

## Res. Asst. TUĞÇE DEMİRDELEN

### Personal Information

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### International Researcher IDs

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### Education Information

Doctorate, Cukurova University, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği, Turkey 2013 - Continues

Postgraduate, Cukurova University, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği, Turkey 2011 - 2013

Undergraduate Double Major, Cukurova University, Fen-Edebiyat Fakültesi, Fizik Bölümü, Turkey 2008 - 2011

Undergraduate, Cukurova University, Mühendislik-Mimarlık Fakültesi, Elektrik-Elektronik Mühendisliği, Turkey 2006 - 2011

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Postgraduate, Modeling and Analysis of Multilevel Parallel Hybrid Active Power Filter, Cukurova University, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği, 2013

### Research Areas

Electrical and Electronics Engineering, Energy, Power Electronics, Electrical Machine Theory and Design, Power Apparatus (transformers,reactors,switchgear,etc.), Power Converters, Power Quality, Engineering and Technology

### Academic Titles / Tasks

Research Assistant, Cukurova University, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği, 2011 - Continues

Research Assistant, Karamanoglu Mehmetbey University, Faculty Of Engineering, Elektrik-Elektronik Mühendisliği, 2011 - 2011

### Published journal articles indexed by SCI, SSCI, and AHCI

1. **Analysis of Carbon Footprint Including Process-Level Calculation and Its Influencing Factors of Process for Low-Carbon and Sustainable Textile Industry**

- Alıcı H., Yiğit B. N., Menemencioğlu B., Tümay Ateş K., Demirdelen Ö., Demirdelen T., Kıvanç Z.  
Sustainability (Switzerland), vol.16, no.23, 2024 (SCI-Expanded)
- II. **Carbon Emission Analysis and Reporting in Urban Emissions: An Analysis of the Greenhouse Gas Inventories and Climate Action Plans in Sarıçam Municipality**  
Davutluoğlu O., Yavuzdeğer A., Esenboğa B., Demirdelen Ö., Tümay Ateş K., Demirdelen T.  
Sustainability (Switzerland), vol.16, no.10, 2024 (SCI-Expanded)
- III. **Performance evaluation of phase-shifting transformer for integration of renewable energy sources**  
Sakallıoğlu B., Esenboga B., DEMİRDELEN T., TÜMAY M.  
ELECTRICAL ENGINEERING, vol.102, no.4, pp.2025-2039, 2020 (SCI-Expanded)
- IV. **Green touch for hydrogen production via alkaline electrolysis: The semi-flexible PV panels mounted wind turbine design, production and performance analysis**  
DEMİRDELEN T., Ekinci F., Mert B. D., Karasu I., Tumay M.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.45, no.18, pp.10680-10695, 2020 (SCI-Expanded)
- V. **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., ESENBOGA B., BİLGİLİ M.  
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART A-JOURNAL OF POWER AND ENERGY, vol.233, no.5, pp.646-658, 2019 (SCI-Expanded)
- VI. **The role of hydropower installations for sustainable energy development in Turkey and the world**  
BİLGİLİ M., BILIRGEN H., ÖZBEK A., EKINCI F., Demirdelen T.  
RENEWABLE ENERGY, vol.126, pp.755-764, 2018 (SCI-Expanded)
- VII. **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, vol.77, pp.215-228, 2017 (SCI-Expanded)
- VIII. **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, vol.71, pp.27-44, 2017 (SCI-Expanded)

