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Education Information

Doctorate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Turkey 2013 - 2017

Postgraduate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Turkey 2011 - 2013

Research Areas

Environmental Engineering

Academic Titles / Tasks

Associate Professor, Yildiz Technical University, Faculty Of Civil Engineering, Department Of Environmental Engineering, 2020 - Continues

Research Assistant, Yildiz Technical University, Faculty Of Civil Engineering, 2011 - 2017

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Integration of electrocoagulation and solar energy for sustainable wastewater treatment: a thermodynamic and life cycle assessment study**
ÇETİNKAYA A. Y.
Environmental Monitoring and Assessment, vol.197, no.2, 2025 (SCI-Expanded)
- II. **Comparative Life Cycle Assessment and Exergy Analysis of Coal- and Natural Gas-Based Ammonia Production**
ÇETİNKAYA A. Y., Bilgili L., KUZU S. L., Yılmaz F.
Chemical Engineering and Technology, vol.46, no.11, pp.2431-2441, 2023 (SCI-Expanded)
- III. **Application of life cycle assessment of system solution scenarios for municipal solid waste management in Turkey**
Çetinkaya A. Y., Bilgili L.
JOURNAL OF MATERIAL CYCLES AND WASTE MANAGEMENT, vol.1, pp.1-10, 2022 (SCI-Expanded)
- IV. **Application fuzzy DEMATEL methodology to investigate some technical parameters of biochemical methane potential (BMP) test produced vegetable waste anaerobic biogas**
Bashan V., ÇETİNKAYA A. Y.
ENVIRONMENTAL MONITORING AND ASSESSMENT, vol.194, no.9, 2022 (SCI-Expanded)
- V. **Iron-Copper Bimetallic Nanoparticle for the Removal of Disinfection By-products: Optimization,**

Kinetic Study, and Life Cycle Assessment

Altuntaş K., El Hadki A., BİLGİLİ L., KUZU S. L., ÇETİNKAYA A. Y., DEBİK E.
WATER AIR AND SOIL POLLUTION, vol.233, no.7, 2022 (SCI-Expanded)

- VI. **Influential Publications and Bibliometric Approach to Heavy Metal Removals for Water**
BAŞHAN V., ÇETİNKAYA A. Y.
WATER AIR AND SOIL POLLUTION, vol.233, no.7, 2022 (SCI-Expanded)
- VII. **Analysis of the effects of domestic waste disposal methods on mucilage with life cycle assessment**
Çetinkaya A. Y., Bilgili L., Sarı M.
MARINE POLLUTION BULLETIN THE INTERNATIONAL JOURNAL FOR MARINE ENVIRONMENTALISTS, SCIENTISTS,
ENGINEERS, ADMINISTRATORS, POLITICIANS AND LAWYERS, vol.180, pp.113813-113830, 2022 (SCI-Expanded)
- VIII. **A Synergistic Assessment of Bio-kinetics and Life Cycle Environmental Impacts of Different Agricultural Biomass Sources in Turkey**
YETİLMEZSOY K., ÇETİNKAYA A. Y., Bilgili L.
Waste and Biomass Valorization, vol.13, no.5, pp.2651-2671, 2022 (SCI-Expanded)
- IX. **Development of an MFC-biosensor for determination of Pb²⁺: an assessment from computational fluid dynamics and life cycle assessment perspectives**
Cetinkaya A. Y., KUZU S. L., Bilgili L.
ENVIRONMENTAL MONITORING AND ASSESSMENT, vol.194, no.4, 2022 (SCI-Expanded)
- X. **Removal of Cu(II) ions from aqueous solutions using membrane system and membrane capacitive deionization (MCDI) technology**
Cetinkaya A. Y., BİLGİLİ L.
ENVIRONMENTAL MONITORING AND ASSESSMENT, vol.193, no.8, 2021 (SCI-Expanded)
- XI. **Medical waste management in a mid-populated Turkish city and development of medical waste prediction model**
Çetinkaya A. Y., KUZU S. L., DEMİR A.
ENVIRONMENT DEVELOPMENT AND SUSTAINABILITY, vol.22, no.7, pp.6233-6244, 2020 (SCI-Expanded)
- XII. **Life cycle assessment of environmental effects and nitrate removal for membrane capacitive deionization technology**
ÇETİNKAYA A. Y.
ENVIRONMENTAL MONITORING AND ASSESSMENT, vol.192, no.8, 2020 (SCI-Expanded)
- XIII. **Evaluation of railway versus highway emissions using LCA approach between the two cities of Middle Anatolia**
Bilgili L., KUZU S. L., Çetinkaya A. Y., Kumar P.
SUSTAINABLE CITIES AND SOCIETY, vol.49, 2019 (SCI-Expanded)
- XIV. **Climatological evaluation in a Central Anatolian city and indirect effects of climatological variation on air quality**
KUZU S. L., Cetinkaya A. Y.
Air Quality, Atmosphere and Health, vol.12, no.7, pp.847-854, 2019 (SCI-Expanded)
- XV. **Life Cycle Comparison of Membrane Capacitive Deionization and Reverse Osmosis Membrane for Textile Wastewater Treatment**
Cetinkaya A. Y., Bilgili L.
WATER AIR AND SOIL POLLUTION, vol.230, no.7, 2019 (SCI-Expanded)
- XVI. **Effect of operating parameters on boron removal using a combined system**
Cetinkaya A. Y.
Materials Research Express, vol.6, no.7, 2019 (SCI-Expanded)
- XVII. **Microbial fuel cell-based biosensor for toxicity testing of Cr⁶⁺**
Çetinkaya A. Y., ÖZKAYA B.
International Journal of Global Warming, vol.17, no.4, pp.347-356, 2019 (SCI-Expanded)
- XVIII. **Performance and mechanism of direct As(III) removal from aqueous solution using low-pressure graphene oxide-coated membrane**
Cetinkaya A. Y.

