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International Researcher IDs

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Yoksis Researcher ID: 260503

Learning Knowledge

Doctorate 2016 - 2021	Ataturk University, Fen Bilimleri Enstitüsü, Makine Mühendisliği Anabilim Dalı, Turkey
Postgraduate 2014 - 2016	Erzincan Üniversitesi, Fen Bilimleri Enstitüsü, Makine Mühendisliği A.B.D., Turkey
Undergraduate 2006 - 2011	Marmara University, Faculty Of Engineering, Makine Mühendisliği, Turkey

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, EXPERIMENTAL AND NUMERICAL ANALYSIS OF THE COOLING OF ELECTRIC VEHICLE BATTERIES WITH DIFFERENT METHODS, Ataturk University, Fen Bilimleri Enstitüsü, Makine Mühendisliği Anabilim Dalı, 2021

Postgraduate, YER ALTI SUYU KAYNAKLI ISI POMPASI İLE ÖRNEK MEKÂN ISITILMASI , Erzincan Üniversitesi, Fen Bilimleri Enstitüsü, Termodinamik, 2016

Academic Titles / Tasks

Assistant Professor 2022 - Continues	Erzincan Binali Yildirim University, Mühendislik-Mimarlık Fakültesi, Makine Mühendisliği Bölümü
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Research Assistant PhD
2021 - Continues

Erzincan Binali Yildirim University, Mühendislik-Mimarlık Fakültesi, Makine
Mühendisliği Bölümü

Research Assistant
2017 - Continues

Erzincan Binali Yildirim University, Mühendislik-Mimarlık Fakültesi, Makine
Mühendisliği Bölümü

Supported Projects

1. CELEN A., BAKIRCI K., KALKAN O., DALKILIÇ A. S., Project Supported by Higher Education Institutions, ELEKTRİK VE HİBRİT ARAÇLARDA KULLANILAN PRİZMATİK BATARYALARIN SIVI İLE SOĞUTULMASININ DENEYSEL OLARAK ARAŞTIRILMASI, 2019 - 2021

Published journal articles indexed by SCI, SSCI, and AHCI

1. **Thermal performance improvement of an air-cooled 18650 NMC battery module: A novel busbar design that acts as a turbulator**
KALKAN O.
Journal of Energy Storage, vol.88, 2024 (SCI-Expanded)
2. **Multi-objective optimization of a liquid metal cooled heat sink for electronic cooling applications**
KALKAN O.
International Journal of Thermal Sciences, vol.190, 2023 (SCI-Expanded)
3. **NUMERICAL INVESTIGATION OF A SERPENTINE-TUBE COLD PLATE COOLED LITHIUM-ION BATTERY UNDER WIDE PARAMETRIC CONDITIONS**
KALKAN O., Ali Celen C., BAKIRCI K.
Heat Transfer Research, vol.54, no.10, pp.53-76, 2023 (SCI-Expanded)
4. **Multi-objective optimization of a mini channeled cold plate for using thermal management of a Li-Ion battery**
Kalkan O., Celen A., Bakirci K.
Energy, vol.251, 2022 (SCI-Expanded)
5. **Prediction of experimental thermal performance of new designed cold plate for electric vehicles' Li-ion pouch-type battery with artificial neural network**
Kalkan O., Colak A. B., Celen A., Bakirci K., Dalkilic A. S.
Journal of Energy Storage, vol.48, 2022 (SCI-Expanded)
6. **Experimental and numerical investigation of the LiFePO4 battery cooling by natural convection**
Kalkan O., Celen A., Bakirci K.
Journal of Energy Storage, vol.40, 2021 (SCI-Expanded)
7. **Experimental investigation of thermal performance of novel cold plate design used in a Li-ion pouch-type battery**
Kalkan O., Celen A., Bakirci K., Dalkılıç A. S.
Applied Thermal Engineering, vol.191, 2021 (SCI-Expanded)

Articles Published in Other Journals

1. **Mikro İşlemciler için Sıvı Metal Soğutmalı Mini Kanallı Soğutucularda Kanatçık Kullanımının Termohidrolik Etkilerinin İncelenmesi**
KALKAN O.

