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Personal Information

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Education Information

Doctorate, Yıldız Technical University, Fen Bilimleri Enstitüsü, Isı Proses Programı, Turkey 2003 - 2012

Postgraduate, Yıldız Technical University, Fen Bilimleri Enstitüsü, Makine Mühendisliği Anabilim Dalı/Isı Proses Programı, Turkey 2000 - 2003

Undergraduate, Yıldız Technical University, İnşaat Fakültesi, İnşaat Mühendisliği Bölümü, Turkey 1998 - 2002

Undergraduate, Yıldız Technical University, Makine Fakültesi, Makine Mühendisliği Bölümü, Turkey 1996 - 2000

Foreign Languages

English, B2 Upper Intermediate

Certificates, Courses and Trainings

Other, ENERJİ YÖNETİCİSİ (BİNA), TC ENERJİ VE TABİİ KAYNAKLAR BAKANLIĞI ELEKTRİK İŞLERİ ETÜT İDARESİ GENEL MÜDÜRLÜĞÜ, 2010

Other, ENERJİ YÖNETİCİSİ (SANAYİ), TC ENERJİ VE TABİİ KAYNAKLAR BAKANLIĞI ELEKTRİK İŞLERİ ETÜT İDARESİ GENEL MÜDÜRLÜĞÜ, 2009

Research Areas

Mechanical Engineering, Energy, Thermodynamics, Engineering and Technology

Academic Titles / Tasks

Associate Professor, Recep Tayyip Erdogan University, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, 2019 - Continues

Assistant Professor, Recep Tayyip Erdogan University, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, 2013 - 2019

Research Assistant, Recep Tayyip Erdogan University, Mühendislik Fakültesi, Enerji Sistemleri Mühendisliği Bölümü, 2012 - 2013

Research Assistant, Yıldız Technical University, Faculty Of Mechanical Engineering, 2002 - 2012

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

- I. A review on converting plastic wastes into clean hydrogen via gasification for better sustainability

MİDİLLİ A., KÜÇÜK H., HACIOSMANOĞLU M., AKBULUT U., DİNCER İ.

INTERNATIONAL JOURNAL OF ENERGY RESEARCH, 2021 (Journal Indexed in SCI)

- II. **A comprehensive review on hydrogen production from coal gasification: Challenges and Opportunities**
MİDİLLİ A., KÜÇÜK H., TOPAL M. E. , AKBULUT U., DİNCER İ.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.46, no.50, pp.25385-25412, 2021 (Journal Indexed in SCI)
- III. **Thermodynamic based environmental and sustainability assessments of gas flow in a curved annular channel**
MİDİLLİ A., KÜÇÜK H., AKBULUT U.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.45, no.49, pp.26379-26386, 2020 (Journal Indexed in SCI)
- IV. **Exergetic performance comparison of air and hydrogen gas flowing through the annular curved duct**
MİDİLLİ A., KUCUK H., AKBULUT U.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.43, no.23, pp.10859-10868, 2018 (Journal Indexed in SCI)
- V. **Viscous dissipation effects on entropy generation in heated vertical parallel-plate channels for mixed convection**
AKBULUT U., OVALI R. V. , KUCUK H.
INTERNATIONAL JOURNAL OF EXERGY, vol.23, no.1, pp.1-17, 2017 (Journal Indexed in SCI)
- VI. **A parametric study on exergetic performance of a YSZ electrolyte supported SOFC stack**
Midilli A., AKBULUT U., DINCER I.
INTERNATIONAL JOURNAL OF EXERGY, vol.24, pp.173-200, 2017 (Journal Indexed in SCI)
- VII. **Exergy, exergoenvironmental and exergoeconomic evaluation of a heat pump-integrated wall heating system**
AKBULUT U., UTLU Z., KINCAI O.
ENERGY, vol.107, pp.502-522, 2016 (Journal Indexed in SCI)
- VIII. **Exergoenvironmental and exergoeconomic analyses of a vertical type ground source heat pump integrated wall cooling system**
AKBULUT U., UTLU Z., KINCAI O.
APPLIED THERMAL ENGINEERING, vol.102, pp.904-921, 2016 (Journal Indexed in SCI)
- IX. **Analysis of a wall cooling system using a heat pump**
AKBULUT U., KINCAI O., UTLU Z.
RENEWABLE ENERGY, vol.85, pp.540-553, 2016 (Journal Indexed in SCI)
- X. **Entropy generation of mixed convection in a vertical parallel plate microchannel with asymmetric wall heat flux**
Akbulut U.
INTERNATIONAL JOURNAL OF EXERGY, vol.18, no.4, pp.462-479, 2015 (Journal Indexed in SCI)
- XI. **Technical and Economic Performance Analysis of Utilization of Solar Energy in Indoor Swimming Pools, An Application**
KINCAI O., UTLU Z., Akbulut U.
JOURNAL OF SOLAR ENERGY ENGINEERING-TRANSACTIONS OF THE ASME, vol.134, no.1, 2012 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **Dikey Toprak Kaynaklı Isı Pompası Destekli Duvardan Soğutma Sisteminin Enerjistik Performans İncelemesi**
AKBULUT U., AÇIKGÖZ Ö., KINCAI O.
Tesisat Mühendisliği, no.135, pp.43-49, 2013 (Other Refereed National Journals)

