

Prof. Dr. KAMİL KAYGUSUZ

Kişisel Bilgiler

E-posta: kamilk@ktu.edu.tr

Web: <https://avesis.ktu.edu.tr//kamilk>

Eğitim Bilgileri

Doktora, Karadeniz Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Türkiye 1988 - 1993

Araştırma Alanları

Kimya Mühendisliği ve Teknolojisi , Proses ve Reaktör Tasarımı, Proses Sistem Mühendisliği, Temel İşlemler ve Termodinamik, Termodinamik , Isı Aktarımı , Kimya, Fizikokimya, Termodinamik, Yakıt Pilleri, Temel Bilimler, Mühendislik ve Teknoloji

Akademik Unvanlar / Görevler

Prof. Dr., Karadeniz Teknik Üniversitesi, Fen Fakültesi, Kimya, 2000 - Devam Ediyor

SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayımlanan Makaleler

- I. **Guest editorial for special issue on "Progress in Energy Systems"**
JAVANI N., KAYGUSUZ K.
International Journal of Energy Research, cilt.46, sa.14, ss.20718, 2022 (SCI-Expanded)
- II. **Carbonized waste hazelnut wood-based shape-stable composite phase change materials for thermal management implementations**
HEKİMOĞLU G., SARI A., Kar T., KELEŞ S., KAYGUSUZ K., YILDIRIM N., Tyagi V. V., Sharma R. K., Saleh T. A.
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, cilt.45, sa.7, ss.10271-10284, 2021 (SCI-Expanded)
- III. **Walnut shell derived bio-carbon/methyl palmitate as novel composite phase change material with enhanced thermal energy storage properties**
HEKİMOĞLU G., SARI A., Kar T., KELEŞ S., KAYGUSUZ K., Tyagi V., Sharma R., Al-Ahmed A., Al-Sulaiman F. A., Saleh T. A.
JOURNAL OF ENERGY STORAGE, cilt.35, 2021 (SCI-Expanded)
- IV. **Comparison of catalytic and noncatalytic pyrolysis and product yields of some waste biomass species**
Kar T., KELEŞ S., KAYGUSUZ K.
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, cilt.43, sa.6, ss.2032-2043, 2019 (SCI-Expanded)
- V. **Molecular Conformational Analysis, Spectroscopic Characterization, Intramolecular Hydrogen Bonding and Natural Bond Analysis of (E,Z)-2-(4-Amino-5-oxo-3-(thiophene-2-ylmethyl)-4,5-dihydro-1,2,4-triazole-1-yl)-N'-(thiophene-2-ylmethylene) Acetohydrazide**
ATALAY A., ÇELİK F., ÜNVER Y., SANCAK K., KAYGUSUZ K.
LETTERS IN ORGANIC CHEMISTRY, cilt.16, sa.3, ss.215-225, 2019 (SCI-Expanded)
- VI. **Catalytic fast pyrolysis of hazelnut cupula: Characterization of bio-oil**

KELEŞ S., Kar T., AKGUN M., KAYGUSUZ K.

ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, cilt.39, sa.24, ss.2216-2225, 2017 (SCI-Expanded)

- VII. **A research on hydrogen production from industrial waste heat by thermal water splitting**
TOKLU E., Avci A. C., KAYGUSUZ K., Gur M.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, cilt.41, sa.24, ss.10071-10079, 2016 (SCI-Expanded)
- VIII. **A perspective for potential and technology of bioenergy in Turkey: Present case and future view**
BİLGEN S., KELEŞ S., Sarikaya I., KAYGUSUZ K.
RENEWABLE & SUSTAINABLE ENERGY REVIEWS, cilt.48, ss.228-239, 2015 (SCI-Expanded)
- IX. **Calculation of higher and lower heating values and chemical exergy values of liquid products obtained from pyrolysis of hazelnut cupulae**
BİLGEN S., KELEŞ S., KAYGUSUZ K.
ENERGY, cilt.41, sa.1, ss.380-385, 2012 (SCI-Expanded)
- X. **Regional sustainable water and energy development projects: A case of Southeastern Anatolia Project (GAP) in Turkey (Retracted article. See vol. 83, pg. 173, 2018)**
Akpınar A., KAYGUSUZ K.
RENEWABLE & SUSTAINABLE ENERGY REVIEWS, cilt.16, sa.2, ss.1146-1156, 2012 (SCI-Expanded)
- XI. **Energy for sustainable development: A case of developing countries**
Kaygusuz K.
RENEWABLE & SUSTAINABLE ENERGY REVIEWS, cilt.16, sa.2, ss.1116-1126, 2012 (SCI-Expanded)
- XII. **The Total Electricity Energy Production of the World, European Union, and Turkey: Projections and Comparison**
AKPINAR A. S., TAVŞAN F., KOMURCU M. I., FILİZ M. H., KAYGUSUZ K.
ENERGY SOURCES PART B-ECONOMICS PLANNING AND POLICY, cilt.7, sa.1, ss.28-44, 2012 (SCI-Expanded)
- XIII. **Renewable energy sources for clean and sustainable energy policies in Turkey**
Yuksel I., KAYGUSUZ K.
RENEWABLE & SUSTAINABLE ENERGY REVIEWS, cilt.15, sa.8, ss.4132-4144, 2011 (SCI-Expanded)
- XIV. **Energy services and energy poverty for sustainable rural development**
Kaygusuz K.
RENEWABLE & SUSTAINABLE ENERGY REVIEWS, cilt.15, sa.2, ss.936-947, 2011 (SCI-Expanded)
- XV. **Prospect of concentrating solar power in Turkey: The sustainable future**
Kaygusuz K.
RENEWABLE & SUSTAINABLE ENERGY REVIEWS, cilt.15, sa.1, ss.808-814, 2011 (SCI-Expanded)
- XVI. **Sustainable Agriculture and the Production of Biomass for Energy Use**
Durusoy I., TÜRKER M. F., KELEŞ S., KAYGUSUZ K.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, cilt.33, sa.10, ss.938-947, 2011 (SCI-Expanded)
- XVII. **The Paradigm of Sustainability In Turkey's Energy Sector**
Kaygusuz K.
ENERGY SOURCES PART B-ECONOMICS PLANNING AND POLICY, cilt.6, sa.1, ss.83-95, 2011 (SCI-Expanded)
- XVIII. **Pyrolysis of Woody Biomass for Sustainable Bio-oil**
KELEŞ S., KAYGUSUZ K., AKGUN M.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, cilt.33, sa.9, ss.879-889, 2011 (SCI-Expanded)
- XIX. **Sustainable Energy Policies in Turkey**
KAYGUSUZ K., Sari A.
ENERGY SOURCES PART B-ECONOMICS PLANNING AND POLICY, cilt.6, sa.3, ss.207-219, 2011 (SCI-Expanded)
- XX. **Energy, Electricity and Socioeconomic Transformation of Rural Regions in Developing Countries**
Kaygusuz K.
ENERGY SOURCES PART B-ECONOMICS PLANNING AND POLICY, cilt.6, sa.4, ss.384-394, 2011 (SCI-Expanded)
- XXI. **Hydrokinetic energy conversion systems: A technology status review**

