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Personal Information

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International Researcher IDs

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Education Information

Doctorate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Turkey 1988 - 1994

Postgraduate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Turkey 1986 - 1988

Undergraduate, Yildiz Technical University, Faculty Of Electrical & Electronics, Electrical Engineering Department, Turkey 1981 - 1986

Dissertations

Doctorate, Üç ve çok fazlı enerji sistemlerinde simetrik bileşenler yöntemi ve faz koordinatları yöntemi ile arıza analizi, Yildiz Technical University, Faculty Of Electrical & Electronics, Electrical Engineering Department, 1994

Research Areas

Electrical and Electronics Engineering, Energy, Power System Analysis, Electric Power Transmission, Distribution and Protection, Engineering and Technology

Academic Titles / Tasks

Associate Professor, Yildiz Technical University, Faculty Of Electrical & Electronics, Electrical Engineering Department, 2022 - Continues

Assistant Professor, Yildiz Technical University, Faculty Of Electrical & Electronics, Electrical Engineering Department, 2018 - 2022

Assistant Professor, Yildiz Technical University, Faculty Of Electrical & Electronics, Electrical Engineering Department, 1994 - 2018

Research Assistant, Yildiz Technical University, Faculty Of Electrical & Electronics, Electrical Engineering Department, 1986 - 1994

Courses

Enerji Dağıtım, Undergraduate, 2021 - 2022, 2020 - 2021

Enerji İletim Sistemleri, Undergraduate, 2020 - 2021

ENERJİ İLETİMİ, Undergraduate, 2017 - 2018

Advising Theses

Gökalp E., Mikro şebekelerde elektrikli araç şarj istasyonu altyapı dizaynı ve yenilenebilir enerji santrallerinin optimal boyutlandırılması, Postgraduate, U.Mert(Student), 2023

Gökalp E., Ateş Y., Dağıtım sistemlerinde röle koordinasyonunun uygulanması, Postgraduate, A.AZİZ(Student), 2023

Gökalp E., ENERJİ SİSTEMLERİNİN PLANLAMA VE İŞLETMESİNDE ESNEKLİĞİN ENERJİ DEPOLAMA KULLANILARAK ARTIRILMASINA YÖNELİK YENİ BİR YAKLAŞIMIN GELİŞTİRİLMESİ, Doctorate, S.MİRZA(Student), 2022

Gökalp E., Hibrit Güç Sistemlerinin Teknik, Ekonomik ve Çevresel Optimizasyonu, Postgraduate, M.TERKEŞ(Student), 2022

Gökalp E., Akıllı şebeke altyapısı ile yenilenebilir enerji santrallerinin şebeke entegrasyonu ve koruma sistemi dizaynı, Doctorate, M.TAN(Student), 2020

Gökalp E., Orta gerilim dağıtım şebekesine bağlanan rüzgar türbinlerinin etkileri, Postgraduate, K.EMRE(Student), 2019

Gökalp E., Harmonik problemi olan tesislerde harmonik filtreli kompanzasyon sistemlerinin tasarımı ve analizi, Postgraduate, M.BAHA(Student), 2019

GÖKALP E., Elektrikli araç bataryalarının akıllı şebekeler kapsamında depolama ünitesi olarak yeniden değerlendirilmesi, Postgraduate, S.Mirza(Student), 2015

GÖKALP E., Akıllı şebekelerde arıza analizi ve koruma, Postgraduate, M.Tan(Student), 2014

Gökalp E., Ürdün ulusal elektrik şebekesinin güç kalitesi açısından incelemesi, Postgraduate, A.SAMARREH(Student), 2012

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Battery Passport for Second-Life Batteries: Potential Applications and Challenges**
Terkes M., Demirci A., Gokalp E., Cali U.
IEEE ACCESS, vol.12, pp.1-46, 2024 (SCI-Expanded)
- II. **The effect of electric vehicle charging demand variability on optimal hybrid power systems with second-life lithium-ion or fresh Na-S batteries considering power quality**
Terkes M., Arikan O., Gokalp E.
Energy, vol.288, 2024 (SCI-Expanded)
- III. **Multi-stage and multi-objective feed-in damping-based battery aging-aware energy management strategy for renewable energy integration**
Terkes M., Demirci A., Gokalp E., Cali U.
IEEE ACCESS, vol.12, pp.1-16, 2024 (SCI-Expanded)
- IV. **An evaluation of optimal sized second-life electric vehicle batteries improving technical, economic, and environmental effects of hybrid power systems**
Terkeş M., Demirci A., Gokalp E.
ENERGY CONVERSION AND MANAGEMENT, vol.291, pp.1-15, 2023 (SCI-Expanded)
- V. **Maximizing self-consumption rates and power quality towards two-stage evaluation for solar energy and shared energy storage empowered microgrids**
Tercan S. M., Demirci A., Gökalp E., Cali U.
Journal of Energy Storage, vol.51, 2022 (SCI-Expanded)
- VI. **An expansion planning method for extending distributed energy system lifespan with energy storage systems**
TERCAN S. M., ELMA O., GÖKALP E., Cali U.
ENERGY EXPLORATION & EXPLOITATION, vol.40, no.2, pp.599-618, 2022 (SCI-Expanded)

