

Assoc. Prof. BORA ACARKAN

Personal Information

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Publons / Web Of Science ResearcherID: O-2899-2013

ScopusID: 56636827700

Yoksis Researcher ID: 173776

Education Information

Doctorate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Elektrik Mühendisliği, Turkey
1999 - 2006

Postgraduate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Elektrik Mühendisliği, Turkey
1997 - 1999

Undergraduate, Yildiz Technical University, Faculty Of Electrical & Electronics, Elektrik Mühendisliği, Turkey 1993 - 1997

Dissertations

Doctorate, Ofis donanımının harmonik etkinliğinin kestirimi ve harmonik analizi, Yildiz Technical University, Graduate School of Natural and Applied Sciences, 2006

Research Areas

Electrical and Electronics Engineering, Energy, Lighting Technology, Power System Analysis, Generating Stations and Plants, Renewable energy, Engineering and Technology

Academic Titles / Tasks

Associate Professor, Yildiz Technical University, Faculty Of Electrical & Electronics, Electrical Engineering Department,
2021 - Continues

Assistant Professor, Yildiz Technical University, Faculty Of Electrical & Electronics, Electrical Engineering Department,
2018 - 2021

Assistant Professor, Yildiz Technical University, Faculty Of Electrical & Electronics, Electrical Engineering Department,
2014 - 2018

Lecturer PhD, Yildiz Technical University, Faculty Of Electrical & Electronics, Electrical Engineering Department, 2009 -
2014

Research Assistant, Yildiz Technical University, Faculty Of Electrical & Electronics, Electrical Engineering Department,
1998 - 2009

Academic and Administrative Experience

Deputy Head of Department, Yildiz Technical University, Faculty Of Electrical & Electronics, Electrical Engineering Department, 2016 - 2017

Supervised Theses

- Acarkan B., Elektrikli taşıtlardaki enerji depolama ve dağıtım sistemleri, Postgraduate, C.BERK(Student), 2021
- Acarkan B., Rüzgâr Enerjisi Santrallerinin Enerji Analizi, Postgraduate, D.ERDOĞAN(Student), 2021
- Acarkan B., DEVELOPMENT OF A NEW ELECTRICAL ENERGY MANAGEMENT SYSTEM FOR THE SHIPS IN ACCORDANCE WITH THE SMART GRID INFRASTRUCTURE, Doctorate, K.YİĞİT(Student), 2019
- Acarkan B., FACADE LIGHTING OF HISTORICAL BUILDINGS USING LED LIGHTING TECHNOLOGIES AND THE APPLICATION OF GALATA TOWER AND MAIDEN TOWER, Postgraduate, Y.DEMİRÖZ(Student), 2019
- ACARKAN B., GÜÇ AKIŞ ANALİZİNDE COĞRAFİ BİLGİ SİSTEMLERİNİN KULLANILMASI, Postgraduate, F.AYDIN(Student), 2014
- ACARKAN B., ELEKTRİKLİ ARAÇLARIN DAĞITILMIŞ ENERJİ ÜRETİM VE DEPOLAMA SİSTEMİ OLARAK DEĞERLENDİRİLMESİ, Postgraduate, İ.VERİM(Student), 2013
- ACARKAN B., BEP-TR YAZILIMI İLE KONUTLARDA ENERJİ KİMLİK BELGESİ UYGULAMASI VE AYDINLATMAYA YÖNELİK TÜKETİLEN ENERJİNİN TASARRUF POTANSİYELİNİN BELİRLENMESİ, Postgraduate, K.YİĞİT(Student), 2013

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **The effect of phase-shifting transformer angle value on system congestion and determination of ideal phase angle**
AYDIN F., YİĞİT K., ACARKAN B.
Electrical Engineering, 2024 (SCI-Expanded)
- II. **A new electrical energy management approach for ships using mixed energy sources to ensure sustainable port cities**
Yiğit K., Acarkan B.
SUSTAINABLE CITIES AND SOCIETY, vol.40, pp.126-135, 2018 (SCI-Expanded)
- III. **A new ship energy management algorithm to the smart electricity grid system**
Yiğit K., Acarkan B.
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.42, no.8, pp.2741-2756, 2018 (SCI-Expanded)
- IV. **Assessment of energy performance certificate systems: a case study for residential buildings in Turkey**
Yiğit K., Acarkan B.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.24, pp.4839-4848, 2016 (SCI-Expanded)
- V. **FGD investments as part of energy policy: A case study for Turkey**
KILIÇ O., ACARKAN B., AY S.
ENERGY POLICY, vol.62, pp.1461-1469, 2013 (SCI-Expanded)
- VI. **Modeling of hydrogen production with a stand-alone renewable hybrid power system**
DURSUN E., ACARKAN B., KILIÇ O.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.37, no.4, pp.3098-3107, 2012 (SCI-Expanded)
- VII. **Cost analysis for FGD units of coal-fired power plants: a case study in Turkey**
Guney I., KILIÇ O., ACARKAN B., AY S.
ENERGY EDUCATION SCIENCE AND TECHNOLOGY PART A-ENERGY SCIENCE AND RESEARCH, vol.28, no.2, pp.983-994, 2012 (SCI-Expanded)

