

Arş.Gör. TUĞÇE DEMİRDELEN

Kişisel Bilgiler

E-posta: tdemirdelen@cu.edu.tr

Web: <https://avesis.cu.edu.tr//tdemirdelen>

Eğitim Bilgileri

Doktora, Çukurova Üniversitesi, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği, Türkiye 2013 - Devam Ediyor

Yüksek Lisans, Çukurova Üniversitesi, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği, Türkiye 2011 - 2013

Lisans Çift Anadal, Çukurova Üniversitesi, Fen-Edebiyat Fakültesi, Fizik Bölümü, Türkiye 2008 - 2011

Lisans, Çukurova Üniversitesi, Mühendislik-Mimarlık Fakültesi, Elektrik-Elektronik Mühendisliği, Türkiye 2006 - 2011

Yabancı Diller

İngilizce, B2 Orta Üstü

Yaptığı Tezler

Yüksek Lisans, Modeling and Analysis of Multilevel Parallel Hybrid Active Power Filter, Çukurova Üniversitesi, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği, 2013

Araştırma Alanları

Elektrik-Elektronik Mühendisliği, Enerji, Güç Elektroniği, Elektrik Makineleri Kuramı ve Tasarımı, Güç Aygıtları (trafolar, reaktörler, şalt teçhizatı v.b.), Güç Çevirgeçleri, Güç Kalitesi, Mühendislik ve Teknoloji

Akademik Unvanlar / Görevler

Araştırma Görevlisi, Çukurova Üniversitesi, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği, 2011 - Devam Ediyor

Araştırma Görevlisi, Karamanoğlu Mehmetbey Üniversitesi, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği, 2011 - 2011

SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- Performance evaluation of phase-shifting transformer for integration of renewable energy sources**
Sakallioğlu B., Esenboga B., DEMİRDELEN T., TÜMAY M.
ELECTRICAL ENGINEERING, cilt.102, ss.2025-2039, 2020 (SCI İndekslerine Giren Dergi)
- A novel hybrid metaheuristic optimization method to estimate medium-term output power for horizontal axis wind turbine**
EKINCI F., Demirdelen T., AKSU I. O. , AYGÜL K., ESENBGA B., BİLGİLİ M.
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART A-JOURNAL OF POWER AND ENERGY,

cilt.233, ss.646-658, 2019 (SCI İndekslerine Giren Dergi)

- III. **The role of hydropower installations for sustainable energy development in Turkey and the world**
BİLGİLİ M., BİLİRGEN H., ÖZBEK A., EKINCI F., Demirdelen T.
RENEWABLE ENERGY, cilt.126, ss.755-764, 2018 (SCI İndekslerine Giren Dergi)
- IV. **A review of magnetically controlled shunt reactor for power quality improvement with renewable energy applications**
Tumay M., DEMİRDELEN T., Bal S., KAYAALP R. İ. , DOĞRU B., AKSOY M.
RENEWABLE & SUSTAINABLE ENERGY REVIEWS, cilt.77, ss.215-228, 2017 (SCI İndekslerine Giren Dergi)
- V. **Simulation modelling and analysis of modular cascaded multilevel converter based shunt hybrid active power filter for large scale photovoltaic system interconnection**
DEMİRDELEN T., KAYAALP R. İ. , TÜMAY M.
SIMULATION MODELLING PRACTICE AND THEORY, cilt.71, ss.27-44, 2017 (SCI İndekslerine Giren Dergi)

Diğer Dergilerde Yayınlanan Makaleler

- I. **Comparison of Different Phase-Shift Control Methods at Isolated Bidirectional DC-DC Converter**
KAYAALP R. İ. , DEMİRDELEN T., KÖROĞLU T., CUMA M. U. , Bayındır K. Ç. , TÜMAY M.
INTERNATIONAL JOURNAL OF APPLIED MATHEMATICS, ELECTRONICS AND COMPUTERS, cilt.4, ss.68-73, 2016
(Hakemli Üniversite Dergisi)
- II. **Modeling and Analysis of a Multilevel Parallel Hybrid Active Power Filter**
DEMİRDELEN T., KAYAALP R. İ. , TÜMAY M.
ENGINEERING TECHNOLOGY & APPLIED SCIENCE RESEARCH, cilt.6, ss.976-981, 2016 (ESCI İndekslerine Giren Dergi)
- III. **Fuzzy Logic Controlled DC-DC Converter Based Dynamic Voltage Restorer**
Inci M., DEMİRDELEN T., TÜMAY M.
JOURNAL OF ELECTRICAL SYSTEMS, cilt.11, ss.367-375, 2015 (ESCI İndekslerine Giren Dergi)
- IV. **Performance Analysis of Closed Loop and Open Loop Control Methods in Dynamic Voltage Restorer**
İNÇİ M., DEMİRDELEN T., TÜMAY M.
International Journal of Engineering Research, cilt.11, no.4, ss.582-585, 2015 (Diğer Kurumların Hakemli Dergileri)
- V. **PARALLEL HYBRID ACTIVE POWER FILTER FOR STATIC REACTIVE POWER AND HARMONICS COMPENSATION WITH SOGI-PLL**
DEMİRDELEN T.
International Journal on Technical and Physical Problems of Engineering (IJTPE) Journal, cilt.6, no.1, ss.148-153, 2014 (Diğer Kurumların Hakemli Dergileri)