- VII. **Integration Analysis of Electric Vehicle Charging Station Equipped with Solar Power Plant to Distribution Network and Protection System Design**
Turan M. T., GÖKALP E.
JOURNAL OF ELECTRICAL ENGINEERING & TECHNOLOGY, vol.17, no.2, pp.903-912, 2022 (SCI-Expanded)
- VIII. **Effect of electric vehicle parking lots equipped with roof mounted photovoltaic panels on the distribution network**
TURAN M. T., ATEŞ Y., ERDİNÇ O., GÖKALP E., Catalao J. P. S.
INTERNATIONAL JOURNAL OF ELECTRICAL POWER & ENERGY SYSTEMS, vol.109, pp.283-289, 2019 (SCI-Expanded)
- IX. **Relay coordination analysis and protection solutions for smart grid distribution systems**
Turan M. T., GÖKALP E.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.24, no.2, pp.474-482, 2016 (SCI-Expanded)
- X. **A new perspective in grid connection of electric vehicles: Different operating modes for elimination of energy quality problems**
BOYNUEĞRİ A. R., UZUNOĞLU M., Erdinc O., GÖKALP E.
APPLIED ENERGY, vol.132, pp.435-451, 2014 (SCI-Expanded)

Articles Published in Other Journals

- I. **A comprehensive review of the aging mechanism and degradation costs of fresh and second-life batteries based on analytical and deterministic methods**
Terkes M., Demirci A., Gokalp E.
ENERGY STORAGE, vol.6, no.e661, pp.1-32, 2024 (ESCI)
- II. **Fault Analysis in Multi-Phase Power Systems Considering Symmetrical Components and Phase Coordinates Methods**
Gökalp E., Tercan S. M.
JOURNAL OF ENGINEERING AND TECHNOLOGY, vol.3, pp.42-60, 2019 (Peer-Reviewed Journal)
- III. **Optimal Bağlantı Kriterlerine Göre Güneş Enerji Santrallerinin Şebeke Entegrasyonu ve Ada Modunda Çalışmada Kritik Yüklerin Enerjilendirilmesi**
Gökalp E.
Avrupa Bilim ve Teknoloji Dergisi, vol.1, pp.306-314, 2018 (Peer-Reviewed Journal)
- IV. **Enerji Dağıtım Sistemlerinde Güneş Enerji Santrali Entegrasyonu ve Rôle Koordinasyonu**
Turan M. T., Ateş Y., Gökalp E.
EMO Bilimsel Dergi, vol.8, pp.63-69, 2018 (Peer-Reviewed Journal)
- V. **Dijital Darbe Kayıtları kullanılarak Yapılan Yıldırım Araştırmasının Faydaları**
GÖKALP E.
Kaynak elektrik, 2002 (Peer-Reviewed Journal)
- VI. **Yıldırım Koruması**
GÖKALP E.
Kaynak Elektrik, 2002 (Peer-Reviewed Journal)
- VII. **Enerji Dağıtım Şebekelerine İlişkin Yatırımlarda Ortaya Çıkan Fiyat Farklarının İncelenmesi**
GÖKALP E.
Kaynak Elektrik, 1997 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **Integration of Solar Power Plant to Existing Network with Adaptive Relay Protection in the Concept of Smart Grid**

Turan M. T., Ateş Y., Gökalp E.

in: The Role of Exergy in Energy and the Environment, Sandro Nizetic, Agis Papadopoulos, Editor, Springer, London/Berlin, Berlin, pp.351-362, 2018

