

Asst. Prof. HAKAN KAHVECİ

Personal Information

Office Phone: [+90 462 377 2976](tel:+904623772976)

Email: hknkahveci@ktu.edu.tr

Address: Karadeniz Teknik Üniversitesi Mühendislik Fakültesi Elektrik-Elektronik Müh. Değirmendere Ortahisar TRABZON

International Researcher IDs

ORCID: 0000-0001-9369-2330

ScopusID: 55842691300

Yoksis Researcher ID: 181184

Education Information

Doctorate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği Anabilimdalı, Turkey
2006 - 2013

Undergraduate, Karadeniz Technical University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, Turkey
2001 - 2006

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, Doğrudan Sürürlü Elektrikli Araçlar İçin Bulanık Mantık Tabanlı Elektronik Diferansiyel sisteminin Gerçeklenmesi, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Müh. Anabilimdalı (Elektrik Makinaları), 2013

Research Areas

Electrical and Electronics Engineering, Power Electronics, Electrical Machine Theory and Design, Electric Motor Drivers, Engineering and Technology

Academic Titles / Tasks

Karadeniz Technical University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2018 - Continues
Assistant Professor, Karadeniz Technical University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü,
2014 - 2018

Lecturer PhD, Karadeniz Technical University, Trabzon Meslek Yüksekokulu, Elektronik ve Otomasyon, 2013 - 2014

Lecturer, Karadeniz Technical University, Trabzon Meslek Yüksekokulu, Elektronik ve Otomasyon, 2010 - 2013

Courses

Jury Memberships

Doctorate, Tez Savunma Jürisi, Karadeniz Teknik Üniversitesi, July, 2015

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Novel PV Array Reconfiguration and Integration with a Maximum Power Point Tracking Algorithm: RMPPT**
Güngör O., KAHVECİ H.
Arabian Journal for Science and Engineering, vol.48, no.11, pp.15445-15461, 2023 (SCI-Expanded)
- II. **The effect of various industrial dust particles on the performance of photovoltaic panels in Turkey**
Güngör O., KAHVECİ H., Gökçe H. S.
Environmental Science and Pollution Research, vol.30, no.6, pp.15128-15144, 2023 (SCI-Expanded)
- III. **Double adaptive power allocation strategy in electric vehicles with battery/supercapacitor hybrid energy storage system**
Çorapsız M. R., KAHVECİ H.
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.46, no.13, pp.18819-18838, 2022 (SCI-Expanded)
- IV. **Performance Analysis of Buck-Boost and SEPIC Converter for Commutation Torque Ripple Minimization in BLDC Motors**
Çorapsız M. R., KAHVECİ H.
Electric Power Components and Systems, vol.49, no.11-12, pp.1052-1067, 2022 (SCI-Expanded)
- V. **A simplified three-level SVM-DTC induction motor drive with speed and stator resistance estimation based on extended Kalman filter**
Usta M. A., OKUMUŞ H. İ., KAHVECİ H.
ELECTRICAL ENGINEERING, vol.99, no.2, pp.707-720, 2017 (SCI-Expanded)
- VI. **Improved brushless DC motor speed controller with digital signal processor**
KAHVECİ H., OKUMUŞ H. İ., Ekici M.
ELECTRONICS LETTERS, vol.50, no.12, pp.864-865, 2014 (SCI-Expanded)

Articles Published in Other Journals

- I. **An overview of frequency-based power split strategies in electric vehicles with battery/supercapacitor hybrid energy storage system**
Çorapsız M. R., KAHVECİ H.
Energy Storage, vol.5, no.6, 2023 (ESCI)
- II. **A study on Li-ion battery and supercapacitor design for hybrid energy storage systems**
Çorapsız M. R., KAHVECİ H.
ENERGY STORAGE, vol.5, no.1, 2023 (ESCI)
- III. **An Experimental Study to Determine the Relationship Between Power Factor and Harmonic Distortion in Single-Phase AC Voltage Controller**
ÇORAPSIZ M. R., KAHVECİ H., ÇORAPSIZ M. F.
Bilecik Şeyh Edebali Üniversitesi Fen Bilimleri Dergisi, vol.7, no.1, pp.306-318, 2020 (Peer-Reviewed Journal)
- IV. **Analysis and Suppressing Speed Fluctuations in Brushless DC Motors**
ÇORAPSIZ M. R., KAHVECİ H., ÇORAPSIZ M. F.
Balkan Journal of Electrical and Computer Engineering, vol.7, pp.300-310, 2019 (Peer-Reviewed Journal)
- V. **Detailed Analysis of DC Choppers and An Example of PMDC Motor Speed Control**

ÇORAPSIZ M. R., ALIM B., KAHVECİ H.