## Articles Published in Other Journals

- I. **SHORT TERM RENEWABLE ENERGY STRATEGIC VISION IN THE WORLD**  
BİLGİLİ M., EKİNCİ F., ÖZBEK A., DEMİRDELEN T.  
International Journal on Technical and Physical Problems of Engineering, vol.51, pp.111-123, 2022 (Peer-Reviewed Journal)
- II. **SHORT-TERM WIND SPEED ESTIMATION WITH ANN BASED HYBRID OPTIMIZATION METHODS IN ÇUKUROVA REGION**  
ESENBOĞA B., AKSU İ. Ö., EKİNCİ F., DEMİRDELEN T.  
Applied Research in Studies and Practice, vol.15, no.1, pp.16-23, 2019 (Peer-Reviewed Journal)
- III. **Doğrusal Yükleri Besleyen Şebeke Bağlantılı PV/Akü SistemininTasarımı ve Tam/Kısmi Gölgeleme Durumlarında PerformansAnalizi**  
AYGÜL K., DEMİRDELEN T., TÜMAY M.  
Çukurova Üniversitesi Mühendislik Mimarlık Fakültesi Dergisi, vol.37, no.2, pp.97-111, 2019 (Peer-Reviewed Journal)
- IV. **A heuristic approach for volume calculation of oil-type power transformers: firefly algorithm**  
DEMİRDELEN T.  
Majlesi Journal of Mechatronic Systems, vol.6, no.4, pp.41-46, 2018 (Peer-Reviewed Journal)
- V. **Kuru Tip Transformatör Optimizasyonuna Yeni Bir Yaklaşım: Ateş Böceği Algoritması**  
DEMİRDELEN T.

Çukurova Üniversitesi Mühendislik Mimarlık Fakültesi Dergisi, vol.33, no.1, pp.87-96, 2018 (Peer-Reviewed Journal)

- VI. **Modular Cascaded Multilevel Inverter Based Shunt Hybrid Active Power Filter For Selective Harmonic and Reactive Power Compensation Under Distorted Unbalanced Grid Voltage Conditions**  
DEMİRDELEN T., KAYAALP R. İ., TÜMAY M.  
Engineering, Technology Applied Science Research, vol.6, no.5, pp.1133-1138, 2016 (ESCI)
- VII. **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, vol.4, no.3, pp.68-73, 2016 (Peer-Reviewed Journal)
- VIII. **Modeling and Analysis of a Multilevel Parallel Hybrid Active Power Filter**  
DEMİRDELEN T., KAYAALP R. İ., TÜMAY M.  
ENGINEERING TECHNOLOGY & APPLIED SCIENCE RESEARCH, vol.6, no.3, pp.976-981, 2016 (ESCI)
- IX. **Fuzzy Logic Controlled DC-DC Converter Based Dynamic Voltage Restorer**  
Inci M., DEMİRDELEN T., TÜMAY M.  
JOURNAL OF ELECTRICAL SYSTEMS, vol.11, no.4, pp.367-375, 2015 (ESCI)
- X. **Comparison of Three, Five and Seven Levels Diode Clamped Multilevel Inverter Topologies based Shunt Hybrid Active Power Filter for Harmonics Compensation with Equal DC Link**  
DEMİRDELEN T., İNCİ M., TÜMAY M.  
International Journal of Applied Mathematics, Electronics and Computers (IJAMEC), vol.4, no.1, pp.24-30, 2015 (Peer-Reviewed Journal)
- XI. **Modelling and Analysis of Bidirectional DC-DC Converter**  
KAYAALP R. İ., DEMİRDELEN T., TÜMAY M.  
International Educative Research Foundation and Publisher, 2015 (Peer-Reviewed Journal)
- XII. **Performance Analysis of Closed Loop and Open Loop Control Methods in Dynamic Voltage Restorer**  
İNCİ M., DEMİRDELEN T., TÜMAY M.  
International Journal of Engineering Research, vol.11, pp.582-585, 2015 (Peer-Reviewed Journal)
- XIII. **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, vol.6, no.18, pp.148-153, 2014 (Peer-Reviewed Journal)

## Books

- 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 İ. Ö., ESENBÖĞA B., AYGÜL K., EKİNCİ F., BİLGİLİ M.  
in: Solar Photovoltaic Power Plants, Precup R.E, Kamal T., Zulqadar Hassan S., Editor, Springer, Singapore, -, pp.165-189, 2019
- II. **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 İ. Ö., ESENBÖĞA B., AYGÜL K., EKİNCİ F., BİLGİLİ M.  
in: Solar Photovoltaic Power Plants Advanced Control and Optimization Techniques, Radu-Emil Precup, Tariq Kamal, Syed Zulqadar Hassan, Editor, Springer Nature, pp.165-187, 2019

## Papers Published in Refereed Scientific Meetings

- I. **Lightning Electric Field Analysis of a Transformer Using ANSYS Maxwell**

BAL S., DEMİRDELEN T., TÜMAY M.