- Fırat Üniversitesi Mühendislik Bilimleri Dergisi, vol.36, 2024 (Peer-Reviewed Journal)
2. **A COMMERCIAL TURBOFAN ENGINE MODELING AND EXERGY ANALYSIS**
KALKAN O.
SELCUK UNIVERSITY JOURNAL OF ENGINEERING, SCIENCE AND TECHNOLOGY, vol.12, no.1, pp.109-122, 2024
(Peer-Reviewed Journal)
 3. **Development of Chip Temperature and Cost-Based Optimum Design for a Radial Heat Sink Cooling High Power LEDs**
KALKAN O.
Bitlis Eren Üniversitesi Fen Bilimleri Dergisi, vol.12, no.4, 2023 (Peer-Reviewed Journal)
 4. **ELEKTRİKLİ ARAÇLARDA KULLANILAN BATARYALAR VE TERMAL YÖNETİM SİSTEMLERİNİN İNCELENMESİ**
Kaba M. Y., Kalkan O., Celen A.
Konya Mühendislik Bilimleri Dergisi, vol.9, no.4, pp.1119-1136, 2021 (Peer-Reviewed Journal)
 5. **Numerical investigation on the usage of finned surface in lithium nickel manganese cobalt oxides batteries by using air cooling method**
Celen A., Kalkan O.
Energy Storage, vol.3, pp.1-16, 2021 (ESCI)
 6. **Experimental Performance Analysis of a Groundwater Heat Pump System in Erzincan, Turkey**
Kalkan O., Kaya M.
Erzincan Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.12, no.3, pp.1254-1265, 2019 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

1. **MECHANICAL AND THERMAL ANALYSIS OF THE PRODUCTION OF AN INDUSTRIAL PRODUCT USING THE PLASTIC INJECTION METHOD**
CANYURT S., ÇAM S., KALKAN O.
1. BİLSEL INTERNATIONAL KORYKOS SCIENTIFIC RESEARCHES AND INNOVATION CONGRESS, 28 January 2024
2. **THERMAL EFFECTS OF USING TURBULATORS IN INJECTION MOLD COOLING CHANNELS**
ŞAHİN K., KALKAN O.
5th International Azerbaijan Congresses on Life, Engineering, Mathematical, and Applied Sciences, 25 January 2024
3. **Thermohydraulic performance analysis of a crossflow finned tube heat exchanger**
KALKAN O.
2. International Conference on Advances and Innovations in Engineering, Turkey, 21 - 23 September 2023
4. **Kese Tipi Lityum-İyon Bir Bataryanın Zorlanmış Taşınım Şartlarında Hava İle Soğutulmasının Deneysel İncelenmesi**
Kaba M. Y., Celen A., Kalkan O.
4. International Marmara Scientific Research And Innovation Congress, İstanbul, Turkey, 11 - 12 March 2023, pp.75-88
5. **Erzincan İlinde Yer Altı Suyu Kaynaklı Isı Pompası İle Sera Isıtılmasının Teorik Olarak İncelenmesi**
KALKAN O., KAYA M.
ULUSLARARASI ERZİNCAN SEMPOZYUMU, Erzincan, Turkey, 28 September - 01 October 2016, pp.441-448

Courses

Isı Pompaları, Undergraduate, 2021 - 2022

Introduction to Mechanical Engineering and Ethics, Undergraduate, 2021 - 2022

Heat Exchangers, Undergraduate, 2021 - 2022

Scientific Refereeing

JOURNAL OF ENERGY STORAGE, SCI Journal, December 2023

JOURNAL OF THERMAL ENGINEERING, National Scientific Refreed Journal, March 2022

ENERGY & ENVIRONMENT, Journal Indexed in SSCI, March 2020

ENERGY EFFICIENCY, Journal Indexed in SCI-E, September 2018

ENERGY CONVERSION AND MANAGEMENT, SCI Journal, July 2017

Metrics

Publication: 18

Citation (WoS): 18

Citation (Scopus): 127

H-Index (WoS): 2

H-Index (Scopus): 5

Research Areas

Mechanical Engineering, Energy, Solar energy, Thermodynamics, Heating, Refrigerating and Air Conditioning, Engineering and Technology