

**Dr. Öğr. Üyesi Fatih
SORGULU**

Kişisel Bilgiler

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Mühendisliği Bölümü, Yıldız,

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Uluslararası Araştırmacı ID'leri

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Publons / Web Of Science

ResearcherID: T-5811-2017

ScopusID: 57196219920

Yoksis Araştırmacı ID: 41432

Biyografi

Linkler:

Eğitim Bilgileri

| | |
|-------------|--------------------------------------------------------------------------------------------------------------------|
| 2016 - 2023 | Doktora, Yıldız Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Makine Mühendisliği/Enerji Doktora Programı, Türkiye |
| 2014 - 2016 | Yüksek Lisans, Yalova Üniversitesi, Mühendislik Fakültesi, Enerji Sistemleri Mühendisliği , Türkiye |
| 2007 - 2013 | Lisans, Erciyes Üniversitesi, Mühendislik Fakültesi, Makine Mühendisliği , Türkiye |

Yaptığı Tezler

| | |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2023 | Entegre Sistemler Kullanılarak Yeşil Hidrojen Üretimi ve Doğal Gaz ile Karıştırılması üzerine Deneysel ve Modelleme Çalışmaları, Yıldız Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Makine Mühendisliği/Enerji Doktora Programı , Doktora |
| 2016 | Polimer Elektrolit Membranlı Yakıt Hücresi için Model Geliştirilmesi ve COMSOL Programı ile Simülasyonu, Yalova Üniversitesi, Mühendislik Fakültesi , Enerji Sistemleri Mühendisliği , Yüksek Lisans |

Araştırma Alanları

Makina Mühendisliği, Enerji, Alternatif Enerji Kaynakları, Enerji depolama teknolojileri, Güneş Enerjisi, Hidrojen teknolojileri ve yakıt hücreleri, Rüzgar Enerjisi, Termodinamik, Mühendislik ve Teknoloji

Akademik Unvanlar / Görevler

SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- I. **Effect of burner head geometry on flame dispersion in gas stoves with hydrogen and natural gas blends**
SORGULU F., ÖZTÜRK M., JAVANI N., DİNCER İ.
Process Safety and Environmental Protection, cilt.183, ss.1135-1151, 2024 (SCI-Expanded)
- II. **Experimental investigation of various burner heads in residential gas stoves tested with hydrogen and natural gas blends**
ÖZTÜRK M., SORGULU F., JAVANI N., DİNCER İ.
International Journal of Hydrogen Energy, cilt.53, ss.1344-1349, 2024 (SCI-Expanded)
- III. **Experimental investigation for combustion performance of hydrogen and natural gas fuel blends**
SORGULU F., ÖZTÜRK M., JAVANI N., DİNCER İ.
International Journal of Hydrogen Energy, cilt.48, sa.88, ss.34476-34485, 2023 (SCI-Expanded)
- IV. **Development of an integrated thermochemical cycle-based hydrogen production and effective utilization**
SORGULU F., DİNCER İ.
International Journal of Hydrogen Energy, cilt.48, sa.71, ss.27502-27512, 2023 (SCI-Expanded)
- V. **An experimental study on the environmental impact of hydrogen and natural gas blend burning**
Öztürk M., Sorgulu F., Javani N., Dincer I.
Chemosphere, cilt.329, 2023 (SCI-Expanded)
- VI. **A solar energy driven thermochemical cycle based integrated system for hydrogen production**
Sorgulu F., Dincer İ.
Energy, cilt.269, 2023 (SCI-Expanded)
- VII. **Development and performance assessment of a calcium-iron bromide cycle-based hydrogen production integrated system**
SORGULU F., DİNCER İ.
Energy Conversion and Management, cilt.277, 2023 (SCI-Expanded)
- VIII. **Thermoeconomic and impact assessments of trigeneration systems with various fuels**
Sorgulu F., Dincer İ.
FUEL, cilt.317, 2022 (SCI-Expanded)
- IX. **Development and assessment of renewable hydrogen production and natural gas blending systems for use in different locations**
Sorgulu F., Dincer İ.
ENERGY SCIENCE & ENGINEERING, cilt.10, sa.5, ss.1739-1751, 2022 (SCI-Expanded)
- X. **Analysis and techno-economic assessment of renewable hydrogen production and blending into natural gas for better sustainability**
SORGULU F., DİNCER İ.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, cilt.47, sa.46, ss.19977-19988, 2022 (SCI-Expanded)
- XI. **A new experimentally developed integrated organic Rankine cycle plant**
Sorgulu F., Akgul M. B., Cebeci E., Yilmaz T. O., Dincer I.
APPLIED THERMAL ENGINEERING, cilt.187, 2021 (SCI-Expanded)
- XII. **Development and assessment of a biomass-based cogeneration system with desalination**
SORGULU F., DİNCER İ.
APPLIED THERMAL ENGINEERING, cilt.185, 2021 (SCI-Expanded)
- XIII. **Development of a hythane based cogeneration system integrated with gasification and landfill subsystems**
SORGULU F., DİNCER İ.
Energy, cilt.215, 2021 (SCI-Expanded)

