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Address: Recep Tayyip Erdogan Üni. Mühendislik ve Mimarlık Fakültesi, Elektrik Elektronik Mühendisliği Bölümü Merkez /Riz

International Researcher IDs

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Publons / Web Of Science ResearcherID: AAC-4423-2022

ScopusID: 57221904797

Yoksis Researcher ID: 301586

Education Information

Doctorate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Elektrik Elektronik Mühendisliği, Turkey 2020 - Continues

Postgraduate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Elektrik Elektronik Mühendisliği, Turkey 2018 - 2020

Undergraduate, Karadeniz Technical University, Mühendislik Fakültesi, Elektrik Elektronik Mühendisliği, Turkey 2009 - 2014

Foreign Languages

English, B2 Upper Intermediate

Certificates, Courses and Trainings

R&D Management, Üniversite-Sanayi İş Birliklerini Arttırmaya Yönelik Ar-Ge Projesi Hazırlama Eğitimi (TÜBİTAK 2237-B Proje Eğitimi Etkinliklerini Destekleme Programı) , Karadeniz Teknik Üniversitesi, 2022

Occupational Health and Safety, İş Güvenliği Uzmanlığı Belgesi - C Sınıfı, T.C. Çalışma ve Sosyal Güvenlik Bakanlığı İş Sağlığı ve Güvenliği Genel Müdürlüğü, 2016

Vocational Training, Elektrik 1 kV Altı ve 1 kV Üstü Topraklama, TMMOB Elektrik Mühendisleri Odası, 2015

Vocational Training, YG Tesislerinde İşletme Sorumluluğu, TMMOB Elektrik Mühendisleri Odası, 2015

Dissertations

Postgraduate, Tek Fazlı Şebekeden Bağımsız Transformatörsüz H5 Evirici Uygulaması, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Elektrik Elektronik Mühendisliği, 2020

Research Areas

Electrical and Electronics Engineering, Power Electronics, Electric Motor Drivers, Superconductivity

Academic Titles / Tasks

Research Assistant, Recep Tayyip Erdogan University, Mühendislik Fakültesi, Elektrik ve Elektronik Mühendisliği Bölümü, 2019 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **A New PWM Technique for Three-Phase Three-Level Neutral Point Clamped Rectifier**
MOLLAHASANOĞLU M., MOLLAHASANOĞLU H., OKUMUŞ H. İ.
Arabian Journal for Science and Engineering, vol.49, no.5, pp.6521-6530, 2024 (SCI-Expanded)
- II. **Comparative study of single-phase multilevel cascaded transformerless inverters with different modulation methods**
Mollahasanoğlu H., Mollahasanoğlu M., Özkop E.
Engineering Science and Technology, an International Journal, vol.51, 2024 (SCI-Expanded)
- III. **New modified carrier-based level-shifted PWM control for NPC rectifiers considered for implementation in EV fast chargers**
Mollahasanoğlu M., Mollahasanoğlu H., Okumuş H. İ.
Turkish Journal of Electrical Engineering and Computer Sciences, vol.31, no.7, pp.1254-1275, 2023 (SCI-Expanded)
- IV. **Enhancing magnetic levitation and guidance force and weight efficiency of high-temperature superconducting maglev systems by using sliced bulk YBCO**
Abdioğlu M., Öztürk U. K., Güner S. B., Öztürk M., Mollahasanoğlu H., Yanmaz E.
International Journal of Applied Ceramic Technology, vol.20, no.6, pp.3766-3774, 2023 (SCI-Expanded)
- V. **Extended 2-D Magnetic Field Modeling of Linear Motor to Investigate the Magnetic Force Parameters of High-Speed Superconducting Maglev**
ÖZTÜRK U. K., ABDİOĞLU M., Ozkat E. C., Mollahasanoglu H.
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY, vol.33, no.4, 2023 (SCI-Expanded)
- VI. **Magnetic Force Performance of Hybrid Multisurface HTS Maglev System With Auxiliary Onboard PMs**
Ozturk U. K., Abdioglu M., Mollahasanoğlu H.
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY, vol.33, no.3, 2023 (SCI-Expanded)
- VII. **Investigation of the effect of different power degree NdFeB magnets used in interior permanent magnet brushless direct current motor (IPMBLDC) on motor performance** Gömülü kalıcı mıknatıslı-fırçasız doğru akım motorda (IPMBLDC) kullanılan farklı güç dereceli NdFeB mıknatısların motor performansına etkisinin incelenmesi
Tören M., Mollahasanoğlu H.
Journal of the Faculty of Engineering and Architecture of Gazi University, vol.38, no.3, pp.1389-1401, 2023 (SCI-Expanded)
- VIII. **Comparative Implementation of Thermoelectric Coolers in Transformer Cooling**
Toren M., Mollahasanoglu H.
Electric Power Components and Systems, 2023 (SCI-Expanded)
- IX. **Comparison of Heuristic Approaches in Weight Optimization of Different Power Levels Transformers**
Toren M., Mollahasanoğlu H.
IETE JOURNAL OF RESEARCH, vol.69, no.5, pp.2266-2280, 2023 (SCI-Expanded)