- Guney M. S., KAYGUSUZ K.
RENEWABLE & SUSTAINABLE ENERGY REVIEWS, cilt.14, sa.9, ss.2996-3004, 2010 (SCI-Expanded)
- XXII. **Wind energy status in renewable electrical energy production in Turkey**
Kaygusuz K.
RENEWABLE & SUSTAINABLE ENERGY REVIEWS, cilt.14, sa.7, ss.2104-2112, 2010 (SCI-Expanded)
- XXIII. **Sustainable energy, environmental and agricultural policies in Turkey**
Kaygusuz K.
ENERGY CONVERSION AND MANAGEMENT, cilt.51, sa.5, ss.1075-1084, 2010 (SCI-Expanded)
- XXIV. **Contribution of the Southeastern Anatolia Project (GAP) to Irrigation and Hydroelectric Power Production in Turkey**
Kaygusuz K.
ENERGY SOURCES PART B-ECONOMICS PLANNING AND POLICY, cilt.5, sa.2, ss.199-209, 2010 (SCI-Expanded)
- XXV. **Energy Services and Energy Poverty for Rural Regions**
Kaygusuz K.
ENERGY SOURCES PART B-ECONOMICS PLANNING AND POLICY, cilt.5, sa.4, ss.424-433, 2010 (SCI-Expanded)
- XXVI. **Climate Change and Biomass Energy for Sustainability**
Kaygusuz K.
ENERGY SOURCES PART B-ECONOMICS PLANNING AND POLICY, cilt.5, sa.2, ss.133-146, 2010 (SCI-Expanded)
- XXVII. **Hydropower in Turkey: The Sustainable Energy Future**
Kaygusuz K.
ENERGY SOURCES PART B-ECONOMICS PLANNING AND POLICY, cilt.4, sa.1, ss.34-47, 2009 (SCI-Expanded)
- XXVIII. **Chemical Exergies of Some Coals in Turkey**
Kaygusuz K.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, cilt.31, sa.4, ss.299-307, 2009 (SCI-Expanded)
- XXIX. **Energy and environmental issues relating to greenhouse gas emissions for sustainable development in Turkey**
Kaygusuz K.
RENEWABLE & SUSTAINABLE ENERGY REVIEWS, cilt.13, sa.1, ss.253-270, 2009 (SCI-Expanded)
- XXX. **Biomass as a Renewable Energy Source for Sustainable Fuels**
KAYGUSUZ K.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, cilt.31, sa.6, ss.535-545, 2009 (SCI-Expanded)
- XXXI. **Environmental Impacts of the Solar Energy Systems**
Kaygusuz K.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, cilt.31, sa.15, ss.1376-1386, 2009 (SCI-Expanded)
- XXXII. **Wind Power for a Clean and Sustainable Energy Future**
Kaygusuz K.
ENERGY SOURCES PART B-ECONOMICS PLANNING AND POLICY, cilt.4, sa.1, ss.122-133, 2009 (SCI-Expanded)
- XXXIII. **Bioenergy as a Clean and Sustainable Fuel**
Kaygusuz K.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, cilt.31, sa.12, ss.1069-1080, 2009 (SCI-Expanded)
- XXXIV. **The Role of Hydropower for Sustainable Energy Development**
Kaygusuz K.
ENERGY SOURCES PART B-ECONOMICS PLANNING AND POLICY, cilt.4, sa.4, ss.365-376, 2009 (SCI-Expanded)
- XXXV. **Thermodynamic Aspects of Renewable and Sustainable Development**
KAYGUSUZ K., BILGEN S.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, cilt.31, sa.4, ss.287-298, 2009 (SCI-Expanded)