Kitap & Kitap Bölümleri

- I. **A New Method for Generating Short-Term Power Forecasting Based on Artificial Neural Networks and Optimization Methods for Solar Photovoltaic Power Plants**
DEMİRDELEN T., AKSU I. O. , ESENBOGA B., AYGÜL K., EKINCI F., BİLGİLİ M.
Solar Photovoltaic Power Plants, Precup R.E, Kamal T., Zulqadar Hassan S., Editör, Springer, Singapore, -, ss.165-189, 2019

Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar

- I. **A Fuzzy Neural Network Approach to Estimate PMSG based and DFIG based Wind Turbines' Power Generation**
Demirdelen T., Bakmaz E., TÜMAY M.

7th International Conference on Innovative Computing Technology (INTECH), Luton, İngiltere, 16 - 18 Ağustos 2017, ss.101-106

- II. **A novel fuzzy logic control for bidirectional DC-DC converter and comparison with dual phase-shift control method in medium voltage applications**
KAYAALP R. İ. , DEMİRDELEN T., TÜMAY M.
2016 IEEE International Conference on Computational Intelligence and Virtual Environments for Measurement Systems and Applications, CIVEMSA 2016, Budapest, Macaristan, 27 - 29 Temmuz 2016
- III. **A Novel Control Scheme for Dynamic Reactive Power Compensation Multilevel Inverter Based Shunt Hybrid Active Power Filter**
DEMİRDELEN T., TÜMAY M.
IEEE 2016 UKSim-AMSS 18th International Conference on Computer Modelling and Simulation, Cambridge, İngiltere, 6 - 08 Nisan 2016, ss.217-223
- IV. **A Novel Control Scheme for Dynamic Reactive Power Compensation Multilevel Inverter Based Shunt Hybrid Active Power Filter**
DEMİRDELEN T., TÜMAY M.
IEEE 2016 UKSim-AMSS 18th International Conference on Computer Modelling and Simulation, Cambridge, İngiltere, 6 - 08 Nisan 2016, ss.217-223
- V. **A Power Rating and Application Survey of Magnetically Controlled Shunt Reactor**
TÜMAY M., DEMİRDELEN T., BAL S., KAYAALP R. İ. , Dogru B., Aksoy M.
10th UKSim-AMSS European Modelling Symposium on Computer Modelling and Simulation (EMS), Pisa, İtalya, 28 - 30 Kasım 2016, ss.111-116
- VI. **PSO - PI Based DC Link Voltage Control Technique for Shunt Hybrid Active Power Filter**
DEMİRDELEN T., KAYAALP R. İ. , TÜMAY M.
2nd International Conference on Systems Informatics, Modelling and Simulation (SIMS), Riga, Letonya, 1 - 03 Haziran 2016, ss.97-102
- VII. **Review of The Control Strategies Applied to Magnetically Controlled Shunt Reactor**
TÜMAY M., DEMİRDELEN T., BAL S., KAYAALP R. İ. , Dogru B., Aksoy M.
National Conference on Electrical, Electronics and Biomedical Engineering (ELECO), Bursa, Türkiye, 1 - 03 Aralık 2016, ss.96-100
- VIII. **A Novel Control Scheme for Dynamic Reactive Power Compensation Multilevel Inverter Based Shunt Hybrid Active Power Filter**
DEMİRDELEN T., TÜMAY M.
18th UKSim-AMSS International Conference on Computer Modelling and Simulation (UKSim), Cambridge, Kanada, 6 - 08 Nisan 2016, ss.217-223
- IX. **Adaptive Input Voltage Prediction Method Based on ANN for Bidirectional DC-DC Converter**
KAYAALP R. İ. , DEMİRDELEN T., TÜMAY M.
2nd International Conference on Systems Informatics, Modelling and Simulation (SIMS), Riga, Letonya, 1 - 03 Haziran 2016, ss.35-40
- X. **Performance Investigation of High Level Modular Multilevel Inverter based Shunt Hybrid Active Power Filter**
DEMİRDELEN T., KAYAALP R. İ. , TÜMAY M.
International Symposium on Fundamentals of Electrical Engineering (ISFEE), Romanya, 30 Haziran - 02 Temmuz 2016
- XI. **A New Control Approach for Shunt Hybrid Active Power Filter to Compensate Harmonics and Dynamic Reactive Power with Grid Interconnection**
DEMİRDELEN T., İNCİ M., TÜMAY M.
A New Control Approach for Shunt Hybrid Active Power Filter to Compensate Harmonics and Dynamic Reactive Power with Grid Interconnection, Madrid, İspanya, 6 - 08 Ekim 2015, ss.247-253
- XII. **The Analysis and Performance Results of Bidirectional DC-DC Converter Based Dynamic Voltage Restorer under Voltage Sag/Swell Conditions**
İNCİ M., DEMİRDELEN T., TÜMAY M.

