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International Researcher IDs

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Publons / Web Of Science ResearcherID: G-7462-2018

ScopusID: 57204918859

Yoksis Researcher ID: 108882



Education

Doctorate
2014 - 2022

Cukurova University, Fen Bilimleri Enstitüsü, Makina Mühendisliği, Turkey

Postgraduate
2012 - 2014

Cukurova University, Makina Mühendisliği, Makine Mühendisliği, Turkey

Undergraduate
2005 - 2011

Gaziantep University, Faculty Of Engineering, Makine Mühendisliği, Turkey

Dissertations

Doctorate, DESIGN AND CONTROL OF A NOVEL EDDY CURRENT DYNAMOMETER, Cukurova University, Mühendislik Fakültesi, 2022

Postgraduate, MAGNETIC RETARDER WITH EXTENDED CONTROL SYSTEM, Cukurova University, Makina Mühendisliği, Makine Mühendisliği, 2014

Academic Positions

Research Assistant
2011 - Continues

Cukurova University, Ceyhan Mühendislik Fakültesi, Makine Mühendisliği

Funded Projects

1. YAVUZ H., ULUOCAK İ., Project Supported by Higher Education Institutions, Ağır Araçlarda Kullanılan Manyetik Retarderlarda Kontrol Sisteminin Geliştirilmesi ve Etkisinin Deneysel Olarak İncelenmesi, 2013 - 2015

Journal articles indexed in SCI, SSCI, and AHCI

1. Comparative evaluation of machine learning models for predicting noise and vibration of a biodiesel-CNG fuelled diesel engine

ULUOCAK İ., ULUDAMAR E.

Measurement: Journal of the International Measurement Confederation, vol.249, 2025 (SCI-Expanded)

2. Artificial Intelligence-Based prediction of engine noise and vibration in Biodiesel-Diesel engines with hydrogen injection
ULUDAMAR E., ULUOCAK İ.
Fuel, vol.385, 2025 (SCI-Expanded)
3. Atmospheric NO₂ concentration prediction with statistical and hybrid deep learning methods
ULUOCAK İ., Pinar E., Bilgili M.
ENVIRONMENTAL AND ECOLOGICAL STATISTICS, vol.32, no.1, pp.89-118, 2025 (SCI-Expanded)
4. Future forecast of global mean surface temperature using machine learning and conventional time series methods
Durhasan T., PINAR E., ULUOCAK İ., BİLGİLİ M.
Theoretical and Applied Climatology, vol.156, no.1, 2025 (SCI-Expanded)
5. Daily air temperature forecasting using LSTM-CNN and GRU-CNN models
ULUOCAK İ., BİLGİLİ M.
Acta Geophysica, vol.72, no.3, pp.2107-2126, 2024 (SCI-Expanded)
6. Model Predictive Control Coupled with Artificial Intelligence for Eddy Current Dynamometers
ULUOCAK İ., YAVUZ H.
COMPUTER SYSTEMS SCIENCE AND ENGINEERING, vol.44, no.1, pp.221-234, 2023 (SCI-Expanded)
7. Artificial Intelligence Based PID Controller for an Eddy Current Dynamometer
ULUOCAK İ., YAVUZ H.
INTELLIGENT AUTOMATION AND SOFT COMPUTING, vol.33, no.2, pp.1229-1243, 2022 (SCI-Expanded)
8. Artificial intelligence techniques for the vibration, noise, and emission characteristics of a hydrogen-enriched diesel engine
Yıldırım S., TOSUN E., Calık A., ULUOCAK İ., AVŞAR E.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, vol.41, no.18, pp.2194-2206, 2019 (SCI-Expanded)

Articles Published in Other Journals

1. Tarım Makineleri ve Traktörlerde Arızalanma Verilerinin İşletmecilik Kararlarında Kullanılma Esasları
SAY S. M., ŞEHİRİ M., ERDOĞAN Y., ULUOCAK İ.
Akademia Mühendislik ve Fen Bilimleri Dergisi/Academia Journal of Engineering and Applied Sciences, vol.1, pp.246-255, 2017 (Peer-Reviewed Journal)
2. Effect of Rotor Material on Eddy Current Brakes
ULUOCAK İ.
EUROPEAN MECHANICAL SCIENCE, vol.5, pp.246-255, 2017 (Peer-Reviewed Journal)
3. Dynamic simulation of automobile crankshaft
ULUOCAK İ.
Advances in Automobile Engineering, vol.5, no.143, pp.1, 2016 (Peer-Reviewed Journal)