Articles Published in Other Journals

- I. **Experimental and Simulated Investigation of a Single-Phase Transformerless H5 Inverter Topology**

MOLLAHASANOĞLU H., ÖZKOP E.

Jordan Journal of Electrical Engineering, vol.10, no.1, pp.103-121, 2024 (Scopus)

- II. **Evaluation of the performance of an unmanned aerial vehicle with artificial intelligence support and Mavlink protocol designed for response to social incidents response**
Tören M., Mollahasanoğlu H., Çepni M., Kına M.
International Journal of Applied Mathematics Electronics and Computers, vol.11, no.2, pp.88-93, 2023 (Peer-Reviewed Journal)
- III. **Gri Kurt Optimizasyon Algoritması ile Güç ve Dağıtım türü Transformatörlerin Ağırlık Optimizasyonu**
TÖREN M., MOLLAHASANOĞLU H.
Niğde Ömer Halisdemir Üniversitesi Mühendislik Bilimleri Dergisi, vol.12, no.1, pp.96-103, 2023 (Peer-Reviewed Journal)
- IV. **Investigation of Electric Motors in Electric and Hybrid Vehicles and Estimation of Changes in CO2 Emissions: A Sample of Turkey**
Tören M., Mollahasanoglu H.
El-Cezeri Journal of Science and Engineering, vol.9, no.3, pp.1082-1097, 2022 (Scopus)
- V. **ELEKTRİKLİ ARAÇLARIN BATARYA YÖNETİM SİSTEMİNİN SOĞUTMA SİSTEM TASARIMI VE KONTROLÜ**
TÖREN M., MOLLAHASANOĞLU H., Kaya S. M.
Journal of Scientific Reports-B, no.5, pp.11-21, 2022 (Peer-Reviewed Journal)
- VI. **Thermoelectric Cooling System in Transformer Performance as an Alternative Cooling System**
Tören M., Mollahasanoğlu H.
European Journal of Science and Technology, vol.32, pp.498-507, 2021 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **INVESTIGATION OF THE EFFECTS OF DIFFERENT TEMPERATURE PERFORMANCE TYPES OF MAGNET ON MOTOR PERFORMANCE PARAMETERS IN PMBLDC GEARLESS MOTOR FROM ELECTRIC VEHICLE TRACTION MOTORS**
Tören M., Mollahasanoğlu H., Toran S. E.
in: CURRENT STUDIES IN ELECTRICAL ELECTRONICS AND COMPUTER ENGINEERING, Prof. Dr. Ismail Saritas, Assoc. Prof. Dr. Ilker Ali Ozkan, Editor, Eğitim Yayınevi Tic. Ltd. Şti., İstanbul, pp.119-131, 2022

Refereed Congress / Symposium Publications in Proceedings

- I. **DEVELOPMENT OF ECG ANALYSIS PROGRAM USING MATLAB INTERFACE FOR HEART RHYTHM DISORDER DETECTION**
TÖREN M., MOLLAHASANOĞLU H., NASUHBEYOĞLU H.
VIII. INTERNATIONAL HEALTH, ENGINEERING AND SCIENCES CONGRESS, İzmir, Turkey, 06 April 2024, pp.74-81
- II. **OPTIMIZATION OF BLDC TRACTION MOTOR PARAMETERS IN ELECTRIC VEHICLES WITH WHALE OPTIMIZATION ALGORITHM**
TÖREN M., MOLLAHASANOĞLU H.
5th International Conference of Materials and Engineering Technology (TICMET'23), Trabzon, Turkey, 13 - 16 November 2023, pp.9
- III. **THE EFFECT OF NANOPARTICLE FLUID COOLERS ON THE LIFE AND PERFORMANCE OF DISTRIBUTION TYPE TRANSFORMERS**
Tören M., Mollahasanoğlu H.
5th International Conference of Materials and Engineering Technology (TICMET'23), Trabzon, Turkey, 13 - 16 November 2023, pp.10-19
- IV. **Investigation of the Effects of Different Temperature Performance Types of Magnet on Motor**

Performance Parameters in PMBLDC Gearless Motor from Electric Vehicle Traction Motors

TÖREN M., MOLLAHASANOĞLU H., Toran S. E.

