

Res. Asst. MEHMET BÜYÜK

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: E-5154-2018

Yoksis Researcher ID: 43730

Education Information

Postgraduate, Cukurova University, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği, Turkey 2012 - 2015

Undergraduate, Cukurova University, Mühendislik-Mimarlık, Elektrik-Elektronik Mühendisliği, Turkey 2007 - 2012

Foreign Languages

English, C1 Advanced

Research Areas

Electrical and Electronics Engineering, Energy, Power System Analysis, Renewable energy, Power Electronics, Power Converters, Power Quality, Engineering and Technology

Academic Titles / Tasks

Research Assistant, Cukurova University, Mühendislik-Mimarlık Fakültesi, Elektrik-Elektronik Mühendisliği, 2015 - Continues

Research Assistant, Adiyaman University, Faculty Of Engineering, Elektrik-Elektronik Mühendisliği, 2013 - 2015

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Improved instantaneous power theory based current harmonic extraction for unbalanced electrical grid conditions**
BÜYÜK M., Inci M., TAN A., TÜMAY M.
ELECTRIC POWER SYSTEMS RESEARCH, vol.177, 2019 (SCI-Expanded)
- II. **Improved adaptive notch filter-based active damping method for shunt active power filter with LCL-filter**
BÜYÜK M., TAN A., Tumay M.
ELECTRICAL ENGINEERING, vol.100, no.3, pp.2037-2049, 2018 (SCI-Expanded)
- III. **PERFORMANCE COMPARISON OF VOLTAGE SAG/SWELL DETECTION METHODS IMPLEMENTED IN CUSTOM POWER DEVICES**

- BÜYÜK M., İNCİ M., TÜMAY M.
 REVUE ROUMAINE DES SCIENCES TECHNIQUES-SERIE ELECTROTECHNIQUE ET ENERGETIQUE, vol.62, no.2,
 pp.129-133, 2017 (SCI-Expanded)
- IV. Topologies, generalized designs, passive and active damping methods of switching ripple filters for voltage source inverter: A comprehensive review
 BÜYÜK M., TAN A., TÜMAY M., BAYINDIR K. Ç.
 RENEWABLE & SUSTAINABLE ENERGY REVIEWS, vol.62, pp.46-69, 2016 (SCI-Expanded)

Articles Published in Other Journals

- I. MULTIPURPOSE COMPENSATION SCHEME FOR VOLTAGE SAG/SWELL AND SELECTIVE HARMONICS ELIMINATION IN DISTRIBUTION SYSTEMS
 İnci M., BÜYÜK M., TAN A., Bayindir K. C., TÜMAY M.
 ADVANCES IN ELECTRICAL AND ELECTRONIC ENGINEERING, vol.16, no.1, pp.71-80, 2018 (ESCI)

Refereed Congress / Symposium Publications in Proceedings

- I. Performance Comparision of PI and PIHC controllers for SAPF with LCL filter
 BÜYÜK M., TAN A., CUMA M. U., TÜMAY M.
 EurasianSciEnTech 2018, 14 - 16 November 2018
- II. Survey of Inverter Topologies Implemented in Dynamic Voltage Restorers
 İnci M., BÜYÜK M., TAN A., BAYINDIR K. Ç., TÜMAY M.
 4th International Conference on Control, Decision and Information Technologies (CoDIT), Barcelona, Spain, 5 - 07 April 2017, pp.1141-1146
- III. MVT Controlled Voltage Restorer for Fault-Ride Through Capability
 İnci M., BÜYÜK M., TAN A., BAYINDIR K. Ç., Tumay M.
 10th International Conference on Electrical and Electronics Engineering (ELECO), Bursa, Turkey, 30 November - 02 December 2017, pp.380-385
- IV. A Notch Filter based Active Damping of LLCL Filter in Shunt Active Power Filter
 BÜYÜK M., TAN A., İNCİ M., TÜMAY M.
 19th International Symposium on Power Electronics (Ee), Novi-Sad, Serbia And Montenegro, 19 - 21 October 2017
- V. EPLL based Controller for Voltage Harmonic Mitigation in Grid Connected Wind Systems
 İnci M., BÜYÜK M., BAYINDIR K. Ç., TÜMAY M.
 4th International Conference on Control, Decision and Information Technologies (CoDIT), Barcelona, Spain, 5 - 07 April 2017, pp.1157-1161
- VI. Capacitor Current Feedback Active Damping for Shunt Active Power Filter with Output LLCL Filter
 BÜYÜK M., İNCİ M., TAN A., Tumay M.
 10th International Conference on Electrical and Electronics Engineering (ELECO), Bursa, Turkey, 30 November - 02 December 2017, pp.376-379
- VII. The Performance Improvement of DVR Based Grid Connected Wind Energy Systems for Sustainable Energy
 BÜYÜK M., İNCİ M., TAN A., TÜMAY M.
 International Conference on Sustainable Development, 19 - 23 October 2016
- VIII. An Overview of Active Damping Methods for Grid Connected Inverters
 BÜYÜK M., İNCİ M., TAN A., TÜMAY M.
 International Energy and Engineering Conference, 13 - 14 October 2016
- IX. Modified SPWM to reduce switching losses in Standby UPS Systems for Sustainable Energy
 İNCİ M., BÜYÜK M., TÜMAY M.
 International Conference on Sustainable Development 2016, Skopje, Macedonia, 19 - 23 October 2016, pp.11-17