- Chemical Papers, vol.72, no.9, pp.2363-2373, 2018 (SCI-Expanded)
- XXIX. **Life cycle assessment and greenhouse gas emission evaluation from aksaray solid waste disposal facility**
Çetinkaya A. Y., Bilgili L., KUZU S. L.
Air Quality, Atmosphere and Health, vol.11, no.5, pp.549-558, 2018 (SCI-Expanded)
- XX. **Phenol removal from synthetic solution using low pressure membranes coated with graphene oxide and carbon**
Cetinkaya A. Y., ÖZDEMİR O. K.
CHEMICAL PAPERS, vol.72, no.2, pp.327-335, 2018 (SCI-Expanded)
- XXI. **Electricity Production and Characterization of High-Strength Industrial Wastewaters in Microbial Fuel Cell**
CETINKAYA A. Y., ÖZDEMİR O. K., DEMİR A., ÖZKAYA B.
APPLIED BIOCHEMISTRY AND BIOTECHNOLOGY, vol.182, no.2, pp.468-481, 2017 (SCI-Expanded)
- XXII. **DISPERSION MODELLING OF VOLATILE ORGANIC COMPOUND EMISSIONS FROM ATAKOY WASTEWATER TREATMENT PLANT IN ISTANBUL**
ÇETİNKAYA A. Y., KUZU S. L.
JOURNAL OF ENVIRONMENTAL PROTECTION AND ECOLOGY, vol.18, no.4, pp.1337-1345, 2017 (SCI-Expanded)
- XXIII. **Simultaneous production of bioelectricity and treatment of membrane concentrate in multitube microbial fuel cell**
KÖROĞLU E. O., Cetinkaya A. Y., ÖZKAYA B., DEMİR A.
JOURNAL OF BIOSCIENCE AND BIOENGINEERING, vol.122, no.5, pp.594-600, 2016 (SCI-Expanded)
- XXIV. **The production of electricity from dual-chambered microbial fuel cell fueled by old age leachate**
CETINKAYA A. Y., ÖZKAYA B., Taskan E., KARADAĞ D., ÇAKMAKCI M.
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, vol.38, no.11, pp.1544-1552, 2016 (SCI-Expanded)
- XXV. **Microbial electrochemical technologies with the perspective of harnessing bioenergy: Maneuvering towards upscaling**
Butti S. K., Velvizhi G., Sulonen M. L. K., Haavisto J. M., KÖROĞLU E. O., Cetinkaya A. Y., Singh S., Arya D., Modestra J. A., Krishna K. V., et al.
RENEWABLE & SUSTAINABLE ENERGY REVIEWS, vol.53, pp.462-476, 2016 (SCI-Expanded)
- XXVI. **Electricity generation from organic fraction of municipal solid wastes in tubular microbial fuel cell**
Karlulah A., KÖROĞLU E. O., Manav N., Cetinkaya A. Y., ÖZKAYA B.
Separation and Purification Technology, vol.156, pp.502-511, 2015 (SCI-Expanded)
- XXVII. **The development of catalytic performance by coating Pt-Ni on CMI7000 membrane as a cathode of a microbial fuel cell**
Cetinkaya A. Y., ÖZDEMİR O. K., KÖROĞLU E. O., Hasimoglu A., ÖZKAYA B.
BIORESOURTE TECHNOLOGY, vol.195, pp.188-193, 2015 (SCI-Expanded)
- XXVIII. **Electricity production by a microbial fuel cell fueled by brewery wastewater and the factors in its membrane deterioration**
Cetinkaya A. Y., Köroğlu E. O., Manav Demir N., Baysoy D. Y., Ozkaya B., Çakmakçı M.
Cuihua Xuebao/Chinese Journal of Catalysis, vol.36, no.7, pp.1068-1076, 2015 (SCI-Expanded)
- XXIX. **Novel design of a multitube microbial fuel cell ((UMFC)-F-2) for energy recovery and treatment of membrane concentrates**
KÖROĞLU E. O., BAYSOY D. Y., CETINKAYA A. Y., ÖZKAYA B., ÇAKMAKCI M.
BIOMASS & BIOENERGY, vol.69, pp.58-65, 2014 (SCI-Expanded)
- XXX. **Change of surface and structure properties of cation exchange membrane in a microbial fuel cell**
ÖZKAYA B., DENKTAŞ C., ÇETİNKAYA A. Y., ÇAKMAKCI M., KARADAĞ D., ŞAHİNKAYA E.
INTERNATIONAL JOURNAL OF GLOBAL WARMING, vol.6, pp.222-233, 2014 (SCI-Expanded)
- XXXI. **Electricity generation from young landfill leachate in a microbial fuel cell with a new electrode material**
Ozkaya B., Cetinkaya A. Y., ÇAKMAKCI M., KARADAĞ D., ŞAHİNKAYA E.

