

Res. Asst. PhD Özgün BALCI

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International Researcher IDs

ORCID: 0000-0002-8560-1782

Publons / Web Of Science ResearcherID: AAZ-4945-2020

ScopusID: 57202158014

Yoksis Researcher ID: 226848

Education Information

Doctorate, Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Mechanical Engineering, Turkey
2015 - 2022

Postgraduate, Istanbul Technical University, Makine Fakültesi, Otomotiv A.B.D., Turkey 2012 - 2015

Undergraduate, Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Mechanical Engineering,
Turkey 2007 - 2012

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Karayolu Taşıtları Fren Sistemlerinde Sürtünme Kaynaklı Yüksek Frekanslı Gürültü ve Titreşim Oluşum
Mekanizmasının Deneysel Verilerle Matematiksel Olarak Modellenmesi, Yildiz Technical University, Faculty Of Mechanical
Engineering, Department Of Mechanical Engineering, 2022

Postgraduate, Modelling Control and Simulation of a Powertrain with Dual Clutch Transmission, İstanbul Teknik
Üniversitesi, Makine Mühendisliği, Otomotiv A.B.D., 2015

Research Areas

Mechanical Engineering, Vehicle Systems Dynamics, Mechanical Vibrations, Fuels and Combustion, Internal Combustion
Engines, Engineering and Technology

Academic Titles / Tasks

Research Assistant, Yildiz Technical University, Faculty Of Mechanical Engineering, Department Of Mechanical
Engineering, 2015 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Comparison and investigation of inverse identification techniques for the material properties of a brake disc through experimental and numerical modal analysis**
BALCI Ö., Yavuz A., ÖZKAN M., Sen O. T.
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART C-JOURNAL OF MECHANICAL ENGINEERING SCIENCE, vol.236, no.20, pp.10395-10412, 2022 (SCI-Expanded)
- II. **EFFECT OF ETHANOL-GASOLINE MIXTURES ON PERFORMANCE AND EMISSIONS OF LIGHT PASSENGER CAR ON DIFFERENT DRIVING CYCLES**
KARAGÖZ Y., BALCI Ö., Gurbuz H.
ENVIRONMENTAL ENGINEERING AND MANAGEMENT JOURNAL, vol.21, no.5, pp.839-855, 2022 (SCI-Expanded)
- III. **Performance and emissions of spark-ignition engines fuelled with petrol and methane**
KARAGÖZ Y., BALCI Ö., GEZER O., KÖTEN H., İŞİN Ö.
PROCEEDINGS OF THE INSTITUTION OF CIVIL ENGINEERS-ENERGY, vol.174, no.4, pp.156-169, 2021 (SCI-Expanded)
- IV. **Numerical and experimental investigation of fuel consumption and CO2 emission performance for a parallel hybrid vehicle**
Balci Ö., Karagöz Y., Gezer O., Kale S., Koten H., Pusat S., Yuksek L.
ALEXANDRIA ENGINEERING JOURNAL, vol.60, no.4, pp.3649-3667, 2021 (SCI-Expanded)
- V. **Fuel consumption and emission comparison of conventional and hydrogen feed vehicles**
BALCI Ö., Karagöz Y., KALE S., Damar S., ATTAR A., Köten H., DALKILIÇ A. S., Wongwises S.
International Journal of Hydrogen Energy, vol.46, pp.16250-16266, 2021 (SCI-Expanded)
- VI. **Cycle-skipping strategy with intake air cut off for natural gas fueled Si engine**
Tunçer E., Sandalci T., Pusat Ş., Balci Ö., Karagöz Y.
Science Progress, vol.104, no.3, 2021 (SCI-Expanded)
- VII. **Effect of different levels of ethanol addition on performance, emission, and combustion characteristics of a gasoline engine**
Köten H., Karagöz Y., Balci Ö.
ADVANCES IN MECHANICAL ENGINEERING, vol.12, 2020 (SCI-Expanded)
- VIII. **Performance analysis of a hybrid lightweight vehicle with downsized engine**
Karagöz Y., Balci Ö., Gezer O., Kale S., Köten H.
Energy Sources, Part A: Recovery, Utilization and Environmental Effects, vol.42, pp.1513-1525, 2020 (SCI-Expanded)
- IX. **Investigation of hydrogen usage on combustion characteristics and emissions of a spark ignition engine**
Karagöz Y., Balci Ö., Köten H.
International Journal of Hydrogen Energy, vol.44, pp.14243-14256, 2019 (SCI-Expanded)
- X. **Effect of hydrogen addition using on-board alkaline electrolyser on SI engine emissions and combustion**
Karagöz Y., Balci Ö., Orak E., Habib M. S.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.43, pp.11275-11285, 2018 (SCI-Expanded)

