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Kişisel Bilgiler

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Publons / Web Of Science ResearcherID: ABB-3112-2020

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Yoksis Araştırmacı ID: 149996

Eğitim Bilgileri

Doktora, İstanbul Teknik Üniversitesi, Kimya-Metalurji Fakültesi, Kimya Mühendisliği
Bölümü, Türkiye 2005 - 2010

Yüksek Lisans, Marmara Üniversitesi, Mühendislik Fakültesi, Endüstri Mühendisliği
Bölümü, Türkiye 2003 - 2005

Yüksek Lisans, İstanbul Teknik Üniversitesi, Kimya-Metalurji Fakültesi, Kimya
Mühendisliği Bölümü, Türkiye 2003 - 2005

Lisans, İstanbul Teknik Üniversitesi, Kimya-Metalurji Fakültesi, Kimya Mühendisliği
Bölümü, Türkiye 1999 - 2003

Yaptığı Tezler

Doktora, The synthesis and thermal properties of novel organic phase change materials, İstanbul Teknik Üniversitesi,
Kimya-Metalurji Fakültesi, Kimya Mühendisliği Bölümü, 2010

Yüksek Lisans, Sulfur dioxide absorption in heat transfer oil and related mass transfer calculations, İstanbul Teknik
Üniversitesi, Kimya-Metalurji Fakültesi, Kimya Mühendisliği Bölümü, 2005

Araştırma Alanları

Teknik Bilimler, Kimya Mühendisliği ve Teknolojisi , Kimyasal Teknolojiler, Polimer Teknolojisi , Organik Teknolojiler

Akademik Unvanlar / Görevler

Doç.Dr., İstanbul Teknik Üniversitesi, Kimya-Metalurji, Kimya Mühendisliği, 2014 - Devam Ediyor

SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- I. Investigation of adsorption and biosorption features of bio-functionalized poly(GMA-Co-EGDMA)
polymer beads in the treatment of nicotine from tobacco industry
Simsek E. B., Saloglu D., Aydin A. A.

