

Asst. Prof. İLKER ERDEM

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: D-7514-2012

ScopusID: 12645204000

Yoksis Researcher ID: 18512

Education Information

Doctorate, Izmir Institute Of Technology, Müh. Ve Fen Bil. Enst, Kimya Müh. Böl., Turkey 2002 - 2009

Postgraduate, Izmir Institute Of Technology, Müh. Ve Fen Bil. Enst, Biyoteknoloji Ve Biyomühendislik YI Programı, Turkey 1999 - 2002

Undergraduate, Ege University, Mühendislik Fak. , Gıda Müh. Böl., Turkey 1995 - 1999

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, (Investigation Of Effects Of Microstructural And Surface Properties Of Ultrafiltration / Nanofiltration Ceramic Membranes On Their Performance) Ultrafiltrasyon / Nanofiltrasyon Seramik Membranların Mikroyapısal Ve Yüzeysel Özelliklerinin Performansları Üzerine Etkilerinin İncelenmesi , İzmir Yüksek Teknoloji Enstitüsü, Müh. Ve Fen Bil. Enst., Kimya Müh. Böl., 2009

Postgraduate, (Preparation of Ultrafiltration / Microfiltration Ceramic Composite Membranes for Biotechnological Applications) Mikrofiltrasyon / Ultrafiltrasyon Seramik Kompozit Filtrelerin Biyoteknolojik Uygulamalar İçin Hazırlanması , İzmir Yüksek Teknoloji Enstitüsü, Müh. Ve Fen Bil. Enst., Biyoteknoloji Ve Biyomühendislik YI Programı, 2002

Research Areas

Chemical Engineering and Technology, Chemical Technologies, Membrane Technology, Metallurgical and Materials Engineering, Material science and engineering, Ceramic Materials, Nanomaterials, Food Engineering, Food Technology, Food Biotechnology, Processing Dairy And Related Products, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Abdullah Gul University, Mühendislik Fakültesi, Nanoteknoloji Mühendisliği, 2020 - Continues
Assistant Professor, Abdullah Gul University, Mühendislik Fakültesi, Malzeme Bilimi Ve Nanoteknoloji Mühendisliği Bölümü, 2018 - 2020

Assistant Professor, Abdullah Gul University, Mühendislik Fakültesi, Malzeme Bilimi Ve Nanoteknoloji Mühendisliği Bölümü, 2014 - 2018

Assistant Professor, Abdullah Gul University, Mühendislik Ve Doğa Bilimleri Fakültesi, Gıda Müh. Böl., 2012 - 2014

Lecturer PhD, Cumhuriyet Üniversitesi, Gemerek Myo, Gıda Teknolojisi, 2011 - 2012

Research Assistant, Izmir Institute Of Technology, Müh. Ve Fen Bil. Enst., Kimya Müh. Böl., 2002 - 2009

Research Assistant, Izmir Institute Of Technology, Müh. Ve Fen Bil. Enst., Biyoteknoloji Ve Biyomühendislik Abd, 1999 - 2002

Academic and Administrative Experience

AGÜ Akademi Sınav Merkezi Koordinatörlüğü, Abdullah Gul University, Mühendislik Fakültesi, Nanoteknoloji Mühendisliği, 2021 - Continues

AGÜ Akademi Birim Kalite Komisyonu (Üye), Abdullah Gul University, Mühendislik Fakültesi, Nanoteknoloji Mühendisliği, 2021 - Continues

Academic Director (AGU MERLAB), Abdullah Gul University, Mühendislik Fakültesi, Nanoteknoloji Mühendisliği, 2019 - Continues

Deputy Head of Department, Abdullah Gul University, Mühendislik Fakültesi, Mühendislik Bilimleri , 2018 - 2021