Refereed Congress / Symposium Publications in Proceedings

- I. **Optimal Sizing and Detailed Analysis of Microgrid with Photovoltaic Panel and Battery Energy Storage System Integrated Electric Vehicle Charging Station**
IŞIK U. M., TERCAN S. M., GÖKALP E.
5 th International Congress on Human-Computer Interaction, Optimization and Robotic Applications, İstanbul, Turkey, 08 June 2023
- II. **The Coordination Time Interval Constraint Does Not Guarantee Optimal Overcurrent Relays Coordination**
Almodafer A. A., Gökalp E., Ateş Y.
10th international congress on engineering architecture and design, İstanbul, Turkey, 24 - 26 December 2022, vol.76, no.16, pp.1351-1362
- III. **Integration of the Electric Vehicle Charging Station for Campus Parking Lot with Renewable Energy Sources**
Terkeş M., Tercan S. M., Demirci A., Gökalp E.
4 th International Engineering Research Symposium, Düzce, Turkey, 4 - 06 March 2022, vol.1, pp.84
- IV. **Integration of the Electric Vehicle Charging Station for Campus Parking Lot with Renewable Energy Sources**
Terkeş M., Tercan S. M., Demirci A., Gökalp E.
4 th International Engineering Research Symposium, Düzce, Turkey, 4 - 06 March 2022, vol.1, no.1, pp.84
- V. **An Evaluation of Renewable Fraction Using Energy Storage for Electric Vehicle Charging Station**
Terkes M., Tercan S. M., Demirci A., Gokalp E.
4th International Congress on Human-Computer Interaction, Optimization and Robotic Applications, HORA 2022, Ankara, Turkey, 9 - 11 June 2022
- VI. **A CASE STUDY OF ENERGY STORAGE SYSTEM IN DISTRIBUTION GRID FOR DIFFERENT STRATEGIES**
TERCAN S. M., GÖKALP E.
World Energy Strategies Congress and Exhibition (WESCE-2019), İstanbul, Turkey, 26 - 28 August 2019, vol.1, no.1, pp.37-40
- VII. **Daily energy use planning with distributed energy storage systems**
TERCAN S. M., GÖKALP E.
10th International Symposium on Intelligent Manufacturing and Service Systems (IMSS'19), Sakarya, Turkey, 9 - 10 September 2019, vol.1, pp.1087-1097
- VIII. **Effect of Distributed Generation Based Campus Model Combined with Electric Vehicle Charging Stations on the Distribution Network**
TURAN M. T., ATEŞ Y., ERDİNÇ O., GÖKALP E.
2019 International Conference on Smart Energy Systems and Technologies (SEST), Porto, Portugal, Portugal, 9 - 11 September 2019
- IX. **Daily energy use planning with distributed energy storage systems**
Tercan S. M., Demirci A., Gökalp E.
10th International Symposium on Intelligent Manufacturing and Service Systems (IMSS'19), Sakarya, Turkey, 9 - 11 September 2019
- X. **Impacts of Grid-Integrated Wind Turbines with Scenario-based Load Flow Analysis According to Demand Power**
Çankırı K. E., Gökalp E., Turan M. T.
World Energy Strategies Congress and Exhibition (WESCE-2019), İstanbul, Turkey, 26 - 28 August 2019
- XI. **Senaryo Tabanlı Kısa Devre ve Güç Akışı Analizleri ile Rüzgâr Türbinlerinin Şebeke Üzerinde**

Oluşturduğu Etkilerin İncelenmesi

GÖKALP E., ÇANKIRI K. E.

Ereğli International Science and Academic Congress, Konya, Turkey, 9 - 10 March 2019, vol.2, pp.57-63

