

## **Doç. Dr. Hadi GENCELİ**

### **Kişisel Bilgiler**

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### **Uluslararası Araştırmacı ID'leri**

ORCID: 0000-0002-9273-548X  
ScopusID: 55110364600  
Yoksis Araştırmacı ID: 340808

### **Eğitim Bilgileri**

Doktora, Ege Üniversitesi, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, Türkiye 2010 - 2014  
Yüksek Lisans, Ege Üniversitesi, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, Türkiye 2006 - 2009

### **Yabancı Diller**

İngilizce, C1 İleri

### **Araştırma Alanları**

Makina Mühendisliği, Enerji, Termodinamik, Isı ve Madde Transferi, Hesaplama akışkanlar dinamiği, Isıl Sistemler

### **SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler**

- I. **Biomass-Fueled Organic Rankine Cycles: State of the Art and Future Trends**  
Heidarnejad P., GENCELİ H., Hashemian N., Asker M., Al-Rawi M.  
Energies, cilt.17, sa.15, 2024 (SCI-Expanded)
- II. **Thermodynamic assessment of an innovative biomass-driven system for generating power, heat, and hydrogen**  
Sabbaghi M. A., Baniasadi E., GENCELİ H.  
International Journal of Hydrogen Energy, cilt.75, ss.529-539, 2024 (SCI-Expanded)
- III. **Optimal design of a solar-driven Kalina system for combined power and desalination purposes**  
Khanmohammadi S., GENCELİ H., Pakseresht A., Bellotti D.  
Solar Energy, cilt.268, 2024 (SCI-Expanded)
- IV. **The pandemic's sustainability windfall: a case study of COVID-19 restrictions on electricity demand patterns and sustainable development goals**  
Heidarnejad P., GENCELİ H., Asker M., YUMURTACI Z.  
International Journal of Global Warming, cilt.32, sa.4, ss.440-463, 2024 (SCI-Expanded)
- V. **Comprehensive evaluation of a new integrated ORC-VCR system with a thermoelectric generator unit combining sustainable energies for hydrogen production**  
Sabbaghi M. A., GENCELİ H., Heidarnejad P., Asker M., Khanmohammadi S.  
International Journal of Hydrogen Energy, 2024 (SCI-Expanded)
- VI. **Exploring the performance of an innovative integrated solar tower power plant with hydrogen**

