

## Asst. Prof. HADİ GANJEHSARABI

### Personal Information

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### Education Information

Doctorate, Ege University, Mühendislik Fakültesi/ Fen Bilimleri Enstitüsü, Makine Mühendisliği Bölümü/Termodinamik, Turkey 2010 - 2014

Postgraduate, Ege University, Mühendislik Fakültesi/ Fen Bilimler Enstitüsü/ Makine Mühendisliği Bölümü, Makine Mühendisliği/Termodinamik, Turkey 2006 - 2009

Undergraduate, Bou Ali Sina University, Mühendislik Fakültesi, Makine Mühendisliği, Iran 1998 - 2003

### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, KASKAT AKTİF MANYETİK REJENERASYONLU (AMR) SOĞUTMA SİSTEMLERİNİN UYGULAMA POTANSİYELİNİN ARAŞTIRILMASI VE SAYISAL MODELLENMESİ, Ege Üniversitesi, Dış Hekimliği Fakültesi, Makine Mühendisliği/Termodinamik, 2014

Postgraduate, Isı Pompalı Çamaşır Kurutucunun Tasarımının Geliştirilmesi Ve Termodinamik Analizi, Ege Üniversitesi, Dış Hekimliği Fakültesi, Makine Mühendisliği/Termodinamik, 2009

### Research Areas

Mechanical Engineering, Energy, Alternative Energy Resources, Energy storage technologies, Hydrogen Technologies and Fuel Cells , Thermodynamics, Heat and Mass Transfer, Computational fluid dynamics, Engineering and Technology

### Academic Titles / Tasks

Assistant Professor, Erzincan Binali Yildirim University, Mühendislik-Mimarlık Fakültesi, Makine Mühendisliği Bölümü, 2018 - 2018

Assistant Professor, Erzincan Binali Yildirim University, Mühendislik-Mimarlık Fakültesi, Makine Mühendisliği Bölümü, 2014 - 2018

Research Assistant, Ontario Canada Üniversitesi, Yenice Meslek Yüksekokulu, Makine Mühendisliği, 2011 - 2013

### Courses

Sayısal Isı İletimi, Postgraduate, 2017 - 2018, 2015 - 2016, 2014 - 2015

Akışkanlar mekaniği II, Undergraduate, 2017 - 2018  
Yakıt pili teknolojisi, Postgraduate, 2017 - 2018  
Isı transferi II, Undergraduate, 2017 - 2018  
Akışkanlar mekaniği II - İÖ, Undergraduate, 2017 - 2018  
Bitirme Projesi-I, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016  
Bitirme Projesi-I (İÖ), Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016  
Isı Transferi-II (İÖ), Undergraduate, 2016 - 2017, 2015 - 2016  
Makine Ana Tasarım I (İÖ), Undergraduate, 2016 - 2017, 2015 - 2016  
İleri sayısal yöntemler, Postgraduate, 2016 - 2017  
Alternatif Enerji Kaynakları (İÖ), Undergraduate, 2016 - 2017, 2015 - 2016  
Sayısal yöntemler, Undergraduate, 2016 - 2017, 2015 - 2016, 2014 - 2015  
Sayısal Yöntemler (İÖ), Undergraduate, 2016 - 2017, 2014 - 2015  
Bitirme Projesi-II, Undergraduate, 2015 - 2016  
Makine Ana Tasarım II (İÖ), Undergraduate, 2015 - 2016  
Isı Transferi-II, Undergraduate, 2015 - 2016  
Makine Ana Tasarım II , Undergraduate, 2015 - 2016  
Güneş Enerji, Undergraduate, 2014 - 2015  
Bilgisayar Destekli Teknik Resim, Undergraduate, 2014 - 2015  
Bilgisayar Destekli Teknik Resim (İÖ), Undergraduate, 2014 - 2015

## Jury Memberships

Post Graduate, Yüksek lisans tez savunmasında jüri olarak görev yapmak, Süleyman Demirel Üniversitesi , March, 2018  
Post Graduate, Yüksek lisans tez savunmasında jüri olarak görev yapmak, Süleyman Demirel Üniversitesi , March, 2018  
Post Graduate, Yüksek lisans tez savunmasında jüri olarak görev yapmak, Süleyman Demirel Üniversitesi , March, 2018  
Doctorate, Doktora "Tez İzleme Komitesi" Jüri Üyeliği, karabük üniversitesi, December, 2017  
Post Graduate, Yüksek lisans tez savunmasında jüri üyeliği, Dokuz Eylül Üniversitesi, October, 2017  
Post Graduate, Yüksek lisans tez savunmasında jüri olarak görev yapmak, Ege Üniversitesi, August, 2017  
Post Graduate, Yüksek lisans tez savunmasında jüri olarak görev yapmak, Dokuz Eylül Üniversitesi, August, 2017  
Post Graduate, Yüksek lisans tez savunmasında jüri olarak görev yapmak, Dokuz Eylül Üniversitesi, June, 2017  
Post Graduate, Yüksek lisans tez savunmasında jüri olarak görev yapmak, Erzincan üniversitesi, April, 2017  
Doctorate, Doktora "Tez İzleme Komitesi" Jüri Üyeliği, karabük üniversitesi, April, 2017