- XII. **Harmonik içeren endüstriyel tesislerde düşük ayarlı pasif harmonik filtre tasarımı ve uygulaması**
Şerbetçi M. B., Tercan S. M., Gökalp E.
1st International Eurasian Conference on Science, Engineering and Technology (EurasianSciEnTech 2018), Ankara, Turkey, 22 - 23 November 2018
- XIII. **Economic Analysis of Energy Storage Preventing Energy Outages in Distribution Network in Turkey**
Tercan S. M., Kekezoğlu B., Gökalp E.
6th International Conference on Control Engineering Information Technology, İstanbul, Turkey, 25 - 27 October 2018
- XIV. **Fault Analysis in Multi-Phase Power Systems Considering Symmetrical Components and Phase Coordinates Methods**
GÖKALP E., TERCAN S. M.
1st INTERNATIONAL ENGINEERING AND TECHNOLOGY SYMPOSIUM (IETS'2018), Batman, Turkey, 3 - 05 May 2018, vol.1, pp.583-590
- XV. **Economic analysis of energy storage preventing energy outages in distribution grid in Turkey**
Tercan S. M., Gökalp E., Kekezoğlu B.
6th International Conference on Control Engineering and Information Technology, CEIT 2018, İstanbul, Turkey, 25 - 27 October 2018
- XVI. **Integration of Electric Vehicle Parking Lot Equipped With Solar Power Plant to the Distribution Network Considering Optimal Operation Criteria**
TURAN M. T., ATEŞ Y., GÖKALP E.
2018 53rd International Universities Power Engineering Conference (UPEC), Glasgow, İSKOÇYA, 4 - 07 September 2018
- XVII. **Integration of Solar Power Plant to Existing Network with Adaptive Relay Protection in the Concept of Smart Grid**
Turan M. T., ATEŞ Y., GÖKALP E.
9th International Exergy, Energy and Environment Symposium (IEEES), Split, Croatia, 14 - 17 May 2017, pp.351-362
- XVIII. **Enerji Dağıtım Sistemlerinde Güneş Enerji Santrali Entegrasyonu ve Röle Koordinasyonu**
Turan M. T., ATEŞ Y., GÖKALP E.
1. Ulusal Elektrik Enerjisi Dönüşümü Kongresi, Elazığ, Turkey, 21 - 22 October 2017
- XIX. **Elektrikli Araçların Dağıtım Şebekesi Üzerindeki Harmonik Etkileri**
TERCAN S. M., GÖKALP E.
1. Ulusal Elektrik Enerjisi Dönüşümü Kongresi, Elazığ, Turkey, 21 - 22 September 2017, vol.1, pp.47-50
- XX. **Elektrikli Araçların Karbon Salınımı**
TERCAN S. M., GÖKALP E.
1. Ulusal Elektrik Enerjisi Dönüşümü Kongresi, Elazığ, Turkey, 21 - 22 September 2017, pp.67-71
- XXI. **Self-healing distribution network design with renewable power sources considering adaptive relay protection**
TURAN M. T., ATEŞ Y., GÖKALP E.
9th International Exergy, Energy and Environment Symposium (IEEES-9), Split, Croatia, 14 - 17 May 2017
- XXII. **UTILIZATION of RURAL OFF-GRID SOLAR ENERGY via C2V and V2G CONCEPT USING SECOND USE VEHICLE BATTERIES**
TERCAN S. M., GÖKALP E.
International Green Energy Euro-mediterranean Hydrogen Technologies Conference (InGECEmHyTec) 2016, GAMMARTH, Tunisia, 9 - 12 May 2016, pp.94
- XXIII. **Supplying residential loads using second-life electric vehicle batteries**
TERCAN S. M., GÖKALP E.
INTERNATIONAL ENERGY TECHNOLOGIES CONFERENCE (ENTECH) 2014, İstanbul, Turkey, 22 - 24 December