- Environmental Science and Pollution Research, cilt.30, sa.24, ss.65801-65821, 2023 (SCI-Expanded)
- II. **Lipid-derived cetyltrimethylammonium salts as renewable phase change materials for thermal energy storage**
Rende Kılıç E., Aydoğan A., Aydin A. A.
Solar Energy Materials and Solar Cells, cilt.250, 2023 (SCI-Expanded)
- III. **Investigation of eight target metals in solid residues of industrial waste gasification in a downdraft gasifier**
Guzel E., Aydin A. A., Okutan H. C.
International Journal of Environmental Science and Technology, cilt.19, sa.3, ss.1729-1737, 2022 (SCI-Expanded)
- IV. **Synthesis and characterization of new organic phase change materials (PCMs): Diesters of suberic acid**
Aydin A. A., Toprakci G.
SOLAR ENERGY MATERIALS AND SOLAR CELLS, cilt.220, 2021 (SCI-Expanded)
- V. **Polycyclic aromatic hydrocarbon (PAH) content of Malkara lignite and its ex-situ underground coal gasification (UCG) char residues**
Utnu Y. E., Okutan H. C., Aydin A. A.
FUEL, cilt.275, 2020 (SCI-Expanded)
- VI. **Investigation of the pollution risk of residues from a laboratory-scale underground coal gasification of Malkara (Turkey) lignite**
Fallahi Y., Aydin A. A., Gur M., Okutan H. C.
International Journal of Environmental Science and Technology, cilt.16, sa.2, ss.1093-1102, 2019 (SCI-Expanded)
- VII. **Effect of different polyol-based plasticizers on thermal properties of polyvinyl alcohol:starch blends**
Aydin A. A., ILBERG V.
CARBOHYDRATE POLYMERS, cilt.136, ss.441-448, 2016 (SCI-Expanded)
- VIII. **Experimental analysis of a cold store integrated with phase change material: a case study**
Kilic G. A., Yalcin E., Aydin A. A.
BULGARIAN CHEMICAL COMMUNICATIONS, cilt.48, ss.195-198, 2016 (SCI-Expanded)
- IX. **Numerical analysis of a novel ground heat exchanger coupled with phase change materials**
Bottarelli M., BORTOLONI M., Su Y., Yousif C., Aydin A. A., GEORGIEV A.
APPLIED THERMAL ENGINEERING, cilt.88, ss.369-375, 2015 (SCI-Expanded)
- X. **Mechanism of Nonpolar Model Substances to Inhibit Primary Gushing Induced by Hydrophobin HFBI**
Shokribousjein Z., GALAN D. R., LOSADA-PEREZ P., WAGNER P., LAMMERTYN J., ARGHIR I., GOLREIHAN A., VERACHTERT H., Aydin A. A., DE MAEYER M., et al.
JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY, cilt.63, sa.18, ss.4673-4682, 2015 (SCI-Expanded)
- XI. **Investigation of overfoaming activities and gushing mechanisms of individual beer ingredients as model substances in bottled carbonated water**
Aydin A. A., ILBERG V., TITZE J.
JOURNAL OF THE SCIENCE OF FOOD AND AGRICULTURE, cilt.94, sa.10, ss.2083-2089, 2014 (SCI-Expanded)
- XII. **Development of an immobilization process for heavy metal containing galvanic solid wastes by use of sodium silicate and sodium tetraborate**
Aydin A. A., Aydin A.
JOURNAL OF HAZARDOUS MATERIALS, cilt.270, ss.35-44, 2014 (SCI-Expanded)
- XIII. **Simultaneous investigation of sesquiterpenes, pyrrolizidine alkaloids and N-oxides in Butterbur (Petasites hybridus) with an offline 2D-combination of HPLC-UV and LC-MMI-ToF-MS**
Aydin A. A., LETZEL T.
JOURNAL OF PHARMACEUTICAL AND BIOMEDICAL ANALYSIS, cilt.85, ss.74-82, 2013 (SCI-Expanded)
- XIV. **In situ preparation and characterization of encapsulated high-chain fatty acid ester-based phase change material (PCM) in poly(urethane-urea) by using amino alcohol**
Aydin A. A.
CHEMICAL ENGINEERING JOURNAL, cilt.231, ss.477-483, 2013 (SCI-Expanded)
- XV. **High-chain fatty acid esters of 1-octadecanol as novel organic phase change materials and**