EASTERN ANATOLIAN JOURNAL OF SCIENCE, vol.4, no.1, pp.16-36, 2018 (Peer-Reviewed Journal)

VI. **Single Input, Multiple Output DC-DC Buck Converter for Electric Vehicles**

ADEN İ. A., KAHVECİ H., ŞAHİN M. E.

Turkish Journal of Electromechanics and Energy, vol.2, no.2, pp.7-13, 2017 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **AA Ev Yüklerini Besleyen Fotovoltaik / Batarya Sisteminin MATLAB/SIMULINK Modeli ve Simülasyonu**
KIRIKCI F. M., ÖZTÜRK M., KAHVECİ H.
3 RD INTERNATIONAL CONFERENCE ON APPLIED ENGINEERING AND NATURAL SCIENCES, Konya, Turkey, 21 July 2022, pp.442-443
- II. **Design and Implementation of Single-Phase AC Voltage Controller with Phase Triggering Control**
ÇORAPSIZ M. R., KAHVECİ H., ÇORAPSIZ M. F.
3rd International Conference on Advanced Engineering Technologies, Bayburt, Turkey, 19 - 21 September 2019, pp.491-497
- III. **Minimization of Torque Ripples in Brushless DC Motors**
ÇORAPSIZ M. R., KAHVECİ H.
3rd International Conference on Advanced Engineering Technologies, Bayburt, Turkey, 19 - 21 September 2019, pp.366-373
- IV. **Real-Time Distance Measurement depend on Ambient Temperature**
ÇORAPSIZ M. R., ÇORAPSIZ M. F., KAHVECİ H.
4th INTERNATIONAL CONFERENCE ON ADVANCES IN NATURAL APPLIED SCIENCES, Ağrı, Turkey, 19 - 22 June 2019
- V. **Voltage Control Strategy for DC-DC Buck Boost Converter**
ÇORAPSIZ M. R., KAHVECİ H.
4th INTERNATIONAL CONFERENCE ON ADVANCES IN NATURAL APPLIED SCIENCES, Ağrı, Turkey, 19 - 22 June 2019
- VI. **A New Approach for Eliminating Speed Fluctuation in BLDC Motors**
ÇORAPSIZ M. R., ÇORAPSIZ M. F., KAHVECİ H.
6. INTERNATIONAL MULTIDISCIPLINARY STUDIES CONGRESS, Gaziantep, Turkey, 26 - 27 April 2019
- VII. **Two-Stage Power Converter Design and Control for Renewable Energy Systems**
Tezde E. I., Demir M. M., Gurel F., Okumus H. I., KAHVECİ H.
18th IEEE International Power Electronics and Motion Control Conference (IEEE PEMC), Budapest, Hungary, 26 - 30 August 2018, pp.457-462
- VIII. **Selective Harmonic Elimination with Particle Swarm Optimization in Multilevel Inverters**
DURAK E. S., OKUMUŞ H. İ., Usta M. A., KAHVECİ H.
18th IEEE International Power Electronics and Motion Control Conference (IEEE PEMC), Budapest, Hungary, 26 - 30 August 2018, pp.1019-1024
- IX. **Sensorless Feedback Linearization Direct Torque Control (FBL-DTC) for Induction Motor Drive with Five-Level Cascaded H-Bridge Inverter**
Usta M. A., Okumus H. I., KAHVECİ H., DURAK E. S.
18th IEEE International Power Electronics and Motion Control Conference (IEEE PEMC), Budapest, Hungary, 26 - 30 August 2018, pp.1025-1030
- X. **Single Input Multiple Output DC/DC Buck Converter for Electric Vehicles**
ADEN İ. A., KAHVECİ H., Şahin M. E.
International Conference on Advanced Engineering Technologies (ICADET 2017), Bayburt, Turkey, 21 - 23 September 2017, pp.1-5
- XI. **The Speed Control Of Dc Motor Under The Load Condition Using P₁ And P_{id} Controllers**

ÇORAPSIZ M. R., KAHVECİ H.

