

## **Dr. Murat Emre Demir**

### **Personal Information**

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### **International Researcher IDs**

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Publons / Web Of Science ResearcherID: ABH-4642-2020

ScopusID: 57191829551

Yoksis Researcher ID: 32397

### **Education Information**

Doctorate, University of Ontario Institute of Technology, Faculty of Engineering and Applied Science, Mechanical Engineering, Canada 2015 - 2018

Postgraduate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Mechanical Engineering, Turkey 2012 - 2015

Undergraduate, Yildiz Technical University, Naval Architecture And Maritime Faculty, Department Of Naval Architecture And Marine Engineering, Turkey 2008 - 2012

### **Research Areas**

Energy, Fluid Mechanics, Conventional Energy Systems and Their Technology, Renewable Energy Systems, Energy storage technologies, Solar energy, Hydrogen Technologies and Fuel Cells , Advanced Energy Technologies, Thermodynamics, Ship Machines

### **Academic Titles / Tasks**

Assistant Professor, Istanbul Technical University, Gemi İnşaatı ve Deniz Bilimleri, Gemi İnşaatı Ve Gemi Makinaları Mühendisliği, 2019 - Continues

Research Assistant, University of Ontario Institute of Technology, Faculty of Engineering, Mechanical Engineering, 2016 - 2018

Research Assistant, Yildiz Technical University, Naval Architecture And Maritime Faculty, Department Of Naval Architecture And Marine Engineering, 2012 - 2015

### **Academic and Administrative Experience**

Vice Dean, Istanbul Technical University, 2022 - Continues

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

- I. **Development and assessment of a solar driven trigeneration system with storage for electricity, ammonia and fresh water production**  
Demir M. E., Dincer I.  
ENERGY CONVERSION AND MANAGEMENT, vol.245, 2021 (SCI-Expanded)
- II. **Evaluation of hydrogen production via electrolysis with ion exchange membranes**  
Yuzer B., Selcuk H., Chehade G., Demir M. E., Dincer I.  
ENERGY, vol.190, 2020 (SCI-Expanded)
- III. **Design and analysis of a new system for photoelectrochemical hydrogen production from wastewater**  
Demir M. E., Chehade G., Dincer I., Yuzer B., Selcuk H.  
ENERGY CONVERSION AND MANAGEMENT, vol.199, 2019 (SCI-Expanded)
- IV. **Transition to a new era with light-based hydrogen production for a carbon-free society: An overview**  
Acar C., Bicer Y., Demir M. E., Dincer I.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.44, no.47, pp.25347-25364, 2019 (SCI-Expanded)
- V. **Synergistic effects of advanced oxidization reactions in a combination of TiO<sub>2</sub> photocatalysis for hydrogen production and wastewater treatment applications**  
Demir M. E., Chehade G., Dincer I., Yuzer B., Selcuk H.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.44, no.43, pp.23856-23867, 2019 (SCI-Expanded)
- VI. **Experimental investigation and analysis of a new photoelectrochemical reactor for hydrogen production**  
Chehade G., Demir M. E., Dincer I., Yuzer B., Selcuk H.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.43, no.27, pp.12049-12058, 2018 (SCI-Expanded)
- VII. **Development and analysis of a new integrated solar energy system with thermal storage for fresh water and power production**  
Demir M. E., Dincer I.  
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.42, no.9, pp.2864-2874, 2018 (SCI-Expanded)
- VIII. **Cost assessment and evaluation of various hydrogen delivery scenarios**  
Demir M. E., Dincer I.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.43, no.22, pp.10420-10430, 2018 (SCI-Expanded)
- IX. **Development of a hybrid solar thermal system with TEG and PEM electrolyzer for hydrogen and power production**  
Demir M. E., Dincer I.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.42, no.51, pp.30044-30056, 2017 (SCI-Expanded)
- X. **Performance assessment of a thermoelectric generator applied to exhaust waste heat recovery**  
Demir M. E., Dincer I.  
APPLIED THERMAL ENGINEERING, vol.120, pp.694-707, 2017 (SCI-Expanded)
- XI. **Development and heat transfer analysis of a new heat recovery system with thermoelectric generator**  
Demir M. E., Dincer I.  
INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER, vol.108, pp.2002-2010, 2017 (SCI-Expanded)
- XII. **Development of an integrated hybrid solar thermal power system with thermoelectric generator for desalination and power production**  
Demir M. E., Dincer I.  
DESALINATION, vol.404, pp.59-71, 2017 (SCI-Expanded)

## Supported Projects

Demir M. E., Erden H. S., Project Supported by Higher Education Institutions, Veri Merkezlerinden Termoelektrik Malzemelerle Isı Geri Kazanımı ve Pasif Soğutma Uygulamaları, 2022 - Continues

Yavuztürk Gül B., Demir M. E., TUBITAK Project, Biyokütle Yoğunlaştırıcı Hibrit Fotosentetik Mikrobiyal Yakıt Hücresi ile Enerji Üretimi ve Yararlı Ürün Geri Kazanımı, 2023 - 2025

## Metrics

Publication: 21

Citation (WoS): 357

Citation (Scopus): 402

H-Index (WoS): 11

H-Index (Scopus): 11