

Assoc. Prof. ORHAN KAPLAN

Personal Information

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Education Information

Doctorate, Gazi University, Fen Bilimleri Enstitüsü, Elektrik Eğitimi (Dr), Turkey 2005 - 2011

Post Graduate, Gazi University, Fen Bilimleri Enstitüsü, Elektrik Eğitimi (Yl) (Tezli), Turkey 2002 - 2005

Under Graduate, Gazi University, Teknik Eğitim Fakültesi, Elektrik Eğitimi Bölümü, Turkey 1997 - 2001

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Bir Fazlı Paralel Aktif Güç Filtreleri için Sensörsüz DA Gerilim Kontrolü, Gazi University, Fen Bilimleri Enstitüsü, Elektrik Eğitimi (Dr), 2011

Post Graduate, PIC Denetimli Kondansatör Grupları ile Güç Katsayısının Düzeltilmesi, Gazi University, Fen Bilimleri Enstitüsü, Elektrik Eğitimi (Yl) (Tezli), 2005

Research Areas

Renewable energy, Electrical Machine Theory and Design, Electric Motor Drivers, Power Apparatus (transformers,reactors,switchgear,etc.), Power Quality

Academic Titles / Tasks

Associate Professor, Gazi University, Teknoloji Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2019 - Continues

Research Assistant, Gazi University, Teknik Eğitim Fakültesi, Elektrik Eğitimi Bölümü, 2007 - 2011

Professional Experience

Deputy Head of Department, Gazi University, Teknoloji Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2020 - Continues

Deputy Head of Department, Gazi University, Teknoloji Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2016 - 2017

Assistant Director of Vocational School, Gazi University, Teknik Bilimler Meslek Yüksekokulu, 2014 - 2015

Assistant Director of Vocational School, Gazi University, Ostim Meslek Yüksekokulu, 2013 - 2014

Courses

EE 210-SİNYALLER VE SİSTEMLER, Under Graduate, 2016 - 2017, 2017 - 2018
EE 316- ELEKTRİK MAKİNELERİ LAB.-II, Under Graduate, 2016 - 2017, 2017 - 2018
EE 314-ELEKTRİK MAKİNELERİ-II, Under Graduate, 2016 - 2017, 2017 - 2018
GÜÇ KALİT. DÜZ VE GÜÇ FİLTRELERİ, Post Graduate, 2016 - 2017, 2017 - 2018
EE-315 ELEKTRİK MAKİNELERİ LAB-I, Under Graduate, 2017 - 2018
EE-313 ELEKTRİK MAKİNELERİ-I, Under Graduate, 2017 - 2018
EE-313 ELEKTRİK MAKİNALARI I, Under Graduate, 2016 - 2017
EE-315 ELEKTRİK MAKİNALARI LAB I, Under Graduate, 2016 - 2017

Advising Theses

KAPLAN O., Photosensitivity Performance Of Al Doped N-Zno/P-Si Heterojunction Devices, Post Graduate, Ö.FARUK(Student), 2018

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **Zero-current switching technique for constant voltage constant frequency sinusoidal PWM inverter**
ÖZTÜRK N., KAPLAN O., Celik E.
ELECTRICAL ENGINEERING, vol.100, no.2, pp.1147-1157, 2018 (Journal Indexed in SCI)
- II. **The Determination of Load Profiles and Power Consumptions of Home Appliances**
ISSI F., KAPLAN O.
ENERGIES, vol.11, no.3, 2018 (Journal Indexed in SCI)
- III. **Simplified Model and Genetic Algorithm Based Simulated Annealing Approach for Excitation Current Estimation of Synchronous Motor**
KAPLAN O., Celik E.
ADVANCES IN ELECTRICAL AND COMPUTER ENGINEERING, vol.18, no.4, pp.75-84, 2018 (Journal Indexed in SCI)
- IV. **A novel method based on Weibull distribution for short-term wind speed prediction**
KAPLAN O., Temiz M.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.42, no.28, pp.17793-17800, 2017 (Journal Indexed in SCI)
- V. **Fuzzy PI controlled inverter for grid interactive renewable energy systems**
Sefa I., Altin N., ÖZDEMİR Ş., KAPLAN O.
IET RENEWABLE POWER GENERATION, vol.9, no.7, pp.729-738, 2015 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **Kablosuz Güç Aktarımı için Karşılıklı Endüktans Hesaplama Aracının Geliştirilmesi**
KAPLAN O.
Gazi Üniversitesi Fen Bilimleri Dergisi Part C: Tasarım ve Teknoloji, vol.7, no.1, pp.37-48, 2019 (Other Refereed National Journals)
- II. **Internet Based Speed Control and Torque Analysis of a 3 Phase Induction Motor**
KAPLAN O.
Przeglad Elektrotechniczny, vol.89, pp.159-165, 2013 (Refereed Journals of Other Institutions)
- III. **PLC ve SCADA kullanılarak bir endüstriyel sistemin otomasyonu**
BAYINDIR R., KAPLAN O., CEM B., SARIKAYA Y., HALLAÇLIOĞLU M.
Erciyes Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.1, no.1, pp.107-115, 2011 (Other Refereed National Journals)
- IV. **Simulation of The DC Capacitor Voltage Controlled Single Phase Shunt Active Power Filters for PowerQuality Improvement**

ÇOLAK İ., BAYINDIR R., KAPLAN O.

GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.23, no.2, pp.177-186, 2010 (Other Refereed National Journals)

V. **PIC Denetimli Reaktif Güç Rölesi Tasarımı**

BAYINDIR R., KAPLAN O.

Journal Of The Faculty Of Engineering And Architecture Of Gazi University, vol.22, no.1, pp.47-56, 2007 (Refereed Journals of Other Institutions)

Refereed Congress / Symposium Publications in Proceedings

- I. **Design and Implementation of Sensorless DC Voltage Regulation for Shunt Active Power Filter Based Single Phase P-Q Theory**
ÇOLAK İ., KAPLAN O.
8th International Conference on Renewable Energy Research and Applications, Brasov, Romania, 3 - 06 November 2019
- II. **Artificial Neural Network Based Automatic Voltage Regulator for a Stand-Alone Synchronous Generator**
BAL G., KAPLAN O., Yalçın S. S.
International Conference on Renewable Energy Research and Applications, 3 - 06 November 2019
- III. **Farklı Yük Akışı Analizi Teknikleri Kullanılarak Gerçek Bir Dağıtım Şebekesinin Değerlendirilmesi**
İŞCAN S., KAPLAN O.
INTERNATIONAL EURASIAN CONFERENCE ON SCIENCE, ENGINEERING AND TECHNOLOGY, Ankara, Turkey, 22 - 23 November 2018
- IV. **Elektrik Dağıtım Hatları Aktif Ve Reaktif Güç Kayıplarının Azaltılmasında Kullanılan Optimizasyon Teknikleri: Bir Literatür Taraması**
İŞCAN S., KAPLAN O.
Uluslararası Mesleki Bilimler Sempozyumu / International Vocational Science Symposium, Antalya, Turkey, 18 - 20 October 2017, vol.1, pp.167
- V. **VIRTUAL LABORATORY STUDY FOR ENERGY EFFICIENCY: ASYNCHRONOUS MOTOR'xxS REAL-TIME TORQUE / POWER EXCHANGE EXPERIMENT**
ISSI F., KARHAN M., KAPLAN O.
Computational and Statistical Methods in Applied Sciences COSTAS 2017, 9 - 11 November 2017
- VI. **DEVELOPMENT OF AN ANDROID BASED DATA LOGGING SOFTWARE FOR ENERGY PRODUCTION AND CONSUMPTION AT SMART HOMES**
ISSI F., KARHAN M., KAPLAN O.
Computational and Statistical Methods in Applied Sciences COSTAS 2017, 9 - 11 November 2017
- VII. **ANDROID BASED ONLINE INDUCTION MOTOR TORQUE ANALYSIS AND CONTROL TOOL**
ISSI F., KAPLAN O., KARHAN M.
Arama Sonuçları INTERNATIONAL SCIENTIFIC CONFERENCE - UNITECH, 17 - 18 November 2017
- VIII. **An Android Based Application and Simulation of Multiple Photovoltaic Panels**
KAPLAN O., ISSI F.
6th IEEE International Conference on Renewable Energy Research and Applications (ICRERA), California, United States Of America, 5 - 08 November 2017, pp.925-930
- IX. **A New Method Based on Weibull Distribution to Generate Stochastic Wind Speed**
TEMİZ M., KAPLAN O.
European Conference on Renewable Energy Systems, İstanbul, Turkey, 28 - 31 August 2016
- X. **Empedans Kaynaklı Bir Eviricinin Modellenmesi ve Simülasyonu**
İŞCAN S., KAPLAN O.
5th International Vocational Schools Symposium, Bosnia And Herzegovina, 18 - 20 May 2016
- XI. **The Analysis of Wind Speed Potential and Energy Density in Ankara**
KAPLAN O., Temiz M.

5th IEEE International Conference on Renewable Energy Research and Applications (ICRERA), Birmingham, England, 20 - 23 November 2016, pp.919-923