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

- I. **Mixed refrigerant as working fluid in Organic Rankine Cycle for hydrogen production driven by geothermal energy**  
GANJEHSARABI H.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.44, no.34, pp.18703-18711, 2019 (SCI-Expanded)
- II. **Performance assessment of solar-powered high pressure proton exchange membrane electrolyzer: A case study for Erzincan**  
GANJEHSARABI H.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.44, no.20, pp.9701-9707, 2019 (SCI-Expanded)
- III. **Mixed refrigerant as working fluid in Organic Rankine Cycle for hydrogen production driven by geothermal energy**  
GANJEHSARABI H.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.39, pp.12-19, 2018 (SCI-Expanded)
- IV. **Performance Assessment of Solar-Powered High Pressure Proton Exchange Membrane Electrolyzer: a case study for Erzincan**

GANJEHSARABI H.

INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.39, pp.1-10, 2018 (SCI-Expanded)

- V. **Assessment of different bio-inspired flow fields for direct methanol fuel cells through 3D modeling and experimental studies**  
Ouellette D., Ozden A., Ercelik M., Colpan C. O., GANJEHSARABI H., Li X., Hamdullahpur F.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.43, no.2, pp.1152-1170, 2018 (SCI-Expanded)
- VI. **Entropy generation analysis of multilayer PCM slabs integrated with fins**  
Asker M., Alptekin E., Ezan M. A., GANJEHSARABI H.  
INTERNATIONAL JOURNAL OF EXERGY, vol.26, pp.154-169, 2018 (SCI-Expanded)
- VII. **Designing, modeling and performance investigation of bio-inspired flow field based DMFCs**  
Ozden A., Ercelik M., Ouellette D., Colpan C. O., GANJEHSARABI H., Hamdullahpur F.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.42, no.33, pp.21546-21558, 2017 (SCI-Expanded)
- VIII. **Exergoeconomic analysis and multi objective optimization of a solar based integrated energy system for hydrogen production**  
Khanmohammadi S., Heidarnejad P., JAVANI N., GANJEHSARABI H.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.42, no.33, pp.21443-21453, 2017 (SCI-Expanded)
- IX. **Analysis and optimisation of a cascade active magnetic regenerative refrigeration system**  
GANJEHSARABI H., DINCER I., Gungor A.  
INTERNATIONAL JOURNAL OF EXERGY, vol.19, no.2, pp.143-160, 2016 (SCI-Expanded)
- X. **Exergoeconomic Analysis of a Heat Pump Tumbler Dryer**  
GANJEHSARABI H., Dincer I., GÜNGÖR A.  
DRYING TECHNOLOGY, vol.32, no.3, pp.352-360, 2014 (SCI-Expanded)
- XI. **Exergoeconomic evaluation of a geothermal power plant**  
GANJEHSARABI H., Gungor A., DINCER I.  
INTERNATIONAL JOURNAL OF EXERGY, vol.14, no.3, pp.303-319, 2014 (SCI-Expanded)
- XII. **Exergetic performance analysis of Dora II geothermal power plant in Turkey**  
Ganjehsarabi H., GÜNGÖR A., DINCER I.  
ENERGY, vol.46, no.1, pp.101-108, 2012 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Thermoeconomic modeling and multi-objective evolutionary-based optimization of a modified transcritical CO<sub>2</sub> refrigeration cycle**  
Khanmohammadi S., Goodarzi M., Khanmohammadi S., GANJEHSARABI H.  
Thermal Science and Engineering Progress, vol.5, pp.86-96, 2018 (Scopus)
- II. **Numerical investigation of inward solidification inside spherical capsule by using temperature transforming method**  
Asker M., GANJEHSARABI H., Çoban T.  
AIN SHAMS ENGINEERING JOURNAL, vol.1, no.1, pp.1-10, 2016 (Scopus)