Coordinator of The Rectorate, Abdullah Gul University, 2017 - 2019

Abdullah Gül Üniversitesi, Tto, 2018 - 2018

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Modification of surface charge characteristics for unsupported nanostructured titania-zirconia UF/NF membrane top layers with calcination temperature**
Erdem İ., Çiftçioğlu M.
JOURNAL OF THE AUSTRALIAN CERAMIC SOCIETY, vol.56, pp.203-215, 2020 (SCI-Expanded)
- II. **Influence of Calcination Temperature on Microstructure and Surface Charge of Membrane Top Layers Composed of Zirconia Nanoparticles**
ERDEM İ., Ciftcioglu M.
JOURNAL OF THE AUSTRALIAN CERAMIC SOCIETY, vol.51, no.1, pp.134-138, 2015 (SCI-Expanded)
- III. **INVESTIGATION OF THE SURFACE PROPERTIES OF STAPHYLOCOCCUS EPIDERMIDIS STRAINS ISOLATED FROM BIOMATERIALS**
Sudagidan M., Erdem I., Çavuşoğlu C., Ciftcioglu M.
MIKROBİYOLOJİ BULTENİ, vol.44, pp.93-103, 2010 (SCI-Expanded)
- IV. **Separation of whey components by using ceramic composite membranes**
Erdem I., CIFTCIOGLU M., HARSA E.
DESALINATION, vol.189, pp.87-91, 2006 (SCI-Expanded)
- V. **Preparation of ceramic composite membranes for protein separation**
Erdem I., Ciftcioglu M., Harsa S.
EURO CERAMICS VIII, PTS 1-3, pp.2251-2254, 2004 (SCI-Expanded)

Articles Published in Other Journals

- I. **Green Synthesis of Silver Nanoparticles Using Walnut Shell Powder and Cynara sp. and their Antibacterial Activities**
Erdem İ., Çakır Ş.
Haceteppe Journal of Biology and Chemistry, vol.50, no.4, pp.335-347, 2022 (Peer-Reviewed Journal)
- II. **The surface charge of unsupported nano-structured titania ceramic membrane top layers with varying calcination temperatures**
Erdem İ., Çiftçioğlu M.
Journal of Chemical Technology and Metallurgy, vol.54, no.1, pp.145-148, 2019 (Scopus)
- III. **Preparation of Photocatalytic Materials for Water Clarification via Organic Waste**
ERDEM İ., BALTACIOĞLU M. F., BİLGİ M. F.
Journal of the Turkish Chemical Society, Section B: Chemical Engineering, vol.1, no.1, pp.81-90, 2017 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **Preparation of Multifunctional Carbon-Based Supported Nano Titania Photocatalyst for Water Clarification**
Erdem İ.
4th International Conference on Catalysis and Chemical Engineering, California, United States Of America, 24 - 26 February 2020, pp.80
- II. **Preparation of Photocatalytic Titania on Organic Support via Sol-Gel Method for Water Clarification**
Erdem İ.
20th International Sol-Gel Conference, Sankt-Peterburg, Russia, 25 - 30 August 2019, pp.222
- III. **PREPARATION OF PHOTOCATALYTICAL MATERIALS FOR WATER CLARIFICATION USING ORGANIC WASTE**
Erdem İ.
4th International Congress on Environmental Researches and Technology - ICERAT'18, Athens, Greece, 14 - 18 November 2018, pp.19
- IV. **Green Synthesis of Silver Nanoparticles using Plant Extracts and Evaluation of their Antimicrobial Activity**
ERDEM İ., ÇAKIR Ş.
3rd International Conference on Material Science and Technology (IMSTEC-2018), Nevşehir, Turkey, 17 - 18 September 2018, pp.319-322
- V. **PREPARATION OF CARBON-SUPPORTED NANO TITANIUM DIOXIDE PARTICLES FOR PHOTOCATALYTICAL APPLICATIONS**
ERDEM İ.
The Internatinonal Conference on Materials Science, Mechanical and Automotive Engineerings and Technology (IMSMATEC'18), İzmir, Turkey, 10 - 12 April 2018, pp.495
- VI. **The Surface Charge of Unsupported Nano-Structured Titania Ceramic Membrane Top Layers with Varying Calcination Temperatures**
ERDEM İ., Çiftçioğlu M.
2nd IMSTEC (International Conference on Material Science and Technology, Nevşehir, Turkey, 11 - 13 October 2017, pp.273-275
- VII. **Digestibility Profile and Pasting Properties of Different RS Sources**
severcan ş., ERDEM İ., KAHRAMAN K.
International Conference on Agriculture, Forest, Food Sciences and Technologies, 15 - 17 May 2017
- VIII. **Sol-gel Applications for Ceramic Membrane Preparation**
Erdem I.
6th Congress and Exhibition on International Advances in Applied Physics and Materials Science (APMAS), İstanbul, Turkey, 1 - 03 June 2016, vol.1809