UKSim-AMSS 9th European Modelling Symposium on Mathematical Modelling and Computer Simulation, Madrid, İspanya, 6 - 08 Ekim 2015, ss.254-259

- XIII. **Comparison of Different Phase-Shift Control Methods at Isolated Bidirectional DC-DC Converter**
KAYAALP R. İ. , DEMİRDELEN T., KÖROĞLU T., CUMA M. U. , BAYINDIR K. Ç. , TÜMAY M.
International Conference on Advanced Technology and Sciences, Antalya, Türkiye, 4 - 07 Ağustos 2015, ss.273-279
- XIV. **Performance Evaluation of a New Hybrid Unified Power Quality Conditioner (HUPQC)**
KÖROĞLU T., CUMA M. U. , TAN A., İNCİ M., DEMİRDELEN T., BAYINDIR K. Ç. , TÜMAY M.
The 6th International Symposium on Power Electronics for Distributed Generation Systems (PEDG?2015), Aachen, Almanya, 22 - 25 Haziran 2015, ss.1-6
- XV. **Performance Investigation of Shunt Hybrid Active Power Filter with a Synchronous Reference Frame Based Controller**
TAN A., KÖROĞLU T., DEMİRDELEN T., İNCİ M., CUMA M. U. , BAYINDIR K. Ç. , TÜMAY M.
The 6th International Symposium on Power Electronics for Distributed Generation Systems (PEDG?2015), Aachen, Almanya, 22 - 25 Haziran 2015, ss.1-8
- XVI. **A Novel Low Cost Sag/Swell Generator**
İNCİ M., DEMİRDELEN T., TAN A., KÖROĞLU T., CUMA M. U. , BAYINDIR K. Ç. , TÜMAY M.
The 6th International Symposium on Power Electronics for Distributed Generation Systems (PEDG?2015), Aachen, Almanya, 22 - 25 Haziran 2015, ss.1-4
- XVII. **Performance Investigation of Shunt Hybrid Active Power Filter with A Synchronous Reference Frame Based Controller**
TAN A., KÖROĞLU T., DEMİRDELEN T., İNCİ M., CUMA M. U. , BAYINDIR K. Ç. , TÜMAY M.
IEEE 6th International Symposium on Power Electronics for Distributed Generation Systems, 2015, Aachen, Almanya, 22 - 25 Haziran 2015, ss.391-398
- XVIII. **Performance Investigation of Shunt Hybrid Active Power Filter with A Synchronous Reference Frame Based Controller**
TAN A., KÖROĞLU T., DEMİRDELEN T., İNCİ M., CUMA M. U. , BAYINDIR K. Ç. , TÜMAY M.
IEEE 6th International Symposium on Power Electronics for Distributed Generation Systems, 2015, Aachen, Almanya, 22 - 25 Haziran 2015, ss.391-398
- XIX. **A Novel Low Cost Sag/Swell Generator**
İNCİ M., DEMİRDELEN T., TAN A., KÖROĞLU T., CUMA M. U. , BAYINDIR K. Ç. , TÜMAY M.
IEEE 6th International Symposium on Power Electronics for Distributed Generation Systems - PEDG 2015, Aachen, Almanya, 22 - 25 Haziran 2015, ss.239-242
- XX. **Performance Investigation of Shunt Hybrid Active Power Filter with A Synchronous Reference Frame Based Controller**
TAN A., KÖROĞLU T., DEMİRDELEN T., İNCİ M., CUMA M. U. , BAYINDIR K. Ç. , TÜMAY M.
IEEE 6th International Symposium on Power Electronics for Distributed Generation Systems, 2015, Aachen, Almanya, 22 - 25 Haziran 2015, ss.391-398
- XXI. **A Novel Low Cost Sag/Swell Generator**
İNCİ M., DEMİRDELEN T., TAN A., KÖROĞLU T., CUMA M. U. , BAYINDIR K. Ç. , TÜMAY M.
The 6th International Symposium on Power Electronics for Distributed Generation Systems (PEDG?2015), Aachen, Almanya, 22 - 25 Haziran 2015, ss.1-4
- XXII. **Performance Evaluation of a New Hybrid Unified Power Quality Conditioner (HUPQC)**
KÖROĞLU T., CUMA M. U. , TAN A., İNCİ M., DEMİRDELEN T., BAYINDIR K. Ç. , TÜMAY M.
IEEE 6th International Symposium on Power Electronics for Distributed Generation Systems - PEDG 2015, Aachen, Almanya, 22 - 25 Haziran 2015, ss.111-116
- XXIII. **Performance Evaluation of a New Hybrid Unified Power Quality Conditioner (HUPQC)**
KÖROĞLU T., CUMA M. U. , TAN A., İNCİ M., DEMİRDELEN T., BAYINDIR K. Ç. , TÜMAY M.
The 6th International Symposium on Power Electronics for Distributed Generation Systems (PEDG?2015), Aachen, Almanya, 22 - 25 Haziran 2015, ss.1-6
- XXIV. **Performance Investigation of Shunt Hybrid Active Power Filter with a Synchronous Reference Frame Based Controller**

