Asst. Prof. SEYFETTİN VADİ

Personal Information

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International Researcher IDs
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Publons / Web Of Science ResearcherID: AAG-4261-2021
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Biography

Seyfettin Vadi received the B.Sc. and M.Sc. degrees in electrical and electronic engineering from Gazi University, Ankara, Turkey, in 2009 and 2014, respectively. In 2023, he complemented his doctorate education at Graduate School of Natural and Applied Sciences in Gazi University. He joined the Department of Electronics and Automation, Gazi University, Turkey, between 2012 and 2023. He started as assist profesor in electrical and electronic engineering from Technology Faculty Gazi University in December-2023 and continues. His current research interests include control and applications of power electronic converters, energy conversion and energy management of renewable sources. Also, He studies in automation application using programmable control. Vadi, who has been an "IEEE Student Member" since 2020, has more than 20 articles and notifications within his fields of study. In addition, he has been involved in 1 national book and 1 international book as an author. There are 3 completed scientific research projects.

Education Information

Doctorate, Gazi University, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği, Turkey 2017 - 2023
Postgraduate, Gazi University, Teknik Eğitim Fakültesi, Elektrik Eğitimi Bölümü, Turkey 2009 - 2014
Undergraduate, Gazi University, Teknik Eğitim Fakültesi, Elektrik Eğitimi, Turkey 2005 - 2009

Dissertations

Postgraduate, Senkron motor ile reaktif güç kompanzasyonu benzetimi için web tabanlı bir eğitim aracı, Gazi University, Fen Bilimleri Enstitüsü, 2014

Research Areas

Renewable energy, Electric Motor Drivers, Power Converters, Power Quality

Academic Titles / Tasks

Lecturer, Gazi University, Teknik Bilimler Meslek Yüksekokulu, Elektronik ve Otomasyon Bölümü, 2012 - Continues

Academic and Administrative Experience

Program Başkanı, Gazi University, Teknik Bilimler Meslek Yüksekokulu, Elektronik ve Otomasyon Bölümü, 2022 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Induction motor control system with a Programmable Logic Controller (PLC) and Profibus communication for industrial plants — An experimental setup**
VADİ S., BAYINDIR R., Toplar Y., Colak I.
ISA Transactions, vol.122, pp.459-471, 2022 (SCI-Expanded)

II. **Modeling, Analysis and Proportional Resonant and Proportional Integral Based Control Strategy for Single Phase Quasi-Z Source Inverters**
VADİ S., BAYINDIR R.
IEEE ACCESS, vol.10, pp.87217-87226, 2022 (SCI-Expanded)

III. **Comprehensive Non-Intrusive Load Monitoring Process: Device Event Detection, Device Feature Extraction and Device Identification Using KNN, Random Forest and Decision Tree**
GÜRBÜZ F. B., BAYINDIR R., VADİ S.
2021 10th International Conference on Renewable Energy Research and Application (ICRERA), pp.447-452, 2021 (SCI-Expanded)

IV. **Design and Simulation of a Grid Connected Wind Turbine with Permanent Magnet Synchronous Generator**
VADİ S., GÜRBÜZ F. B., BAYINDIR R., HOSSAIN E.
2020 8th International Conference on Smart Grid (icSmartGrid), pp.169-175, 2020 (SCI-Expanded)

V. **A Review of Control Methods on Suppression of 2 < italic >& x03C9;</italic > Ripple for Single-Phase Quasi-Z-Source Inverter**
VADİ S., BAYINDIR R., Hossain E.
IEEE ACCESS, vol.8, pp.42055-42070, 2020 (SCI-Expanded)

VI. **A Review on Communication Standards and Charging Topologies of V2G and V2H Operation Strategies**
VADİ S., BAYINDIR R., Colak A. M., Hossain E.
ENERGIES, vol.12, no.19, 2019 (SCI-Expanded)

VII. **A Review on Optimization and Control Methods Used to Provide Transient Stability in Microgrids**
VADİ S., Padmanaban S., BAYINDIR R., Blaabjerg F., Mihet-Popa L.
ENERGIES, vol.12, no.18, 2019 (SCI-Expanded)

VIII. **Real-Time Monitoring and Control of the Parameters of an Induction Motor**
BAYINDIR R., VADİ S.
ELEKTRONIKA IR ELEKTROTECHNIKA, vol.19, no.10, pp.145-150, 2013 (SCI-Expanded)

IX. **COMPUTER BASED IMPLEMENTATION OF SPEED CONTROL EXPERIMENT DEPENDING ON FREQUENCY VARIATION FOR INDUCTION MOTORS**
IRMAK E., VADİ S.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.26, no.1, pp.57-62, 2011 (SCI-Expanded)

Articles Published in Other Journals

I. **Overview: Using Hybrid Energy System for Electricity Production Based on the Optimization Methods**
SAİB S., BAYINDIR R., VADİ S.
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.1, no.1, pp.1-10, 2024 (ESCI)

