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Personal Information

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Education Information

Doctorate, Gazi University, Fen Bilimleri Enstitüsü, Makine Mühendisliği (Dr), Turkey 2003 - 2011

Post Graduate, Gazi University, Fen Bilimleri Enstitüsü, Makine Mühendisliği (YI) (Tezli), Turkey 2001 - 2003

Under Graduate, Gazi University, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, Turkey 1995 - 2000

Dissertations

Doctorate, Akış kanalları içerisindeki yarı silindirik blokların PEM yakıt pili performansına etkisinin üç boyutlu analizi, Gazi University, Fen Bilimleri Enstitüsü, Makine Mühendisliği (Dr), 2011

Post Graduate, Metal hidrid yataklarında hidrojen soğurulmasının sayısal analizi, Gazi University, Fen Bilimleri Enstitüsü, Makine Mühendisliği (YI) (Tezli), 2003

Research Areas

Mechanical Engineering, Energy, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Gazi University, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, 2014 - Continues

Research Assistant, Avrupa Komisyonu, Enerji Enstitüsü, Temiz Enerji Birimi, 2012 - 2013

Research Assistant, Gazi University, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, 2001 - 2013

Research Assistant, Enea- Casaccia Araştırma Merkezi, İtalyan Ulusal Ajansı, Yeni Teknolojiler Ve Enerji, 2004 - 2005

Professional Experience

Deputy Head of Department, Gazi University, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, 2016 - 2016

Courses

MM215E DIFFERENTIAL EQUATIONS, Under Graduate, 2016 - 2017, 2017 - 2018

ME309 Heat Transfer, Under Graduate, 2017 - 2018

MM548 YAKIT PİLİ PRENSİPLERİ, Under Graduate, 2017 - 2018

ME102 Introduction to Engineering Programming, Under Graduate, 2017 - 2018

ME479 Process Heat Transfer, Under Graduate, 2017 - 2018

MM548 YAKIT PİLİ PRENSİPLERİ, Post Graduate, 2016 - 2017, 2017 - 2018

MM401 Isıl Çevre Mühendisliği, Under Graduate, 2017 - 2018
MM102 MÜHENDİSLİKTE PROGRAMLAMAYA GİRİŞ, Under Graduate, 2017 - 2018
ME108 Introduction to Mech. Engineering, Under Graduate, 2017 - 2018
MM313E INT. TO NUMERİCAL ANALYSİS, Under Graduate, 2016 - 2017

Advising Theses

BİLGİLİ M., Takılabilir modüllerde kullanılan elektronik kartların doğrudan hava akışı metodu ile soğutulması, Post Graduate, B.BÜŞRA(Student), 2019
BİLGİLİ M., Farklı sıkıştırma yöntemlerinin PEM yakıt hücresi performansına etkilerinin incelenmesi, Post Graduate, A.UZUNDURUKAN(Student), 2019
BİLGİLİ M., Effect Of Bipolar Plate Gas Flow Channel Pattern Design On The Performance Of Proton Exchange Membrane Fuel Cell, Post Graduate, C.YILMAZ(Student), 2018

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **Examination of compression effects on PEMFC performance by numerical and experimental analyses**
Uzundurukan A., BİLGİLİ M., Devrim Y.
International Journal of Hydrogen Energy, vol.45, no.60, pp.35085-35096, 2020 (Journal Indexed in SCI Expanded)
- II. **3D NUMERICAL ANALYSIS OF PEM FUEL CELL AT DIFFERENT MEA THICKNESSES AND OPERATING PRESSURE CONDITIONS**
BİLGİLİ M., Sivrioglu M.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.31, no.1, pp.51-63, 2016 (Journal Indexed in SCI)
- III. **Gas flow field with obstacles for PEM fuel cells at different operating conditions**
BİLGİLİ M., Bosomoiu M., Tsotridis G.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.40, no.5, pp.2303-2311, 2015 (Journal Indexed in SCI)
- IV. **How carbon affects hydrogen desorption in NaAlH₄ and Ti-doped NaAlH₄**
Cento C., Gislon P., Bilgili M., Masci A., Zheng Q., Prosini P. P.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.437, pp.360-366, 2007 (Journal Indexed in SCI)
- V. **Numerical analysis of hydrogen absorption in a P/M metal bed**
Bilgili M., Ataer O.
POWDER TECHNOLOGY, vol.160, no.2, pp.141-148, 2005 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **Investigation of the Effect of Stoichiometry Ratio on Two-Cell PEM Fuel Cell Stack Performance**
Cellek M. S. , Bilgili M.
Gazi Üniversitesi Fen Bilimleri Dergisi Part C: Tasarım ve Teknoloji, vol.9, no.1, pp.134-147, 2021 (Other Refereed National Journals)
- II. **İki Hücreli PEM Yakıt Pili Yığının Sayısal Analizi**
Arıç T., Bilgili M., Özsunar A.
Gazi Üniversitesi Fen Bilimleri Dergisi Part C: Tasarım ve Teknoloji, vol.7, no.4, pp.999-1011, 2019 (Refereed Journals of Other Institutions)