Articles Published in Other Journals

- I. **Gemi jeneratörlerinin senkronizasyonu üzerine bir benzetim çalışması**
Erdoğan D., Yiğit K., Aydın F., Acarkan B.
Dicle Üniversitesi Mühendislik Fakültesi Mühendislik Dergisi, vol.13, no.3, pp.477-483, 2022 (Peer-Reviewed Journal)
- II. **Determination of the Electrical Energy Production Potential of a Wind Power Plant Depending on the Power Capacity: a Case Study for Province of Artvin**
Erdoğan D., Yiğit K., Acarkan B.
İğdır Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.11, no.2, pp.998-1013, 2021 (Peer-Reviewed Journal)
- III. **Gemi ve Liman Etkileşimi İçin Önerilen Enerji Yönetim Sistemi Modelinin İncelenmesi**
Yiğit K., Acarkan B.
Dokuz Eylül Üniversitesi Denizcilik Fakültesi Dergisi, vol.10, no.2, pp.169-181, 2018 (Peer-Reviewed Journal)
- IV. **An examination of the photovoltaic, energy storage, and diesel hybrid power system for the ship applications**
Yiğit K., Acarkan B.
International Journal of Advances on Automotive and Technology,, vol.2, pp.78-88, 2018 (Peer-Reviewed Journal)
- V. **Yol Aydınlatmasında Besleme Gerilimine Bağlı Olarak Nötr Hattındaki Harmonik Kayıpların Modellenmesi**
Kılıç O., Acarkan B.
3e Electrotech, no.2006, pp.102-106, 2006 (Peer-Reviewed Journal)

Books

- I. **Electric power generation potential estimation, exergy analysis, and future projections in wind turbines**
Erdoğan D., Yiğit K., Acarkan B.
in: Advanced Studies in Engineering, Şaban Öztürk,Umut Özkaya, Editor, Nobel Yayınevi, Ankara, pp.33-56, 2022
- II. **Elektrikli Taşıtlar: Tarihsel Gelişimi, Türleri ve Gelecek Eğilimi**
Aykaç C. B., Yiğit K., Acarkan B.
in: Academic Research for Sustainability-1, Cengiz KAHRAMAN, Editor, Artikel Akademi, İstanbul, pp.73-91, 2021
- III. **The importance of the ships in the next-generation electric power system, called "Smart Grid"**
YİĞİT K., ACARKAN B.
in: Exergetic, Energetic and Environmental Dimensions, Dincer I., Colpan C.O., Kizilkan O., Editor, Elsevier - Academic Press, Londra, pp.167-178, 2017

Refereed Congress / Symposium Publications in Proceedings

- I. **Determining the ideal size of SVC using secure voltage limits and line thermal constraints**
Aydın F., Kıyak İ., Acarkan B., Yiğit K.
EUROASIA International Congress on Scientific Researches and Recent Trends-VII, Ankara, Turkey, 29 - 30 November 2023, pp.815-828
- II. **Evaluation of energy management for stand-alone fuel cell and photovoltaic hybrid system model**
Albdıry A. T., Yiğit K., Acarkan B.
The Second International Conference on Artificial Intelligence of Things (ICAIoT 2022), İstanbul, Turkey, 29 - 30 December 2022, pp.1-6
- III. **Tam elektrikli gemilerde enerji verimliliğini artırma yöntemleri ve gelecek projeksiyonları**
Erdoğan D., Yiğit K., Acarkan B.
Karadeniz 10th International Conference on Applied Sciences, Samsun, Turkey, 17 - 18 September 2022, pp.15