- generation and storage**
- Mirbagheri M. H., Baniasadi E., GENCELİ H.  
International Journal of Hydrogen Energy, cilt.48, sa.99, ss.39271-39285, 2023 (SCI-Expanded)
- VII. **Analysis of a novel concentrated solar power and magnetohydrodynamic liquid metal units integrated system with hydrogen production**
- Nezhad Q. A., Jafarmadar S., Genceli H.  
International Journal of Hydrogen Energy, cilt.48, sa.60, ss.22734-22751, 2023 (SCI-Expanded)
- VIII. **Novel Saturated Flow Boiling Correlations for R600a and R717 Refrigerants**
- Turgut O. E., Genceli H., Asker M., Çoban M. T.  
HEAT TRANSFER ENGINEERING, cilt.43, sa.18, ss.1579-1609, 2022 (SCI-Expanded)
- IX. **Air quality during COVID-19 pandemic forced partial confinement in Turkey**
- GENCELİ H.  
INTERNATIONAL JOURNAL OF GLOBAL WARMING, cilt.26, sa.3, ss.311-321, 2022 (SCI-Expanded)
- X. **Novel Saturated Flow Boiling Heat Transfer Correlation for R32 Refrigerant**
- Turgut O. E., Asker M., Genceli H., Çoban M. T.  
Journal Of Thermophysics And Heat Transfer, cilt.1, sa.1, ss.1-6, 2021 (SCI-Expanded)
- XI. **Exergetic evaluation and optimisation of a novel integrated energy conversion system including thermoelectric generators**
- Malik M. Z., Musharavati F., Saadat-Targhi M., Khanmohammadi S., GENCELİ H.  
INTERNATIONAL JOURNAL OF EXERGY, cilt.35, sa.2, ss.195-209, 2021 (SCI-Expanded)
- XII. **A comprehensive approach for optimizing a biomass assisted geothermal power plant with freshwater production: Techno-economic and environmental evaluation**
- HEIDARNEJAD P., GENCELİ H., Asker M., Khanmohammadi S.  
Energy Conversion and Management, cilt.226, 2020 (SCI-Expanded)
- XIII. **A comprehensive approach for optimizing a biomass assisted geothermal power plant with freshwater production: Techno-economic and environmental evaluation**
- Heidarmejad P., Genceli H., Asker M., Khanmohammadi S.  
Energy Conversion And Management, cilt.226, sa.1, ss.113514, 2020 (SCI-Expanded)
- XIV. **The effects of driving patterns and PEM fuel cell degradation on the lifecycle assessment of hydrogen fuel cell vehicles**
- Ahmadi P., Torabi S. H., Afsaneh H., Sadegheih Y., Genceli H., Ashjaee M.  
International Journal Of Hydrogen Energy, cilt.45, sa.5, ss.3595-3608, 2020 (SCI-Expanded)
- XV. **The effect of phase change material incorporated building wall on the CO<sub>2</sub> mitigation: a case study of Izmir, Turkey**
- Asker M., Alptekin E., Tokuç A., Ezan M. A., Genceli H.  
International Journal of Global Warming, cilt.19, sa.1, ss.54-75, 2019 (SCI-Expanded)
- XVI. **Mixed refrigerant as working fluid in Organic Rankine Cycle for hydrogen production driven by geothermal energy**
- Genceli H.  
International Journal Of Hydrogen Energy, cilt.44, sa.34, ss.18703-18711, 2019 (SCI-Expanded)
- XVII. **Performance assessment of solar-powered high pressure proton exchange membrane electrolyzer: A case study for Erzincan**
- Genceli H.  
International Journal Of Hydrogen Energy, cilt.44, sa.20, ss.9701-9707, 2019 (SCI-Expanded)
- XVIII. **Numerical investigation of inward solidification inside spherical capsule by using temperature transforming method**
- Asker M., Genceli H., Çoban M. T.  
AIN SHAMS ENGINEERING JOURNAL, cilt.9, sa.4, ss.537-547, 2018 (SCI-Expanded)
- XIX. **Assessment of different bio-inspired flow fields for direct methanol fuel cells through 3D modeling and experimental studies**
- Ouellette D., Ozden A., Ercelik M., Çolpan C. Ö., Genceli H., Li X., Hamdullahpur F.

- International Journal Of Hydrogen Energy, cilt.43, sa.2, ss.1152-1170, 2018 (SCI-Expanded)
- XX.** **Entropy generation analysis of multilayer PCM slabs integrated with fins**  
Asker M., Alptekin E., Ezan M. A., Genceli H.  
International Journal Of Exergy, cilt.25, sa.1, ss.154-169, 2018 (SCI-Expanded)
- XXI.** **Thermoeconomic modeling and multi-objective evolutionary-based optimization of a modified transcritical CO<sub>2</sub> refrigeration cycle**  
Khanmohammadi S., Goodarzi M., Khanmohammadi S., Genceli H.  
JOURNAL OF THERMAL SCIENCE AND ENGINEERING APPLICATIONS, cilt.5, ss.86-96, 2017 (SCI-Expanded)
- XXII.** **Designing, modeling and performance investigation of bio-inspired flow field based DMFCs**  
Ozden A., Ercelik M., Ouellette D., Çolpan C. Ö., Genceli H., Hamdullahpur F.  
International Journal Of Hydrogen Energy, cilt.42, sa.33, ss.21546-21558, 2017 (SCI-Expanded)
- XXIII.** **Exergoeconomic analysis and multi objective optimization of a solar based integrated energy system for hydrogen production**  
Khanmohammadi S., Heidarnejad P., Javani N., Genceli H.  
International Journal Of Hydrogen Energy, cilt.42, sa.33, ss.21443-21453, 2017 (SCI-Expanded)
- XXIV.** **Analysis and optimisation of a cascade active magnetic regenerative refrigeration system**  
Genceli H., Dincer İ., Güngör A.  
International Journal Of Exergy, cilt.19, sa.2, ss.143-160, 2016 (SCI-Expanded)
- XXV.** **Exergoeconomic evaluation of a geothermal power plant**  
Genceli H., Dincer İ., Güngör A.  
International Journal Of Exergy, cilt.14, sa.3, ss.303-319, 2014 (SCI-Expanded)
- XXVI.** **Exergoeconomic Analysis of a Heat Pump Tumbler Dryer**  
Genceli H., Dincer İ., Güngör A.  
Drying Technology, cilt.32, sa.3, ss.352-360, 2014 (SCI-Expanded)
- XXVII.** **Exergetic performance analysis of Dora II geothermal power plant in Turkey**  
Genceli H., Güngör A., Dincer İ.  
ENERGY, cilt.46, sa.1, ss.101-108, 2012 (SCI-Expanded)