TAN A., KÖROĞLU T., DEMİRDELEN T., İNCİ M., CUMA M. U. , BAYINDIR K. Ç. , TÜMAY M.

The 6th International Symposium on Power Electronics for Distributed Generation Systems (PEDG?2015), Aachen, Almanya, 22 - 25 Haziran 2015, ss.1-8

- XXV. **A New Control Approach for Shunt Hybrid Active Power Filter to Compensate Harmonics and Dynamic Reactive Power with Grid Interconnection**
DEMİRDELEN T., İnci M., TÜMAY M.
UKSim-AMSS 9th IEEE European Modelling Symposium on Computer Modelling and Simulation (EMS), Madrid, İspanya, 6 - 08 Ekim 2015, ss.247-253
- XXVI. **A Novel Low Cost Sag/Swell Generator**
İnci M., DEMİRDELEN T., TAN A., KÖROĞLU T., CUMA M. U. , BAYINDIR K. Ç. , TÜMAY M.
IEEE 6th International Symposium on Power Electronics for Distributed Generation Systems (PEDG), Aachen, Almanya, 22 - 25 Haziran 2015, ss.239-242
- XXVII. **PERFORMANCE INVESTIGATION OF SHUNT HYBRID ACTIVE POWER FILTER WITH A SYNCHRONOUS REFERENCE FRAME BASED CONTROLLER**
TAN A., KÖROĞLU T., DEMİRDELEN T., İnci M., CUMA M. U. , BAYINDIR K. Ç. , TÜMAY M.
IEEE 6th International Symposium on Power Electronics for Distributed Generation Systems (PEDG), Aachen, Almanya, 22 - 25 Haziran 2015, ss.391-398
- XXVIII. **The Analysis and Performance Results of Bidirectional DC-DC Converter Based Dynamic Voltage Restorer under Voltage Sag/Swell Conditions**
İnci M., DEMİRDELEN T., BAYINDIR K. Ç. , TÜMAY M.
UKSim-AMSS 9th IEEE European Modelling Symposium on Computer Modelling and Simulation (EMS), Madrid, İspanya, 6 - 08 Ekim 2015, ss.254-259
- XXIX. **Performance Evaluation of a New Hybrid Unified Power Quality Conditioner (HUPQC)**
KÖROĞLU T., CUMA M. U. , TAN A., İnci M., DEMİRDELEN T., BAYINDIR K. Ç. , TÜMAY M.
IEEE 6th International Symposium on Power Electronics for Distributed Generation Systems (PEDG), Aachen, Almanya, 22 - 25 Haziran 2015, ss.111-116
- XXX. **PARALLEL HYBRID ACTIVE POWER FILTER STATIC REACTIVE POWER COMPENSATION WITH HARMONIC COMPENSATION**
DEMİRDELEN T.
9th International Conference on Technical and Physical Problems of Electrical Engineering (ICTPE-2013), İstanbul, Türkiye, 9 - 11 Eylül 2013, ss.153-158
- XXXI. **Şebekeye Bağlı Sistemler İçin Üç Faz ve Tek Faz PLL'lerin Performans Değerlendirmesi**
DEMİRDELEN T., TAN A., İNCİ M., KÖROĞLU T., BÜYÜK M., TERCİYANLI A., BAYINDIR K. Ç. , TÜMAY M.
5. Enerji Verimliliği ve Kalitesi Sempozyumu - EVK 2013, Kocaeli, Türkiye, 23 - 24 Mayıs 2013, ss.5-9
- XXXII. **Şebekeye Bağlı Sistemler için Üç Faz ve Tek Faz PLL'lerin Performans Değerlendirmesi**
DEMİRDELEN T., TAN A., İNCİ M., KÖROĞLU T., Büyük M., Terciyanlı A., Bayındır K. Ç. , TÜMAY M.
5. Enerji Verimliliği Ve Kalitesi Sempozyumu 2013, Kocaeli, Türkiye, 23 - 24 Mayıs 2013, ss.5-9
- XXXIII. **Şebekeye Bağlı Sistemler İçin Üç Faz ve Tek Faz PLL'lerin Performans Değerlendirmesi**
DEMİRDELEN T., TAN A., İNCİ M., KÖROĞLU T., BÜYÜK M., TERCİYANLI A., BAYINDIR K. Ç. , TÜMAY M.
5. Enerji Verimliliği ve Kalitesi Sempozyumu - EVK 2013, Kocaeli, Türkiye, 23 - 24 Mayıs 2013, ss.5-9
- XXXIV. **Analysis of Power Quality Problems of Coreless Induction Melting Furnace with Exact Simulation Model Based on Field Measurements**
TAN A., DEMİRDELEN T., BAYINDIR K. Ç. , TÜMAY M.
IEEE 4th International Conference on Power Engineering, Energy and Electrical Drives - POWERENG 2013, İstanbul, Türkiye, 13 - 17 Mayıs 2013, ss.283-289
- XXXV. **Review of Hybrid Active Power Filter Topologies and Controllers**
DEMİRDELEN T.
4th International Conference on Power Engineering, Energy and Electrical Drives, İstanbul, Türkiye, 13 - 17 Mayıs 2013, ss.587-592
- XXXVI. **Analysis of Power Quality Problems of Coreless Induction Melting Furnace with Exact Simulation Model Based on Field Measurements**