- IV. **Evaluation the effect of MPPT technique on photovoltaic systems and consumer side**
Albdıry A. T., Yiğit K., Acarkan B.
Al-Farabi 4th International Congress on Applied Sciences, Erzurum, Turkey, 19 - 20 August 2022, pp.91-101
- V. **Electric power generation potential estimation, exergy analysis, and future projections in wind turbines**
Erdoğan D., Yiğit K., Acarkan B.
3rd International Conference on Applied Engineering and Natural Sciences (ICAENS), Konya, Turkey, 20 - 23 July 2022, pp.2483
- VI. **Multi-criteria decision making methods: A comparative study for ideal compensator location in power grid**
Aydın F., Gümüş B., Acarkan B., Yiğit K.
4. INTERNATIONAL PALANDOKEN SCIENTIFIC STUDIES CONGRESS, Erzurum, Turkey, 28 - 29 April 2022, pp.852-863
- VII. **Effect of distributed generation facilities on optimal location of flexible alternating current transmission system controllers**
Aydın F., Gümüş B., Acarkan B., Yiğit K.
IV. HAGIA SOPHIA INTERNATIONAL CONFERENCE ON MULTIDISCIPLINARY SCIENTIFIC STUDIES, İstanbul, Turkey, 11 - 13 February 2022, pp.898-911
- VIII. **A case study to determine the capacity factor and electrical energy production potential in wind turbines**
Erdoğan D., Yiğit K., Acarkan B.
International Online Conference on Engineering and Natural Sciences (IOCENS), Gümüşhane, Turkey, 5 - 07 July 2021, pp.75
- IX. **Electric motor types for electric vehicles: Advantages and disadvantages**
Aykaç C. B., Yiğit K., Acarkan B.
International Congress of Engineering and Natural Sciences Studies (ICENSS), Ankara, Turkey, 7 - 09 May 2021, pp.154-165
- X. **Elektrikli taşıtlar: Tarihsel gelişimi, türleri ve gelecek eğilimi**
Aykaç C. B., Yiğit K., Acarkan B.
International Congress on Science and Engineering for Sustainability , İstanbul, Turkey, 16 - 18 April 2021, pp.55-56
- XI. **Sürdürülebilir Şehirlerin Su Şebekelerinde Enerji ve Maliyet Yönetimi için Talep Cevabı Programlarının Rolü ve Önemi Üzerine Bir İnceleme**
Yalçın Y., Yiğit K., Acarkan B.
TOK2019 - Otomatik Kontrol Ulusal Toplantısı, Muğla, Turkey, 11 - 14 September 2019, pp.622-627
- XII. **Energy Management Of Water Transfer Stations By Using Demand Response Programs**
YALÇIN Y., YİĞİT K., ACARKAN B.
6th International Conference on Control Engineering and Information Technologies, CEIT 2018, İstanbul, Turkey, 25 - 27 October 2018, pp.642-646
- XIII. **Akıllı Şehirlerde Su Terfi İstasyonlarının Talep Cevabı Programları ile Kontrolü**
YALÇIN Y., YİĞİT K., ACARKAN B.
Otomatik Kontrol Ulusal Toplantısı, TOK2018, Kayseri, Turkey, 12 - 14 September 2018, pp.189-194
- XIV. **An Examination Of The Photovoltaic, Energy Storage, And Diesel Hybrid Power System For The Ship Applications**
Yiğit K., Acarkan B.
3rd Conference On Advances In Mechanical Engineering – ICAME2017, İstanbul, Turkey, 19 - 21 December 2017, pp.807-815
- XV. **Kamu Binalarında LED Ve Floresan Aydınlatma Elemanlarının Kullanılması Ve Karşılaştırmalı Performans Analizi**
Demiröz Y., Acarkan B.
11. Ulusal Aydınlatma Kongresi 2017, İstanbul, Turkey, 21 - 22 September 2017, pp.86-92

