Prof. Mustafa Bağrıyanık

Personal Information

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International Researcher IDs
ScholarID: OG1aQG4AAAAJ
ORCID: 0000-0001-6258-8645
Publons / Web Of Science ResearcherID: ABE-8078-2020
ScopusID: 6505967419
Yoksis Researcher ID: 149505

Education Information

Doctorate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Elektrik Mühendisliği (Dr), Turkey 1989 - 1997
Postgraduate, Istanbul Technical University, Elektrik-Elektronik Fakültesi, Elektrik Mühendisliği Bölümü, Turkey 1985 - 1989
Undergraduate, Istanbul Technical University, Elektrik-Elektronik Fakültesi, Elektrik Mühendisliği Bölümü, Turkey 1981 - 1985

Foreign Languages

English, B2 Upper Intermediate

Research Areas

Technical Sciences, Electrical and Electronics Engineering, Energy, Lighting Technology, Power System Analysis, Electric Power Transmission, Distribution and Protection, Protection Systems, Renewable energy

Academic Titles / Tasks

Professor, Istanbul Technical University, Elektrik-Elektronik, Elektrik Mühendisliği, 2013 - Continues
Associate Professor, Istanbul Technical University, Elektrik-Elektronik, Elektrik Mühendisliği, 2000 - 2013
Assistant Professor, Istanbul Technical University, Elektrik-Elektronik, Elektrik Mühendisliği, 2000 - 2000
Research Assistant, Istanbul Technical University, Elektrik-Elektronik, Elektrik Mühendisliği, 1986 - 2000

Academic and Administrative Experience

İstanbul Teknik Üniversitesi, Elektrik-Elektronik Fakültesi, Elektrik Mühendisliği Bölümü, 2011 - 2013

Courses

Courses

Elektrik Mühendisliği Projesi, Undergraduate, 2021 - 2022
Raylı Ulaşım Sistem Elektrotekniği, Postgraduate, 2017 - 2018
Enerji Sistemlerinde Geçici Olaylar, Doctorate, 2017 - 2018
Distribution of Electrical Energy, Undergraduate, 2017 - 2018
Flexible Control Of Distribution Systems, Postgraduate, 2017 - 2018
Elektrik Mühendisliği Projesi, Undergraduate, 2017 - 2018

Published journal articles indexed by SCI, SSCI, and AHCI

I. **The impact of mutual interaction between electric and water distribution systems via demand response**
Bağrıyanık F. G., Sönmez M. A., Bağrıyanık M.
Sustainable Energy, Grids and Networks, vol.34, 2023 (SCI-Expanded)

II. **A Preventive Control Approach for Power System Vulnerability Assessment and Predictive Stability Evaluation**
Akdeniz E., Bağrıyanık M.
Sustainability (Switzerland), vol.15, no.8, 2023 (SCI-Expanded)

III. **OBTAINING THE RESIDENTIAL MANAGEABLE CARBON DIOXIDE EMISSION CAPACITY BY ACTIVITY-BASED POWER MODELS**
Sönmez M. A., Bağrıyanık M.
ENVIRONMENTAL ENGINEERING AND MANAGEMENT JOURNAL, vol.21, no.5, pp.891-902, 2022 (SCI-Expanded)

IV. **A Novel Priority-Based Load Management Method that Improves Comfort in Residential Demand Response**
Sönmez M. Ş., Bağrıyanık M.
ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, vol.47, no.3, pp.2763-2779, 2022 (SCI-Expanded)

V. **Disrupting the power grid via EV charging: The impact of the SMS Phishing attacks**
Soykan E. U., Bağrıyanık M., Soykan G.
SUSTAINABLE ENERGY GRIDS & NETWORKS, vol.26, 2021 (SCI-Expanded)

VI. **Generating Manageable Electricity Demand Capacity for Residential Demand Response Studies by Activity-based Load Models**
Sönmez M. Ş., Bağrıyanık M.
ADVANCES IN ELECTRICAL AND COMPUTER ENGINEERING, vol.21, no.1, pp.99-108, 2021 (SCI-Expanded)

VII. **A topological overview of microgrids: from maturity to the future**
ERENOĞLU A. K., Sancar S., ERDİNÇ O., Bağrıyanık M.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.29, no.3, pp.1308-1353, 2021 (SCI-Expanded)

VIII. **The Effect of SMiShing Attack on Security of Demand Response Programs**
Soykan E. U., Bağrıyanık M.
ENERGIES, vol.13, no.17, 2020 (SCI-Expanded)

IX. **Reconfiguration of Distribution Network for Transformer Life Extension Using Quasi-static Time-Series Analysis**
Uçar B., Bağrıyanık M.
ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, vol.45, no.3, pp.1703-1713, 2020 (SCI-Expanded)

X. **Development and Field Demonstration of a Gamified Residential Demand Management Platform Compatible with Smart Meters and Building Automation Systems**
Zehir M. A., Ortac K. B., Gul H., Batman A., Aydin Z., Portela J. C., Soares F. J., Bağrıyanık M., Kucuk U., Özdemir A.
ENERGIES, vol.12, no.5, 2019 (SCI-Expanded)

XI. **Impacts of microgrids with renewables on secondary distribution networks**
Zehir M. A., BATMAN A., SONMEZ M. A., Font A., TSIAMITROS D., STIMONIARIS D., KOLLATOU T., Bağrıyanık M., Özdemir A., Dialynas E.

