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Education Information

Doctorate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Turkey 1988 - 1993

Research Areas

Chemical Engineering and Technology, Process and Reactor Design, Chemical Process System Engineering, Basic Operations and Thermodynamics, Thermodynamics, Heat Transfer, Chemistry, Physical Chemistry, Thermodynamics, Fuel Cells, Natural Sciences, Engineering and Technology

Academic Titles / Tasks

Professor, Karadeniz Technical University, Fen Fakültesi, Kimya, 2000 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Guest editorial for special issue on "Progress in Energy Systems"**
JAVANI N., KAYGUSUZ K.
International Journal of Energy Research, vol.46, no.14, pp.20718, 2022 (SCI-Expanded)
- II. **Carbonized waste hazelnut wood-based shape-stable composite phase change materials for thermal management implementations**
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- III. **Walnut shell derived bio-carbon/methyl palmitate as novel composite phase change material with enhanced thermal energy storage properties**
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- 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, vol.43, no.6, pp.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**
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- VI. **Catalytic fast pyrolysis of hazelnut cupula: Characterization of bio-oil**

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- VII. **A research on hydrogen production from industrial waste heat by thermal water splitting**
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- VIII. **A perspective for potential and technology of bioenergy in Turkey: Present case and future view**
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- IX. **Calculation of higher and lower heating values and chemical exergy values of liquid products obtained from pyrolysis of hazelnut cupulae**
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- 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.
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- XI. **Energy for sustainable development: A case of developing countries**
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- XII. **The Total Electricity Energy Production of the World, European Union, and Turkey: Projections and Comparison**
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- XIV. **Energy services and energy poverty for sustainable rural development**
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- XV. **Prospect of concentrating solar power in Turkey: The sustainable future**
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- XVI. **Sustainable Agriculture and the Production of Biomass for Energy Use**
Durusoy I., TÜRKER M. F., KELEŞ S., KAYGUSUZ K.
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- XVII. **The Paradigm of Sustainability In Turkey's Energy Sector**
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- XX. **Energy, Electricity and Socioeconomic Transformation of Rural Regions in Developing Countries**
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- LI. **The Future of Nuclear Power and Renewable Energy Sources in the European Union**
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- LIII. **Energy Related Environmental Policies in Turkey**
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- LV. **Thermal conductivity improvement of stearic acid using expanded graphite and carbon fiber for energy storage applications**
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- LVIII. **High density polyethylene/paraffin composites as form-stable phase change material for thermal energy storage**
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- LXIV. **Small hydropower plants as a new and renewable energy source**
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- LXXV. **The role of renewables in future energy directions of Turkey**
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- LXXVII. **Second law analysis of various types of coal and woody biomass in Turkey**
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- LXXVIII. **Climate change mitigation in Turkey**
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- LXXXII. **Wind energy: Progress and potential**
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- C. **Renewable energy and sustainable development in Turkey**
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Metrics

Publication: 201

Citation (WoS): 5417

Citation (Scopus): 5936

H-Index (WoS): 42

H-Index (Scopus): 46

Non Academic Experience

KARADENİZ TEKNİK ÜNİVERSİTESİ FEN FAKÜLTESİ KİMYA BÖLÜMÜ