- XIV. **Design and analysis of a solar tower power plant integrated with thermal energy storage system for cogeneration**
Sorgulu F., Dincer İ.
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, cilt.43, sa.12, ss.6151-6160, 2019 (SCI-Expanded)
- XV. **Cost evaluation of two potential nuclear power plants for hydrogen production**
Sorgulu F., Dincer İ.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, cilt.43, sa.23, ss.10522-10529, 2018 (SCI-Expanded)
- XVI. **A renewable source based hydrogen energy system for residential applications**
Sorgulu F., Dincer İ.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, cilt.43, sa.11, ss.5842-5851, 2018 (SCI-Expanded)
- XVII. **Thermodynamic analyses of a solar-based combined cycle integrated with electrolyzer for hydrogen production**
SORGULU F., DİNCER İ.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, cilt.43, sa.2, ss.1047-1059, 2018 (SCI-Expanded)

Diğer Dergilerde Yayınlanan Makaleler

- I. **Hidrojen ve Doğal Gaz Karışımının Evsel Cihazlarda Kullanımının Deneysel ve Teorik Olarak İncelenmesi**
Sorgulu F., Öztürk M., Javani N., Dinçer İ.
Cihannüma Teknoloji Fen ve Mühendislik Bilimleri Akademi Dergisi, cilt.1, ss.23-38, 2022 (Hakemli Dergi)

Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar

- I. **A geothermal energy-based thermochemical cycle integrated with a cement factory for carbon capture for methane production**
SORGULU F., DİNCER İ.
Global Conference on Global Warming (GCGW-2023), İstanbul, Türkiye, 14 - 16 Haziran 2023
- II. **A Geothermal Driven Thermochemical Cycle Based Integrated System for Hydrogen Production and Effective Utilization**
SORGULU F., DİNCER İ.
The 7th International Hydrogen Technologies Congress (IHTEC-2023), 10-12 May, Elazığ, Türkiye, 10 - 12 Mayıs 2023
- III. **Assessment of Trigeneration Energy Systems with Storage Options**
SORGULU F., DİNCER İ., JAVANI N., ÖZTÜRK M.
The 2nd World Energy Storage Conference (WESC-2022), İstanbul, Türkiye, 18 - 21 Aralık 2022
- IV. **A Hybrid Sulfur-Bromine Cycle-Based Hydrogen Production and Utilization for Residential Purposes by Blending with Natural Gas**
SORGULU F., DİNCER İ.
13th International Conference on Hydrogen Production (ICH2P-22), Islamabad, Pakistan, 11 - 14 Aralık 2022
- V. **Assessment of Hydrogen and Natural Gas Blending for Use in Different Locations**
SORGULU F., DİNCER İ.
13th International Exergy, Energy and Environment Symposium (IEEES-13), Mekke, Suudi Arabistan, 14 - 17 Mart 2022
- VI. **A Solar Energy Driven Thermochemical Cycle for Hydrogen Production**
SORGULU F., DİNCER İ.
6th International Hydrogen Technologies Congress (IHTEC-2022), Çanakkale, Türkiye, 23 - 26 Ocak 2022
- VII. **PERFORMANCE ASSESSMENT OF A CALCIUM-IRON BROMIDE CYCLE BASED MULTIGENERATION SYSTEM**

SORGULU F., DİNCER İ.

23rd World Hydrogen Energy Conference: Bridging Continents by H2, WHEC 2022, İstanbul, Türkiye, 26 - 30 Haziran 2022, ss.1042-1043

VIII. **Techno-Economic and Environmental Impact Assessments of Trigeneration Systems with Various Fuels**

SORGULU F., DİNCER İ.

TUBA World Conference on Energy Science and Technology, August 8-12, 2021, Online, Türkiye, 8 - 12 Ağustos 2021

IX. **Analysis of an Ocean and Wind Energy Based Pumped Hydro Storage System**

SORGULU F., DİNCER İ.

World Energy Strategies Congress and Exhibition 2019 (WESCE'19), 26 - 28 Ağustos 2019

X. **Exergetic Assessment of a Combined Cycle Integrated with Gasification, Anaerobic Digestion, and Distillation Units**

Sorgulu F., Dincer İ.

11th International Exergy, Energy and Environment Symposium (IEEES-11), July 14-18, 2019, Chennai, India, Chennai, Hindistan, 14 - 18 Temmuz 2019

XI. **Analyses of an Ocean Current and Wind Energy Based Hydrogen Production and Desalination**

SORGULU F., DİNCER İ.