- IX. Organik Atıklar Kullanılarak Su Arıtımına Yönelik Fotokatalitik Malzeme Hazırlanması**
ERDEM İ.
12. Ulusal Kimya Mühendisliği Kongresi, İzmir, Turkey, 23 - 26 August 2016, pp.1085-1090
- X. Sol-Gel Applications for Ceramic Membrane Preparation**
Erdem İ.
6th International Advances in Applied Physics and Materials Science Congress & Exhibition, İstanbul, Turkey, 1 - 03 June 2016, pp.17
- XI. Detection of Aflatoxin Producing Aspergillus Species in Turkish Red Peppers by Using PCR Based Methods**
Kesmen Z., Güllüce A., ERDEM İ., Yetiman A., Etgü H., Yetim H.
4th International Congress on Food and Nutrition / 3rd SAFE Consortium International Congress on Food Safety, İstanbul, Turkey, 12 - 14 October 2011, pp.261
- XII. Identification and Quantification of Mycotoxigenic Fungi in Foods: A Review of Real-Time PCR Applications in Food Safety**
Kesmen Z., Güllüce A., ERDEM İ., Yetiman A., Yetim H.
4th International Congress on Food and Nutrition / 3rd SAFE Consortium International Congress on Food Safety, İstanbul, Turkey, 12 - 14 October 2011, pp.260
- XIII. SOL JEL YÖNTEMİNDE KULLANILAN KATKILARIN SOLÜN VE HAZIRLANAN SERAMİK KOMPOZİT MEMBRANIN ÖZELLİKLERİNE ETKİLERİ**
ERDEM İ.
1. ULUSAL NANOTEKNOLOJİ KONGRESİ, İstanbul, Turkey, 17 - 18 June 2011
- XIV. The Effects of Additives used in Sol-Gel Method on Properties of Sol and Prepared Ceramic Composite Membrane**
ERDEM İ., Çiftçioğlu M.
1st National Nanotechnology Congress, İstanbul, Turkey, 17 - 18 June 2011, pp.76-79
- XV. BİTKİSEL ÇAYLARIN ANTİOKSİDAN AKTİVİTELERİNİN KIYASLANMASI**
ERDEM İ., Potur F., Esat M., ALTIOK E.
GIDA KONGRESİ 2005, İzmir, Turkey, 19 - 21 April 2005
- XVI. Comparison of Antioxidant Capacities of Herbal Teas**
ERDEM İ., Pour F., Esat M., Altıok E.
Food Congress 2005, İzmir, Turkey, 19 - 21 April 2005, pp.4
- XVII. Cholesterol Analysis by HPLC in Egg Yolks from Turkish Market**
ERDEM İ., Çetin A. E., Büyükkileci A. O., Ertürk H.
First International Symposium on Recent Advances in Food Analysis, Prag, Czech Republic, 5 - 07 October 2003, pp.51
- XVIII. SERAMİK KOMPOZİT MEMBRANLARIN BİYOTEKNOLOJİK UYGULAMALAR İÇİN HAZIRLANMASI**
ERDEM İ., ÇİFTÇİOĞLU M., HARSA H. Ş.
5. ULUSAL KİMYA MÜHENDİSLİĞİ KONGRESİ, Ankara, Turkey, 2 - 05 September 2002
- XIX. Preparation of Ceramic Composite Membranes for Biotechnological Applications**
ERDEM İ., Çiftçioğlu M., Harsa Ş.
5th National Congress of Chemical Engineering (UKMK-5), Ankara, Turkey, 2 - 05 September 2002, pp.1