Books & Book Chapters

- I. **Entropy Generation of Hydrogen Flow in a Curved Annular Duct**
KÜÇÜK H., AKBULUT U., MİDİLLİ A.
in: Progress in Sustainable Energy Technologies: Creating Sustainable Development, Dincer I., Midilli A., Kucuk H., Editor, Springer, Cham, pp.63-77, 2014
- II. **Entropy Generation of Hydrogen Flow in a Curved Annular Duct**
KÜÇÜK H., AKBULUT U., MİDİLLİ A.
in: Progress in Sustainable Energy Technologies Vol II, İbrahim Dinçer, Adnan Midilli, Haydar Küçük, Editor, Springer, pp.63-77, 2014
- III. **Comparison of Energy Performance and Static Loads on a Building Integrated Wind, Solar, and Rainwater Harvester**
GÜRBÜZ A., AKBULUT U., ÖZSABAN M.
in: Progress in Exergy, Energy, and the Environment, İbrahim Dincer Adnan Midilli Haydar Kucuk, Editor, Springer, Cham, Cham, pp.875-884, 2014
- IV. **Comparison of Energy Performance and Static Load on a Building Integrated Wind, Solar, and Rainwater Harvester**
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- VII. **Exergetic Analysis of a Vertical Ground-Source Heat Pump System with Wall Heating/Cooling**
AKBULUT U., AÇIKGÖZ Ö., KINCAY O., KARAKOÇ T. H.
in: Progress in Exergy Energy and the Environment, İbrahim Dinçer, Adnan Midilli, Haydar Küçük, Editor, Springer, pp.305-312, 2014

Refereed Congress / Symposium Publications in Proceedings

- I. **Integrated sustainability assessment of a multigeneration system**
AKBULUT U., DİNÇER İ.
12th International Exergy, Energy, and Environment Symposium (IEEES-12), DOHA, Qatar, 20 - 24 December 2020
- II. **On the global stability and unrest resulting from fossil fuel consumption: A case study for QATAR**
MİDİLLİ A., AKBULUT U., DİNÇER İ.
8th Global Conference on Global Warming (GCGW-2019), Doha, Qatar, 22 - 25 April 2019, vol.1, pp.466-468
- III. **Some Indicators in Evaluating Exergetic Sustainability Aspects for Hydrogen Gas Flowing Through the Annular Curved Duct**
Midilli A., Küçük H., Akbulut U.
10th International Conference on Hydrogen Production (ICH2P-2019), Cluj-Napoca, Romania, 15 - 17 May 2019
- IV. **Effect of Inlet Air Temperature on Exergetic Performance of Hydrogen Production from Car Tires via Plasma Gasification**
DEMİRÇAY H., MEHAN M., TOPAL M. E., KALINCI Y., BAYRAKTAR Ş., AKBULUT U., KÜÇÜK H., OLGUN H., MİDİLLİ A., DİNÇER İ.

