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International Researcher IDs

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Education

Doctorate, Ataturk University, Mühendislik Fakültesi, Kimya Müh, Turkey 1999 - 2005

Postgraduate, Ataturk University, Mühendislik Fakültesi, Kimya Müh, Turkey 1996 - 1999

Undergraduate, Ataturk University, Mühendislik Fakültesi, Kimya Müh, Turkey 1992 -

1996

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, Ham ve kalsine manyezit cevherinin glukonik asit çözeltilerinde çözündürülme kinetiği ve optimizasyonu, Ataturk Üniversitesi, Mühendislik Fakültesi, Kimya Müh, 2005

Postgraduate, Seri bağlı elektrotlarda doğal konveksiyonla kütle transferi, Ataturk Üniversitesi, Mühendislik Fakültesi, Kimya Müh, 1999

Research Areas

Chemical Engineering and Technology, Basic Operations and Thermodynamics, Mass Transfer, Engineering and Technology

Journal articles indexed in SCI, SSCI, and AHCI

- I. Effects of STZ-Induced Diabetes on Zinc, Boron and Antioxidant Defense Mechanisms in Rats
Miloglu F. D., Gundogdu G., BAYRAK B., KADIOĞLU Y., YÜKSEL B.
Nigerian Journal of Clinical Practice, vol.28, no.2, pp.248-254, 2025 (SCI-Expanded)
- II. Synthesis of an innovative SF/NZVI catalyst and investigation of its effectiveness on bio-oil production in liquefaction process alongside other parameters.
Ersöz K., BAYRAK B., Gündüz F., KARACA H.

- Environmental science and pollution research international, vol.31, no.19, pp.27913-27934, 2024 (SCI-Expanded)
- III. **Production of natural rubber from Euphorbia stricta L. and Tragopogon aureus Boiss plants**
Gerez E., Korkut Ö., Bayrak B., Kuşlu Y.
BIOMASS CONVERSION AND BIOREFINERY, vol.12, no.11, pp.5385-5396, 2022 (SCI-Expanded)
- IV. **The synthesis of biochar-supported nano zero-valent iron composite and its adsorption performance in removal of malachite green**
Yıldırım G. M., Bayrak B.
BIOMASS CONVERSION AND BIOREFINERY, vol.12, no.10, pp.4785-4797, 2022 (SCI-Expanded)
- V. **Use of natural and effective mandarin peel in elimination of malachite green from the aqueous media: adsorption properties, kinetics and thermodynamics**
Yalvaç G. M., Bayrak B.
DESALINATION AND WATER TREATMENT, vol.177, pp.176-185, 2020 (SCI-Expanded)
- VI. **Synthesis and performance of pomegranate peel-supported zero-valent iron nanoparticles for adsorption of malachite green**
Gunduz F., BAYRAK B.
DESALINATION AND WATER TREATMENT, vol.110, pp.180-192, 2018 (SCI-Expanded)
- VII. **Biosorption of malachite green from an aqueous solution using pomegranate peel: Equilibrium modelling, kinetic and thermodynamic studies**
GÜNDÜZ F., BAYRAK B.
JOURNAL OF MOLECULAR LIQUIDS, vol.243, pp.790-798, 2017 (SCI-Expanded)
- VIII. **Investigation of adsorption and ultrasound assisted desorption of lead (II) and copper (II) on local bentonite: A modelling study**
Korkut Ö., Şayan E., Lacin O., Bayrak B.
DESALINATION, vol.259, pp.243-248, 2010 (SCI-Expanded)
- IX. **Kinetic study on the leaching of calcined magnesite in gluconic acid solutions**
Bayrak B., Lacin Ö., Sarac H.
Journal of Industrial and Engineering Chemistry, vol.16, no.3, pp.479-484, 2010 (SCI-Expanded)
- X. **Dissolution kinetics of natural magnesite in lactic acid solutions**
Bakan F., Lacin O., Bayrak B., Sarac H.
INTERNATIONAL JOURNAL OF MINERAL PROCESSING, vol.80, no.1, pp.27-34, 2006 (SCI-Expanded)
- XI. **Investigation of dissolution kinetics of natural magnesite in gluconic acid solutions**
Bayrak B., Lacin Ö., Bakan F., Sarac H.
Chemical Engineering Journal, vol.117, no.2, pp.109-115, 2006 (SCI-Expanded)
- XII. **Modeling of adsorption and ultrasonic desorption of cadmium(II) and zinc(II) on local bentonite**
Lacin O., Bayrak B., Korkut Ö., Sayan E.
JOURNAL OF COLLOID AND INTERFACE SCIENCE, vol.292, no.2, pp.330-335, 2005 (SCI-Expanded)
- XIII. **Natural convection mass transfer behavior of serially connected cylindrical electrodes**
ATABEK B., SARAÇ H., Laçın O., KORKUT Ö.
Applied Surface Science, vol.230, pp.283-291, 2004 (SCI-Expanded)
- XIV. **Investigation of changes in fouling (occurred during milk pasteurization) resistance by alkaline-acidic cleaning solutions**
KORKUT Ö., SARAC H., ATABEK B., LAÇİN Ö.
Milchwissenschaft, vol.58, pp.409-412, 2003 (SCI-Expanded)

