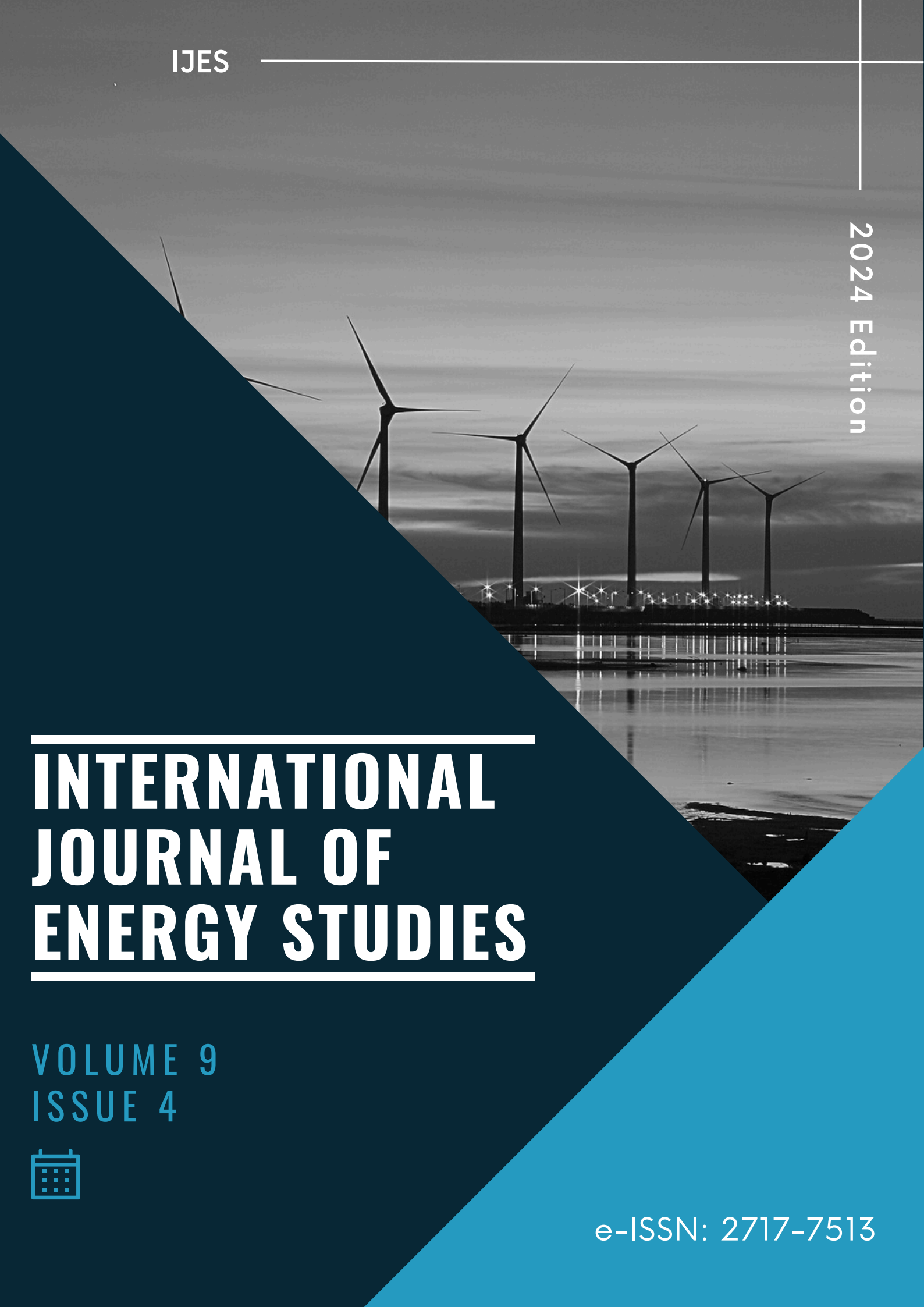


IJES

2024 Edition



INTERNATIONAL JOURNAL OF ENERGY STUDIES

VOLUME 9
ISSUE 4



e-ISSN: 2717-7513

International Journal of Energy Studies (*IJES*)

IJES is published four times a year

e-ISSN:2717-7513

homepage: <https://dergipark.org.tr/en/pub/ijes>

Publisher: Türkiye Enerji Stratejileri ve Politikaları Araştırma Merkezi (TESPAM)

2024, Volume 9, Issue 4

Contents

Experimental investigation of the synthesis gas purification using the PSA method to isolate hydrogen / Pages:559-579 / Kemalcan Sevuk, Berre Kumuk, Mustafa Ilbas (Research Article)

International hydrogen market meets blockchain: A new frontier in trade / Pages:581-599 / Sofya Morozova, Arif Karabuga, Zafer Utlu (Research Article)