International Conference On Advances in Natural And Applied Sciences ICANAS 2017), Antalya, Turkey, 18 - 21 April 2017, pp.1-5

XII. The Speed Control of DC Motor under the Load Condition using PI and PID Controllers

ÇORAPSIZ M. R., KAHVECİ H.

2nd International Conference on Advances in Natural and Applied Sciences (ICANAS), Antalya, Turkey, 18 - 21 April 2017, vol.1833

XIII. Temperature Measurement and Monitoring with Wireless Development Tool

AYDIN M., OKUMUŞ H. İ., KAHVECİ H.

International Conference on Image Processing, Production and Computer Science, Londra, United Kingdom, 26 - 27 March 2016, pp.17-22

XIV. Periodic Price Averages Forecasting of MCP in Day-Ahead Market

Senocak F., KAHVECİ H.

National Conference on Electrical, Electronics and Biomedical Engineering (ELECO), Bursa, Turkey, 1 - 03 December 2016, pp.664-668

XV. SLIDING MODE CONTROL OF PV POWERED DC/DC BUCK-BOOST CONVERTER WITH DIGITAL SIGNAL PROCESSOR

Şahin M. E., OKUMUŞ H. İ., KAHVECİ H.

17th Conference on Power Electronics and Applications, EPE'15-ECCE Europe, Cenevre (Geneva), Switzerland, 8 - 10 September 2015, pp.1-5

XVI. Sliding mode control of PV powered DC/DC Buck-Boost converter with digital signal processor

ŞAHİN M. E., OKUMUŞ H. İ., KAHVECİ H.

17th European Conference on Power Electronics and Applications (EPE ECCE-Europe), Geneva, Switzerland, 8 - 10 September 2015

XVII. An electronic differential system using fuzzy logic speed controlled in-wheel brushless DC motors

KAHVECİ H., OKUMUŞ H. İ., EKICI M.

2013 4th International Conference on Power Engineering, Energy and Electrical Drives, POWERENG 2013, İstanbul, Turkey, 13 - 17 May 2013, pp.881-885

XVIII. A LabVIEW Based Submarine Depth Control Simulator with PID and Fuzzy Controller

EKICI M., KAHVECİ H., AKPINAR A. S.

IEEE International Symposium on INnovations in Intelligent SysTems and Applications (INISTA), Bulgaria, 19 - 21 June 2013

XIX. A Fuzzy Logic Speed and Current Controller For Brushless DC Motors

KAHVECİ H., OKUMUŞ H. İ., EKICI M.

IEEE International Symposium on INnovations in Intelligent SysTems and Applications (INISTA), Bulgaria, 19 - 21 June 2013

XX. A Novel Fuzzy Logic Speed Controller for Brushless DC Motors

KAHVECİ H., OKUMUŞ H. İ.

9th International Conference on Electronics Computer and Computation (ICECCO 2012), Ankara, Turkey, 1 - 03 November 2012, pp.167-170

Supported Projects

OKUMUŞ H. İ., KAHVECİ H., TUBITAK Project, Üç Seviyeli Evirici İle Dsp Tabanlı Hız Geribeslemesiz Ve Doğrudan Moment Kontrollü Motor Sürücü Tasarımı Ve Gerçeklenmesi, 2016 - Continues

ALTAŞ İ. H., KAYIKÇIOĞLU T., ÇAVDAR İ. H., ÖZKOP E., SEVİM Y., ÇAKIR O., HACIOĞLU G., YAZGAN A., KAYA H., NUROĞLU F. M., et al, Project Supported by Higher Education Institutions, ElektrikElektronik Mühendisliği Bölümü Lisans Laboratuvarları Altyapısının İyileştirilmesi, 2016 - 2017

BİLGİN A., OKUMUŞ H. İ., ASLAN M., KAHVECİ H., BAYRAKTAR H., ŞAHİN Z., Project Supported by Higher Education Institutions, Elektrikli ve Hidromobil Taşıt geliştirme Laboratuvarı Kurulması, 2015 - 2015

KAHVECİ H., Project Supported by Other Official Institutions, Otomatik Tıbbi Kart Test Okuma ve Değerlendirme Sistemi,
2011 - 2012

Metrics

Publication: 36

Citation (WoS): 29

Citation (Scopus): 83

H-Index (WoS): 3

H-Index (Scopus): 4

Non Academic Experience

Business Establishment Private, Türk Telekom A.Ş.

Türk Telekom A.Ş.