2014, vol.1, pp.137-146

- XXIV. **GELENEKSEL BİR RİNG ŞEBEKENİN AKILLI ŞEBEKE ALTYAPISINA UYGUN HATA ANALİZİ VE RÖLE KOORDİNASYONU**
Turan M. T., ATEŞ Y., GÖKALP E., YUMURTACI R.
Elektrik Elektronik ve Bilgisayar Sempozyumu, Elazığ, Turkey, 5 - 07 October 2011, vol.1, pp.217-221
- XXV. **Geleneksel Bir Ring Şebekenin Akıllı Şebeke Altyapısına Uygun Hata Analizi Ve Röle Koordinasyonu**
Ateş Y., Gökalp E., UZUNOĞLU M., Yumurtacı R., Karakaş A.
01 October 2011
- XXVI. **A Concept for The Thermal Model of An Oil Immersed Power Transformer**
TRABULUS S., GÖKALP E.
Internatiol Conference On Electrical Engineering, 9 - 13 July 2006
- XXVII. **Enerji Dağıtım Fiderlerinin Şebeke kayıplarını Azaltmak amacıyla Genetik algoritma Yöntemi Kullanarak Yeniden Yapılandırılması**
GÖKALP E., ÖZDEŞ A., PEKİNER F. O.
Elektrik elektronik bilgisayar mühendisliği 11.Ulusal Kongresi ve Fuarı, Turkey, 22 - 25 September 2005
- XXVIII. **Protection against Lightning Surges of Electrical and Industrial Installations**
TRABULUS S., GÖKALP E.
2003 IEEE PES Transmission and Distribution Conference, Dallas, TX, United States Of America, 7 - 12 September 2003, vol.2, pp.515-519
- XXIX. **Common Criteria for Right Selection of the Medium Voltage Circuit Breakers**
TRABULUS S., GÖKALP E., BEKİROĞLU K. N.
Electrical Insulation Conferece and Electrical ManufacturingCoil Winding Technology Conferece, 23 - 25 September 2003
- XXX. **Protection Against Lighting Surges of electrical and Industrial Installation**
TRABULUS S., GÖKALP E.
IEEE Pes Transmission Distribution Conference, 7 - 12 September 2003
- XXXI. **Integration of Digital Measuring technoloji in Gas Insulated Substations(GIS)**
TRABULUS S., GÖKALP E., BEKİROĞLU K. N.
The 11.Mediterranean Conference on ControlAutomation, 18 - 20 June 2003
- XXXII. **The Effect of Switching Overvoltages On Insulation Coordination of Gas Insulated High Voltage Swichgear**
TRABULUS S., GÖKALP E.
Nordic Insulation Symposium, 11 - 13 June 2003
- XXXIII. **Protection against lightning surges of electrical and industrial installations**
Trabulus S., Gokalp E.
IEEE PES Transmission and Distribution Conference and Exposition, Texas, United States Of America, 7 - 12 September 2003, pp.515-519
- XXXIV. **Common criteria for right selection of the medium voltage circuit breakers**
Trabulus S., Gokalp E., Donmezturk N.
Electrical Insulation Conference/Electrical-Manufacturing-and-Coil-Winding-Association Exposition, Indiana, United States Of America, 23 - 25 September 2003, pp.161-165
- XXXV. **Kuru Tip Yüksek Gerilim Güç Transformatörlerinin Sargı İzalasyonu İçin Yeni Bir Taslak**
TRABULUS S., GÖKALP E.
Elektrik elektronik bilgisayar Mühendisliği Sempozyumu, Turkey, 8 - 12 November 2000
- XXXVI. **Cadde ve sokak Aydınlatma Tesislerinin kurulması Sırasında Kontrolluk Teşkilatının İşlevi**
GÖKALP E., UMURKAN N.
2.ulusal Aydınlatma Kongresi, Turkey, 26 - 27 November 1998
- XXXVII. **Güç Sistemlerinde Durum Tahmini ve Hatalı Verilerin Yok Edilmesi**
GÖKALP E., Ümitsen H.
Bursa IV. Elektromekanik Sempozyumu, Turkey, 17 - 21 December 1997
- XXXVIII. **Elektrik Enerjisi Yatırımı Kontrolluk Hizmetlerinde Bilimsel Destekli bir Model**

UMURKAN N., GÖKALP E.

II.Karamürsel Denizcilik Sempozyumu, Turkey, 30 June - 04 July 1996

XXXIX. **SF6 Tesislerinin Çeşitli Kapsülleme Biçimlerinin Kıyaslanması**

GÖKALP E., ÇAKIR H., TRABULUS S.

Elektrik Mühendisliği 6.Ulusal Kongresi, Turkey, 11 - 17 September 1995

XL. **SF6 Kesicilerin Geliştirilmesi İçin İleri Diagnostik Metodlar**

GÖKALP E., ÇAKIR H., TRABULUS S.

Elektrik Mühendisliği 6.Ulusal Kongresi, Turkey, 11 - 17 September 1995

Supported Projects

Demirci A., Gökalp E., TUBITAK Project, İkincil Kullanım Bataryaların Enerji Yönetimi Ve Performans Optimizasyonu: Akıllı Enerji Yönetim Sistemleri İle Yaşlanma Modellerinin Geliştirilmesi, 2024 - 2025

GÖKALP E., TERKEŞ M., Project Supported by Higher Education Institutions, Hibrit Güç Sistemlerinin Teknik, Ekonomik ve Çevresel Optimizasyonu, 2022 - 2022

GÖKALP E., Project Supported by Higher Education Institutions, Elektrikli Araç Bataryalarının Akıllı Şebekeler Kapsamında Depolama Ünitesi Olarak Yeniden Değerlendirilmesi, 2014 - 2015

Metrics

Publication: 58

Citation (WoS): 72

Citation (Scopus): 195

H-Index (WoS): 3

H-Index (Scopus): 6

Non Academic Experience

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