

Asst. Prof. YAHYA DANAYİYEN

Personal Information

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International Researcher IDs

ScholarID: Z3B11-sAAAAJ

ORCID: 0000-0002-8679-4088

Publons / Web Of Science ResearcherID: C-2728-2019

ScopusID: 56038876100

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Education Information

Doctorate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Elektrik Elektronik Mühendisliği, Turkey 2014 - 2021

Doctorate, Seoul National University Of Science And Technology, South Korea 2017 - 2018

Doctorate, University of Southampton, Electronics And Computer Science, Electronics And Computer Science, United Kingdom 2015 - 2015

Postgraduate, Högskola Dalarna (Dalarna University College), Faculty Of Energy And Environmental Engineering, Solar Energy Engineering, Sweden 2011 - 2011

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Kesintisiz Güç Kaynaklarında Model Öngörülü Kontrol Uygulamaları, Karadeniz Technical University, Mühendislik Fakültesi, Elektrik-Elektronik, 2021

Postgraduate, Model Öngörülü Kontrol Yönteminin Örneklerle Karşılaştırmalı İncelenmesi, Karadeniz Technical University, Mühendislik Fakültesi, Elektrik-Elektronik, 2013

Research Areas

Optimal Control, Electrical and Electronics Engineering, Direct Energy Conversion and Energy Storage, Renewable energy, Power Electronics, Electric Motor Drivers, Power Converters, System Dynamics and Control

Academic Titles / Tasks

Research Assistant, Karadeniz Technical University, Mühendislik Fakültesi, Elektrik-Elektronik, 2012 - 2021

Courses

Aydınlatma Tekniđi, Undergraduate, 2022 - 2023
Lighting Techniques , Undergraduate, 2022 - 2023
Mühendislik Optimizasyonu, Postgraduate, 2022 - 2023
Drive Systems, Undergraduate, 2021 - 2022
Güç Elektroniđi Uygulamaları, Undergraduate, 2022 - 2023
Power Electronic Circuits, Undergraduate, 2022 - 2023
Güç Elektroniđi Devreleri, Undergraduate, 2022 - 2023

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Model Predictive Control of Uninterruptible Power Supply with Robust Disturbance Observer**
Danayiyen Y., Lee K., Choi M., Lee Y. I.
ENERGIES, vol.12, no.15, 2019 (SCI-Expanded)

Articles Published in Other Journals

- I. **Robust power stabilizing control of a grid-connected inverter using linear matrix inequality**
Soth P., Noun S., Tang H., Or C., Srang S., DANAYİYEN Y., Choeng C.
Sigma Journal of Engineering and Natural Sciences, vol.42, no.5, pp.1367-1377, 2024 (ESCI)
- II. **Symmetrical components-based robust stabilizing control of a grid-connected inverter under unbalanced voltage sag**
Choeng C., DANAYİYEN Y., Srang S., Lee Y.
JOURNAL OF ENGINEERING-JOE, no.8, 2024 (ESCI)
- III. **A Novel Fractional Order Proportional Integral-Fractional Order Proportional Derivative Controller Design Based on Symbiotic Organisms Search Algorithm for Speed Control of a Direct Current Motor**
DANAYİYEN Y., DİNCER K., Nuhoglu Y.
ELECTRICA, vol.24, pp.327-335, 2024 (ESCI)
- IV. **MODEL PREDICTIVE CONTROL OF A DC-DC BUCK CONVERTER**
Danayiyen Y., Altaş İ. H., Şahin E.
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES-SIGMA MUHENDISLIK VE FEN BILIMLERI DERGISI, vol.8, no.2, pp.91-97, 2017 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **Hidroelektrik Santral Modeli için PSO, GWO ve MA Optimizasyon Algoritmalarıyla Kesir Dereceli PID Denetleyici Tasarımı**
Köse İ. H., Danayiyen Y., Çavdar B.
Akıllı Sistemlerde Yenilikler ve Uygulamaları Konferansı (ASYU), Sivas, Turkey, 11 - 13 October 2023
- II. **X-Band Pyramidal Horn Antenna Directivity Optimization with Symbiotic Organism Search Algorithm**
SAĞ ÖRNEK R., ATEŞ O. K., BOĞA A. Y., DANAYİYEN Y.
5th Global Power, Energy and Communication Conference (GPECOM), Nevşehir, Turkey, 14 - 16 June 2023, pp.519-523
- III. **Nonlinear Convergence Factor Based Grey Wolf Optimization Algorithm and Load Frequency Control**
HOCAOĞLU G. S., ÇAVLI N., KILIÇ E., DANAYİYEN Y.
5th Global Power, Energy and Communication Conference (GPECOM), Nevşehir, Turkey, 14 - 16 June 2023, pp.282-287
- IV. **A Comparative Study for Optimum Computation of PID Parameters Using Metaheuristic Algorithms in a DC-DC Buck Converter Application**

Akay B., Danayiyen Y.