- mathematical correlations for estimating the thermal properties of higher fatty acid esters' homologous series**
Aydin A. A.
SOLAR ENERGY MATERIALS AND SOLAR CELLS, cilt.113, ss.44-51, 2013 (SCI-Expanded)
- XVI. **Polyurethane rigid foam composites incorporated with fatty acid ester-based phase change material**
Aydin A. A., Okutan H. C.
ENERGY CONVERSION AND MANAGEMENT, cilt.68, ss.74-81, 2013 (SCI-Expanded)
- XVII. **The medical plant butterbur (Petasites): Analytical and physiological (re)view**
Aydin A. A., ZERBES V., PARLAR H., LETZEL T.
JOURNAL OF PHARMACEUTICAL AND BIOMEDICAL ANALYSIS, cilt.75, ss.220-229, 2013 (SCI-Expanded)
- XVIII. **Fatty acid ester-based commercial products as potential new phase change materials (PCMs) for thermal energy storage**
Aydin A. A.
SOLAR ENERGY MATERIALS AND SOLAR CELLS, cilt.108, ss.98-104, 2013 (SCI-Expanded)
- XIX. **Diesters of high-chain dicarboxylic acids with 1-tetradecanol as novel organic phase change materials for thermal energy storage**
Aydin A. A.
SOLAR ENERGY MATERIALS AND SOLAR CELLS, cilt.104, ss.102-108, 2012 (SCI-Expanded)
- XX. **Solubility of Sulfur Dioxide in a Commercial Hydrocarbon Mixture in the Temperature Range of (303 to 343) K: Effect of Hydrocarbon Composition on Absorption**
Aydin A. A., Okutan H. C.
JOURNAL OF CHEMICAL AND ENGINEERING DATA, cilt.57, sa.4, ss.1146-1151, 2012 (SCI-Expanded)
- XXI. **High-chain fatty acid esters of 1-hexadecanol for low temperature thermal energy storage with phase change materials**
Aydin A. A., Aydin A.
SOLAR ENERGY MATERIALS AND SOLAR CELLS, cilt.96, sa.1, ss.93-100, 2012 (SCI-Expanded)
- XXII. **High-chain fatty acid esters of myristyl alcohol with even carbon number: Novel organic phase change materials for thermal energy storage-1**
Aydin A. A., Okutan H. C.
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- XXIII. **High-chain fatty acid esters of myristyl alcohol with odd carbon number: Novel organic phase change materials for thermal energy storage-2**
Aydin A. A., Okutan H. C.
SOLAR ENERGY MATERIALS AND SOLAR CELLS, cilt.95, sa.8, ss.2417-2423, 2011 (SCI-Expanded)
- XXIV. **Composition, properties, and application of products formed in oxidation of polyethylene by nitric acid**
Garaeva S. R., Aydin A. A., Aydin A., Yalcin B., FATULLAEVA P. A., Medzhidov A. A.
RUSSIAN JOURNAL OF APPLIED CHEMISTRY, cilt.83, sa.1, ss.97-101, 2010 (SCI-Expanded)
- XXV. **Sulfur dioxide solubility in heat transfer oil in the temperature range of (293.15 to 313.15) K: Experimental results and related correlations**
Aydin A. A., Erciyes A. T., OKUTAN H. C.
JOURNAL OF CHEMICAL AND ENGINEERING DATA, cilt.51, sa.4, ss.1289-1293, 2006 (SCI-Expanded)
- XXVI. **Gold leaching by use of an N,N'-disubstituted thiourea**
Aydin A. A., KAKI E., Aydin A.
SEPARATION SCIENCE AND TECHNOLOGY, cilt.36, sa.14, ss.3239-3251, 2001 (SCI-Expanded)

Diğer Dergilerde Yayınlanan Makaleler

- I. **New gushing mechanism proposed by applying particle size analysis and several surfactants**
CHRISTIAN M., ILBERG V., Aydin A. A., TITZE J., FRIESS A., JACOB F., Parlar H.

Kitap & Kitap Bölümleri

- I. Optimum Operating Temperature Range of Phase Change Materials Used in Cold Storage Applications: A Case Study
Kılıç G. A., Yalçın E., Aydin A. A.
Environmentally-Benign Energy Solutions, Ibrahim Dincer, Can Ozgur Colpan, Mehmet Akif Ezan, Editör, Springer, London/Berlin , Basel, ss.711-726, 2020
- II. The Genus Lavandula: An Overview
Aydin A., Aydin A. A.
Phytotherapeutics III, Recent Progress in Medicinal Plants, Govil J.N. , Editör, Studium Press Llc, Alabama, ss.199-258, 2016
- III. Heavy Metals
Aydin A. A., Aydin A.
Handbook of Combustion (2nd Edition), Lackner M., Winter F., Agarwal A.K. , Editör, John Wiley And John Wiley & Sons, West Sussex, Uk, Alness, ss.1-54, 2016

Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar

- I. Optimum Operating Temperature Range of Phase Change Materials Used in Cold Storage Applications: A Case Study
Kılıç G. A., YALÇIN E., Aydin A. A.
7th Global Conference on Global Warming (GCGW), İzmir, Türkiye, 24 - 28 Haziran 2018, ss.711-726
- II. Suberik Asit Esash Yeni Organik Faz Değiştiren Malzemelerin (FDM) Sentezi ve Karakterizasyonu
Toprakçı G., Aydin A. A.
31. Ulusal Kimya Kongresi, İstanbul, Türkiye, 10 - 13 Eylül 2019, ss.10-15
- III. Efficiency analysis of PCM added cold store
Kılıç A., YALÇIN E., AYDIN A. A.
7th GLOBAL CONFERENCE on GLOBAL WARMING, İzmir, Türkiye, 24 - 28 Haziran 2018
- IV. The effect of phase change material (PCM) utilization on air-cooled condenser capacity
YALÇIN E., Kılıç A., AYDIN A. A.
Alternative Energy Sources, Materials Technologies (AESMT'18), 13 - 16 Mayıs 2018
- V. Effect of Phase Change Material (PCM) Utilization on Air-Cooled Condenser Capacity in One Stage Vapor Compressed Refrigeration System
YALÇIN E., Kılıç G. A., AYDIN A. A.
1st International Scientific Conference on Alternative Energy Sources, Materials Technologies, 14 - 15 Mayıs 2018
- VI. Laboratory Studies on Pollution Risk of In-Situ Gasification of Malkara Lignite
Fallahi Y., Sevinç B., Çevik D., GÜR M., AYDIN A. A., OKUTAN H. C.
İnerma 2017, 27 - 30 Eylül 2017
- VII. Experimental analysis of a cold store integrated with phase change material a case study
Kılıç G. A., YALÇIN E., AYDIN A. A.
XV International Scientific Conference "RE & IT - 2016" Renewable Energies and Innovative Technologies, 10 - 11 Haziran 2016
- VIII. Analysis of a Cold Store Integrated with Phase Change Material
Kılıç G. A., YALÇIN E., AYDIN A. A.
Sustainable Energy 2016: The ISE Annual Conference, 04 Ekim 2016
- IX. Analysis of a cold store integrated with phase change material experimental and numerical evaluations

Kılıç G. A., YALÇIN E., AYDIN A. A.

9th International Conference on Sustainable Energy and Environmental Protection, 22 - 24 Eylül 2016

X. **Characterization of feedstock char and cyclone dust from a downdraft industrial waste gasifier**

Güzel E., AYDIN A. A., DEMİR İ., OKUTAN H. C.

9th International Conference on Sustainable Energy and Environmental Protection, 22 - 24 Eylül 2016

XI. **Novel commercial organic Phase Change Materials (PCMs) for low temperature thermal energy storage applications**

Aydin A. A.

6th International Conference on Thermal Engineering Theory and Applications, İstanbul, Türkiye, 29 Mayıs - 01

Haziran 2012

Desteklenen Projeler

Aydin A. A., UFUK AVRUPA Projesi, EFFICIENT COMPACT MODULAR THERMAL ENERGY STORAGE SYSTEM, 2023 - 2026

Aydin A. A., Yükseköğretim Kurumları Destekli Proje, Faz Değişim Malzemelerinin Donmuş Muhafaza Odalarının Enerji Tüketimine Etkisi, 2016 - 2018

Aydin A. A., Yükseköğretim Kurumları Destekli Proje, Yeni Nesil Organik Faz Değişim Malzemelerinin (FDM) Geliştirilmesi, 2016 - 2017

Aydin A. A., Diğer Özel Kurumlarca Desteklenen Proje, Avrupa Normlarına Uygun Alev Geçiktiricilere Yönelik Poliüretan Rijit Köpük Sistemlerin Geliştirilmesi, 2015 - 2015

Aydin A. A., Diğer Uluslararası Fon Programları, Erarbeitung technologischer Maßnahmen in der Brauerei bzw Mälzerei zur Vermeidung von Gushing bei Verwendung von Rohstoffen mit erhöhtem Gushing Potenzial unter Beachtung des Reinheitsgebots, 2011 - 2015

Aydin A. A., Diğer Uluslararası Fon Programları, Phase Change Materials Coupled with Ground Heat Exchangers, 2011 - 2012

Aydin A. A., Diğer Uluslararası Fon Programları, Bestimmung des Pyrolizidinalkaloid Gehalts von Pestwurz Extrakten, 2011 - 2012

Metrikler

Yayın: 45

Atıf (WoS): 720

Atıf (Scopus): 844

H-İndeks (WoS): 13

H-İndeks (Scopus): 14