Refereed Congress / Symposium Publications in Proceedings

- I. **PEM Yakıt Pillerinde Su İçeriğinin Hücre Performansı Üzerine Etkilerinin Sayısal İncelenmesi**
Günüşen H., BİLGİLİ M., ÖZSUNAR A.
22. Isı Bilimi ve Tekniği Kongresi (ULIBTK 2019), Kocaeli, Turkey, 11 - 14 September 2019, vol.3, pp.131-136
- II. **Comparison of the Wind Turbines**
Yılmaz F., BİLGİLİ M.
International Conference on Innovations Emerging Trends in Mechanical Engineering, Bengaluru, India, 26 - 27 March 2019
- III. **Investigation of the Effect of CO2 Amount on Indoor Air Quality in a Closed Space**
Güngör B., Kır Ö. F., BİLGİLİ M.
International Conference on Innovations Emerging Trends in Mechanical Engineering, Bengaluru, India, 26 - 27 March 2019
- IV. **Investigation of Compression Pressure Distribution of Proton Exchange Membrane Fuel Cell**
Uzundurukan A., BİLGİLİ M., DEVRİM Y.
4th International Hydrogen Technologies Congress (IHTEC-2019), Edirne, Turkey, 20 - 23 June 2019, pp.48-51
- V. **Takılabilir Modüllerde Kullanılan Elektronik Kartların Doğrudan Hava Akışı ile Soğutulmasının İncelenmesi**
Samet B. B., BİLGİLİ M.
3rd International Symposium on Innovative Approaches in Scientific Studies (ISAS 2019), Ankara, Turkey, 19 - 21 April 2019, pp.316-322
- VI. **Air to Air Heat Exchanger Optimization for Aircraft**
Altunsoy S., BİLGİLİ M.
3rd International Symposium on Innovative Approaches in Scientific Studies (ISAS 2019), Ankara, Turkey, 19 - 21 April 2019, pp.55
- VII. **Effects of Support Type on a 3-D CFD Modelled Hydrogen Fed Planar SOFC**
Görürlyılmaz M. T., BİLGİLİ M.
16th International Conference on Clean Energy (ICCE-2018), Gazimagusa, Cyprus (Kkct), 9 - 11 May 2018, pp.1-10
- VIII. **Effect of Bipolar Plate Gas Flow Channel Pattern on Proton Exchange Membrane Fuel Cells Performance**
Yılmaz C., BİLGİLİ M., DEVRİM Y.
3rd International Hydrogen Technologies Congress, Alanya, Turkey, 15 - 18 March 2018, pp.40-44
- IX. **A 3-D CFD Modelling of Different Flow Types for an Anode Supported Hydrogen Fed SOFC**
BİLGİLİ M., Görürlyılmaz M. T.
8th International Advanced Technologies Symposium, Elazığ, Turkey, 19 - 22 October 2017, vol.13, pp.2715-2723
- X. **3-D Modelling of a Single PEM Fuel Cell at the Different Stoichiometric Conditions**
BİLGİLİ M., Görürlyılmaz M. T.
8th International Advanced Technologies Symposium, Elazığ, Turkey, 19 - 22 October 2017, vol.13, pp.2739-2745
- XI. **Methods of Hydrogen Storage in Energy Conversion Systems**
BİLGİLİ M.
2nd International Hydrogen Technologies Congress, Adana, Turkey, 15 - 18 March 2017, pp.96-101
- XII. **X ray computed tomography of gas diffusion layers of PEM fuel cells Determination of the effective thermal conductivities**
BİLGİLİ M., Bosomoiu M., Tsotridis G.
International Conference on Thermophysical and Mechanical Properties of Advanced Materials, İzmir, Turkey, 12 - 15 June 2014
- XIII. **Cost Benefit Analysis of Wind Turbines in Smart Grid Systems**
Colak I., AYAZ M. S., BİLGİLİ M., BORAN K.
16th International Power Electronics and Motion Control Conference and Exposition (PEMC), Antalya, Turkey, 21 - 24 September 2014, pp.1295-1299

Citations

Total Citations (WOS):86

h-index (WOS):4