APPLIED ENERGY, vol.201, pp.308-319, 2017 (SCI-Expanded)

XII. **The Effect of the Types of Network Topologies on Nontechnical Losses in Secondary Electricity Distribution Systems**
Yorukoglu S., NASIBOV F., Mungan M., Bağrıyanık M.
IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS, vol.52, no.5, pp.3631-3643, 2016 (SCI-Expanded)

XIII. **Demand-side management by integrating bus communication technologies into smart grids**
Stimoniaris D., KOLLATOU T., TSIAMITROS D., ZEHIR M. A., BATMAN A., Bağrıyanık M., Özdemir A., Dialynas E.
ELECTRIC POWER SYSTEMS RESEARCH, vol.136, pp.251-261, 2016 (SCI-Expanded)

XIV. **A knowledge based decision support algorithm for power transmission system vulnerability impact reduction**
Akdeniz E., Bağrıyanık M.
INTERNATIONAL JOURNAL OF ELECTRICAL POWER & ENERGY SYSTEMS, vol.78, pp.436-444, 2016 (SCI-Expanded)

XV. **Demand Side Management by controlling refrigerators and its effects on consumers**
Zehir M. A., Bağrıyanık M.
ENERGY CONVERSION AND MANAGEMENT, vol.64, pp.238-244, 2012 (SCI-Expanded)

XVI. **A feasibility study of grid-connected photovoltaic systems in Istanbul, Turkey**
Batman A., Bağrıyanık F. G., AYGEN Z. E., GUL Ö., Bağrıyanık M.
RENEWABLE & SUSTAINABLE ENERGY REVIEWS, vol.16, no.8, pp.5678-5686, 2012 (SCI-Expanded)

XVII. **Characterization of transients in transformers using discrete wavelet transforms**
Butler-Purry K., Bagriyanik M.
IEEE TRANSACTIONS ON POWER SYSTEMS, vol.18, no.2, pp.648-656, 2003 (SCI-Expanded)

XVIII. **Determination of location of series compensation devices using fuzzy decision making**
Bağrıyanık M., DAĞ H.
EUROPEAN TRANSACTIONS ON ELECTRICAL POWER, vol.11, no.4, pp.241-245, 2001 (SCI-Expanded)

Articles Published in Other Journals

I. **Influence of PV Penetration on Distribution Transformer Aging**
UÇAR B., BAĞRIYANIK M., KÖMÜRGÖZ KIRIŞ G.
Journal of Clean Energy Technologies, vol.5, no.2, pp.131-134, 2017 (Peer-Reviewed Journal)

II. **Ekolojik Yerleşme Planlaması ve Tasarımı: Eskişehir Kocakır Rezerv Yapı Alanı Örneği**
Terzi F., Ocakçı M., Yılmaz A. Z., Türkoğlu H., Okumuş G., Erbaş Gürler E., Onuk Madanoğlu T., Tanık A. G., Güven H., Böke Y. E., et al.
Kentli, vol.24, pp.79-82, 2016 (Peer-Reviewed Journal)

III. **The effect of fault current limiters on distribution systems with wind turbine generators**
Çakal G., BAĞRIYANIK F. G., BAĞRIYANIK M.
INTERNATIONAL JOURNAL OF RENEWABLE ENERGY RESEARCH, vol.3, no.1, pp.149-154, 2013 (Scopus)

Supported Projects

Bağrıyanık M., Project Supported by Higher Education Institutions, Türkiyede Güneş paneli içeren sistemlerde Akıllı Sayaç için Güç Hattı Üzerinden Haberleşmede gürültü analizi, 2013 - 2018

Bağrıyanık M., Project Supported by Higher Education Institutions, Elektrik Dağıtım Sistemlerinde Güç Hatları Üzerinden Haberleşmenin İncelenmesi, 2013 - 2018

Bağrıyanık M., Project Supported by Higher Education Institutions, Akıllı Şebeke Termostatik Yükler için Yönetim Stratejilerinin Değerlendirilmesi, 2012 - 2018

Bağrıyanık M., Project Supported by Higher Education Institutions, SC ve PST Kullanılarak Planlanmamış Akışların Kontrolü için Bulanık Genetik Algoritmaya Dayalı Bir Yaklaşık, 2011 - 2018

Bağrıyanık M., Project Supported by Higher Education Institutions, THE EFFECTS OF SELECTİON STRATEGİES ON FUZZY-GENETİC ALGORİTHM BASED POWER FLOW CONTROL, 2009 - 2018
Bağrıyanık M., Project Supported by Higher Education Institutions, Dağıtım Sistemlerinde Yük Kontrolü, 2012 - 2013
Bağrıyanık M., Project Supported by Higher Education Institutions, Arıza Akım Sınırlayıcıların Dağıtım Sistemlerinde Etkilerinin İncelenmesi, 2011 - 2013
Bağrıyanık M., Project Supported by Higher Education Institutions, Gemi Elektrik Dağıtım sistemlerinde Arıza Yerinin Tespiti ve Analizinin Araştırılması, 2005 - 2005
Bağrıyanık M., Project Supported by Higher Education Institutions, Enerji İletim Sistemlerinde Hat Parametrelerin Kestirminin Araştırılması, 2004 - 2005
Bağrıyanık M., Project Supported by Higher Education Institutions, Elektrik Güç Sistemlerinde Uygun Reaktif Güç Kullanılması, 1998 - 2000

Metrics

Publication: 86
Citation (WoS): 381
Citation (Scopus): 546
H-Index (WoS): 10
H-Index (Scopus): 13

Non Academic Experience

Af-MERCADOS EMI
Texas A&M University