Papers Presented at Peer-Reviewed Scientific Conferences

1. Performance of Eddy Current Dynamometers with Changing Rotor Speed
Uluocak İ., Yavuz H.
6th International Mediterranean Science and Engineering Congress (IMSEC 2021), Antalya, Turkey, 25 - 27 October 2021, no.321, pp.704, (Summary Text)

2. **Effect of Rotor Temperature on Eddy Current Dynamometers**
Uluocak İ., Yavuz H.
7th International Mediterranean Science and Engineering Congress (IMSEC 2022), Antalya, Turkey, 25 - 27 October 2021, pp.703, (Summary Text)
3. **Design and Setup of A Eddy Current Dynamometer**
ULUOCAK İ., YAVUZ H., TOSUN E.
International Academic Conference on Engineering, Transport, IT and Artificial Intelligence (IAC-ETITAI) 2019, Budapest, Hungary, 23 - 24 August 2019, pp.179-186, (Full Text)
4. **Effects of Membership Function Type and Number of Membership Functions on ANFIS Predictions of Diesel Engine Vibration**
TOSUN E., AYDIN K., ULUOCAK İ.
International Academic Conference on Engineering, Transport, IT and Artificial Intelligence (IAC-ETITAI) 2019, Budapest, Hungary, 23 - 24 August 2019, pp.187-193, (Full Text)
5. **Application of Artificial Neural Networks in Prediction of Compression Ignition Engine Performance and Emission Parameters**
Uluocak İ., Yıldırım S., Yavuz H., Tosun E.
292th International Conference on Science, Technology, Engineering and Management(ICSTEM), Paris, France, 25 - 26 August 2018, pp.52, (Summary Text)
6. **Tarım Makineleri ve Traktörlerde Arızalanma Verilerinin İşletmecilik Kararlarında Kullanılma Esasları**
SAY S. M., ŞEHİRİ M., ERDOĞAN Y., ULUOCAK İ.
3rd ASM International Congress Of Agriculture And Environment, Antalya, Turkey, 16 - 18 November 2017, vol.2, pp.73, (Summary Text)
7. **Simulation of Eddy Current Brake Using Matlab/SimulinkInterface**
Uluocak İ.
2nd International Mediterranean Science and Engineering Congress, Adana, Turkey, 25 - 27 October 2017, no.221, pp.460, (Summary Text)
8. **Effects of Rotor Material on Eddy Current Brake Performance**
Uluocak İ., Yavuz H., Gürsul M.
2nd International Mediterranean Science and Engineering Congress, Adana, Turkey, 25 - 27 October 2017, (Full Text)
9. **Dynamic Simulation of Automobile Crank Shaft**
Uluocak İ., Yavuz H., Özarslan H., Burgaç A., Akbıyık H., Conker Ç.
International Conference and Exhibition on Automobile Engineering, Valencia, Spain, 1 - 02 September 2015, vol.4, pp.38, (Full Text)
10. **Genişletilmiş Kontrol Aralıklı Manyetik Retarder**
ULUOCAK İ., CONKER Ç., YAVUZ H., AYDIN K.
OTEKON, Bursa, Turkey, 26 - 27 May 2014, pp.217-218, (Full Text)
11. **Control application and performance analysis of wave energy converters**
YAVUZ H., SERİN H., Conker C., AYDIN K., ULUOCAK İ.
European Biotechnology Congress, Bratislava, Slovakia, 16 - 18 May 2013, vol.24, (Summary Text)

Peer Reviews in Scientific Publications

- European Mechanical Science, Other Indexed Journal, January 2022
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, SCI Journal, June 2018
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, SCI Journal, May 2018
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, SCI Journal, March 2018
International Journal of Hydrogen Energy, SCI Journal, December 2017
European Mechanical Science , Other Indexed Journal, October 2017

Research Areas

Mechanical Engineering, Machine Theory and Dynamics, System Dynamics and Control, Modeling and Simulation of Dynamic Systems, Engineering and Technology