- XXXVI. **Use of Biomass as a Transitional Strategy to a Sustainable and Clean Energy System**
KAYGUSUZ K., KELEŞ S.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, cilt.31, sa.1, ss.86-97, 2009 (SCI-Expanded)
- XXXVII. **Thermal Properties and Thermal Reliability of Capric Acid/Stearic Acid Mixture for Latent Heat Thermal Energy Storage**
Karaipekli A., Sari A., KAYGUSUZ K.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, cilt.31, sa.3, ss.199-207, 2009 (SCI-Expanded)
- XXXVIII. **Thermal Characteristics of Paraffin/Expanded Perlite Composite for Latent Heat Thermal Energy Storage**
Karaipekli A., Sari A., KAYGUSUZ K.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, cilt.31, sa.10, ss.814-823, 2009 (SCI-Expanded)
- XXXIX. **Energy situation and renewables in Turkey and environmental effects of energy use**
AKPINAR A., KOMURCU M. I., Kankal M., Ozolcer I. H., KAYGUSUZ K.
RENEWABLE & SUSTAINABLE ENERGY REVIEWS, cilt.12, sa.8, ss.2013-2039, 2008 (SCI-Expanded)
- XL. **The calculation of the chemical exergies of coal-based fuels by using the higher heating values**
BİLGEN S., KAYGUSUZ K.
APPLIED ENERGY, cilt.85, sa.8, ss.776-785, 2008 (SCI-Expanded)
- XL I. **Status of geothermal energy amongst Turkey's energy sources**
AKPINAR A., KOEMUERCUE M. I., ONSOYA H., KAYGUSUZ K.
RENEWABLE & SUSTAINABLE ENERGY REVIEWS, cilt.12, sa.4, ss.1148-1161, 2008 (SCI-Expanded)
- XLII. **Thermal energy storage performance of paraffin in a novel tube-in-shell system**
AKGUN M., AYDM O., KAYGUSUZ K.
APPLIED THERMAL ENGINEERING, cilt.28, ss.405-413, 2008 (SCI-Expanded)
- XLIII. **Global warming and renewable energy sources for sustainable development: A case study in Turkey**
BİLGEN S., KELEŞ S., Kaygusuz A., Sari A., KAYGUSUZ K.
RENEWABLE & SUSTAINABLE ENERGY REVIEWS, cilt.12, sa.2, ss.372-396, 2008 (SCI-Expanded)
- XLIV. **Capric acid and stearic acid mixture impregnated with gypsum wallboard for low-temperature latent heat thermal energy storage**
Sari A., Karaipekli A., KAYGUSUZ K.
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, cilt.32, sa.2, ss.154-160, 2008 (SCI-Expanded)
- XLV. **Capric acid and myristic acid for latent heat thermal energy storage**
Sari A., Karaipekli A., KAYGUSUZ K.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, cilt.30, sa.16, ss.1498-1507, 2008 (SCI-Expanded)
- XLVI. **Thermal energy storage behavior of $\text{CaCl}_2 \cdot 6\text{H}_2\text{O}$ during melting and solidification**
BİLEN K., Takgil F., KAYGUSUZ K.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, cilt.30, sa.9, ss.775-787, 2008 (SCI-Expanded)
- XLVII. **Encapsulated fatty acids in an acrylic resin as shape-stabilized phase change materials for latent heat thermal energy storage**
KAYGUSUZ K., Alkan C., Sari A., Uzun O.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, cilt.30, sa.11, ss.1050-1059, 2008 (SCI-Expanded)
- XLVIII. **Second law (exergy) analysis of cogeneration system**
BİLGEN S., KAYGUSUZ K.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, cilt.30, sa.13, ss.1267-1280, 2008 (SCI-Expanded)
- XLIX. **Fatty acid/expanded graphite composites as phase change material for latent heat thermal energy**

storage

Sari A., Karaipekli A., KAYGUSUZ K.

ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, cilt.30, sa.5, ss.464-474, 2008 (SCI-Expanded)

- L. **Thermodynamic aspects of energy systems and sustainable development**
BİLGEN S., KAYGUSUZ K., Sari A.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, cilt.30, sa.4, ss.325-333, 2008 (SCI-Expanded)
- LI. **The Future of Nuclear Power and Renewable Energy Sources in the European Union**
Kaygusuz K.
ENERGY SOURCES PART B-ECONOMICS PLANNING AND POLICY, cilt.3, sa.4, ss.348-361, 2008 (SCI-Expanded)
- LII. **Thermal properties and long-term reliability of capric acid/lauric acid and capric acid/myristic acid mixtures for thermal energy storage**
Karaipekli A., Sari A., KAYGUSUZ K.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, cilt.30, sa.13, ss.1248-1258, 2008 (SCI-Expanded)
- LIII. **Energy Related Environmental Policies in Turkey**
KAYGUSUZ K., BİLGEN S.
ENERGY SOURCES PART B-ECONOMICS PLANNING AND POLICY, cilt.3, sa.4, ss.396-410, 2008 (SCI-Expanded)
- LIV. **Energy use and air pollution issues in Turkey**
Kaygusuz K.
CLEAN-SOIL AIR WATER, cilt.35, sa.6, ss.539-547, 2007 (SCI-Expanded)
- LV. **Thermal conductivity improvement of stearic acid using expanded graphite and carbon fiber for energy storage applications**
KARAIPEKLI A., Sari A., Kaygusuz K.
RENEWABLE ENERGY, cilt.32, sa.13, ss.2201-2210, 2007 (SCI-Expanded)
- LVI. **An experimental optimization study on a tube-in-shell latent heat storage**
Aydin O., AKGUN M., Kaygusuz K.
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, cilt.31, sa.3, ss.274-287, 2007 (SCI-Expanded)
- LVII. **Experimental study on melting/solidification characteristics of a paraffin as PCM**
AKGUN M., Aydin O., Kaygusuz K.
ENERGY CONVERSION AND MANAGEMENT, cilt.48, sa.2, ss.669-678, 2007 (SCI-Expanded)
- LVIII. **High density polyethylene/paraffin composites as form-stable phase change material for thermal energy storage**
Kaygusuz K., SARI A.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, cilt.29, sa.3, ss.261-270, 2007 (SCI-Expanded)
- LIX. **Thermal energy storage behavior of a paraffin during melting and solidification**
AKGUN M., AYDIN O., Kaygusuz K.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, cilt.29, sa.14, ss.1315-1326, 2007 (SCI-Expanded)
- LX. **Poly(vinyl alcohol)/fatty acid blends for thermal energy storage**
SARI A., Kaygusuz K.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, cilt.29, sa.10, ss.873-883, 2007 (SCI-Expanded)
- LXI. **The role of biomass in greenhouse gas mitigation**
BILGEN S., KELES S., Kaygusuz K.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, cilt.29, sa.13, ss.1243-1252, 2007 (SCI-Expanded)
- LXII. **Energy for sustainable development: Key issues and challenges**
Kaygusuz K.