3rd International Hydrogen Technologies Congress, 15 - 18 March 2018, pp.366-369

- V. **Development of exergetic sustainability indicators for RDF plasma gasification**
MİDİLLİ A., AKBULUT U., DİNCER İ.
10th International Exergy, Energy and Environment Symposium (IEEES-10), Katowice, Poland, 1 - 04 July 2018
- VI. **Exergetic performance study on heat recovery during plasma gasification of sewage sludge for syngas production**
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3rd International Hydrogen Technologies Congress, Antalya, Turkey, 15 - 18 March 2018, pp.366-369
- VIII. **An Investigation on Exergetic Performance of Hydrogen Gas Flowing through the Annular Curved Duct**
Midilli A., Küçük H., Akbulut U.
2nd International Hydrogen Technologies Congress, Adana, Turkey, 15 - 18 March 2017, pp.279-286
- IX. **A Basic Thermodynamic Design of a Planar SOFC Integrated S-CO₂ Micro-Gas Turbine for Residential Applications**
AKBULUT U., MİDİLLİ A.
9th International Exergy, Energy and Environment Symposium (IEEES-9), Split, Croatia, 14 - 17 May 2017, vol.1, no.1, pp.1108-1113
- X. **A Basic Thermodynamic Design of a Planar SOFC Integrated S-CO₂ Micro-Gas Turbine for Residential Applications**
AKBULUT U., MİDİLLİ A.
9th International Exergy, Energy and Environment Symposium (IEEES-9), Split, Croatia, 14 - 17 May 2017, vol.1, no.1, pp.1108-1113
- XI. **An Investigation on Exergetic Performance of Hydrogen Gas Flowing Through the Annular Curved Duct**
MİDİLLİ A., KÜÇÜK H., AKBULUT U.
2nd International Hydrogen Technologies Congress, Adana, Turkey, 15 - 18 March 2017, vol.1, no.1, pp.279-283
- XII. **An Investigation on Exergetic Performance of Hydrogen Gas Flowing through the Annular Curved Duct**
MİDİLLİ A., KÜÇÜK H., AKBULUT U.
2nd International Hydrogen Technologies Congress, Adana, Turkey, 15 - 18 March 2017, pp.279-286
- XIII. **An Investigation on Exergetic Performance of Hydrogen Gas Flowing Through the Annular Curved Duct**
MİDİLLİ A., KÜÇÜK H., AKBULUT U.
2nd International Hydrogen Technologies Congress, Adana, Turkey, 15 - 18 March 2017, vol.1, no.1, pp.279-283
- XIV. **An Investigation on Exergetic Performance of Hydrogen Gas Flowing through the Annular Curved Duct**
MİDİLLİ A., KÜÇÜK H., AKBULUT U.
2nd International Hydrogen Technologies Congress, Adana, Turkey, 15 - 18 March 2017, pp.110
- XV. **Nano Boyutlu Üleksit Malzemesinin Mekaniksel Öğütme Yöntemi ile Hazırlanması ve Analizi**
KUTUK S., KÜTÜK T., AKBULUT U., İLHAN M.
Bor ve Bor Teknolojileri Çalıştayı RTEÜ, Rize, Turkey, 24 May 2016
- XVI. **Evaluating Exergetic Sustainability Indicators for an Electrolyte Supported SOFC Stack**
MİDİLLİ A., AKBULUT U.
8th International Exergy, Energy and Environment Symposium (IEEES-8), Antalya, Turkey, 1 - 04 May 2016, vol.1, no.1, pp.64-71
- XVII. **Studying the effect of electrolyte thickness on exergetic performance for an electrolyte supported**

SOFC Stack

AKBULUT U., MİDİLLİ A., DINCER I.

8th International Exergy, Energy and Environment Symposium (IEEES-8), Antalya, Turkey, 1 - 04 May 2016, vol.1, no.1, pp.497-503

