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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.
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- 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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- 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**Regional sustainable water and energy development projects: A case of Southeastern Anatolia Project (GAP) in Turkey (Retracted article.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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- XIII. **Renewable energy sources for clean and sustainable energy policies in Turkey**
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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**
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- XX. **Energy, Electricity and Socioeconomic Transformation of Rural Regions in Developing Countries**
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- XL. **The calculation of the chemical exergies of coal-based fuels by using the higher heating values**
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- XLI. **Status of geothermal energy amongst Turkey's energy sources**
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- LI. **The Future of Nuclear Power and Renewable Energy Sources in the European Union**
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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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- LXXVIII. **Climate change mitigation in Turkey**
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- C. **Renewable energy and sustainable development in Turkey**
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