- ENERGY SOURCES PART B-ECONOMICS PLANNING AND POLICY, cilt.2, sa.1, ss.73-83, 2007 (SCI-Expanded)
- LXIII. **Renewable energy sources in the European Union: Markets and capacity**
Kaygusuz K., YUKSEK O., SARI A.
ENERGY SOURCES PART B-ECONOMICS PLANNING AND POLICY, cilt.2, sa.1, ss.19-29, 2007 (SCI-Expanded)
- LXIV. **Small hydropower plants as a new and renewable energy source**
YUEKSEK Ö., Kaygusuz K.
ENERGY SOURCES PART B-ECONOMICS PLANNING AND POLICY, cilt.1, sa.3, ss.279-290, 2006 (SCI-Expanded)
- LXV. **Studies on poly(vinyl chloride)/fatty acid blends as shape-stabilized phase change material for latent heat thermal energy storage**
Sari A., Kaygusuz K.
INDIAN JOURNAL OF ENGINEERING AND MATERIALS SCIENCES, cilt.13, sa.3, ss.253-258, 2006 (SCI-Expanded)
- LXVI. **Thermal energy storage characteristics of myristic and stearic acids eutectic mixture for low temperature heating applications**
SARI A., Kaygusuz K.
CHINESE JOURNAL OF CHEMICAL ENGINEERING, cilt.14, sa.2, ss.270-275, 2006 (SCI-Expanded)
- LXVII. **Developing wind energy in the European Union**
Kaygusuz K.
ENERGY SOURCES PART B-ECONOMICS PLANNING AND POLICY, cilt.1, sa.1, ss.9-21, 2006 (SCI-Expanded)
- LXVIII. **The benefits of renewables in Turkey**
Kaygusuz K., Sari A.
ENERGY SOURCES PART B-ECONOMICS PLANNING AND POLICY, cilt.1, sa.1, ss.23-35, 2006 (SCI-Expanded)
- LXIX. **Thermal energy storage performance of fatty acids as a phase change material**
Kaygusuz K., SARI A.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, cilt.28, ss.105-116, 2006 (SCI-Expanded)
- LXX. **Thermal energy storage system using a technical grade paraffin wax as latent heat energy storage material**
Kaygusuz K., SARI A.
ENERGY SOURCES, cilt.27, sa.16, ss.1535-1546, 2005 (SCI-Expanded)
- LXXI. **Lauric and myristic acids eutectic mixture as phase change material for low-temperature heating applications**
KELES S., Kaygusuz K., SARI A.
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, cilt.29, sa.9, ss.857-870, 2005 (SCI-Expanded)
- LXXII. **Lauric and palmitic acids eutectic mixture as latent heat storage material for low temperature heating applications**
TUNCBILEK K., SARI A., TARHAN S., ERGUNES G., Kaygusuz K.
ENERGY, cilt.30, sa.5, ss.677-692, 2005 (SCI-Expanded)
- LXXIII. **Geothermal energy in Turkey: the sustainable future**
Kaygusuz K., KAYGUSUZ A.
RENEWABLE & SUSTAINABLE ENERGY REVIEWS, cilt.8, sa.6, ss.545-563, 2004 (SCI-Expanded)
- LXXIV. **Renewable energy for a clean and sustainable future**
BILGEN S., Kaygusuz K., SARI A.
ENERGY SOURCES, cilt.26, sa.12, ss.1119-1129, 2004 (SCI-Expanded)
- LXXV. **The role of renewables in future energy directions of Turkey**
Kaygusuz K.
ENERGY SOURCES, cilt.26, sa.12, ss.1131-1140, 2004 (SCI-Expanded)
- LXXVI. **Energy and sustainable development. Part II: Environmental impacts of energy use**
Kaygusuz K., KAYGUSUZ A.
ENERGY SOURCES, cilt.26, sa.11, ss.1071-1082, 2004 (SCI-Expanded)
- LXXVII. **Second law analysis of various types of coal and woody biomass in Turkey**
BILGEN S., Kaygusuz K., SARI A.