Articles Published in Other Journals

- I. **Life cycle assessment and thermodynamic performance of biomass-based combined cogeneration**
ÇETİNKAYA A. Y., Yılmaz F., Bilgili L.
Engineering Research Express, vol.6, no.4, 2024 (ESCI)
- II. **Life cycle assessment of energy production from municipal solid waste: İstanbul case**
ÇETİNKAYA A. Y., Bilgili L.
Environmental Research and Technology, vol.7, no.4, pp.537-546, 2024 (Scopus)
- III. **Performance of Chitosan/Carbon Nanotube-Coated Ultrafiltration Membranes for Natural Organic Matter Removal from Drinking Water**
ZENGİN İ. H., ÇAKMAKCI M., BÜYÜKBÜBEROĞLU F. B. Y., KARADAĞ D., DENKTAŞ C., AVCIATA O., ÇETİNKAYA A. Y.
JOURNAL OF ANATOLIAN ENVIRONMENTAL AND ANIMAL SCIENCES, vol.9, no.2, pp.257-268, 2024 (Peer-Reviewed Journal)
- IV. **Environmental impact assessment of earthquake-generated construction and demolition waste management: a life cycle perspective in Turkey**
Bilgili L., ÇETİNKAYA A. Y.
Environment Systems and Decisions, vol.44, no.2, pp.424-432, 2024 (Scopus)
- V. **Comparative Life Cycle Assessment of Container Cities and Tent Cities for Earthquake Victims: Environmental Impacts and Sustainability Considerations**
ÇETİNKAYA A. Y., Bilgili L.
Circular Economy and Sustainability, vol.4, no.1, pp.149-161, 2024 (Scopus)
- VI. **Treatment of slaughterhouse industry wastewater with ultrafiltration membrane and evaluation with life cycle analysis**
Çetinkaya A. Y., Bilgili L.
Environmental Research & Technology, vol.5, no.3, pp.197-201, 2022 (Peer-Reviewed Journal)
- VII. **Life Cycle Comparison of Passenger Air and Rail Transportation**
BİLGİLİ L., ÇETİNKAYA A. Y., KUZU S. L.
Environmental Research & Technology, vol.5, no.1, pp.44-49, 2022 (Scopus)
- VIII. **Bio-electroactive fuel cells and their applications**
Çetinkaya A. Y., Kuzu S. L., Demir A.
Environmental Research and Technology, vol.3, no.4, pp.182-186, 2020 (Peer-Reviewed Journal)
- IX. **Investigation of Biomethane Potential of Dairy Industry Wastewater**
Cetinkaya A. Y.
JOURNAL OF POLYTECHNIC-POLITEKNİK DERGISI, vol.21, no.2, pp.457-460, 2018 (ESCI)
- X. **EFFECT OF PRETREATMENT ON ELECTRICITY GENERATION FROM MUNICIPAL SOLID WASTE IN MICROBIAL FUEL CELL**
Karluvalı A., Cetinkaya A. Y., KÖROĞLU E. O., ÖZKAYA B.
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES-SIGMA MUHENDISLIK VE FEN BİLİMLERİ DERGISI, vol.33, no.4, pp.479-488, 2015 (ESCI)
- XI. **Microbial Fuel Cells for Energy Recovery from Waste**
KÖROĞLU E. O., ÖZKAYA B., ÇETİNKAYA A. Y.
International Journal of Energy Science, vol.4, no.1, pp.28, 2014 (Non Peer-Reviewed Journal)