13th International Istanbul Scientific Research Congresses, İstanbul, Turkey, 29 April 2023, pp.259-266

- V. **Karınca Kolonisi Optimizasyon Algoritması ile Bir AVR Sistemi için Optimum PID Denetleyici Tasarımı**
Yurdusever T., Danayiyen Y.
1th International Conference on Frontiers in Academic Research, Konya, Turkey, 18 - 21 February 2023, vol.1, pp.108-113
- VI. **Robust Discrete Time Disturbance Observer with Finite Control Set Model Predictive Control in UPS System**
Danayiyen Y., Altaş İ. H., Lee Y. I.
IFAC Workshop on Control of Smart Grid and Renewable Energy Systems (CSGRES), Jeju, South Korea, 10 - 12 June 2019, vol.52, pp.51-56
- VII. **A Novel Robust Disturbance Observer for Uninterruptible Power Supplies**
DANAYİYEN Y., LEE Y. I.
18th International Conference on Control, Automation and Systems (ICCAS 2018), Pyeongchang, South Korea, 17 - 20 October 2018, pp.44
- VIII. **Güneş Paneli İle Beslenen Kesintisiz Güç Kaynağında Yük Akımının Model Öngörülmesi Kontrolü**
Danayiyen Y., Altaş İ. H.
International Conference on Advanced Engineering Technologies, Bayburt, Turkey, 21 - 23 September 2017, pp.1408
- IX. **Dalga/Ultra Kondansatör Enerji Sistemi için Bir DA-DA Artıran Çeviricinin Bulanık Mantık ile Denetimi**
ŞAHİN E., ALTAŞ İ. H., DANAYİYEN Y.
Akıllı Sistemlerde Yenilikler ve Uygulamaları Sempozyumu (ASYU), Düzce, Turkey, 29 September - 01 October 2016, pp.158-163
- X. **Alçaltan DA-DA Dönüştürücünün Model Öngörülmesi Kontrolü**
DANAYİYEN Y., ALTAŞ İ. H., ŞAHİN E.
Akıllı Sistemlerde Yenilikler ve Uygulamaları Sempozyumu (ASYU2016), Düzce, Turkey, 29 September - 01 October 2016, pp.154-157
- XI. **Laguerre Fonksiyonları Kullanarak DA Motor Hızının Sürekli Zamanlı Model Öngörülmesi Kontrolü**
DANAYİYEN Y., ALTAŞ İ. H.
Akıllı Sistemlerde Yenilikler ve Uygulamaları Sempozyumu (ASYU2014), İzmir, Turkey, 9 - 10 October 2014, pp.41
- XII. **Design of a fuzzy logic controller for a 2-DOF robot manipulator**
AYAS M. Ş., DANAYİYEN Y., ALTAŞ İ. H.
Electronics, Computer and Computation (ICECCO), Ankara, Turkey, 7 - 09 November 2013, pp.265-268
- XIII. **DESIGN OF A FUZZY LOGIC CONTROLLER FOR A 2-DOF ROBOT MANIPULATOR**
AYAS M. Ş., DANAYİYEN Y., ALTAŞ İ. H.
10th International Conference on Electronics, Computer and Computation (ICECCO), Ankara, Turkey, 7 - 09 November 2013, pp.265-268

Supported Projects

ATASOY A., SEVİM Y., HACIOĞLU G., ÖZKOP E., BENLİ E., TURHAL M., YAZGAN A., DANAYİYEN Y., ÖZTÜRK M., Project Supported by Higher Education Institutions, Yenilikçi Laboratuvar Yaklaşımlarının Elektrik Elektronik Mühendisliği Eğitimine Uygulanması, 2022 - Continues