Supported Projects

ERDEM İ., Project Supported by Other Private Institutions, Hall Efektli Uydu İtki Sistemi Geliştirme Projesi Ön Yapılabilirlik Etüdü, 2014 - 2015

İŞOĞLU İ. A., ERDEM İ., EU Framework Program Project, BIO-DENT: New Applications and Course Materials for Prosthetic Dentistry, Implant Dentistry and Biomedical Engineers, 2012 - 2015

ERDEM İ., Other International Funding Programs, Developing Method for Production of Kit for Determination of Components from Vegetal Sources used in Foods for Adulteration, 2011 - 2014

ERDEM İ., Other International Funding Programs, Design of an enzymatic membrane reactor and study of the operating parameters for treatment of wastewaters containing phenolic compounds, 2007 - 2008

Memberships / Tasks in Scientific Organizations

International Sol-Gel Society, Member, 2015 - Continues

Scientific Refereeing

INTERNATIONAL JOURNAL OF SECONDARY METABOLITE, National Scientific Refreed Journal, July 2023

Selcuk Dental Journal, National Scientific Refreed Journal, February 2023

YEKARUM, National Scientific Refreed Journal, December 2022

Turkish Journal of Science & Technology, National Scientific Refreed Journal, November 2022

SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES, Journal Indexed in ESCI, January 2022

TURKISH JOURNAL OF CHEMISTRY, Journal Indexed in SCI-E, July 2021

JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, Journal Indexed in SCI-E, July 2020

Politeknik Dergisi, Journal Indexed in ESCI, November 2019

JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, Journal Indexed in SCI-E, April 2019

13. Ne Üretelim? Etkinlikleri ve Proje Yarışması, Other Journals, August 2016

JOURNAL OF FOOD PROCESSING AND PRESERVATION, Journal Indexed in SCI-E, January 2009

Metrics

Publication: 29

Citation (WoS): 42

Citation (Scopus): 45

H-Index (WoS): 4

H-Index (Scopus): 3

Congress and Symposium Activities

4th International Conference on Chemical Engineering and Catalysis, Attendee, California, United States Of America, 2020

20th International Sol-Gel Conference, Attendee, Sankt-Peterburg, Russia, 2019

4th International Congress on Environmental Research and Technology (ICERAT-2018), Session Moderator, Athens, Greece, 2018

3rd International Conference on Material Science and Technology (IMSTEC-2018), Session Moderator, Nevşehir, Turkey, 2018

2nd IMSTEC (International Conference on Material Science and Technology), Attendee, Nevşehir, Turkey, 2017

AEROEX 2016 Uluslararası Uzay ve Havacılık Teknolojileri Üzerine Ar-Ge Projeleri Sergisi, Attendee, Kayseri, Turkey, 2016

Horizon 2020 Space Info Day, Attendee, Praha, Czech Republic, 2016

Ufuk 2020'de Türkiye - Uzay Teknolojileri Alanı Tematik Eğitimi, Attendee, İstanbul, Turkey, 2016

12. Ulusal Kimya Mühendisliği Kongresi (12. UKMK), Attendee, İzmir, Turkey, 2016

6th International Advances in Applied Physics and Materials Science Congress & Exhibition, Invited Speaker, İstanbul, Turkey, 2016

6. Uluslararası Uygulamalı Fizik ve Malzeme Bilimlerindeki Gelişmeler Kongre ve Sergisi (6th APMAS), Attendee, İstanbul,

Turkey, 2016

Invited Talks

IVth International Conference on Catalysis and Chemical Engineering (CCE-2020), Conference, United Scientific Group, United States Of America, February 2020

6th International Advances in Applied Physics and Materials Science Congress & Exhibition (6th APMAS), Conference, Gebze Teknik Üniversitesi, Turkey, June 2016

Scholarships

Erasmus Student Exchange Program, European Commission, 2007 - 2008