- XVI. **The Role Of The Ships In The Smart Electric Grid Systems**
Yiğit K., Acarkan B.
ICES 2016 International Conference On Energy Systems, İstanbul, Turkey, 21 - 23 December 2016
- XVII. **Tarihi Yapılarda Dış Cephe Aydınlatması Ve Galata Kulesi Uygulaması**
Demiröz Y., Acarkan B.
ELECO 2016 - Elektrik - Elektronik ve Biyomedikal Mühendisliği Konferansı, Bursa, Turkey, 1 - 03 December 2016, pp.110-114
- XVIII. **Güç Akış Analizlerinde Coğrafi Bilgi Sistemlerinin Kullanılması**
Aydın F., Acarkan B.
3. Elektrik Tesisat Ulusal Kongre ve Sergisi, Güç ve Enerji Sistemleri Sempozyumu, İzmir, Turkey, 21 - 24 November 2013
- XIX. **Floresan Lambaların Harmonik Güç Hesapları Ve Ölçümü**
KILIÇ O., ACARKAN B., AY S., GÜNDÜZ N.
V. Enerji Verimliliği ve Kalitesi Sempozyumu, EVK 2013, Kocaeli, Turkey, 23 - 24 May 2013
- XX. **Yeşil Binalar İle Aydınlatma İçin Tüketilen Enerjideki Tasarruf Potansiyelinin Ve Ekonomik Katkıların Belirlenmesi**
YÜKSEL T., ACARKAN B.
V. Enerji Verimliliği ve Kalitesi Sempozyumu, EVK 2013, Kocaeli, Turkey, 23 - 24 May 2013
- XXI. **BEP TR yazılımı ile konutlarda enerji kimlik belgesi uygulaması ve aydınlatmaya yönelik tüketilen enerjinin tasarruf potansiyelinin belirlenmesi**
Acarkan B., Yiğit K.
V. Enerji Verimliliği ve Kalitesi Sempozyumu (EVK), Kocaeli, Turkey, 23 - 24 May 2013
- XXII. **Elektrikli Araçların Dağıtılmış Enerji Üretim Depolama Sistemi Olarak Değerlendirilmesi**
Verim İ., Acarkan B., Yağcıtekin B., Uzunoğlu M.
V. Enerji Verimliliği ve Kalitesi Sempozyumu, EVK 2013, Kocaeli, Turkey, 23 - 24 May 2013
- XXIII. **Bilgisayar Yüklerinin Harmonik Aktivite Kestirimi ve Harmonik Analizi**
Acarkan B., Kılıç O., Ay S., Gündüz N.
IV. Enerji Verimliliği ve Kalitesi Sempozyumu, EVK 2011, Kocaeli, Turkey, 12 - 13 May 2011, pp.209-213
- XXIV. **Sodyum Buharlı Lambaların Harmonik Aktivite Kestirimi ve Harmonik Analizi**
Acarkan B., Kılıç O., Ay S.
III. Enerji Verimliliği ve Kalitesi Sempozyumu, EVK 2009, Kocaeli, Turkey, 21 - 22 May 2009, pp.201-205
- XXV. **Elektronik Balastlı Floresan Lambaların Harmonik Modellemesi ve Harmonik Analizi**
Acarkan B., Erkan K.
II. Enerji Verimliliği ve Kalitesi Sempozyumu, EVK 2007, Kocaeli, Turkey, 17 - 18 May 2007, pp.79-84
- XXVI. **Zero Power Levitation Control Design for a 4 Pole Electromagnet on the Basis of a Transfer Function Approach**
Erkan K., Acarkan B., Koseki T.
IEEE International Electric Machines and Drives Conference, IEMDC 2007, Antalya, Turkey, 3 - 05 May 2007, vol.2, pp.1751-1756
- XXVII. **Harmonics Modeling and Harmonic Activity Analysis of Equipments with Switch Mode Power Supply using MATLAB and Simulink**
ACARKAN B., ERKAN K.
IEEE International Electric Machines and Drives Conference, IEMDC 2007, Antalya, Turkey, 3 - 05 May 2007, pp.508-513
- XXVIII. **Mesures des Harmoniques dans des Conditions Sinusoïdales et Non Sinusoïdale**
ACARKAN B., ZORLU PARTAL S.
4th International Conference on Electrical and Power Engineering, EPE 2006, Iasi, Romania, 12 - 14 October 2006, pp.945-948
- XXIX. **Nonlinear Resistance Modeling using MATLAB and Simulink in Estimation of Office Equipment Harmonic Activity**
KILIÇ O., ACARKAN B.