## Diger Dergilerde Yayınlanan Makaleler

- I. **Numerical analysis of phase change material filled with metal foam inside a cylindrical capsule**  
Genceli H., Al-Rawi M., Asker M.  
ENERGY STORAGE, cilt.1, sa.1, ss.1-10, 2023 (ESCI)
- II. **Numerical Simulation of Thermal Energy Storage System Inside a Spherical Capsule Under Periodic Boundary Conditions**  
Asker M., Genceli H., Ezan M. A.  
ENERGY STORAGE, cilt.1, sa.1, ss.1-10, 2022 (ESCI)
- III. **Simulation and Performance Analysis of a Cooling Energy Storage System Based on Encapsulated Nano-Enhanced Phase Change Materials**  
Ghojavand, F., Baniasadi E., Afshari E., Genceli H.  
ENERGY STORAGE, cilt.1, sa.1, ss.1-11, 2022 (ESCI)
- IV. **Comparative techno-economic-environmental assessment of biomass fueled integrated energy systems**  
Heidarnejad P., Genceli H., Yumurtaci Z.  
Turkish Journal of Electromechanics & Energy, cilt.6, sa.2, ss.39-45, 2021 (Hakemli Dergi)
- V. **Comparative techno-economic-environmental assessment of biomass fueled integrated energy systems**  
HEIDARNEJAD P., GENCELİ H., YUMURTACI Z.  
Turkish Journal of Electromechanics & Energy, 2021 (Hakemli Dergi)
- VI. **Thermodynamic analysis and performance assessment of a cascade active magnetic regenerative**

## **refrigeration system**

Genceli H., Dincer İ., Güngör A.

INTERNATIONAL JOURNAL OF AIR-CONDITIONING AND REFRIGERATION, cilt.21, sa.3, ss.1350016, 2013 (ESCI)

## **Kitap & Kitap Bölümleri**

- I. **Numerical Simulation of Building Wall Integrated with Phase Change Material: A Case Study of a Mediterranean City Izmir, Turkey**  
Asker M., Alptekin E., Tokuç A., Ezan M. A., Genceli H.  
The Role of Exergy in Energy and the Environment, Sandro Nižetić, Agis Papadopoulos, Editör, Springer, London/Berlin , New York, ss.757-768, 2018
- II. **Energy and exergy analyses of an active magnetic refrigerator**  
Genceli H., Güngör A., Dincer İ.  
Progress in Sustainable Energy Technologies Vol II: Creating Sustainable Development, Ibrahim Dincer, Adnan Midilli, Haydar Kucuk, Editör, Springer, London/Berlin , New York, ss.1-10, 2014
- III. **Exergy Analysis and Environmental Impact Assessment of a Geothermal Power Plant**  
Genceli H., Dinçer İ., Güngör A.  
Causes, Impacts and Solutions to Global Warming, İbrahim Dinçer, Can Özgür Çolpan, Fethi Kadioglu, Editör, Springer, London/Berlin , New York, ss.825-837, 2013