Articles Published in Other Journals

- I. **Gaz Kromatografisi/Kütle Spektrometrisi ile Sudaki Pestisit Kalıntılarının Eşzamanlı Olarak Belirlenmesi için Çoklu Kalıntı Metodu Geliştirilmesi**
BAYRAK B.
European Journal of Science and Technology, no.16, pp.84-91, 2019 (Peer-Reviewed Journal)

- II. **Method Development and Validation for the Determination of Pesticide Residues in Water by GC-NPD(Sudaki Pestisit Kalıntılarının Belirlenmesi için GC-NPD Kullanılarak Method Geliştirilmesi ve Validasyonu)**
BAYRAK B.
Journal of the Institute of Science and Technology-Iğdır Üni. Fen Bilimleri Enst. Der, vol.8, pp.133-141, 2018 (Peer-Reviewed Journal)
- III. **HAM MANYEZİT CEVHERİNİN GLUKONİK ASİT ÇÖZELTİLERİNDE ÇÖZÜNDÜRÜLMESİİNİN OPTİMİZASYONU**
LAÇİN Ö., BAYRAK B., SARAÇ H.
Anadolu University Journal of Science and Technology-A Applied Sciences and Engineering, vol.16, no.2, pp.195, 2015 (Peer-Reviewed Journal)
- IV. **Study of minimum film boiling at different metal surfaces in KOH solutions and pure water**
LAÇİN O., SARAÇ H., BAYRAK B., KORKUT Ö.
Gazi Üniversitesi Fen Bilimleri Ens.Dergisi, vol.15, pp.671-677, 2002 (Peer-Reviewed Journal)

Papers Presented at Peer-Reviewed Scientific Conferences

- I. **Erzurumda yetişen sütleğen(Euphorbia stricta L.) bitkisinden doğal kauçuk üretimi**
Gerez E., Korkut Ö., Bayrak B., Kuşlu Y.
8th INTERNATIONAL CONGRESS ON ENGINEERING, ARCHITECTURE AND DESIGN, İstanbul, Turkey, 6 - 07 December 2021, pp.632-636, (Full Text)
- II. **The Investigation Of Removal Of Malachite Green From Aqueous MediumUsing Carbonized Mandarin Peel**
Yalvaç G. M., Bayrak B.
İtesdes, Giresun, Turkey, 27 - 29 June 2018, pp.5, (Summary Text)
- III. **The Removal of Malachite Green with Synthesized NZVI / CMP Adsorbent**
Yalvaç G. M., Bayrak B.
Icelis, Kastamonu, Turkey, 26 - 29 April 2018, pp.280, (Summary Text)
- IV. **Development of a New Multi Residue Methodfor Determination of Five Pesticides in Water by GC Mass**
Bayrak B.
International Conference on Engineering and Natural Sciences-Icens2016, Sarajevo, Bosnia And Herzegovina, 24 - 28 May 2016, (Summary Text)
- V. **Comparison of dosimetry gels prepared by agar and bovine gelatine**
SAĞSÖZ M. E., KORKUT Ö., Alemdar N., Aktaş S., Çali E., Kantarcı M.
1st International Physics Conference at the Anatolian Peak, IPCAP 2016, Erzurum, Turkey, 25 - 27 February 2016, vol.707, (Full Text)
- VI. **Development and Validation of a Multiresidue Method for the Determination of Pesticide Residues in Water by GC NPD**
Bayrak B.
International conference on engineering and natural sciences-ICENS 2015, Skopje, Macedonia, 15 - 19 May 2015, (Summary Text)
- VII. **Ham Manyezit Cevherinin Glukonik Asit Çözeltilerinde Çözündürülmesinin Optimizasyonu**
Bayrak B., Laçin O., Saraç H.
Ulusal Kimya Mühendisliği Kongresi UKMK-11, Eskişehir, Turkey, 2 - 05 September 2014, (Full Text)
- VIII. **Manyezit cevherinin laktik asit çözeltilerindeki çözünürlük kinetiği**
BAKAN F., LAÇİN O., SARAÇ H., BAYRAK B.
Ulusal Kimya Mühendisliği Kongresi-UKMK6, Turkey, 7 - 10 September 2004, (Full Text)
- IX. **Dik silindir elektrotlarda doğal konveksiyonla meydana gelen eş zamanlı ısı ve kütle transferi**
KORKUT Ö., SARAÇ H., LAÇİN O., BAYRAK B.