- ENERGY SOURCES, cilt.26, sa.11, ss.1083-1094, 2004 (SCI-Expanded)
- LXXVIII. **Climate change mitigation in Turkey**
Kaygusuz K.
ENERGY SOURCES, cilt.26, sa.6, ss.563-573, 2004 (SCI-Expanded)
- LXXIX. **Energy utilization, environmental pollution and renewable energy sources in Turkey**
OCAK M., OCAK Z., BILGEN S., KELES S., Kaygusuz K.
ENERGY CONVERSION AND MANAGEMENT, cilt.45, sa.6, ss.845-864, 2004 (SCI-Expanded)
- LXXX. **First and second laws analyses of a closed latent heat thermal energy storage system**
SARI A., Kaygusuz K.
CHINESE JOURNAL OF CHEMICAL ENGINEERING, cilt.12, sa.2, ss.290-293, 2004 (SCI-Expanded)
- LXXXI. **Hydropower and the world's energy future**
Kaygusuz K.
ENERGY SOURCES, cilt.26, sa.3, ss.215-224, 2004 (SCI-Expanded)
- LXXXII. **Wind energy: Progress and potential**
Kaygusuz K.
ENERGY SOURCES, cilt.26, sa.2, ss.95-105, 2004 (SCI-Expanded)
- LXXXIII. **Energy policies and climate change mitigation in Turkey**
Kaygusuz K.
ENERGY EXPLORATION & EXPLOITATION, cilt.22, sa.2, ss.145-160, 2004 (SCI-Expanded)
- LXXXIV. **Phase change energy storage for solar heating systems**
Kaygusuz K.
ENERGY SOURCES, cilt.25, sa.8, ss.791-807, 2003 (SCI-Expanded)
- LXXXV. **Energy policy and climate change in Turkey**
Kaygusuz K.
ENERGY CONVERSION AND MANAGEMENT, cilt.44, sa.10, ss.1671-1688, 2003 (SCI-Expanded)
- LXXXVI. **Some fatty acids used for latent heat storage: thermal stability and corrosion of metals with respect to thermal cycling**
SAN A., Kaygusuz K.
RENEWABLE ENERGY, cilt.28, sa.6, ss.939-948, 2003 (SCI-Expanded)
- LXXXVII. **Oil and gas market developments in Turkey**
Kaygusuz K.
ENERGY SOURCES, cilt.25, sa.3, ss.229-240, 2003 (SCI-Expanded)
- LXXXVIII. **Renewable energy potential and utilization in Turkey**
Kaygusuz K., SARI A.
ENERGY CONVERSION AND MANAGEMENT, cilt.44, sa.3, ss.459-478, 2003 (SCI-Expanded)
- LXXXIX. **Thermal and heat transfer characteristics in a latent heat storage system using lauric acid**
SARI A., Kaygusuz K.
ENERGY CONVERSION AND MANAGEMENT, cilt.43, sa.18, ss.2493-2507, 2002 (SCI-Expanded)
- XC. **Geothermal energy: Power for a sustainable future**
Kaygusuz K., KAYGUSUZ A.
ENERGY SOURCES, cilt.24, sa.10, ss.937-947, 2002 (SCI-Expanded)
- XCI. **Sustainable development of hydroelectric power**
Kaygusuz K.
ENERGY SOURCES, cilt.24, sa.9, ss.803-815, 2002 (SCI-Expanded)
- XCII. **Biomass energy potential in Turkey**
Kaygusuz K., TURKER M.
RENEWABLE ENERGY, cilt.26, sa.4, ss.661-678, 2002 (SCI-Expanded)
- XCIII. **Renewable energy sources: The key to a better future**
Kaygusuz K.
ENERGY SOURCES, cilt.24, sa.8, ss.787-799, 2002 (SCI-Expanded)
- XCIV. **Renewable and sustainable energy use in Turkey: a review**

- Kaygusuz K.
RENEWABLE & SUSTAINABLE ENERGY REVIEWS, cilt.6, sa.4, ss.339-366, 2002 (SCI-Expanded)
- XCV. **Environmental impacts of energy utilisation and renewable energy policies in Turkey**
Kaygusuz K.
ENERGY POLICY, cilt.30, sa.8, ss.689-698, 2002 (SCI-Expanded)
- XCVI. **Energy and sustainable development in Turkey. Part I: Energy utilization and sustainability**
Kaygusuz K., KAYGUSUZ A.
ENERGY SOURCES, cilt.24, sa.6, ss.483-498, 2002 (SCI-Expanded)
- XCVII. **Review of Biomass energy in Turkey**
Kaygusuz K., TURKER M.
ENERGY SOURCES, cilt.24, sa.5, ss.383-401, 2002 (SCI-Expanded)
- XCVIII. **Sustainable development of hydropower and biomass energy in Turkey**
Kaygusuz K.
ENERGY CONVERSION AND MANAGEMENT, cilt.43, sa.8, ss.1099-1120, 2002 (SCI-Expanded)
- XCIX. **Thermal performance of palmitic acid as a phase change energy storage material**
SARI A., Kaygusuz K.
ENERGY CONVERSION AND MANAGEMENT, cilt.43, sa.6, ss.863-876, 2002 (SCI-Expanded)
- C. **Renewable energy and sustainable development in Turkey**
Kaygusuz K., KAYGUSUZ A.
RENEWABLE ENERGY, cilt.25, sa.3, ss.431-453, 2002 (SCI-Expanded)
- CI. **Thermal performance of a eutectic mixture of lauric and stearic acids as PCM encapsulated in the annulus of two concentric pipes**
SARI A., Kaygusuz K.
SOLAR ENERGY, cilt.72, sa.6, ss.493-504, 2002 (SCI-Expanded)
- CII. **Oil and gas production and consumption in Turkey**
Kaygusuz K.
ENERGY EXPLORATION & EXPLOITATION, cilt.20, sa.1, ss.37-50, 2002 (SCI-Expanded)
- CIII. **Thermal performance of myristic acid as a phase change material for energy storage application**
SARI A., Kaygusuz K.
RENEWABLE ENERGY, cilt.24, sa.2, ss.303-317, 2001 (SCI-Expanded)
- CIV. **Hydropower and biomass as renewable energy sources in Turkey**
Kaygusuz K.
ENERGY SOURCES, cilt.23, sa.9, ss.775-799, 2001 (SCI-Expanded)
- CV. **Investigation of the variables effects on fuelwood consumption as an energy source in forest villages of Turkey**
TURKER M., Kaygusuz K.
ENERGY CONVERSION AND MANAGEMENT, cilt.42, sa.10, ss.1215-1227, 2001 (SCI-Expanded)
- CVI. **Thermal energy storage system using some fatty acids as latent heat energy storage materials**
SARI A., Kaygusuz K.
ENERGY SOURCES, cilt.23, sa.3, ss.275-285, 2001 (SCI-Expanded)
- CVII. **Renewable energy: Power for a sustainable future**
Kaygusuz K.
ENERGY EXPLORATION & EXPLOITATION, cilt.19, sa.6, ss.603-626, 2001 (SCI-Expanded)
- CVIII. **Thermal energy storage system using stearic acid as a phase change material**
SARI A., Kaygusuz K.
SOLAR ENERGY, cilt.71, sa.6, ss.365-376, 2001 (SCI-Expanded)
- CIX. **Environmental impacts of energy utilization and renewable energy sources in Turkey**
Kaygusuz K.
ENERGY EXPLORATION & EXPLOITATION, cilt.19, sa.5, ss.497-509, 2001 (SCI-Expanded)
- CX. **Experimental and theoretical investigation of a solar heating system with heat pump**
Kaygusuz K.