ISMSIT 2019, International Symposium on Multidisciplinary Studies and Innovative Technologies, Ankara, Turkey, 11 - 13 October 2019

**II. Three-Phase Distribution Transformer Modeling and Electromagnetic Transient Analysis Using ANSYS Maxwell**

BAL S., DEMİRDELEN T., TÜMAY M.

ISMSIT 2019, International Symposium on Multidisciplinary Studies and Innovative Technologies, Ankara, Turkey, 11 - 13 October 2019

**III. SHORT-TERM WIND SPEED ESTIMATION WITH ANN BASED HYBRID OPTIMIZATION METHODS INÇUKUROVA REGION**

ESENBOĞA B., AKSU İ. Ö., EKİNCİ F., DEMİRDELEN T.

scedu 2019, 10 - 11 October 2019

**IV. Experimental Partial Shading Analysis of Solar Photovoltaic (PV) Panels in Çukurova Region**

EKİNCİ F., AYGÜL K., ESENBOĞA B., YAVUZDEĞER A., DEMİRDELEN T.

IMSEC 4th International Mediterranean Science and Engineering Congress, Antalya, Turkey, 25 - 27 April 2019

**V. Kısmi Gölgeleme Durumundaki Fotovoltaik Panellerin Maksimum Güç Noktası Takibi için Sistem Tasarımı ve Kontrolü**

AYGÜL K., ESENBOĞA B., EKİNCİ F., DEMİRDELEN T., TÜMAY M.

XVI. Otomatik Kontrol Seminer ve Sergisi, Adana, Turkey, 24 - 25 April 2019

**VI. Comparison of Different Type Electrodes'xx Performances in Solar Assisted Hydrogen Production for Off-Grid Areas**

DOĞRU MERT B., EKİNCİ F., DEMİRDELEN T.

4th IMSEC, Turkey, 25 - 27 April 2019, pp.278

**VII. Üç Fazlı Yağlı Tip Transformatörün ANSYS Maxwell ile Modellemesi ve Elektromanyetik Analizi**

BAL S., DEMİRDELEN T., TÜMAY M.

XVI. Otomatik Kontrol Seminer ve Sergisi, Adana, Turkey, 24 - 25 April 2019

**VIII. Tek Faz Bir Transformatörün 2B Sonlu Elemanlar Analizi**

ESENBOĞA B., AYGÜL K., DEMİRDELEN T., TÜMAY M.

GÜÇ SİSTEMLERİ KONFERANSI, Turkey, 15 - 16 November 2018

**IX. Microgeneration Systems Based on Renewable Energy Sources : A General Aspect**

EKİNCİ F., DEMİRDELEN T., ESENBOĞA B., BİLGİLİ M., Hoplamaz H.

INTERNATIONAL GAP RENEWABLE ENERGY AND ENERGY EFFICIENCY CONGRESS (GAPYENEV 2018), 10 - 12 May 2018

**X. A Comparative Survey of Battery Energy Storage Systems for Renewable Energy Sources**

AYGÜL K., ESENBOĞA B., KAYAALP R. İ., DEMİRDELEN T., TÜMAY M.

IMCOFE 2018, 24 - 26 July 2018

**XI. Short-Term Generated Power Forecasting Based On Artificial Neural Network In Photovoltaic (Pv) Power Plants**

ESENBOĞA B., AKSU İ. Ö., AYGÜL K., DEMİRDELEN T., EKİNCİ F.