- 4th International Conference on Electrical and Power Engineering, EPE 2006, Iasi, Romania, 12 - 14 October 2006, pp.838-843
- XXX. **Power Definitions of Office Equipments under Sinusoidal and Nonsinusoidal Conditions**
KILIÇ O., ACARKAN B., ZORLU PARTAL S.
4th International Conference on Electrical and Power Engineering, EPE 2006, Iasi, Romania, 12 - 14 October 2006, pp.844-851
- XXXI. **Harmonic Activity Simulation of Office Equipments using MATLAB Simulink**
ACARKAN B., ZORLU PARTAL S.
4th International Conference on Electrical and Power Engineering, EPE 2006, Iasi, Romania, 12 - 14 October 2006, pp.797-803
- XXXII. **Nonlinear Resistance Modeling using MATLAB and Simulink in Estimation of City Street Lighting Harmonic Activity**
ACARKAN B., ZORLU PARTAL S., KILIÇ O.
The IEEE International Conference on "Computer as a Tool", EUROCON 2005, Belgrade, Serbia And Montenegro, 21 - 24 November 2005, pp.1251-1254
- XXXIII. **Harmonik Aktivite Kestiriminde MATLAB ve Simulink Kullanarak Nonlineer Direnç Modellemesi**
Acarkan B., Kılıç O.
BMYS'2005 - Bilimde Modern Yöntemler Sempozyumu, Kocaeli, Turkey, 16 - 18 November 2005, pp.596-604
- XXXIV. **Yol Aydınlatmasında Besleme Gerilimine Bağlı Olarak Nötr Hattındaki Harmonik Kayıpların Modellenmesi**
Kılıç O., Acarkan B.
Elektrik-Elektronik-Bilgisayar Mühendisliği 11. Ulusal Kongresi ve Fuarı, İstanbul, Turkey, 22 - 25 September 2005, pp.1-4
- XXXV. **Medikal Cihazlardan Kaynaklanan Harmoniklerin Etkinliği**
Acarkan B., İnan A., İzgi E.
I. Enerji Verimliliği ve Kalitesi Sempozyumu, EVK 2005, Kocaeli, Turkey, 17 - 18 May 2005, pp.279-283
- XXXVI. **Dengeli ve Dengesiz Enerji İletim Sistemlerinde Direk Temas Gerilimi Analizi**
İzgi E., İnan A., Acarkan B.
I. Enerji Verimliliği ve Kalitesi Sempozyumu, EVK 2005, Kocaeli, Turkey, 17 - 18 May 2005, pp.296-300
- XXXVII. **Alçak Gerilimde Tek Fazlı Yükler İçin Harmonik Akım Sınırları**
ACARKAN B., KILIÇ O., İNAN A.
III. Elektrik, Elektronik ve Bilgisayar Mühendisliği Sempozyumu, ELECO 2004, Bursa, Turkey, 8 - 12 December 2004
- XXXVIII. **Fuzzy Functional Approximation for Determination of Reduction Level in Transformers Apparent Power Rating**
TANRIÖVEN M., KÜÇÜKSARI S., ACARKAN B., ÇAKIR H.
International Conference on Fuzzy Systems and Soft Computational Intelligence in Management and Industrial Engineering, FSSCIMIE 2002, İstanbul, Turkey, 29 - 31 May 2002, pp.174-178
- XXXIX. **The State of Corona Discharge in High Voltage Transmission Line under Non Linear Conditions using ANN**
TANRIÖVEN M., ACARKAN B., BAYSAL M., KARAKAŞ A.
International Conference on Fuzzy Systems and Soft Computational Intelligence in Management and Industrial Engineering, FSSCIMIE 2002, İstanbul, Turkey, 29 - 31 May 2002, pp.31-36
- XL. **Ofis Aydınlatmasında Ergonomik Aydınlatma Tasarımının Bulanık Kontrolör Kullanılarak Gerçekleştirilmesi**
TANRIÖVEN M., UZUNOĞLU M., ACARKAN B., ARGİN M.
İzmir Aydınlatma Sempozyumu, İzmir, Turkey, 28 - 30 November 2001, pp.137-144

Supported Projects

ACARKAN B., Project Supported by Higher Education Institutions, Elektrikli Araçların Dağıtılmış Enerji Üretim ve

Depolama Sistemi Olarak Deęerlendirmesi, 2012 - 2014

Acarkan B., Arabul A. Y., Inan A., Project Supported by Higher Education Institutions, Analysis of Thermal Specification of Illumination Equipment under Sinusoidal and Non-sinusoidal Supply Voltage Conditions, 2012 - 2013

ACARKAN B., Project Supported by Higher Education Institutions, Ofis Donanımlarının ve Aydınlatma Aygıtlarının Çevresel Koşullara Bağlı Olarak Harmonik Etkinliğinin Kestirimi ve Harmonik Analizi, 2010 - 2012

Metrics

Publication: 57

Citation (WoS): 99

Citation (Scopus): 174

H-Index (WoS): 5

H-Index (Scopus): 6