- X. **Improved SRF to Extract Harmonics in Active Power Filters for Single Phase Systems**
 İNCİ M., BÜYÜK M., TÜMAY M.
 International Conference on Sustainable Development 2016, Skopje, Macedonia, 19 - 23 October 2016, pp.30-34
- XI. **A Comprehensive Review of Power Quality Problems and Solution Techniques in Grid Connected Wind Systems**
 İNCİ M., BÜYÜK M., TÜMAY M.
 International Conference on Sustainable Development 2016, Skopje, Macedonia, 19 - 23 October 2016, pp.18-23
- XII. **FFT based Reference Signal Generation to Compensate Simultaneous Voltage Sag/Swell and Voltage Harmonics**
 İnci M., BÜYÜK M., TÜMAY M.
 IEEE 16th International Conference on Environment and Electrical Engineering (EEEIC), Florence, Italy, 6 - 10 June 2016
- XIII. **Performance Evaluation of LLCL Filter for Active Power Filter**
 BÜYÜK M., Inci M., TÜMAY M.
 IEEE 16th International Conference on Environment and Electrical Engineering (EEEIC), Florence, Italy, 6 - 10 June 2016
- XIV. **Analysis and Comparison of Passive Damping Methods for Shunt Active Power Filter with Output LCL Filter**
 BÜYÜK M., TAN A., BAYINDIR K. Ç., TÜMAY M.
 2015 International Aegean Conference on Electrical Machines and Power Electronics and 2015 Electromotion Joint Conference - ACEMP 2015, Antalya, Turkey, 2 - 04 September 2015, pp.434-440
- XV. **Analysis and Comparison of Passive Damping Methods for Shunt Active Power Filter with Output LCL Filter**
 BÜYÜK M., TAN A., BAYINDIR K. Ç., TÜMAY M.
 IEEE International Conference ACEMP_OPTIM-ELECTROMOTION 2015 Side Turkey, Antalya, Turkey, 2 - 04 September 2015, pp.434-440
- XVI. **ANALYSIS AND COMPARISON OF PASSIVE DAMPING METHODS FOR SHUNT ACTIVE POWER FILTER WITH OUTPUT LCL FILTER**
 BÜYÜK M., TAN A., BAYINDIR K. Ç., TÜMAY M.
 Int Aegean Conference on Electrical Machines and Power Electronics (ACEMP) / Int Conference on Optimization of Electrical and Electronic Equipment (OPTIM) / Int Symposium on Advanced Electromechanical Motion Systems (ELECTROMOTION), Side, Turkey, 2 - 04 September 2015, pp.434-440
- XVII. **Şebekeye Bağlı Sistemler İçin Üç Faz ve Tek Faz PLL?lerin Performans Değerlendirmesi**
 DEMİRDELEN T., TAN A., İNCİ M., KÖROĞLU T., BÜYÜK M., TERÇİYANLI A., BAYINDIR K. Ç., TÜMAY M.
 5. Enerji Verimliliği ve Kalitesi Sempozyumu - EVK 2013, Kocaeli, Turkey, 23 - 24 May 2013, pp.5-9
- XVIII. **Şebekeye Bağlı Sistemler İçin Üç Faz ve Tek Faz PLL?lerin Performans Değerlendirmesi**
 DEMİRDELEN T., TAN A., İNCİ M., KÖROĞLU T., BÜYÜK M., TERÇİYANLI A., BAYINDIR K. Ç., TÜMAY M.
 5. Enerji Verimliliği ve Kalitesi Sempozyumu - EVK 2013, Kocaeli, Turkey, 23 - 24 May 2013, pp.5-9

Supported Projects

- TÜMAY M., BÜYÜK M., Project Supported by Higher Education Institutions, Design and Implementation of Converter based Active Damper for Shunt Active Power Filter with Output LCL Filter, 2019 - 2020
- İNCİ M., BÜYÜK M., TAN A., Project Supported by Higher Education Institutions, Gerilim Çukuru ve Tepesi Tespit Yöntemlerinin Uygulamalı Performans Analizi, 2017 - 2018
- TÜMAY M., TAN A., BÜYÜK M., İNCİ M., Project Supported by Higher Education Institutions, LLCL Çıkış Filtreli Şönt Aktif Güç Filtreleri için Aktif Sönükleme Yöntemlerinin İncelenmesi ve Uygulaması, 2017 - 2018
- TAN A., İNCİ M., BÜYÜK M., TÜMAY M., Project Supported by Higher Education Institutions, Survey of Inverter Topologies Implemented in Dynamic Voltage Restorers, 2017 - 2017
- TAN A., İNCİ M., BÜYÜK M., Project Supported by Higher Education Institutions, Dinamik Gerilim İyileştircilerde Gerilim

Tespit Metotlarının Karşılaştırılması ve Anahtarlama Dalgacık Filtrelerinin İncelenmesi, 2016 - 2016
TÜMAY M., BÜYÜK M., İNCİ M., Project Supported by Higher Education Institutions, Üç Faz Üç Tel Paralel Aktif Güç
Filtreleri için LCL Çıkış Filtresinin Pasif ve Aktif Damping Metotlarının İncelenmesi ve Analizi, 2015 - 2016

Scientific Refereeing

IET Power Electronics, SCI Journal, December 2016
IET Generation, Transmission and Distribution, SCI Journal, December 2016
IET Power Electronics, SCI Journal, December 2016
Renewable and Sustainable Energy Reviews, SCI Journal, November 2016
IET Power Electronics, SCI Journal, October 2016
IET Power Electronics, SCI Journal, July 2016
ACEMP - OPTIM - ELECTROMOTION JOINT CONFERENCE, Other journals, August 2015

Metrics

Publication: 23
Citation (WoS): 61
Citation (Scopus): 63
H-Index (WoS): 4
H-Index (Scopus): 3

Non Academic Experience

ENDOKS ENERJİ SİSTEMLERİ