

Res. Asst. PhD BÜŞRA ARSLAN

Personal Information

Office Phone: [+90 0312 202 8503](tel:+9003122028503)

Email: busraozdemir@gazi.edu.tr

Web: <https://avesis.gazi.edu.tr/10645>

International Researcher IDs

ScholarID: mVbBmTEAAAAJ

ORCID: 0000-0002-1084-013X

Publons / Web Of Science ResearcherID: HTP-0203-2023

ScopusID: 57216656298

Yoksis Researcher ID: 265237

Education Information

Doctorate, Gazi University, Teknoloji Fakültesi, Enerji Sistemleri Mühendisliği, Turkey 2018 - 2024

Postgraduate, Suleyman Demirel University, Fen Bilimleri Enstitüsü, İş Sağlığı Ve İş Güvenliği Anabilim Dalı, Turkey 2016 - 2018

Postgraduate, Suleyman Demirel University, Fen Bilimleri Enstitüsü, Enerji Sistemleri Mühendisliği (YI) (Tezli), Turkey 2014 - 2018

Undergraduate, Suleyman Demirel University, Teknoloji Fakültesi, Enerji Sistemleri Mühendisliği Bölümü, Turkey 2010 - 2014

Foreign Languages

English, B2 Upper Intermediate

Certificates, Courses and Trainings

Education Management and Planning, Eğitim Fakültesi Pedagojik Formasyon Eğitimi Sertifikası, Süleyman Demirel Üniversitesi, 2016

Dissertations

Doctorate, Faz Değiştiren Malzemeler (FDM) ile Isıl Enerji Depolamanın Araştırılması: Doğrudan Kullanım ve Hidrojen Depolama Uygulaması, Gazi University, Fen Bilimleri Enstitüsü, -, 2024

Postgraduate, Güneş enerjisi kaynaklı ev tipi trijenerasyon sisteminin termodinamik analizi, Suleyman Demirel University, Fen Bilimleri Enstitüsü, Enerji Sistemleri Mühendisliği Anabilim Dalı, 2018

Research Areas

Energy storage technologies, Hydrogen Technologies and Fuel Cells

Academic Titles / Tasks

Research Assistant, Gazi University, Teknoloji Fakültesi, Enerji Sistemleri Mühendisliği, 2018 - Continues
Research Assistant, Iskenderun Technical University, Faculty Of Engineering And Natural Sciences, Department Of Energy Systems Engineering, 2017 - 2018

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Numerical investigation of the laminar burning velocity and adiabatic flame temperature phenomenon for NH₃/Hydrogen rich coal gases (HRCGs)/air flames**
Kekul O., İlbaşı M., Arslan B.
Energy Sources, Part A: Recovery, Utilization, and Environmental Effects , vol.46, no.1, pp.10579-10598, 2024 (SCI-Expanded)
- II. **Characterization and utilization of industrial wastewater in biorefinery systems: A comprehensive approach**
Castellanos H. G., Aryanfar Y., Fardinnia H., Arslan B., İlbaşı M., Keçebaşı A.
Environmental Progress and Sustainable Energy, vol.43, no.4, 2024 (SCI-Expanded)
- III. **Experimental and Numerical Investigation of Macroencapsulated Phase Change Materials for Thermal Energy Storage**
Arslan B., İlbaşı M.
Materials, vol.17, no.12, pp.1-25, 2024 (SCI-Expanded)
- IV. **Entrainment effects on combustion and emission characteristics of turbulent non-premixed ammonia/air and methane/air swirl flames through a developed perforated burner**
Sahin M., İLBAŞ M., ARSLAN B.
CANADIAN JOURNAL OF CHEMICAL ENGINEERING, vol.102, no.3, pp.1066-1077, 2024 (SCI-Expanded)
- V. **ENERGY, EXERGY, AND EXERGOCHEMICAL ANALYSIS OF A TRANS-CRITICAL CO₂ CYCLE POWERED BY A SINGLE FLASH GEOTHERMAL CYCLE IN WITH/WITHOUT ECONOMIZER WORKING MODES**
Aryanfar Y., Mohtaram S., Castellanos H. G., Tag-eldin E. M., ARSLAN B., Deifalla A., Ragab A. E., Sun H.
THERMAL SCIENCE, vol.28, no.2C, pp.1701-1716, 2024 (SCI-Expanded)
- VI. **Experimental analysis of hydrogen storage performance of a LaNi₅-H₂ reactor with phase change materials**
Arslan B., İlbaşı M., Çelik S.
International Journal of Hydrogen Energy, vol.48, no.15, pp.6010-6022, 2023 (SCI-Expanded)
- VII. **Numerical investigation of a direct ammonia tubular solid oxide fuel cell in comparison with hydrogen**
İlbaşı M., Kümük B., Alemu M. A., Arslan B.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.45, no.60, pp.35108-35117, 2020 (SCI-Expanded)

Articles Published in Other Journals

- I. **A numerical study on the melting behaviors of paraffin with and without Al₂O₃ nanoparticles**
Arslan B., İlbaşı M.
JOURNAL OF POLYTECHNIC-POLITEKNIK DERGISI, vol.24, no.3, pp.1243-1248, 2021 (ESCI)
- II. **Numerical Investigations of Phase Change Materials (PCMs) for Thermal Energy Storage Systems: An Overview**
ARSLAN B., İLBAŞ M.
International Journal of Energy Studies, vol.4, no.9, 2019 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **Numerical Analysis of Three-Dimensional Isothermal and Non-Isothermal PEM Fuel Cell Model**
İLBAŞ M., İLHAN G. Ö., KÜMÜK B., ÖZDEMİR B.
4th International Hydrogen Technologies Congress (IHTEC-2019), Edirne, Turkey, 20 - 23 June 2019, pp.127-130
- II. **Numerical Modeling of a Model Tubular Solid Oxide Fuel Cell Running on Amonia in Comparison with Hydrogen**
İLBAŞ M., KÜMÜK B., ALEMU M. A., ÖZDEMİR B.
4th International Hydrogen Technologies Congress (IHTEC-2019), Edirne, Turkey, 20 - 23 June 2019, pp.123-126
- III. **Designing and Numerical Analysis of a High Pressure Hydrogen Storage Tank**
İLBAŞ M., YILDIRIM S. C., ÖZDEMİR B., KÜMÜK B.
4th International Conference on Viable Energy Trends (INVENT-2019), İstanbul, Turkey, 26 - 28 April 2019, pp.108-115
- IV. **A Review of Numerical Studies on Energy Storage in Phase Change Materials (PCMs)**
İLBAŞ M., ÖZDEMİR B., ŞAHİN M.
International Congress on the World of Technology and Advanced Materials (WITAM-2018), Kırşehir, Turkey, 21 - 23 September 2018

Supported Projects

Arslan B., İlbaş M., Kümük B., Project Supported by Higher Education Institutions, Faz Değiştiren Malzemeler (FDM) ile Isıl Enerji Depolamanın Sayısal ve Deneysel Analizi, 2020 - 2022

Metrics

Publication: 13

Citation (WoS): 27

Citation (Scopus): 35

H-Index (WoS): 2

H-Index (Scopus): 2