Articles Published in Other Journals

- I. **Natural gas-fueled HCCI engine performance and emission analysis and comparison with SI and spark-assisted operations**
Tunçer E., SANDALCI T., BALCI Ö., Karagöz Y.
Australian Journal of Mechanical Engineering, 2024 (ESCI)

Refereed Congress / Symposium Publications in Proceedings

- I. **Mathematical modelling of friction induced high frequency noise and vibration mechanism in vehicle brake systems through experimental data**
Balci Ö., Yavuz A., Özkan M., Şen O. T.
InterNoise23, Chiba, Japan, 20 - 23 August 2023, vol.9, pp.4807-4815
- II. **Comparison of Performance Data of Electric Vehicle and Internal Combustion Engine-Powered Vehicle**
Karagöz Y., Balci Ö., Pusat Ş.
International Conference on Progresses in Automotive Technologies 2020, İstanbul, Turkey, 28 - 29 December 2020, pp.1-7
- III. **Cycle Skipping Strategies For Natural Gas SI Engine**
Tunçer E., Sandalcı T., Pusat Ş., Balci Ö., Karagöz Y.
International Conference on Progresses in Automotive Technologies 2020, İstanbul, Turkey, 28 - 29 December 2020, pp.1-7
- IV. **Investigation on Effect of A Micro Pilot Injection Method on Performance and Emissions in Diesel-LPG Dual Fuelled Engine**
KÖTEN H., KARAGÖZ Y., BALCI Ö., GEZER O., KALE S.
2ND INTERNATIONAL CONFERENCE ON LIFE AND ENGINEERING SCIENCES JUNE 27-29, 2019 ISTANBUL TURKEY, 27 - 29 June 2019
- V. **On Vehicle Comparison of Gasoline Fueled SI Engine, Hydrogen Fueled SI Engine and Hydrogen Fueled SI Engine Microbial Fuel Cell Powered Systems**
Attar A., Karagöz Y., Balci Ö., Kale S., Köten H.
4th International Hydrogen Technologies Congress, Edirne, Turkey, 20 - 23 June 2019, no.154, pp.298-301
- VI. **Comparison of emission and fuel consumption values of a gasoline fuelled and gasoline hydrogen fuelled SI engine powered light duty vehicle in new european driving cycle**
Karagöz Y., Attar A., Balci Ö., Köten H.
4th International Hydrogen Technologies Congress, Edirne, Turkey, 20 - 23 June 2019, no.153, pp.294-297
- VII. **Effect of Different Levels of Ethanol Addition on Performance, Emission and Combustion Characteristics of A Gasoline Engine**
KÖTEN H., KARAGÖZ Y., BALCI Ö.
ECRES 2018 (THE 6TH EUROPEAN CONFERENCE ON RENEWABLE ENERGY SYSTEMS Istanbul/Turkey 25-27 June 2018), İstanbul, Turkey, 25 June 2018, pp.674-685
- VIII. **Investigation of Hydrogen Usage on Combustion Characteristics and Emissions of A Spark Ignition Engine**
KARAGÖZ Y., BALCI Ö., KÖTEN H.
ECRES 2018 (THE 6TH EUROPEAN CONFERENCE ON RENEWABLE ENERGY SYSTEMS Istanbul/Turkey 25-27 June 2018), İstanbul, Turkey, 25 June 2018, pp.662-673

Supported Projects

ÖZKAN M., BALCI Ö., Project Supported by Higher Education Institutions, Karayolu Taşıtları Fren Sistemlerinde Sürtünme Kaynaklı Yüksek Frekanslı Gürültü ve Titreşim Oluşum Mekanizmasının Deneysel Verilerle Matematiksel Olarak Modellenmesi, 2020 - 2023

Scientific Refereeing

PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS, PART D: JOURNAL OF AUTOMOBILE ENGINEERING, Journal Indexed in SCI-E, June 2022
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS, PART D: JOURNAL OF AUTOMOBILE ENGINEERING, Journal Indexed in SCI-E, March 2022

SCIENTIA IRANICA INTERNATIONAL JOURNAL OF SCIENCE & TECHNOLOGY, Journal Indexed in SCI-E, September 2021
Propulsion and Power Research, Journal Indexed in SCI-E, June 2021
Journal of Thermal Engineering, Journal Indexed in ESCI, September 2017

Metrics

Publication: 21

Citation (WoS): 49

Citation (Scopus): 66

H-Index (WoS): 3

H-Index (Scopus): 5