- RENEWABLE ENERGY, cilt.21, sa.1, ss.79-102, 2000 (SCI-Expanded)
- CXI. **Calculation of required collector area of a solar-assisted series heat pump for domestic heating**
Kaygusuz K.
ENERGY SOURCES, cilt.22, sa.3, ss.247-256, 2000 (SCI-Expanded)
- CXII. **Energy and exergy calculations of latent heat energy storage systems**
SARI A., Kaygusuz K.
ENERGY SOURCES, cilt.22, sa.2, ss.117-126, 2000 (SCI-Expanded)
- CXIII. **Energy and water potential of the Southeastern Anatolia Project (GAP)**
Kaygusuz K.
ENERGY SOURCES, cilt.21, sa.10, ss.913-922, 1999 (SCI-Expanded)
- CXIV. **Investigation of a combined solar-heat pump system for residential heating. Part 2: Simulation results**
Kaygusuz K.
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, cilt.23, sa.14, ss.1225-1237, 1999 (SCI-Expanded)
- CXV. **Investigation of a combined solar-heat pump system for residential heating. Part 1: Experimental results**
Kaygusuz K.
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, cilt.23, sa.14, ss.1213-1223, 1999 (SCI-Expanded)
- CXVI. **Forest biomass as a source of renewable energy in Turkey**
TURKER M., AYAZ H., Kaygusuz K.
ENERGY SOURCES, cilt.21, sa.8, ss.705-714, 1999 (SCI-Expanded)
- CXVII. **The viability of thermal energy storage**
Kaygusuz K.
ENERGY SOURCES, cilt.21, sa.8, ss.745-755, 1999 (SCI-Expanded)
- CXVIII. **Experimental and theoretical investigation of combined solar heat pump system for residential heating**
Kaygusuz K., AYHAN T.
ENERGY CONVERSION AND MANAGEMENT, cilt.40, sa.13, ss.1377-1396, 1999 (SCI-Expanded)
- CXIX. **Hydropower potential in Turkey**
Kaygusuz K.
ENERGY SOURCES, cilt.21, sa.7, ss.581-588, 1999 (SCI-Expanded)
- CXX. **Utilization of solar energy and waste heat**
Kaygusuz K.
ENERGY SOURCES, cilt.21, sa.7, ss.595-610, 1999 (SCI-Expanded)
- CXXI. **Energy situation, future developments, energy saving, and energy efficiency in Turkey**
Kaygusuz K.
ENERGY SOURCES, cilt.21, sa.5, ss.405-416, 1999 (SCI-Expanded)
- CXXII. **The comparison of measured and calculated solar radiations in Trabzon, Turkey**
Kaygusuz K.
ENERGY SOURCES, cilt.21, sa.4, ss.347-353, 1999 (SCI-Expanded)
- CXXIII. **Electricity generation: A case study in Turkey**
Kaygusuz K.
ENERGY SOURCES, cilt.21, sa.3, ss.275-290, 1999 (SCI-Expanded)
- CXXIV. **Analysis of solar radiation data for Trabzon, Turkey**
Kaygusuz K., AYHAN T.
ENERGY CONVERSION AND MANAGEMENT, cilt.40, sa.5, ss.545-556, 1999 (SCI-Expanded)
- CXXV. **Use of wood as an energy source in Turkey**
Kaygusuz K., TURKER M.
ENERGY SOURCES, cilt.20, sa.7, ss.605-614, 1998 (SCI-Expanded)
- CXXVI. **Drying behaviour of hazelnuts**
DEMIRTAS C., AYHAN T., Kaygusuz K.