TAN A., DEMİRDELEN T., BAYINDIR K. Ç., TÜMAY M.

IEEE 4th International Conference on Power Engineering, Energy and Electrical Drives - POWERENG 2013,
İstanbul, Türkiye, 13 - 17 Mayıs 2013, ss.283-289

Desteklenen Projeler

DEMİRDELEN T., TÜBİTAK Projesi, Çok Seviyeli Dönüştürücü Tabanlı Özgün Melez Aktif Güç Filtresinin Modellemesi Ve Analizi, 2016 - Devam Ediyor

TÜBİTAK Projesi, Da-Da Yükseltici Çeviricili Melez Birleştirilmiş Güç Kalitesi Düzenleyicisi Tasarımı Ve Gerçekleştirilmesi, 2011 - Devam Ediyor

TÜMAY M., Sakalhoğlu B., DEMİRDELEN T., Yükseköğretim Kurumları Destekli Proje, Modelling and Analysis of Two Core Asymmetric Phase Shifting Transformer, 2016 - 2020

TÜMAY M., BAL S., DEMİRDELEN T., Yükseköğretim Kurumları Destekli Proje, Manyetik Kontrollü Şönt Reaktör için Uygulanan Kontrol Yöntemlerinin İncelenmesi, 2016 - 2017

TÜMAY M., DEMİRDELEN T., KAYAALP R. İ. , Yükseköğretim Kurumları Destekli Proje, Modelling and Analysis of Modular Cascaded Multilevel Converter Based Shunt Hybrid Active Power Filter for Large Scale Photovoltaic System Interconnection, 2016 - 2016

Bilimsel Hakemlikler

International Journal for Innovation Education and Research, Diğer İndekslerce Taranan Dergi, Ocak 2016

Alexandria Engineering Journal, Diğer İndekslerce Taranan Dergi, Ocak 2016

Electric Power Components and Systems Journal, SCI Kapsamındaki Dergi, Ocak 2014

International Journal of Electrical Power & Energy Systems, SCI Kapsamındaki Dergi, Kasım 2013

TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES, SCI Kapsamındaki Dergi, Haziran 2013

Atıflar

Toplam Atıf Sayısı (WOS):52

h-indeksi (WOS):4