## **Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar**

- I. **Feasibility Study of Designing A Zero Energy Building in Hot and Dry Climate**  
Karami M., Saeidi A., Heidarnejad P., Genceli H.  
12th Global Conference on Global Warming (GCGW-2024) , Şanlıurfa, Türkiye, 16 - 19 Mayıs 2024, ss.10-14
- II. **Integration of an SOFC with Closed Brayton and Rankine Cycles for Hydrogen Production: Thermodynamic Analysis and Heat Recovery Considerations**  
Genceli H., Sabbaghi M. A., Baniasadi .  
8th International Hydrogen Technologies Congress (IHTEC 2024), Diyarbakır, Türkiye, 12 - 15 Mayıs 2024, ss.130-134
- III. **Thermodynamic Assessment of an Improved Solar Powered Multi-Generation System Using a Thermoelectric Generator**  
Sabbaghi M. A., Genceli H., Baniasadi E.  
8th International Hydrogen Technologies Congress (IHTEC 2024), Diyarbakır, Türkiye, 12 - 15 Mayıs 2024, ss.294-298
- IV. **A Comparative Study Based on the Efficiency of Metaheuristic Algorithms for Performing Gibbs Free Energy Minimization Problems**  
Çoban T., Turgut O. E., Genceli H., Asker M.  
24th Congress on Thermal Science and Technology with International Participation (Ulibtk'23), Ankara, Türkiye, 6 - 08 Eylül 2023, ss.1-4
- V. **Thermodynamic Performance Evaluation of Direct Dimethyl Ether Fuel Cells Using Exergy Analysis**  
Genceli H., Alpaydin G. U., Çolpan C. Ö., Devrim Y.  
7th International Hydrogen Energy Congress, Elazığ, Türkiye, 10 - 12 Mayıs 2023, ss.10-14
- VI. **A NUMERICAL STUDY ON A PHASE-CHANGE PROCESS IN A CYLINDRICAL CAPSULE**  
Genceli H., Asker M., Al-Rawi M.  
The 2nd World Energy Storage Conference, İstanbul, Türkiye, 18 - 21 Aralık 2022, ss.1-4
- VII. **Performance assessment of a solar driven Kalina cycle with the purpose of power and fresh water generation**  
Genceli H., Khanmohammadi S.

- International Conference on Sustainable Energy and Technologie, İstanbul, Türkiye, 16 - 18 Ağustos 2022, ss.2-7
- VIII. **Performance Analysis of a Solar Tower Power Plant Integrated with Hydrogen Energy Storage System**  
Mirbagheri M. H., Baniasadi E., Genceli H.  
23rd World Hydrogen Energy Conference, İstanbul, Türkiye, 26 - 30 Haziran 2022, ss.2-6
- IX. **Simulation of a three-dimensional single-phase direct ethanol fuel cell**  
Genceli H., Çolpan C. Ö., Erünal E.  
6 th International Hydrogen Technologies Congress (IHTEC-2022), Çanakkale, Türkiye, 23 - 26 Ocak 2022, ss.1-4
- X. **Parametric Analysis of Photovoltaic Module**  
Asker M., Turgut O. E., Genceli H.  
International Conference on Advances in Engineering, Architecture, Science and Technology (ICA-EAST 2021), Erzurum, Türkiye, 15 - 17 Aralık 2021, ss.1-4
- XI. **DYNAMIC SIMULATION OF A FLAT PLATE SOLAR COLLECTOR SYSTEM UNDER HOT AND HUMID CLIMATIC CONDITIONS**  
Genceli H., Özdoğan A., Asker M.  
5 International Anatolian Energy Symposium, 24 - 25 Mart 2021, ss.436-442

## Desteklenen Projeler

DİNÇER İ., JAVANI N., GENCELİ H., KANTÜRK FİGEN A., SORGULU F., ÖZTÜRK M., AKGÜN İ., ERDEMİR D., AYDIN M. İ., GÜRSU H., Yükseköğretim Kurumları Destekli Proje, Yeşil Hidrojen Üretim Sisteminin Geliştirilmesi ve Kurulması, 2024 - Devam Ediyor  
Genceli H., Çolpan C. Ö., TÜBİTAK Projesi, Yüksek Performanslı Doğrudan Etanol Yakıt Pili (DEYP) Yiğini Üç Boyutlu Modelinin Gelişmesi, Tasarımı, Üretimi Ve Deneysel Karakterizasyonu, 2021 - 2022

## Metrikler

Yayın: 49  
Atıf (WoS): 772  
Atıf (Scopus): 862  
H-İndeks (WoS): 13  
H-İndeks (Scopus): 13

## Akademi Dışı Deneyim

Vestel beyaz eşya