

## Asst. Prof. AYHAN ATIZ

### Personal Information

**Email:** aatiz@cu.edu.tr

**Web:** <https://avesis.cu.edu.tr/aatiz>

**Address:** Çukurova Üniversitesi Fen Edebiyat Fakültesi Fizik Bölümü Balcalı Sarıçam/Adana

### International Researcher IDs

ORCID: 0000-0002-1292-5161

Yoksis Researcher ID: 261183

### Research Areas

Natural Sciences

### Academic Titles / Tasks

Assistant Professor, Cukurova University, Fen-Edebiyat Fakültesi, Fizik, 2021 - Continues

### Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Hydrogen production of flat plate solar collectors integrated with photovoltaic thermal panels**  
ATIZ A., Erden M., KARAKILÇIK M.  
International Journal of Hydrogen Energy, vol.52, pp.1408-1424, 2024 (SCI-Expanded)
- II. **Investigation of the energetic, exergetic performance, environmental, economic, and hydrogen production analyses of PV-T for increasing surface areas and mass flow rates compared to PV**  
ATIZ A., KARAKILÇIK M., Sogukpınar H., Bozkurt I.  
International Journal of Hydrogen Energy, vol.49, pp.424-436, 2024 (SCI-Expanded)
- III. **Solar pond integrated with parabolic trough solar collector for producing electricity and hydrogen**  
Damarseekin S., ATIZ A., KARAKILÇIK M.  
International Journal of Hydrogen Energy, vol.52, pp.115-126, 2024 (SCI-Expanded)
- IV. **Assessment of hydrogen generation and thermodynamic efficiencies of PEM coupled with PV and PV-T under diverse circumstances**  
ATIZ A., KARAKILÇIK M.  
International Journal of Hydrogen Energy, 2024 (SCI-Expanded)
- V. **Experimental room heating applications relative to increasingly evacuated vacuum tube solar collectors**  
ATIZ A., KARAKILÇIK M.  
HEAT AND MASS TRANSFER, vol.59, no.6, pp.1059-1071, 2023 (SCI-Expanded)
- VI. **Energy and exergy analyses and electricity generation of PV-T combined with a solar collector for varying mass flow rate and ambient temperature**  
ATIZ A., Erden M., KARAKILÇIK M.  
HEAT AND MASS TRANSFER, vol.58, no.7, pp.1263-1278, 2022 (SCI-Expanded)
- VII. **The integration of parabolic trough solar collectors and evacuated tube collectors to geothermal resource for electricity and hydrogen production**

ATIZ A., KARAKILÇIK H., Erden M., KARAKILÇIK M.

INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.46, no.57, pp.29027-29037, 2021 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Energy and exergy analysis of PV-T cooled with air and water for four different conditions**  
ATIZ A.  
Pamukkale Üniversitesi Mühendislik Bilimleri Dergisi, vol.29, no.2, pp.110-119, 2023 (Peer-Reviewed Journal)
- II. **Comparison of heat efficiency of flat-plate and vacuum tube collectors integrated with Organic Rankine Cycle in Adana climate conditions**  
ATIZ A., KARAKILÇIK M.  
PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSITESI MUHENDISLIK BILIMLERI DERGISI, vol.26, no.1, pp.106-112, 2020 (ESCI)
- III. **The Theoretical Investigation of Performance of the Hydrogen Attainment System with Electricity from a Solar Pond**  
ATIZ A., KARAKILÇIK M.  
Çukurova Üniversitesi Mühendislik-Mimarlık Fakültesi Dergisi, vol.34, no.4, pp.1-8, 2018 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **Investigation of Cushion Gas / Working Gas Ratios of Underground Salt Caverns Hydrogen Gas Storage**  
San S., KARAKILÇIK M., KARAKILÇIK H., Erden M., ATIZ A.  
in: Emerging Trends in Energy Storage Systems and Industrial Applications, Prabhansu, Nayan Kumar, Editor, Elsevier, Oxford, pp.67-78, 2022
- II. **Thermal Energy Storage Performance Analysis of Different Model Solar Ponds**  
KARAKILÇIK M., ATIZ A., BOZKURT İ., Erden M., Çiloğulları M., Saxena A.  
in: Renewable Energy Based Solutions, Uyar Tanay Sıdkı, Javani Nader, Editor, Springer, Cham, pp.465-487, 2022
- III. **Performance Improving of Low Temperature Geothermal Sources with the Assist of a Solar Pond**  
KARAKILÇIK H., ATIZ A., Erden M., KARAKILÇIK M.  
in: Renewable Energy Based Solutions, Uyar Tanay Sıdkı, Javani Nader, Editor, Springer, Cham, pp.451-463, 2022
- IV. **Hydrogen production and space heating using water heated by solar radiation**  
ATIZ A., KARAKILÇIK H., KARAKILÇIK M.  
in: Solar Water Heating: Fundamentals and Applications, Khalil Kassmi, Editor, Nova Science Publishers, Inc., Hauppauge NY, pp.177-202, 2021
- V. **Daily comparison energy and exergy analysis and thermal energy storage performance of solar collectors**  
ATIZ A., KARAKILÇIK H., SAXENA A., KARAKILÇIK M.  
in: Solar Water Heating: Fundamentals and Applications, Khalil Kassmi, Editor, Nova Science Publishers, Inc., Hauppauge NY, pp.59-83, 2021
- VI. **100 Renewable Energy Generation with Integrated Solar Energy Systems**  
ATIZ A., KARAKILÇIK M.  
in: Accelerating the Transition to a 100 Renewable Energy Era, Tanay Sıtkı Uyar, Editor, Springer Nature, Cham, pp.259-274, 2020

## Refereed Congress / Symposium Publications in Proceedings

- I. **INVESTIGATION OF ELECTRICITY, HYDROGEN AND CLEAN WATER PRODUCTION WITH RENEWABLE**

## **ENERGY SYSTEM INTEGRATED ONTO A SHIP: MOBILE ENERGY PRODUCTION ON A SHIP**

Erden M., ATIZ A., KARAKILÇIK H., KARAKILÇIK M.

23rd World Hydrogen Energy Conference (WHEC2022), İstanbul, Turkey, 26 - 30 June 2022, vol.1, pp.170-172

### **Metrics**

Publication: 27

Citation (WoS): 6

Citation (Scopus): 9

H-Index (WoS): 2

H-Index (Scopus): 1