Altaş İ. H., Ayas M. Ş., Baysal Y. A., Danayiyen Y., Özgenç B., TUBITAK Project, Grid/Load Integration of Photovoltaic Systems with shadow effect for Energy Continuity, 2023 - 2026

Danayiyen Y., Tüysüz M., Şahin E., Project Supported by Higher Education Institutions, Yeni Nesil Elektrikli Araç Teknolojilerine Yönelik Nitelikli Eleman Yetiştirilmesi için Bir Stüdyo Tarzı Laboratuvarın Tasarımı, 2023 - 2024

Altaş İ. H., Danayiyen Y., TUBITAK Project, Belirsizlik İçeren Kesintisiz Güç Kaynaklarında Model Öngörülmesi Kontrol Uygulamaları, 2019 - 2020

Altaş İ. H., TUBITAK Project, Şebeke Bağlantılı Fv Güneş Enerji Sistemine Sahip Konutlarda Akıllı Güç Tüketimi Ve Enerji Yönetimi, 2016 - 2018

Memberships / Tasks in Scientific Organizations

IEEE Control System Society Membership, Member, 2019 - Continues, Turkey
Elektrik Mühendisleri Odası, Member, 2009 - Continues, Turkey

Scientific Refereeing

INTERNATIONAL JOURNAL OF CONTROL, AUTOMATION AND SYSTEMS, SCI Journal, December 2022
INTERNATIONAL JOURNAL OF CONTROL, AUTOMATION AND SYSTEMS, SCI Journal, October 2022
INTERNATIONAL JOURNAL OF CONTROL, AUTOMATION AND SYSTEMS, SCI Journal, June 2022
INTERNATIONAL JOURNAL OF CONTROL, AUTOMATION AND SYSTEMS, SCI Journal, April 2022
IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, SCI Journal, January 2021
INTERNATIONAL JOURNAL OF CONTROL, AUTOMATION AND SYSTEMS, SCI Journal, September 2020
INTERNATIONAL JOURNAL OF CONTROL, AUTOMATION AND SYSTEMS, SCI Journal, May 2020
INTERNATIONAL JOURNAL OF CONTROL, AUTOMATION AND SYSTEMS, SCI Journal, April 2020
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, SCI Journal, March 2017

Tasks In Event Organizations

Danayiyen Y., YENİLENEBİLİR ENERJİ SİSTEMLERİ KİŞ OKULU, Scientific Congress, Afyonkarahisar, Turkey, Ocak 2024
Danayiyen Y., RAYLI SİSTEMLER KONGRE VE SERGİSİ, Scientific Congress, Eskişehir, Turkey, Kasım 2023

Scientific Research / Working Group Memberships

Cost Action Ca20109, Modular Energy Islands For Sustainability And Resilience (Modenerlands), COST-European Cooperation in Science and Technology, Portugal, <https://modenerlands.eu/>, 2022 - Continues
Ca21104 - Pan-European Network For Sustainable Hydropower (Pen@Hydropower), COST-European Cooperation in Science and Technology, Turkey, <https://www.pen-hydropower.eu/>, 2022 - Continues
Ca19108 - High-Temperature Superconductivity For Accelerating The Energy Transition, COST-European Cooperation in Science and Technology, Belgium, <https://www.cost.eu/>, 2020 - Continues
Digital Control System Laboratory (Dcsl), Seoul National University of Science and Technology, South Korea, <http://mpc.seoultech.ac.kr/>, 2017 - Continues
Power Energy And Control Research Laboratory, Karadeniz Technical University, Turkey, <http://www.powencon.com/>, 2014 - Continues

Metrics

Publication: 18
Citation (WoS): 19
Citation (Scopus): 19
H-Index (WoS): 3
H-Index (Scopus): 3

Congress and Symposium Activities

Control of Smart Grid and Renewable Energy Systems (CSGRES 2019), Attendee, Jeju-Si, South Korea, 2019
Dünya Enerji Konseyi Türk Milli Komitesi VI. Gençlik ve Enerji Çalıştayı, Attendee, Ankara, Turkey, 2013

Scholarships

TÜBİTAK 2214A Doktora Sırası Araştırma Bursu, TÜBİTAK, 2017 - 2018

Non Academic Experience

Serkan İnşaat
Sıkada Elektrik Tic. San. Ltd