## Books & Book Chapters

- 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., GANJEHSARABI H.  
in: The Role of Exergy in Energy and the Environment, Nizetic S, Papadopoulos A., Editor, Springer, Cham, Newyork, pp.757-768, 2018
- II. **Thermodynamic Performance Assessment and Comparison of Active Magnetic Regenerative and Conventional Refrigeration Systems**

GANJEHSARABI H., Gungor A., DINCER I.

in: Exergy for A Better Environment and Improved Sustainability 1, Aloui F, DINCER I, Editor, Springer, Cham, Newyork, pp.1329-1338, 2018

III. **Energy and exergy analyses of an active magnetic refrigerator**

GANJEHSARABI H., DINCER I., Gungor A.

in: Progress in Sustainable Energy Technologies Vol II: Creating Sustainable Development, Ibrahim Dincer, Adnan Midilli, Haydar Kucuk, Editor, Springer-Verlag, Newyork, pp.1-10, 2014

IV. **Exergoeconomic analysis of a cascade active magnetic regenerative refrigeration system**

GANJEHSARABI H., DINCER I., Gungor A.

in: Progress in Exergy, Energy, and the Environment, Ibrahim Dincer, Adnan Midilli, Haydar Kucuk, Editor, Springer-Verlag, Newyork, pp.69-80, 2014

V. **Exergy analysis and environmental impact assessment of a geothermal power plant**

GANJEHSARABI H., Gungor A., DINCER I.

in: Causes, Impacts and Solutions to Global Warming, Ibrahim Dincer, Can Ozgu Colpan, Fethi Kadioglu, Editor, Springer-Verlag, Newyork, pp.825-837, 2013

## **Refereed Congress / Symposium Publications in Proceedings**

I. **TÜRKİYE'NİN YENİLENEBİLİR ENERJİ VİZYONU VE DEĞERLENDİRMESİ**

GANJEHSARABI H., oktay coşkun z.

I. Uluslararası Sosyal Bilimlerde Kritik Tartışmalar Kongresi (ICCDSS), İzmir, Turkey, 5 - 07 October 2018, pp.11-17

II. **Performance Evaluation of Solar Powered High Pressure Proton Exchange Membrane Electrolyzer : A Case Study of Erzincan, Turkey**

GANJEHSARABI H.

9th International Conference On Hydrogen Production, Zagreb, Croatia, 16 - 19 July 2018, pp.1-10

III. **Performance assessment of a solar assisted heat pump for indoor swimming pool**

GANJEHSARABI H., Asker M.

10 th International Exergy, Energy and environment Symposium IEEEES-10, Katowice, Poland, 1 July - 04 April 2018, pp.1-10

IV. **Thermodynamic performance assessment of magnetic cooling systems in hybrid electric vehicle**

GANJEHSARABI H., Javani N.

10 th International Exergy, Energy and environment Symposium IEEEES-10, Katowice, Poland, 1 July - 04 April 2018, pp.10-20

V. **The Effect of Driving Patterns on the Lifecycle Assessment and Fuel Cell Degradation on Hydrogen Vehicles**

GANJEHSARABI H., Ahmadi P.

7 th Global Conference on Global Warming (GCGW-2018), İzmir, Turkey, 24 - 28 June 2018, pp.833-837

VI. **A CONSTRUCTAL FLOW FIELD LAYOUT FOR DIRECT METHANOL FUEL CELLS**

GANJEHSARABI H., Ouellette D., Ercelik M., Colpan C. Ö.

7th GLOBAL CONFERENCE on GLOBAL WARMING, İzmir, Turkey, 24 June - 28 August 2018, pp.478-483

VII. **ECONOMIC ASSESSMENT OF PHASE CHANGE MATERIALS IN BUILDINGS**

Asker M., Alptekin E., Tokuç A., Ezan M. A., GANJEHSARABI H.

7 th Global Conference on Global Warming (GCGW-2018), İzmir, Turkey, 24 - 28 June 2018, pp.1-10

VIII. **Integrating of PEM Electrolyzer for Hydrogen Production in a Kalina Cycle Driven by Low-Grade Geothermal Energy**

GANJEHSARABI H.

3rd International Hydrogen Technologies Congress (IHTEC-2018), Antalya, Turkey, 14 - 18 March 2018, pp.10-14

IX. **Thermal performance assessment of thermal energy storage systems using composite phase change materials**

Asker M., Alptekin E., Ezan M. A., GANJEHSARABI H.

9th International Exergy, Energy and Environment Symposium, Split, Croatia, 14 - 17 May 2017, pp.619-625

**X. Numerical simulation of building envelopes with phase change material**

Asker M., Alptekin E., Tokuç A., Ezan M. A., GANJEHSARABI H.