Books

- I. **Investigation of EU Environmental Policies from the Past to the Future in the LCA Perspective**
BİLGİLİ L., ÇETİNKAYA A. Y., KUZU S. L.

in: The Future of the European Union Integration: A Failure or A Success? Future Expectations, Altuğ Günar, Burak Darıcı, Editor, Peter Lang, pp.95-106, 2020

II. Investigation of EU Environmental Policies from the Past to the Future in the LCAPerspective
ÇETİNKAYA A. Y., BİLGİLİ L., KUZU S. L.

in: Future of the European Union Integration A Failure or A Success? Future Expectations, , Editor, Peterlang, pp.95-106, 2020

Papers Published in Refereed Scientific Meetings

- I. **Life cycle assessment of three municipal solid waste management scenarios in İstanbul**
Çetinkaya A. Y., Bilgili L.
6th EurAsia Waste Management Symposium 2022, İstanbul, Turkey, 24 October - 26 November 2022, pp.1-3
- II. **Eco-Indicators for Municipal Waste Management of Istanbul: A Historical Perspective**
Özkaya B., Demir A., Çetinkaya A. Y., Bilgili L., Karluvalı A.
IRRC Waste-to-Energy, Vienna, Austria, 14 - 15 October 2019, pp.143-152
- III. **Energy, Environment and Sustainable Development**
ÇETİNKAYA A. Y.
International Conference on Energy and Sustainable Built Development, 19 - 20 June 2019
- IV. **Production of Electricity from methane by microbial fuel cell system**
ÇETİNKAYA A. Y.
4th International Hydrogen Technologies Congress, 20 - 23 June 2019
- V. **Treatment of Slaughterhouse Industry Wastewater by Microfiltration and Ultrafiltration Membranes and Use as Agricultural Irrigation**
ÇETİNKAYA A. Y.
2nd INTERNATIONAL CONFERENCE ON LIFE AND ENGINEERING SCIENCES, 27 - 29 June 2019
- VI. **Araba Yıkama Atıksularının Tekrar kullanılmasında Ters Osmoz Membran Performansının Değerlendirilmesi**
ÇETİNKAYA A. Y.
4th Uluslararası Bilimsel Araştırmalar Kongresi, 14 - 17 February 2019
- VII. **Environment Impact of Waste Management Using Life Cycle Assesment in ISTANBUL**
ÇETİNKAYA A. Y.
İCELİS, 26 - 28 May 2018
- VIII. **Mikrobiyal Yakıt Hücresi İle Elektrik Enerjisi Üretimi ve Biyosensör Olarak Kullanımı**
ÇETİNKAYA A. Y.
Eurasian Conference on Biological and Chemical Sciences, 26 - 27 April 2018
- IX. **Çevre Mühendisliğinin Tarihçesi ve Gelişimi**
ÇETİNKAYA A. Y.
1. International Symposium on Innoative Approaches in Scientific Studies, 11 - 13 April 2018
- X. **PRODUCTION OF SUSTAINABLE ENERGY VIA INTEGRATION OF DIRECT BOROHYDRIDE**
ÇETİNKAYA A. Y., ÖZDEMİR O. K., ÖZKAYA B.
2nd International Energy Engineering Conference, Gaziantep, Turkey, 12 - 13 October 2017
- XI. **Historical Development in Microbial Fuel Cell Design and Performance in Yildiz Technical University**
KÖROĞLU E. O., ÇETİNKAYA A. Y., KARLUVALI A., ÖZKAYA B., DEMİR A.
International Workshop on 'Microbial Electrochemical Technologies for Sustainability: Fuels, Chemicals, Remediation', HAYDARABAD, India, 28 February 2017
- XII. **Different anode materials for microbial fuel cells**
ÇETİNKAYA A. Y., KÖROĞLU E. O., ÖZKAYA B., DEMİR A.
International Workshop on 'Microbial Electrochemical Technologies for Sustainability: Fuels, Chemicals, Remediation', HAYDARABAD, India, 28 February 2017
- XIII. **Different Anode Materials for Microbial Fuel Cell**