4th International Hydrogen Technologies Congress, Edirne, Turkey, 20 - 23 Haziran 2019

XII. **Development of a Hythane Based Combined Cycle Integrated with Gasification and Anaerobic Digestion Subsystems**

Sorgulu F., Dincer İ.

10th International Conference on Hydrogen Production (ICH2P-2019), Cluj-Napoca, Romania, Cluj-Napoca, Romanya, 15 - 17 Mayıs 2019

XIII. **Analysis of an Ocean Current Energy Based Cogenerational System**

SORGULU F., DİNCER İ.

8th Global Conference on Global Warming (GCGW-2019), 22 - 25 Nisan 2019

XIV. **Exergoenvironmental Analysis of a Solar Tower Based Integrated System: Comparison with Various Fuels**

SORGULU F., DİNCER İ.

7th Global Conference on Global Warming (GCGW-2018), İzmir, Türkiye, 24 - 28 Haziran 2018

XV. **Thermodynamic and Economic Analyses of a Renewable Energy Based Hydrogen Production System**

SORGULU F., DİNCER İ.

3. International Hydrogen Technologies Congress (IHTEC-2018), 15 - 18 Mart 2018

XVI. **Design and Analysis of a Solar Tower based Integrated System with Thermal Energy Storage**

SORGULU F., DİNCER İ.

14. International Conference on Energy Storage, 25 - 28 Nisan 2018, ss.1065-1070

XVII. **A Renewable Energy Based and Integrated Hydrogen Energy System for Residential Applications**

SORGULU F., DİNCER İ.

9th International Exergy, Energy and Environment Symposium (IEEES-9), Split, Hırvatistan, 14 - 17 Mayıs 2017

XVIII. **Computational Modelling And Simulation Of Polymer Electrolyte Membrane Fuel Cell With Comsol**

ÇAKMAK M. E., SORGULU F.

INTERNATIONAL CONFERENCE ON ENERGY AND THERMAL ENGINEERING: ISTANBUL 2017, İstanbul, Türkiye, 25

- 28 Nisan 2017, cilt.1, ss.594-596

XIX. **Nuclear-based Hydrogen Production Cost Evaluation for Two Possible Nuclear Power Plants**

SORGULU F., DİNCER İ.

2nd International Hydrogen Technologies Congress (IHTEC-2017), 15 - 18 Mart 2017

XX. **Thermodynamic Analyses of a Solar Based Combined Cycle Integrated with Electrolyzer**

SORGULU F., DİNCER İ.

2ND INTERNATIONAL CONFERENCE ON ENERGY SYSTEMS, 21 - 23 Aralık 2016

XXI. **DeneySEL Ve Hesaplamalı Olarak Elde Edilen Isı Transferi Verileri Arasındaki Farklılıkların**

Belirlenmesi

Soylu E., Coşkun C., SORGULU F., ÇAKMAK M. E., MERT M. S.

20. Ulusal Isı Bilimi Ve Tekniği Kongresi, Balıkesir, Türkiye, 02 Eylül 2015 - 05 Eylül 2016

XXII. **Simulation of Single Phase Flow in 2 D Porous Media Implications for Water Management in PEMFCs**

SORGULU F., ÇAKMAK M. E.

4th Renewable Energy Systems Winter School, Afyon, 15 - 18 Ocak 2015

XXIII. **Pore Scale Simulation of Fluid Flow and Mass Transport in Energy Related Systems**

SORGULU F., ÇAKMAK M. E.

Turkish - German Conference on Energy Technologies, 13 - 15 Ekim 2014

Desteklenen Projeler

| | |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| 2024 - Devam Ediyor | Yeşil Hidrojen Üretim Sisteminin Geliştirilmesi ve Kurulması, Yükseköğretim Kurumları Destekli Proje |
| 2023 - Devam Ediyor | Temiz Hidrojen Enerji Teknolojilerinin Geliştirilmesi, Yükseköğretim Kurumları Destekli Proje |
| 2024 - 2025 | Hidrojen Üretimi için Yeni Termokimyasal Çevrimlerin Deneysel İncelenmesi, TÜBİTAK Projesi |
| 2022 - 2023 | Farklı geometrilere sahip ocak başlıklarının doğal gaz hidrojen karışımının yanma performansına etkisi, Yükseköğretim Kurumları Destekli Proje |
| 2022 - 2022 | Doğal gazın hidrojen ilavesiyle ocaklardaki yanma performansının deneysel incelenmesi, Yükseköğretim Kurumları Destekli Proje |
| 2020 - 2021 | Türkiye Doğalgaz Sektöründe Hidrojen Yol Haritası, Diğer Özel Kurumlarca Desteklenen Proje |

Metrikler

Yayın: 41

Atıf (WoS): 196

Atıf (Scopus): 335

H-İndeks (WoS): 6

H-İndeks (Scopus): 9