9th International Exergy, Energy and Environment Symposium, Split, Croatia, 14 - 17 May 2017, pp.1146-1151

**XI. Comparison of Serpentine and Constructal Theory Based Flow Fields in DMFCs**

GANJEHSARABI H., Ouellette D., Ercelik M., ÇOLPAN Ö.

9th International Exergy, Energy and Environment Symposium, Split, Croatia, 14 - 17 May 2017, pp.470-478

**XII. Performance analysis of heat pumps clothes dryer**

GANJEHSARABI H., Gungor A.

5 th International Ege Energy Symposium and Exhibition, Denizli, Turkey, 27 - 30 June 2010, pp.135-139

## Supported Projects

GANJEHSARABI H., ÇOLPAN C. Ö., ERÇELİK M., Project Supported by Higher Education Institutions, Doğrudan Etanol Yakıt Pili DEYP Test Sistemi Kurulumu ve DEYP Deneysel Çalışmaları, 2017 - 2018

GANJEHSARABI H., ÇOLPAN C. Ö., Project Supported by Higher Education Institutions, DMYP Akış Kanallarının Doğadan Esinlenilerek Yenilikçi Bir Yaklaşımla Tasarlanması Modellenmesi ve Deneysel Olarak İncelenmesi, 2016 - 2018

## Scientific Refereeing

Current Alternative Energy, Other journals, April 2018

Journal of Thermal Engineering, National Scientific Refreed Journal, April 2018

International journal of exergy, SCI Journal, March 2018

Fuel, SCI Journal, November 2017

Applied Thermal Engineering, SCI Journal, November 2017

International Journal of Hydrogen Energy , SCI Journal, October 2017

International journal of hydrogen energy, National Scientific Refreed Journal, October 2017

International Journal of Energy Research, SCI Journal, October 2017

International journal of hydrogen energy, National Scientific Refreed Journal, October 2017

International Journal of Global Warming, SCI Journal, September 2017

International Journal of Hydrogen Energy, SCI Journal, September 2017

International journal of hydrogen energy, National Scientific Refreed Journal, September 2017

International Journal of Hydrogen Energy, SCI Journal, August 2017

International Journal of Hydrogen Energy , SCI Journal, July 2017

International journal of hydrogen energy, National Scientific Refreed Journal, July 2017

International journal of hydrogen energy, National Scientific Refreed Journal, June 2017

International journal of hydrogen energy, National Scientific Refreed Journal, June 2017

International journal of hydrogen energy, National Scientific Refreed Journal, June 2017

## Metrics

Publication: 31

Citation (WoS): 144

Citation (Scopus): 143

H-Index (WoS): 6

H-Index (Scopus): 7

## **Congress and Symposium Activities**

The 10th International Exergy, Energy and Environment Symposium (IEEES-10), Attendee, Katowice, Poland, 2018  
9 th International Conference on Hydrogen Production, Attendee, Zagreb, Croatia, 2018  
7th Global Conference on Global Warming (GCGW-2018), Attendee, İzmir, Turkey, 2018  
The 3rd International Hydrogen Technologies Congress (IHTEC-2018), Attendee, Antalya, Turkey, 2018  
The 3rd international hydrogen technologies congress (IHTEC-2018), Session Moderator, Antalya, Turkey, 2018  
9th International Exergy, Energy and Environment Symposium, Attendee, Split, Croatia, 2017  
9th International Exergy, Energy and Environment Symposium (IEEES-9), Session Moderator, Split, Croatia, 2017  
2th International Conference On Energy Systems, Attendee, Istanbul, Turkey, 2016  
5th International Conference on Renewable Energy Research and applications, Attendee, Birmingham, United Kingdom, 2016  
8th International Exergy, Energy and Environment Symposium, Attendee, Antalya, Turkey, 2016  
7th International Exergy, Energy and Environment Symposium, Attendee, Valence, France, 2015  
International Conference on Clean Energy (ICCE-2014), Attendee, Istanbul, Turkey, 2014  
7th International Ege Energy Symposium,, Attendee, Uşak, Turkey, 2014  
6th International Exergy, Energy and Environment Symposium, Attendee, Rize, Turkey, 2013  
11th International Conference on Sustainable Energy technologies, Attendee, Vancouver, Canada, 2012  
6 th International Ege Energy Symposium,, Attendee, İzmir, Turkey, 2012  
6th International Green Energy Conference (IGEC-VI), Attendee, Eskişehir, Turkey, 2011  
5 th International Ege Energy Symposium and Exhibition, Attendee, Denizli, Turkey, 2010