PV SYSTEM WITH HYBRID SUPERCAPACITORS BATTERIES ENERGY STORAGE SYSTEM

Bouzelata Y., KURT E., Chenni R., ALTIN N.

ECRES 2016 - European Conference on Renewable Energy Systems, 28 - 24 August 2016

XLIV. Performance Analysis of Interleaved Quadratic Boost Converter with Coupled Inductor for Fuel Cell Applications

Balci S., ALTIN N., Komurcugil H., SEFA İ.

42nd Annual Conference of the IEEE-Industrial-Electronics-Society (IECON), Florence, Italy, 24 - 27 October 2016, pp.3541-3546

XLV. 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

XLVI. Maximum Power Point Tracking Quadratic Boost Converter for Photovoltaic Systems

ALTIN N., Ozturk E.

8th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), Ploiesti, Romania, 30 June - 02 July 2016

- XLVII. **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 Conference of the IEEE-Industrial-Electronics-Society (IECON), Florence, Italy, 24 - 27 October 2016, pp.2396-2401
- XLVIII. **Energy Storage Systems and Power System Stability**
ALTIN N.
3rd International Smart Grid Workshop and Certificate Program (ISGWCP), İstanbul, Turkey, 21 - 25 March 2016, pp.48-54
- XLIX. **An Investigation of Ferrite And Nanocrystalline Core Materials for Medium Frequency Transformers**
balcı s., SEFA İ., ALTIN N.
3. European Conference on Renewable Energy Systems (ECRES), Antalya, Turkey, 7 - 10 October 2015
- L. **Investigation of The Thermal Behaviour of The Ferrite Core for Medium Frequency Applications**
balcı s., SEFA İ., ALTIN N.
3. European Conference on Renewable Energy Systems (ECRES), Antalya, Turkey, 7 - 10 October 2015
- LI. **Investigation of the thermal behaviour of the ferrite core for medium frequency transformer applications**
selami b., SEFA İ., ALTIN N.
ECRES 2015, 3th European Conference on Renewable Energy Systems, Antalya, Turkey, 7 - 10 October 2015, pp.1-10
- LII. **OPTIMAL DESIGN AND PERFORMANCE EVALUATION OF HYBRID WIND SOLAR ENERGY SYSTEM FOR POWER GENERATION AND HARMONIC COMPENSATION**
Yahia B., ALTIN N., Rachid C., KURT E.
ECRES 2015, 3th European Conference on Renewable Energy Systems, Antalya, Turkey, 7 - 10 October 2015, pp.1-11
- LIII. **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
- LIV. **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
- LV. **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
- LVI. **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
- LVII. **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
- LVIII. **Power Quality Analyzer for Three Phase Systems**
SEFA İ., ALTIN N., Asa E., Colak K.
International Conference on Renewable Energy Research and Applications (ICRERA), Madrid, Spain, 20 - 23

October 2013, pp.1222-1227

- LIX. **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
- LX. **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
- LXI. **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
- LXII. **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
- LXIII. **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
- LXIV. **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
- LXV. **Single Phase Grid Interactive PV System With MPPT Capability Based on Type-2 Fuzzy Logic Systems**
Altin N.
1st International Conference on Renewable Energy Research and Applications (ICRERA), Nagasaki, Japan, 11 - 14
November 2012
- LXVI. **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
- LXVII. **Simulation of Neuro Fuzzy Controlled Grid Interactive Inverter**
ALTIN N., SEFA İ.
XXIII International Symposium on Information, Communication and Automation Technologies, saraybosna, Bosnia
And Herzegovina, 27 - 29 October 2011, pp.1-7
- LXVIII. **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
(Kktc), 7 - 09 July 2011, pp.1-6
- LXIX. **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
- LXX. **A Microcontroller Based Power Units for Dynamic Reactive Power Compensation Systems**
SEFA İ., abduallah ö., ALTIN N., GÖRGÜNOĞLU S., açığıöz a. m.
7th International Conference on "Technical and Physical Problems of Power Engineering, Cyprus (Kktc), 7 - 09 July
2011
- LXXI. **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, Monaco Grimaldi, FRANSA GÜNEY BÖLGESİ, 25 - 27 March 2010, pp.10-334

LXXII. 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

LXXIII. 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

LXXIV. MATLAB Tabanlı Bir Enerji Kalitesi Simülâtörü

SEFA İ., ALTIN N., erdem a.

Elektrik-Elektronik ve Bilgisayar Mühendisliği Sempozyumu, Bursa, Turkey, 26 - 30 November 2008

LXXV. 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

LXXVI. 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

LXXVII. Simulation of Fuzzy Logic Controlled Grid Interactive Inverter

SEFA İ., ALTIN N.

4th International Conference on Technical and Physical Problems of Power Engineering, Pitesti, Romania, 4 - 06 September 2008, pp.30-35

LXXVIII. Simulation of Current Controlled Grid Interactive Inverter

SEFA İ., ALTIN N.

TPE-2006 3rd Conference on Technical and Physical Problems in Power Engineering, Ankara, Turkey, 29 - 31 May 2006

Supported Projects

ALTIN N., Project Supported by Higher Education Institutions, Bilgisayar Denetimli 2 Eksenli Güneş Takip sistemi, 2011 - 2013

ALTIN N., Project Supported by Higher Education Institutions, 30 Darbeli Doğrultucu Tasarımı, 2010 - 2012

Citations

Total Citations (WOS):1285

h-index (WOS):20

Scholarships

A RESEARCH ON BATTERY ENERGY STORAGE SYSTEMS AND THEIR GRID INTERFACES AT UNIVERSITY OF WISCONSIN-MILWAUKEE, TÜBİTAK, 2017 - 2019