II. **Bir İnceleme: Farklı Teknolojilerin Kullanımı ile Elektrik Enerjisi Depolama Sistemi Bağlantılı Hibrit Güç Sistemleri**
SAİB S., BAYINDIR R., VADİ S.
JOURNAL OF POLYTECHNIC-POLITEKNIK DERGISI, 2023 (ESCI)

III. **Non-intrusive Load Monitoring, Classification and Control in Electrical Home Appliances**
GÜRBÜZ F. B., BAYINDIR R., VADİ S.
Gazi Universitesi Fen Bilimleri Dergisi Part C: Tasarim ve Teknoloji, vol.11, no.4, pp.1209-1222, 2023 (Peer-Reviewed Journal)

IV. **Doğru Akım Motoru Kapalı Çevrim Hız Denetim Sistemindeki PIParametrelerinin Genetik ve Parçacık Sürü Algoritması KullanarakOptimizasyonu**
VADİ S., BAYINDIR R.
Veri Bilimi, vol.2, no.2, pp.51-60, 2019 (Peer-Reviewed Journal)

V. **A Web-Based Educational Tool For Simulation of Reactive Power Compensation With Synchronous Motor**
BAYINDIR R., VADİ S.
JOURNAL OF POLYTECHNIC-POLITEKNIK DERGISI, vol.20, no.1, pp.61-69, 2017 (ESCI)

VI. **Endüstriyel Alanlarda Kullanılan Veri İletim Tekniklerinin Karşılaştırılması**
VADİ S., GÜLER N., BAYINDIR R.
Gazi Üniversitesi Fen Bilimleri Dergisi Part:C, Tasarım Ve Teknoloji, vol.2, no.1, pp.181-188, 2014 (Peer-Reviewed Journal)

VII. **Development Of An Opc And Plc Based Remote Access Laboratory A Synchronous Motor Control Experiment**
BAYINDIR R., VADİ S.
International Conference on Advanced Technology & Sciences (ICAT'14), 2014 (Peer-Reviewed Journal)

VIII. **Implementation of a PLC and OPC Based DC Motor Control Laboratory**
BAYINDIR R., VADİ S.
Fourth International Conference on Power Engineering, Energy and Electrical Drives (POWERENG), pp.1151-1155, 2013 (Peer-Reviewed Journal)

IX. **Monitoring Parameters of Synchronous Motor Via Internet**
BAYINDIR R., VADİ S.
Renewable Energy Research and Applications (ICRERA), pp.1-4, 2012 (Peer-Reviewed Journal)

X. **An Interactive Platform for Switched Reluctance Motor**
BAYINDIR R., VADİ S., KAPLAN O.
Ever Monaco-2012, pp.1-4, 2012 (Peer-Reviewed Journal)

XI. **Mikrodenetleyici Tabanlı DA Motor Kontrolü ve PC Üzerinden İzlenmesi**
VADİ S., Reyhanoğlu S., Çelik S.
6th International Advanced Technologies Symposium (IATS'11), pp.211-215, 2011 (Peer-Reviewed Journal)

XII. **Endüstriyel Otomasyonda Siemens Simatic S7 300 PLC nin Kullanımı**
VADİ S., Reyhanoğlu S., Çelik S.
6th International Advanced Technologies Symposium (IATS'11), pp.206-210, 2011 (Peer-Reviewed Journal)

XIII. **Gerçek Zamanlı Çalışan bir Trafik Kontrol Sinyalizasyon Sisteminin PLC Tabanlı Uygulaması ve PC Üzerinden İzlenmesi**
VADİ S., Karakuş E., Şerdan Y.
Ulusal Meslek Yuksekokulları Öğrenci Sempozyumu-Düzce, pp.1-10, 2010 (Peer-Reviewed Journal)

Books & Book Chapters

I. **Elektrik Kumanda Devreleri ve S7 1200 ile PLC Programlama**
Çolak İ., Bayındır R., Vadi S.
Seçkin Yayıncılık, Ankara, 2021

II. **Elektrik Enerjisi Sektöründe Siber Güvenlik**
TÜR M. R., BAYINDIR R., VADİ S.
in: Siber Güvenlik ve Savunma Kitap Serisi 2 Problemler ve Çözümler, Şeref Sağıroğlu, Mustafa Şenol, Editor, HAVELSAN, Ankara, pp.459-478, 2019

Refereed Congress / Symposium Publications in Proceedings

I. **Modelling, Analysis of PI and PR Based Control Strategy for Single Phase QZSI**
Vadi S., Bayındır R.
12th IEEE International Conference on Renewable Energy Research and Applications, ICRERA 2023, Oshawa, Canada, 29 August - 01 September 2023, pp.487-491

II. **Performance Enhancement of SMC Based Buck Converter under Variable Conditions by Particle Swarm Optimization Algorithm**
VADİ S., BAYINDIR R.
3rd International Conference on Smart Grid and Renewable Energy, SGRE 2022, Doha, Qatar, 20 - 22 March 2022

III. **Optimization of PI based buck-boost converter by particle swarm optimization algorithm**
VADİ S., Gurbuz F. B., SAĞIROĞLU Ş., BAYINDIR R.
9th International Conference on Smart Grid, icSmartGrid 2021, Virtual, Setubal, Portugal, 29 June - 01 July 2021, pp.295-301