10th International Conference on Advanced Technologies (ICAT'22), Van, Turkey, 25 November 2022, pp.73

V. Unmanned Aerial Vehicle Designed for Response to Social Incidents and Performance Investigation

TÖREN M., MOLLAHASANOĞLU H., ÇEPNİ M., KINA M.

10th International Conference on Advanced Technologies (ICAT'22), Van, Turkey, 25 November 2022, pp.272-276

VI. Cooling System Design and Control of Battery Management System of Electric Vehicles

Tören M., Mollahasanoğlu H., Kaya S. M.

3rd International Conference on Applied Engineering and Natural Sciences, Konya, Turkey, 20 - 23 July 2022, pp.1025-1026

VII. Determination of Optimum Stator and Rotor Resistance Values for Obtaining Parameters of Three Phase Induction Motor by Taguchi Method

TÖREN M., MOLLAHASANOĞLU H.

13th International Conference on Electrical and Electronics Engineering (ELECO), Bursa, Turkey, 25 November 2021, pp.440-444

VIII. Fırçasız DA Motorlarda (FDAM) Kullanılan Kalıcı Mıknatıs Boyutunun Taguchi Metodu ile Optimizasyonu

TÖREN M., MOLLAHASANOĞLU H.

ELEKTRİK-ELEKTRONİK MÜHENDİSLİĞİNDE GÜNCEL GELİŞMELER SEMPOZYUMU, Trabzon, Turkey, 24 September 2021, vol.1, pp.39-44

IX. Investigation of Performance Effects of Different Synchronous Generators to be Used in Micro Type Hydro Power Plants

Tören M., Mollahasanoğlu H., Koç E.

I. Elektrik-Elektronik Mühendisliğinde Güncel Gelişmeler Sempozyumu (EEMGG'21), Trabzon, Turkey, 24 - 25 September 2021, vol.1, pp.25-28

X. Investigation of Thermoelectric Cooler System Effect on Induction Motor Performance

Tören M., Mollahasanoğlu H.

2021 17th International Conference on Electrical Machines, Drives and Power systems (ELMA), Sofija, Bulgaria, 1 - 04 July 2021, pp.1-10

XI. Investigation Of The Thermoelectric Coolers Effects On Life Cycle Of Transformers

Tören M., Mollahasanoğlu H., Tağıl M.

12th International Conference on Electrical and Electronics Engineering (ELECO), Bursa, Turkey, 26 - 28 November 2020, pp.221-225

XII. Tek Fazlı Şebeke Bağlantılı Transformatörsüz H5 Evirici Denetimi

Mollahasanoğlu H., Özkop E.

II. Uluslararası Bilim ve Akademi Kongresi, Konya, Turkey, 19 - 20 April 2019, vol.2, pp.131-136

Supported Projects

TÖREN M., MOLLAHASANOĞLU H., KINA M., ÇEPNİ M., Project Supported by Higher Education Institutions, TOPLUMSAL OLAYLARA MÜDAHALEDE İNSANSIZ HAVA ARACI (TOMHA) YAPIMI ve ANALİZLERİ, 2022 - 2023

Tören M., Mollahasanoğlu H., Yelgel Ö. C., TUBITAK Project, Termoelektrik Soğutucuların Yağlı Tip Dağıtım Transformatörlerinin Faydalı Ömürlerine Etkisinin İncelenmesi, 2021 - 2022

Memberships / Tasks in Scientific Organizations

TMMOB Elektrik Mühendisleri Odası, Member, 2014 - Continues

Metrics

Publication: 28

Citation (WoS): 4

Citation (Scopus): 11

H-Index (WoS): 1

H-Index (Scopus): 2

Non Academic Experience

Business Establishment Private, Çoruh Elektrik Dağıtım A.Ş., Şebeke Operasyonları

Business Establishment Private, İstanbul Büyükşehir Belediyesi, İSKİ-Yenikapı Atıksu Arıtma Tesisi