IMCOFE 2018, 24 - 26 July 2018

**XII. Partial Shading Condition Controller for Solar Panels: An Overview**

EKİNCİ F., DEMİRDELEN T., AYGÜL K., BİLGİLİ M.

Uluslararası GAP Yenilenebilir Enerji ve Enerji Verimliliği Kongresi 2018, 10 - 12 May 2018

**XIII. Partial Shading Condition Controllers for Solar Panels: An Overview**

EKİNCİ F., DEMİRDELEN T., AYGÜL K., BİLGİLİ M.

GAPYENEV 2018, 10 - 12 May 2018, pp.62-65

**XIV. A GENERAL OVERVIEW OF OPTIMIZATION METHODS USED IN ELECTRICAL MACHINES APPLICATIONS**

BAL S., AKSU İ. O., DEMİRDELEN T.

7th International Conference on Advanced Technologies, Antalya, Turkey, 28 April - 01 May 2018

**XV. 3D DRY TYPE TRANSFORMER TECHNOLOGY**

- BAL S., DEMİRDELEN T., TÜMAY M.  
7th International Conference on Advanced Technologies, Antalya, Turkey, 28 April - 01 May 2018
- XVI. **A REVIEW ON THE FORECASTING OF SOLAR GENERATED POWER**  
DEMİRDELEN T., EKİNCİ F., SARAÇ EŞSİZ E., AKSU İ. Ö., BİLGİLİ M.  
ICAT'xx18, 28 April - 01 May 2018
- XVII. **A REVIEW OF POWER QUALITY PROBLEM CLASSIFICATION USING ARTIFICIAL NEURAL NETWORKS**  
BAL S., AKSU I. O., DEMİRDELEN T.  
7th International Conference on Advanced Technologies, Antalya, Turkey, 28 April - 01 May 2018
- XVIII. **SPECIAL PURPOSE TRANSFORMERS**  
BAL S., DEMİRDELEN T., TÜMAY M.  
7th International Conference on Advanced Technologies, Antalya, Turkey, 28 April - 01 May 2018
- XIX. **SPECIAL PURPOSE TRANSFORMER**  
BAL S., DEMİRDELEN T., TÜMAY M.  
7th International Conference on Advanced Technologies, Antalya, Turkey, 28 April - 01 May 2018
- XX. **SHORT TERM WIND SPEED PREDICTION A COMPREHENSIVE REVIEW**  
DEMİRDELEN T., EKİNCİ F., SARAÇ EŞSİZ E., AKSU İ. Ö., BİLGİLİ M.  
ICAT 2018, Antalya, Turkey, 28 April - 01 May 2018
- XXI. **Micro-cogeneration: A Review Of The Present State Of The Art**  
EKİNCİ F., DEMİRDELEN T.  
2 nd International Mediterranean Science And Engineering Congress, 25 - 27 November 2017
- XXII. **Fotovoltaik/termal (pv/t) Sistemler: Isı Pompası Uygulaması Üzerine Bir Derleme**  
EKİNCİ F., DEMİRDELEN T.  
2nd International Mediterranean Science And Engineering Congress, 25 - 27 November 2017
- XXIII. **THE THREE DIMENSIONAL ELECTROMAGNETIC ANALYSIS OF POWER TRANSFORMERS BASED ON ANSYS**  
DEMİRDELEN T., BAL S., TÜMAY M., CUMA M. U., CİCİBAŞ A., KÖSEOĞLU K., AKSOY M.  
ICAT RIGA, 6 International Conference on Advanced Technology Sciences, Riga, Latvia, 12 - 15 September 2017
- XXIV. **Comparison of Harmonics at Phase-Shift Controllers of Isolated Bidirectional DC-DC Converter for DCGrid Systems**  
KAYAALP R. İ., DEMİRDELEN T., CUMA M. U., BAYINDIR K. Ç., TÜMAY M.  
6th International Conference on Advanced Technology Sciences, Riga, Latvia, 12 - 15 September 2017
- XXV. **Smart Transformers for Integration of Renewable Energy Sources**  
DEMİRDELEN T., TÜMAY M., BAL S., CUMA M. U., CİCİBAŞ A., KÖSEOĞLU A. K., AKSOY M.  
7th International Symposium on Energy, Manchester, United Kingdom, 13 - 17 August 2017
- XXVI. **Wind Energy Source based New Generation Electric Generator**  
EKİNCİ F., DEMİRDELEN T., FIRAT E., BİLGİLİ M.  
6th International Conference on Advanced Technology Sciences, Riga, Latvia, 12 - 15 September 2017
- XXVII. **COMPARATIVE PERFORMANCE EVALUATION OF MULTI SOGI PLL FOR MINIMUM SETTLING TIME AND LOW UNIT VECTOR DISTORTION UNDER DISTORTED CONDITIONS**  
DEMİRDELEN T., ÖZDEMİR T., TÜMAY M.  
5th International Conference on Advanced Technology Sciences, İstanbul, Turkey, 9 - 12 May 2017
- XXVIII. **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, United Kingdom, 16 - 18 August 2017, pp.101-106
- XXIX. **Manyetik Kontrollü Şönt Reaktör için Uygulanan Kontrol Yöntemlerini Literatür İncelemesi**  
TÜMAY M., DEMİRDELEN T., BAL S., KAYAALP R. İ., DOĞRU B., AKSOY M.  
ELECO 2016, Turkey, 1 - 03 December 2016, pp.96-100
- XXX. **Phase Shifting Transformers A Survey On Control And Optimization Strategies**  
TÜMAY M., DEMİRDELEN T., BAL S., DOĞRU B., CİCİBAŞ A., KÖSEOĞLU A., AKSOY M.