- JOURNAL OF THE SCIENCE OF FOOD AND AGRICULTURE, cilt.76, sa.4, ss.559-564, 1998 (SCI-Expanded)
- CXXVII. **Energy, water, and environment in Turkey**
Kaygusuz K.
ENERGY SOURCES, cilt.19, sa.9, ss.917-930, 1997 (SCI-Expanded)
- CXXVIII. **Rural energy resources: Applications and consumption in Turkey**
Kaygusuz K.
ENERGY SOURCES, cilt.19, sa.6, ss.549-557, 1997 (SCI-Expanded)
- CXXIX. **Role of the clean energy potential for energy savings and air pollution control in Turkey**
Kaygusuz K., KARGI H., KAYGUSUZ A.
ENERGY SOURCES, cilt.18, sa.8, ss.885-901, 1996 (SCI-Expanded)
- CXXX. **EXPERIMENTAL AND THEORETICAL INVESTIGATION OF LATENT-HEAT STORAGE FOR WATER-BASED SOLAR HEATING-SYSTEMS**
KAYGUSUZ K.
ENERGY CONVERSION AND MANAGEMENT, cilt.36, sa.5, ss.315-323, 1995 (SCI-Expanded)
- CXXXI. **Socio-economic analysis of fuelwood use in a rural area of Turkey**
TURKER M., Kaygusuz K.
BIORESOURSE TECHNOLOGY, cilt.54, sa.3, ss.285-290, 1995 (SCI-Expanded)
- CXXXII. **PERFORMANCE OF SOLAR-ASSISTED HEAT-PUMP SYSTEMS**
KAYGUSUZ K.
APPLIED ENERGY, cilt.51, sa.2, ss.93-109, 1995 (SCI-Expanded)
- CXXXIII. **PERFORMANCE OF AN AIR-TO-AIR HEAT-PUMP UNDER FROSTING AND DEFROSTING CONDITIONS**
KAYGUSUZ K.
APPLIED ENERGY, cilt.48, sa.3, ss.225-241, 1994 (SCI-Expanded)
- CXXXIV. **SOLAR-ASSISTED HEAT-PUMP AND ENERGY-STORAGE FOR RESIDENTIAL HEATING**
COMAKLI O., KAYGUSUZ K., AYHAN T.
SOLAR ENERGY, cilt.51, sa.5, ss.357-366, 1993 (SCI-Expanded)
- CXXXV. **EXERGY ANALYSIS OF SOLAR-ASSISTED HEAT-PUMP SYSTEMS FOR DOMESTIC HEATING**
KAYGUSUZ K., AYHAN T.
ENERGY, cilt.18, sa.10, ss.1077-1085, 1993 (SCI-Expanded)
- CXXXVI. **EXPERIMENTAL INVESTIGATION AND A DYNAMIC SIMULATION OF THE SOLAR-ASSISTED ENERGY-STORAGED HEAT-PUMP SYSTEM**
COMAKLI O., KAYGUSUZ K., AYHAN T., ARSLAN F.
SOLAR ENERGY, cilt.51, sa.2, ss.147-158, 1993 (SCI-Expanded)
- CXXXVII. **SOLAR-ASSISTED HEAT-PUMP AND ENERGY-STORAGE FOR DOMESTIC HEATING IN TURKEY**
KAYGUSUZ K., GULTEKIN N., AYHAN T.
ENERGY CONVERSION AND MANAGEMENT, cilt.34, sa.5, ss.335-346, 1993 (SCI-Expanded)
- CXXXVIII. **ENERGY AND ECONOMIC COMPARISONS OF AIR-TO-AIR HEAT-PUMPS AND CONVENTIONAL HEATING-SYSTEMS FOR THE TURKISH CLIMATE**
KAYGUSUZ K.
APPLIED ENERGY, cilt.45, sa.3, ss.257-267, 1993 (SCI-Expanded)
- CXXXIX. **EXPERIMENTAL INVESTIGATION OF THE EXERGETIC EFFICIENCY OF SOLAR ASSISTED AND ENERGY-STORAGE HEAT-PUMP SYSTEMS**
AYHAN T., COMAKLI O., KAYGUSUZ K.
ENERGY CONVERSION AND MANAGEMENT, cilt.33, sa.3, ss.165-173, 1992 (SCI-Expanded)
- CXL. **HEAT-STORAGE CHEMICAL MATERIALS WHICH CAN BE USED FOR DOMESTIC HEATING BY HEAT-PUMPS**
GULTEKIN N., AYHAN T., KAYGUSUZ K.
ENERGY CONVERSION AND MANAGEMENT, cilt.32, sa.4, ss.311-317, 1991 (SCI-Expanded)
- CXLI. **SOLAR-ASSISTED HEAT-PUMP SYSTEMS AND ENERGY-STORAGE**
KAYGUSUZ K., COMAKLI O., AYHAN T.
SOLAR ENERGY, cilt.47, sa.5, ss.383-391, 1991 (SCI-Expanded)