- XVIII. **Evaluating Exergetic Sustainability Indicators for an Electrolyte Supported SOFC Stack**
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8th International Exergy, Energy and Environment Symposium (IEEES-8), Antalya, Turkey, 1 - 04 May 2016, vol.1, no.1, pp.64-71
- XIX. **Studying the effect of electrolyte thickness on exergetic performance for an electrolyte supported SOFC Stack**
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8th International Exergy, Energy and Environment Symposium (IEEES-8), Antalya, Turkey, 1 - 04 May 2016, vol.1, no.1, pp.497-503
- XX. **BİR KATIOKSİT YAKIT PİLİ HÜCRESİNDE SICAKLIĞIN POLARİZASYONLARIN ORANSAL DEĞİŞİMİNE ETKİSİNİN PARAMETRİK İNCELENMESİ**
AKBULUT U., MİDİLLİ A.
Ulusal hidrojen teknolojileri kongresi, Turkey, 20 - 23 December 2015
- XXI.
AKBULUT U., utlu z.
ww, Reading, United Kingdom, 28 - 27 October 2015, pp.1-11
- XXII. **Examination of a heating system combined with renewable energy in wall heating systems in terms of thermodynamic parameters**
UTLU Z., AKBULUT U.
The 7th International Conference of SuDBE2015, 27 - 29 July 2015
- XXIII. **COMPARISON OF THE ENERGY PERFORMANCE AND STATIC LOADS ON A BUILDING INTEGRATED WIND SOLAR AND RAIN WATER HARVESTER**
GÜRBÜZ A., AKBULUT U., ÖZSABAN M.
the Sixth International Exergy, Energy and Environment Symposium (IEEES-6), 1 - 04 July 2013, vol.1, pp.137-144
- XXIV. **EXERGETIC ANALYSIS OF A VERTICAL GROUND SOURCE HEAT PUMP SYSTEM WITH WALL HEATING COOLING**
AKBULUT U., AÇIKGÖZ Ö., KINCA Y O., KARAKOÇ T. H.
the Sixth International Exergy, Energy and Environment Symposium (IEEES-6), Rize, Turkey, 1 - 04 July 2013, vol.1, pp.806-813
- XXV. **DİKEY TİP TOPRAK KAYNAKLI ISI POMPASI DESTEKLİ DUWARDAN ISITMA SİSTEMİNİN ENERJİTİK PERFORMANS İNCELEMESİ**
AKBULUT U., AÇIKGÖZ Ö., KINCA Y O.
11. ULUSAL TESİSAT MÜHENDİSLİĞİ KONGRESİ, Turkey, 17 - 20 April 2013, vol.1, pp.1315-1322
- XXVI. **Çevre Dostu Bir Tasarım Yıldız Yenilenebilir Enerji Evi**
KINCA Y O., UTLU Z., AKBULUT U., AÇIKGÖZ Ö., AĞUSTOS H., YUMURTACI Z., BEKİROĞLU K. N. , KEYF S.
Çevre ve Tasarım Kongresi, YTÜ Oditoryumu, İstanbul, İstanbul, Turkey, 8 - 09 December 2011, vol.1, pp.291-300
- XXVII. **Annual Investigation of Ground Source Heat Pump System Performance on a Wall Heating System in Istanbul**
AKBULUT U., YÖRÜ Y., KINCA Y O.
The 6th International Green Energy Conference, IGEC-VI, Eskişehir, June 5-9, Anadolu University, Türkiye, Eskişehir, Turkey, 5 - 09 June 2011
- XXVIII. **Dynamic Exergy Analysis of a Real Vertical Ground Source Heat Pump System by Using Fast Artificial Neural Network Library FANN**
YÖRÜ Y., AKBULUT U., KINCA Y O., KARAKOÇ T. H.
The Fifth International Ege Energy Symposium and Exhibition, IESE-5, June 27-30, 2010, Pamukkale University, Denizli, Türkiye, Denizli, Turkey, 27 - 30 June 2010
- XXIX. **Alternatif Enerji Arayışında Birleşik Yenilenebilir Enerji Kaynaklarının Kullanılabilirliği**

KINCAY O., UTLU Z., AĞUSTOS H., AKBULUT U., AÇIKGÖZ Ö.

Uluslararası Katılımlı Nükleer ve Alternatif Enerji Kaynakları TÜBAV Konferansı, NUYEK-2009, Ankara, Ankara, Turkey, 28 September - 29 December 2009, vol.1, pp.525-534

XXX. Ülkemizde Rüzgar Enerjisi Başvuruları Gerekçe Usul ve Bazı Gerçekler

AKBULUT U., DOĞAN B. T. , KINCAY O.

IV. Ege Enerji Sempozyumu, Ege Üniversitesi, İzmir, 2008., İzmir, Turkey, 21 - 23 May 2008, vol.1, pp.43-52

XXXI. Dikey Tip Toprak Kaynaklı Isı Pompası Sisteminin Konvansiyonel Sistemlerle Ekonomik Olarak Karşılaştırılması

AKBULUT U., AÇIKGÖZ Ö., KINCAY O.

IV. Ege Enerji Sempozyumu, Ege Üniversitesi, İzmir, 2008., İzmir, Turkey, 21 - 23 May 2008, vol.1, pp.649-654

Other Publications

- I. **Nano-boyutlu üleksit mineralinin mekaniksel öğütme yöntemi ile hazırlanması ve analizi, Bor ve Bor Teknolojileri Çalıştayı, Sözlü, RİZE**
KÜTÜK S., KÜTÜK T., AKBULUT U., İLHAN M.
Presentation, pp.1, 2016
- II. **Nano-boyutlu üleksit mineralinin mekaniksel öğütme yöntemi ile hazırlanması ve analizi**
Kütük S., Kütük T., Akbulut U., İlhan M.
Presentation, pp.1-20, 2016

Supported Projects

KÜTÜK T., GÜNER M. S. , TERZİ C., KÜTÜK S., SAYIN A., AKBULUT U., Project Supported by Higher Education Institutions, Sürdürülebilir Ulaştırmada Yeni Bir Yaklaşım: Beton Yol Tasarımında Nano Bor Minerallerinin Etkilerinin Mekanik, Termal Ve Yapısal Olarak Analizi, 2014 - 2017

Citations

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