- XII. **ANN Controlled Single Phase Inverter For Solar Energy Systems**
DEMİRTAŞ M., ÇETİNBAŞ İ., Serefoglu S., KAPLAN O.
16th International Power Electronics and Motion Control Conference and Exposition (PEMC), Antalya, Turkey, 21 - 24 September 2014, pp.768-772
- XIII. **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
- XIV. **A high efficient driver design for LED lighting system**
KAPLAN O., İSSİ F., MUSTAFA E.
4th International Conference on Power Engineering, Energy and Electrical Drives, Istanbul, Turkey, Turkey, 13 - 17 May 2013, pp.1548-1552
- XV. **C.NET and MATLABsupx00AE/sup based simulation program for basic electrical circuits**
BAYINDIR R., KAPLAN O., CAN C.
International Aegean Conference on Electrical Machines and Power Electronics and Electromotion, Joint Conference, Istanbul, Turkey, 8 - 10 September 2011
- XVI. **Analysing the efficient use of energy in a small smart grid system**
ÇOLAK İ., Heinz W., Fulli G., Vasiljevska J., İSSİ F., KAPLAN O.
2012 International Conference on Renewable Energy Research and Applications (ICRERA), Nagasaki, Japan, 11 - 14 November 2012
- XVII. **Intelligent Decision Support System For Energy Investments**
YAVANOĞLU U., KAPLAN O., Atli H., Tanis G., Milletsever O., Inal U.
12th International Conference on Machine Learning and Applications (ICMLA), Florida, United States Of America, 4 - 07 December 2013, pp.224-231
- XVIII. **Country Study of Renewable Energy Resources**
KAPLAN O., YAVANOĞLU U.
1th International Conference on Renewable Energy Research and Applications, Japan, 11 - 14 November 2012
- XIX. **An Intelligent Power Factor Correction Approach Based on Linear Regression and Ridge Regression Methods**
BAYINDIR R., GÖK M., KABALCI E., KAPLAN O.
2011 10th International Conference on Machine Learning and Applications and Workshops, Honolulu, HI, 18 - 21 December 2011
- XX. **Country Study on Renewable Energy Sources in Turkey**
KAPLAN O., Yavanoglu U., İssi F.
1st International Conference on Renewable Energy Research and Applications (ICRERA), Nagasaki, Japan, 11 - 14 November 2012
- XXI. **A comparative study of harmonic extraction methods for single phase shunt active power filter**
ÇOLAK İ., BAYINDIR R., IRMAK E., KAPLAN O.
2011 International Conference on Power Engineering, Energy and Electrical Drives, Malaga, Spain, 11 - 13 May 2011
- XXII. **MATLAB GUI based simulation for photovoltaic systems**
BAYINDIR R., ÇOLAK İ., KAPLAN O., CAN C.
2011 International Conference on Power Engineering, Energy and Electrical Drives, Malaga, Spain, Spain, 11 - 13 May 2011, pp.1-4
- XXIII. **Design and Application of a Novel Zero Crossing Detector Circuit**
IRMAK E., ÇOLAK İ., KAPLAN O., GÜLER N.
International Conference on Power Engineering, Energy and Electrical Drives~POWERENG2011, 11 - 13 May 2011
- XXIV. **A novel technique for power factor calculation using a PLC**
BAYINDIR R., ÇOLAK İ., KAPLAN O.

6th International Conference and Exhibition on Ecological Vehicles and Renewable Energies (EVER'11), 31 March - 03 April 2011

- XXV. **C#.NET and MATLAB((R)) Based Simulation Program for Basic Electrical Circuits**
BAYINDIR R., KAPLAN O., Can C.
International Aegean Conference on Electrical Machines and Power Electronics / Electromotion Joint Conference, İstanbul, Turkey, 8 - 10 September 2011, pp.430-435
- XXVI. **Development of a Real Time Monitoring and Control System for PLC Based Elevator**
Irmak E., Colak I., Kaplan O., Köse A.
14th European Conference on Power Electronics and Applications (EPE)/ECCE Europe Conference on Power Electronics and Adjustable Speed Drives - Towards the 20-20-20 Target, Birmingham, England, 30 August - 01 September 2011
- XXVII. **DC Bus Voltage Regulation of an Active Power Filter Using a Fuzzy Logic Controller**
ÇOLAK İ., BAYINDIR R., KAPLAN O., Taş F.
2010 Ninth International Conference on Machine Learning and Applications, Washington, DC, USA, United States Of America, 12 - 14 December 2010, pp.692-696
- XXVIII. **Development of an Intelligent Decision Support System for Determining the Efficiency of Shunt Active Power Filter**
SAĞIROĞLU Ş., BAYINDIR R., KAPLAN O., Kahraman H. T.
8th International Conference on Machine Learning and Applications, Florida, United States Of America, 13 - 15 December 2009, pp.626-628
- XXIX. **Reaktif Güç Kompanzasyonu Uygulamalarının Eğitim Amaçlı Benzetimi**
ÇOLAK İ., KAPLAN O., BAYINDIR R., KUNDAKOĞLU H.
ELECO 2008, Bursa, Turkey, 26 - 30 November 2008

Supported Projects

KAPLAN O., Project Supported by Higher Education Institutions, ELEKTRİKLİ ARAÇLAR İÇİN ADAPTİF EMPEDANS EŞLEŞTİRMESİ KULLANILARAK MANYETİK REZONANS KUPLAJLI KABLOSUZ ŞARJ SİSTEMİ TASARIMI VE UYGULAMASI, 2018 - Continues

Activities in Scientific Journals

Gazi Üniversitesi Fen Bilimleri Dergisi: PART:C Tasarım ve Teknoloji, Assistant Editor, 2019 - Continues

Citations

Total Citations (WOS):97

h-index (WOS):4