- Ulusal Kimya Mühendisliği Kongresi-UKMK5, Turkey, 2 - 05 September 2002, (Full Text)
- X. **Süt pastörizasyonunda oluşan kirlenme dirençlerinin bazik asidik yıkama çözeltileri etkisi ile değişilerinin incelenmesi**
KORKUT Ö., SARAÇ H., LAÇİN O., BAYRAK B.
Ulusal Kimya Mühendisliği Kongresi-UKMK5, Turkey, 2 - 05 September 2002, (Full Text)
- XI. **Natural convection mass transfer in serial electrodes**
Bayrak B., Saraç H., Laçin O., Korkut Ö.
14th International congress of Chemical and Process Engineering-CHISA 2000, Praha, Czech Republic, 27 - 31 August 2000, (Full Text)
- XII. **The effect of bed height on mass transfer between fluid and immersed object in liquid fluidized bed of spherical inert particles**
Laçin O., Saraç H., Bayrak B., Korkut Ö.
14th International congress of Chemical and Process Engineering-CHISA 2000, Praha, Czech Republic, 27 - 31 August 2000, (Full Text)

Funded Projects

BAYRAK B., SARI KOTAN L., Project Supported by Higher Education Institutions, UÇUCU KÜL DESTEK MATERYALI VE SIFIR DEĞERLİKLİ NANO DEMİR İLE KOMPOZİT MALZEME SENTEZLENMESİ VE NİKELİN UZAKLAŞTIRILMASINDAKİ ETKİNLİĞİ, 2023 - 2024

BAYRAK B., ERSÖZ K., Project Supported by Higher Education Institutions, SİVİLÂŞTIRMA YÖNTEMİ İLE ALTERNATİF YAKIT ÜRETİMİNDE DESTEKLİ DEMİR VE NİKEL NANO BİMETALİK KATALİZÖRLERİN ETKİNLİĞİNİN İNCELENMESİ, 2023 - 2024

BAYRAK B., ERSÖZ K., Project Supported by Higher Education Institutions, SİLİŞ DUMANI DESTEKLİ SIFIR DEĞERLİKLİ NANO DEMİR KOMPOZİTİN SENTEZLENMESİ VE BİYOYAĞ ÜRETİMİ İÇİN KATALİZÖR OLARAK ETKİNLİĞİ, 2022 - 2023

BAYRAK B., Project Supported by Higher Education Institutions, UBYT nedeniyle alınacak destegin Daytam analizlerinde kullanılması, 2021 - 2022

KORKUT Ö., GEREZ E., KUŞLU Y., BAYRAK B., Project Supported by Higher Education Institutions, YABANI OLARAK YETİŞEN BİTKİLERDEN DOĞAL KAUÇUK ELDE EDİLMESİ, 2020 - 2022

BAYRAK B., Project Supported by Higher Education Institutions, NAR KABUĞU VE SIFIR DEĞERLİKLİ NANODEMİRDEN ELDE EDİLEN AKTİF KARBON YARDIMIYLA MALAHİT YEŞİLİNİN UZAKLAŞTIRILMASI, 2016 - 2018

Bayrak B., Biringen Loker G., TUBITAK Project, TARAL1007 107G208 Ulusal gıda kompozisyonunun belirlenmesi ve yaygın sürekli paylaşım sisteminin oluşturulması, 2008 - 2011

Bayrak B., Saraç H., Project Supported by Higher Education Institutions, Manyezit cevherinden elektrokimyasal yöntemle magnezyum metali üretimi, 2001 - 2003

Peer Reviews in Scientific Publications

Water, Air, & Soil Pollution, Journal Indexed in SCI-E, March 2023

BIOMASS CONVERSION AND BIOREFINERY, SCI Journal, November 2022

CHEMISTRY AND ECOLOGY, Journal Indexed in SCI-E, October 2022

BIOMASS CONVERSION AND BIOREFINERY, Journal Indexed in SCI-E, December 2021

BIOMASS CONVERSION AND BIOREFINERY, Journal Indexed in SCI-E, August 2021

INTERNATIONAL JOURNAL OF PHYTOREMEDIATION, SCI Journal, June 2021

Mühendislik Bilimleri ve Tasarım Dergisi, National Scientific Refreed Journal, March 2021

NİĞDE ÜNİVERSİTESİ MÜHENDİSLİK BİLİMLERİ DERGİSİ, National Scientific Refreed Journal, March 2021

ENVIRONMENTAL RESEARCH, SCI Journal, July 2020

INTERNATIONAL JOURNAL OF PHYTOREMEDIATION, SCI Journal, September 2019

AVRUPA BİLİM VE TEKNOLOJİ DERGİSİ, National Scientific Refreed Journal, June 2019

ENVIRONMENTAL RESEARCH, SCI Journal, June 2019

FOOD ANALYTICAL METHODS, SCI Journal, December 2017

AFYON KOCATEPE ÜNİVERSİTESİ FEN VE MÜHENDİSLİK BİLİMLERİ DERGİSİ, National Scientific Refreed Journal,

November 2017

ENVIRONMENTAL RESEARCH, SCI Journal, October 2017

SELÇUK ÜNİVERSİTESİ MÜHENDİSLİK, BİLİM VE TEKNOLOJİ DERGİSİ, National Scientific Refreed Journal, June 2017

Scientific Project Refereeing

Project Supported by Higher Education Institutions, BAP Research Project, March 2020

Metrics

Publication: 31

Citation (WoS): 400

Citation (Scopus): 438

H-Index (WoS): 9

H-Index (Scopus): 9