Diğer Dergilerde Yayınlanan Makaleler

- I. **Fast pyrolysis of fig leaves: influence of pyrolysis parameters and characterization of bio-oil**
KAR T., KELEŞ S., EMİR Z., KAYGUSUZ K.
Turkish Journal of Analytical Chemistry (Online), cilt.4, sa.2, ss.80-87, 2022 (Hakemli Dergi)
- II. **Hydrogen production potential from renewable energy sources in Turkey**
AVCI A. C., KAYGUSUZ K.
Journal of Engineering Research and Applied Science, 2019 (Hakemli Dergi)
- III. **Prediction of the solar photovoltaic potential for electricity generation in Turkey**
KAYGUSUZ K.
Journal of Engineering Research and Applied Science, 2019 (Hakemli Dergi)
- IV. **Theoretical thermal performance of the air-source heat pumps in Trabzon, Turkey**
KAYGUSUZ K.
Journal of Engineering Research and Applied Science, 2019 (Hakemli Dergi)
- V. **Potential and utilization of hydroelectric energy in Turkey**
KAYGUSUZ K.
Journal of Engineering Research and Applied Science, 2019 (Hakemli Dergi)
- VI. **Potential and utilization of solar energy policies in Turkey**
KAYGUSUZ K., AVCI A. C.
Journal of Engineering Research and Applied Science, 2019 (Hakemli Dergi)
- VII. **Theoretical performance of solar heat pump residential heating applications**
KAYGUSUZ K., KAYGUSUZ Ö.
Journal of Engineering Research and Applied Science, 2019 (Hakemli Dergi)
- VIII. **Green chemistry and green energy technologies for environmental friendly sustainable development**
KAYGUSUZ K.
Journal of Engineering Research and Applied Science, 2018 (Hakemli Dergi)
- IX. **Small hydropower potential and utilization in Turkey**
KAYGUSUZ K.
Journal of Engineering Research and Applied Science, 2018 (Hakemli Dergi)
- X. **Renewable energy for rural development in Turkey**
GÜNEY M. Ş., Kaygusuz Ö., KAYGUSUZ K.
Journal of Engineering Research and Applied Science, cilt.7, sa.2, ss.886-895, 2018 (Hakemli Dergi)
- XI. **Performance of solar assisted parallel and series heat pump systems with energy storage for building heating**
KAYGUSUZ K.
Journal of Engineering Research and Applied Science, 2018 (Hakemli Dergi)
- XII. **Renewable energy potential, utilization and policies in Turkey for environmental friendly sustainable development**
KAYGUSUZ K., coşkun a.
Journal of Engineering Research and Applied Science, 2018 (Hakemli Dergi)
- XIII. **Thermal processing technologies for biomass conversion to clean fuels**
KAYGUSUZ K., KELEŞ S., Kar T.
Journal of Engineering Research and Applied Science, 2018 (Hakemli Dergi)
- XIV. **Second law of thermodynamics and heat pumps for domestic heating**
KAYGUSUZ K.
Journal of Engineering Research and Applied Science, cilt.6, sa.2, ss.668-679, 2017 (Hakemli Dergi)
- XV. **Global utilization of wood pellet for residential heating**
KAYGUSUZ K., TOKSOY D., BAYRAMOĞLU M. M.
Journal of Engineering Research and Applied Science, cilt.6, sa.2, ss.688-697, 2017 (Hakemli Dergi)
- XVI. **Renewable energy from woody biomass in Turkey**
KELEŞ S., KAR T., BAHADIR A., KAYGUSUZ K.

- journal of engineering research and applied science, cilt.6, sa.2, ss.652-661, 2017 (Hakemli Dergi)
- XVII. **Current state and future prospects of biomass energy in Turkey**
KARA B., EMİR Z., ŞEKER T., BAHADIR A., KAYGUSUZ K.
Journal of Engineering Research and Applied Science, cilt.6, sa.1, ss.522-529, 2017 (Hakemli Dergi)
- XVIII. **Bioenergy potential, utilization and policies in Turkey**
KELEŞ S., BİLGİN S., KAYGUSUZ K.
Journal of Engineering Research and Applied Science, cilt.6, sa.1, ss.566-576, 2017 (Hakemli Dergi)
- XIX. **Biomass energy source in developing countries**
KELEŞ S., BİLGİN S., KAYGUSUZ K.
Journal of Engineering Research and Applied Science, cilt.6, sa.1, ss.566-576, 2017 (Hakemli Dergi)
- XX. **Bio-oil production from fast pyrolysis of maple fruit (acer platanoides samaras): product yields**
Bahadır A., Kar T., KELEŞ S., KAYGUSUZ K.
WORLD JOURNAL OF ENGINEERING, cilt.14, sa.1, ss.55-59, 2017 (ESCI)
- XXI. **Dynamics of energy utilization patterns in Turkey for sustainable development**
KAYGUSUZ K.
Journal of Engineering Research and Applied Science, cilt.5, sa.2, ss.399-407, 2016 (Hakemli Dergi)
- XXII. **Hydropower as clean and renewable energy source for electricity generation**
KAYGUSUZ K.
Journal of Engineering Research and Applied Science, cilt.5, sa.1, ss.359-369, 2016 (Hakemli Dergi)
- XXIII. **Fast pyrolysis of biomass for bio oils**
KELEŞ S., KAYGUSUZ K.
Journal of Engineering Research and Applied Science, sa.1, ss.370-377, 2016 (Hakemli Dergi)
- XXIV. **The increase of exploitability of renewable energy sources in Turkey**
KAYGUSUZ K., TOKLU E.
Journal of Engineering Research and Applied Science, cilt.5, sa.1, ss.352-358, 2016 (Hakemli Dergi)
- XXV. **Renewable energy technologies for clean and sustainable development**
KAYGUSUZ K.
Energy & Diplomacy, 2015 (Hakemli Dergi)
- XXVI. **Sustainable bioenergy policies in Turkey**
KAYGUSUZ K., KELEŞ S.
Journal of Engineering Research and Applied Science, cilt.1, sa.1, ss.34-43, 2012 (Hakemli Dergi)

Kitap & Kitap Bölümleri

I. Termodinamik

KAYGUSUZ K., TABAK A., KINAL A.

Fizikokimya, Nursel Pekel BAYRAMGİL, Gülsen ASMAN, Editör, Palme Yayıncılık, Ankara, ss.1-32, 2015

Desteklenen Projeler

SAVAŞKAN YILMAZ S., KAYGUSUZ K., KOLCUOĞLU Y., ALTIN İ., BACAĞIZ E., Yükseköğretim Kurumları Destekli Proje, INTERNATIONAL CONFERENCE ON CHEMICAL ENERGY AND SEMICONDUCTOR PHOTOCHEMISTRY, 2019 - 2020

Metrikler

Yayın: 201

Atf (WoS): 5454

Atf (Scopus): 5974

H-İndeks (WoS): 42

H-İndeks (Scopus): 46

Akademi Dışı Deneyim

KARADENİZ TEKNİK ÜNİVERSİTESİ FEN FAKÜLTESİ KİMYA BÖLÜMÜ