4th International Conference on Advanced Technology Sciences, ROMA, 23 - 25 November 2016

- XXXI. **Faz Kaydırıcı Transformatörlerin Dünyadaki Durumu ve Uygulama Alanlarının Literatür İncelemesi**  
TÜMAY M., DEMİRDELEN T., BAL S., doğru b., cibaba a., köseoğlu k., aksoy m.  
Güç Sistemleri Konferansı (Cigre), Turkey, 15 - 16 November 2016
- XXXII. **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, Hungary, 27 - 29 July 2016
- XXXIII. **A Novel Modular Multilevel Bidirectional DC DC Converter with Dual Phase Shift Control Method in Medium Voltage Applications**  
KAYAALP R. İ., DEMİRDELEN T., TÜMAY M.  
International Symposium on Fundamentals of Electrical Engineering, BÜKREŞ, Romania, 30 June - 02 July 2016
- XXXIV. **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, United Kingdom, 6 - 08 April 2016, pp.217-223
- XXXV. **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, United Kingdom, 6 - 08 April 2016, pp.217-223
- XXXVI. **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, Turkey, 1 - 03 December 2016, pp.96-100
- XXXVII. **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, Italy, 28 - 30 November 2016, pp.111-116
- XXXVIII. **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, Latvia, 1 - 03 June 2016, pp.35-40
- XXXIX. **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), Romania, 30 June - 02 July 2016
- XL. **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, Latvia, 1 - 03 June 2016, pp.97-102
- XLI. **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, Canada, 6 - 08 April 2016, pp.217-223
- XLII. **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, Spain, 6 - 08 October 2015, pp.247-253