An experimental research on the effect of infrared and carbon fiber film heater integration in heat pump food drying system on drying performance / Pages:601-618 / Ümit İşkan, Ahmet Yüksel, Cüneyt Tunçkal (Research Article)

Experimental optimization of the SG6043 airfoil for horizontal axis wind turbine using Schmitz equations / Pages:619-636 / Mehmet Seyhan, Himmet Erdi Tanürün (Research Article)

Numerical investigation on torque performance of darrieus-savonius hybrid designs / Pages:637-678 / Mehmet Bakırcı (Research Article)

Evaluating machine learning techniques for fluid mechanics: Comparative analysis of accuracy and computational efficiency / Pages:679-721 / Eyup Kocak (Research Article)

Energy outlook of Japan: A economic and econometric analysis / Pages:723-743 / Rahmi Incekara, Beyhan Incekara (Research Article)

Enhanced droop control for off-grid and grid-tied scenarios in renewable energy systems / Pages:745-773 / Sahin Gullu, Mohammad Nilian, Issa Batarseh (Research Article)

Parameters affecting energy production in hydroelectric power plants: A case study in Şırnak / Pages:775-808 / Elif Nur Bilen, Edip Taşkesen (Research Article)

Assessment and prioritization of renewable energy alternatives to achieve sustainable development goals in Türkiye: Based on fuzzy AHP approach / Pages:809-847 / Emre Akusta, Raif Cergibozan (Research Article)

Assessment of thermal comfort preferences of industrial facility workers / Pages:849-865 / İsmail Caner, Şükran Özbağ, Nadir İlten (Research Article)

Highway wind energy conversion with a savonius-darrieus hybrid turbine / Pages:867-904 / Mehmet Bakırcı, Osama Ahmed Kazal (Research Article)

Design and simulation of a standing wave thermoacoustic refrigerator using air as the working fluid / Pages:905-924 / Netice Duman, Halil İbrahim Acar, Lutuf Ertürk (Research Article)

New boron-containing microcapsule for energy storage with upgraded flame retardant properties / Pages:925-942 / Timur Paçacı (Research Article)

Determining the biomass energy potential derived from agricultural wastes in Uganda / Pages:943-955 / Mohamedeltayib Omer Salih EISSA (Research Article)

Editorial Team

Editor-in-Chief

Prof. Dr. Mustafa İlbaş - Gazi University – Türkiye

Co-Editor

Prof. Dr. Serhat Karyeyen - Gazi University – Türkiye

Dr. Berre Kümük – Iskenderun Technical University - Türkiye

Dr. Büşra Arslan - Gazi University - Türkiye

Associate Editors

Prof. Dr. Bora Timurkutluk - Niğde Ömer Halisdemir University - Türkiye

Prof. Dr. Nesrin Kayataş Demir - Erciyes University - Türkiye

Prof. Dr. Bilge Albayrak Çeper - Erciyes University - Türkiye

Prof. Dr. Selahattin Çelik - Ankara Yıldırım Beyazıt University - Türkiye

Assoc. Prof. Dr. Harun Yılmaz - Erzincan Binali Yıldırım University – Türkiye

Language Editor

Fatma Ülkü Kavruk - Gazi University – Türkiye

Editorial Advisory Board

Prof. Dr. Volkan Ş. Ediger - Kadir Has University - Türkiye

Prof. Dr. Ashwani K. Gupta - University of Maryland, College Park - Maryland, USA

Prof. Dr. Oktay Çetinkaya - Middle East Technical University - Türkiye

Prof. Dr. Shouyin (Ian) Yang - National Formosa University - Taiwan

Prof. Dr. İlker Yılmaz - Gazi University - Türkiye

Prof. Dr. Hakan Serhad Soyhan - Sakarya University - Türkiye

Prof. Dr. Yüksel Kaplan - Niğde Ömer Halisdemir University - Türkiye

Prof. Dr. İskender Gökçalp - CNRS - France

Prof. Dr. Ahmet Yozgatlıgil - Middle East Technical University - Türkiye

Prof. Dr. Veli Çelik - Ankara Yıldırım Beyazıt University – Türkiye

Prof. Dr. Nafiz Kahraman - Erciyes University - Türkiye

Prof. Dr. Yueh-Heng Li - National Cheng Kung University – Taiwan

Assoc. Prof. Dr. Murat Sahin - National Defence University - Türkiye

Assoc. Prof. Dr. Abdulkadir Bektaş – Directorate of Climate Change - Türkiye

Dr. Paramvir Singh - Indian Institute of Technology Mumbai – India

Technical Editors

Dr. Berre Kümük – Iskenderun Technical University - Türkiye

Dr. Büşra Arslan - Gazi University - Türkiye

Res. Assist. Fethi Mustafa Çimen - Gazi University – Türkiye

Res. Assist. Mehmet Arif Saltan - National Defence University - Türkiye