ÇETİNKAYA A. Y., KÖROĞLU E. O., ÖZKAYA B., DEMİR A.

international Workshop on 'Microbial Electrochemical Technologies for Sustainability, 28 February 2017

- XIV. **Air Cathode Microbial Fuel Cells with Pt-Co Coated CMI7000 Membrane as the Cathodic Catalyst**
ÇETİNKAYA A. Y., ÖZDEMİR O. K., ÖZKAYA B., Sulonen M., Puhakka J.

General Meeting of the International Society for Microbial Electrochemistry and Technology, 3 - 06 December 2016

- XV. **Katot Yüzeyi Pt Ni Katalizörle Kaplanmış CMI 7000 Membranının Mikrobiyal Yakıt Hücresindeki Performansının Değerlendirilmesi**

ÇETİNKAYA A. Y., ÖZDEMİR O. K., KÖROĞLU E. O., ÖZKAYA B.

4. ULUSAL MEMBRAN TEKNOLOJİLERİ VE UYGULAMALARI SEMPOZYUMU, Turkey, 7 - 09 October 2015

- XVI. **The Change Of Surface And Structure Properties Of Cation Exchange Membrane In A Microbial Fuel Cell**

Çetinkaya A. Y., Denктаş C., Özkaya B., Çakmakçı M., Şahinkaya E., Karadağ D.

International Conference On Recycling And Reuse , İstanbul, Turkey, 4 - 06 June 2012, pp.56

- XVII. **Yeni Geliştirilen Çapraz Akışlı Çoklu Tüp Mikrobiyal Yakıt Hücresi İle Evsel Atıksu Akımından Elektrik Enerjisi Üretimi**

ÖZKAYA B., ÇETİNKAYA A. Y., KÖROĞLU E. O., ÇAKMAKÇI M., KARADAĞ D.

YTÜ II.AR-GE PROJE PAZARI-ENERJİ VE ÇEVRE TEKNOLOJİLERİ, Turkey, 14 May 2012

Supported Projects

Çetinkaya A. Y., Satıcı S. A., H2020 Project, Empower Students as the agents of change, 2023 - 2025

KARLUVALI A., TAHERI MOUSAVI S. M., ÇETİNKAYA A. Y., ÖZKAYA B., Project Supported by Higher Education Institutions, GÜNEŞ ENERJİLİ DAMITMA SİSTEMİNDE FAZ DEĞİŞİM MALZEMESİNİN ETKİSİ, 2022 - 2023

Kuzu S. L., Çetinkaya A. Y., TUBITAK Project, Yeni Geliştirilen Entegre Kapasitif Karışım ve Mikrobiyal Yakıt Hücresi Sistemi ile Tuzluluk Gradyanlarından ve Atıksudan Elektrik Enerjisi Üretimi, 2019 - 2020

Çetinkaya A. Y., TUBITAK Project, Mikro Ölçekli Mikrobiyal Yakıt Hücresinin Toksikite Sensörü Olarak Kullanımının Değerlendirilmesi, 2019 - 2020

Özkaya B., EU Supported Other Project, Düşük Maliyetli ve Verimli Mikrobiyal Yakıt Hücresi MYH Malzemeleri ile Atıksulardan Biyoelektrik Üretimi, 2014 - 2017

ÖZKAYA B., ÇETİNKAYA A. Y., Project Supported by Higher Education Institutions, Mikrobiyal Yakıt Hücresinde Biyobozunur Atıklardan Elektrik Enerjisi Üretimi, 2013 - 2015

ÖZKAYA B., ÇETİNKAYA A. Y., Project Supported by Higher Education Institutions, Mikrobiyal Yakıt Hücresi Teknolojisi İle Bira Endüstrisi Atıksularından Elektrik Enerjisi Üretimi, 2012 - 2014

Karadağ D., TUBITAK Project, Yüzeyi Kaplanmış Ultrafiltrasyon Membranları ile İçme Suyu Kaynaklarındaki Organik Maddelerin Arıtılabilirliği, 2011 - 2013

Metrics

Publication: 62

H-Index (WoS): 14

H-Index (Scopus): 15

Non Academic Experience

CSIR-Indian Institute of Chemical Technology, Araştırmacı

Tampere University of Technology, Araştırmacı