- XLIII. **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, Spain, 6 - 08 October 2015, pp.254-259
- XLIV. **COMPARISON OF THREE FIVE AND SEVEN LEVELS DIODE CLAMPED MULTILEVEL INVERTER TOPOLOGIES BASED SHUNT HYBRID ACTIVE POWER FILTER FOR HARMONICS COMPENSATION WITH EQUAL DC LINK**  
DEMİRDELEN T., İNCİ M., TÜMAY M.  
ICAT 2015, 4 - 07 August 2015
- XLV. **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, Turkey, 4 - 07 August 2015, pp.273-279
- XLVI. **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, Germany, 22 - 25 June 2015, pp.391-398
- XLVII. **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, Germany, 22 - 25 June 2015, pp.1-6
- XLVIII. **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, Germany, 22 - 25 June 2015, pp.1-8
- XLIX. **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, Germany, 22 - 25 June 2015, pp.239-242
- L. **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, Germany, 22 - 25 June 2015, pp.1-4
- LI. **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.  
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- LII. **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, Germany, 22 - 25 June 2015, pp.391-398
- LIII. **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,

Germany, 22 - 25 June 2015, pp.1-8

- LIV. **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, Germany, 22 - 25 June 2015, pp.111-116
- LV. **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, Germany, 22 - 25 June 2015, pp.1-4
- LVI. **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.  
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DEMİRDELEN T.  
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- LXIV. **Şebekeye Bağlı Sistemler için Üç Faz ve Tek Faz PLL'lerin Performans Değerlendirmesi**  
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- LXV. **Şebekeye Bağlı Sistemler İçin Üç Faz ve Tek Faz PLL'lerin Performans Değerlendirmesi**  
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- LXVI. **Şebekeye Bağlı Sistemler İçin Üç Faz ve Tek Faz PLL'lerin Performans Değerlendirmesi**  
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- LXVII. **Analysis of Power Quality Problems of Coreless Induction Melting Furnace with Exact Simulation Model Based on Field Measurements**  
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- LXVIII. **Review of Hybrid Active Power Filter Topologies and Controllers**  
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## Supported Projects

- DEMİRDELEN T., TUBITAK Project, Çok Seviyeli Dönüştürücü Tabanlı Özgün Melez Aktif Güç Filtresinin Modellemesi Ve Analizi, 2016 - Continues
- TUBITAK Project, Da-Da Yükseltici Çeviricili Melez Birleştirilmiş Güç Kalitesi Düzenleyicisi Tasarımı Ve Gerçekleştirilmesi, 2011 - Continues
- TÜMAY M., Sakalhoğlu B., DEMİRDELEN T., Project Supported by Higher Education Institutions, Modelling and Analysis of Two Core Asymmetric Phase Shifting Transformer, 2016 - 2020
- TÜMAY M., BAL S., DEMİRDELEN T., Project Supported by Higher Education Institutions, Manyetik Kontrollü Şönt Reaktör için Uygulanan Kontrol Yöntemlerinin İncelenmesi, 2016 - 2017
- TÜMAY M., DEMİRDELEN T., KAYAALP R. İ., Project Supported by Higher Education Institutions, Modelling and Analysis of Modular Cascaded Multilevel Converter Based Shunt Hybrid Active Power Filter for Large Scale Photovoltaic System Interconnection, 2016 - 2016

## Peer Reviews in Scientific Publications

- International Journal for Innovation Education and Research, Other Indexed Journal, January 2016
- Alexandria Engineering Journal, Other Indexed Journal, January 2016
- Electric Power Components and Systems Journal, SCI Journal, January 2014
- International Journal of Electrical Power & Energy Systems, SCI Journal, November 2013
- TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES, SCI Journal, June 2013

## Metrics

- Publication: 92
- Citation (WoS): 104
- Citation (Scopus): 135
- H-Index (WoS): 4
- H-Index (Scopus): 5

## **Non Academic Experience**

Çukurova Silo, Danışman

Abdioğulları ARGE Mühendislik Tasarım AŞ, Danışman

IT RED Enerji Tasarım Mühendislik Arge Danışmanlık Sanayi ve Ticaret Limited Şirketi, Danışman

Adana Hacı Sabancı Organize Sanayi Bölgesi Bölge Müdürlüğü, Danışman

ULUSOY TEKSTİL San. ve Tic. A.Ş., Danışman