IV. **ELEKTRO-MANYETİK KARIŞTIRMA YÖNTEMİ İLE AA7050 ALAŞIMINDA TİKSOTROPİK ÖN-MALZEME ÜRETİMİ**
VADİ S., ÖZER A., ATAKUL S., ÖZER M.
7. ULUSLARARASI MUHENDİSLİK MİMARLIK VE TASARIM KONGRESİ, İstanbul, Turkey, 21 May 2021, pp.199-204

V. **Design and Simulation of a Grid Connected WindTurbine with Permanent Magnet SynchronousGenerator**
VADİ S., Gurbuz F. B., BAYINDIR R., Hossain E.
8th IEEE International Conference on Smart Grid, 17 - 19 June 2020

VI. **The Path of the Smart Grid - The New and Improved Power Grid**
BAYINDIR R., Hossain E., Vadi S.
3rd International Smart Grid Workshop and Certificate Program (ISGWCP), İstanbul, Turkey, 21 - 25 March 2016, pp.62-69

VII. **Implementation of a PLC and OPC based DC motor control laboratory**
BAYINDIR R., VADİ S., GOKSUCUKUR F.
Power Engineering, Energy and Electrical Drives (POWERENG), 13 - 15 May 2013

VIII. **Monitoring Parameters of Synchronous Motor Via Internet**
BAYINDIR R., Vadi S.
1st International Conference on Renewable Energy Research and Applications (ICRERA), Nagasaki, Japan, 11 - 14 November 2012

Supported Projects

Ünal K., Ocak C., Bekiroğlu E., Vadi S., Project Supported by Higher Education Institutions, Tam zamanında üretim felsefesine dayalı otomatik yönlendirmeli araç sistemlerinin gerçek zamanlı yörünge kontrolü, 2024 - 2025
Şansal U., Derici S., Fidanboy H., Vadi S., Fesli U., Ayhan E., Project Supported by Higher Education Institutions, Kablosuz Bağlantı ile LORA Kullanılarak Kampüs Alanı İçerisindeki Farklı Noktalardan Sıcaklık-Nem ve Hava Kalite Sensörlerinden Gelen Bilgilerin İzlenmesi Uygulamasının Geliştirilmesi., 2023 - 2023

Şansal U., Vadi S., Project Supported by Higher Education Institutions, Küçük Ölçekli Rüzgâr Türbini Simülatör Uygulamasının Gerçekleştirilmesi, 2023 - 2023
Vadi S., TUBITAK Project, ASENKRON MOTOR PARAMETRELERİNİN BİLGİSAYAR ARAYÜZÜ ÜZERİNDEN İZLENMESİ VE KONTROLÜ, 2022 - 2023
Vadi S., Project Supported by Other Private Institutions, Üç Fazlı Asenkron Motorun V/F Oranı Sabit Tutularak Kontrolü ve Çalışma Parametrelerinin İzlenmesi, 2022 - 2022
Vadi S., Project Supported by Other Private Institutions, Üç Fazlı Asenkron Motorun Kontrolü ve Çalışma Parametrelerinin SCADA ile İzlenmesi, 2022 - 2022
BAYINDIR R., GÜLER N., VADİ S., Project Supported by Higher Education Institutions, FOTOVOLTAİK ENERJİ SİSTEMLERİ İÇİN QUASSİ Z-SOURCE EVİRİCİ TASARIMI VE HİBRİT ALGORİTMA İLE KONTROLÜ, 2020 - 2022
Vadi S., Derici S., Ayhan E., Fidanboy H., Project Supported by Other Private Institutions, Endüstriyel Haberleşme Protokollerini Destekleyen Eğitim Aracının Tasarımı ve Üretimi, 2021 - 2021
ÖZER M., ÖZER A., VADİ S., ATAKUL S., Project Supported by Higher Education Institutions, YARI-KATI ŞEKİLLENDİRME İÇİN ELEKTRO-MANYETİK KARIŞTIRMA YÖNTEMİ İLE ÖN MALZEME ÜRETİMİ, 2020 - 2021
BAYINDIR R., VADİ S., GÜLER N., Project Supported by Higher Education Institutions, Parçacık Sürü Optimizasyonu Algoritması ile DA Motoru Kapalı Çevrim Hız Denetim Sistemindeki PI Parametrelerinin İyileştirilmesi, 2019 - 2021

Memberships / Tasks in Scientific Organizations

IEEE IES Young Professionals Turkey representative, Member, 2021 - Continues, United States Of America
IEEE, Member, 2021 - Continues, United States Of America

Metrics

Publication: 32
Citation (WoS): 112
Citation (Scopus): 201
H-Index (WoS): 5
H-Index (Scopus): 7

Congress and Symposium Activities

10TH INTERNATIONAL CONFERENCE ON RENEWABLE ENERGY RESEARCH AND APPLICATIONS, Attendee, İstanbul, Turkey, 2021

Non Academic Experience

Gazi Meslek Yüksekokulu