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Araştırma Alanları

Çevre Mühendisliği

Akademik Unvanlar / Görevler

Dr. Öğr. Üyesi, Yıldız Teknik Üniversitesi, İnşaat Fakültesi, Çevre Müh.Bölümü, 2023 - Devam Ediyor

Verdiği Dersler

Life Cycle Assessment, Doktora, 2023 - 2024

Bilgisayar Destekli Teknik Resim, Lisans, 2020 - 2021

SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- Comparative modeling and assessment of renewable hydrogen production and utilization in remote communities**
AYDIN M. İ., DİNCER İ.
Computers and Chemical Engineering, cilt.194, 2025 (SCI-Expanded)
- Development of a UV-based photocatalytic electro dialysis reactor for ion separation and humic acid removal**
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- New paradigms in sustainable energy systems with hydrogen**
DİNCER İ., AYDIN M. İ.
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- A life cycle impact analysis of various hydrogen production methods for public transportation sector**
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- A photoelectrochemical reactor for ion separation and hydrogen production**

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- VI. **Optimal performance of electro dialysis process for the recovery of acid wastes in wastewater: Practicing circular economy in aluminum finishing industry**
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- VII. **An assessment study on various clean hydrogen production methods**
Aydin M. İ., Dincer I.
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- VIII. **Photocatalytic, self-cleaning and antibacterial properties of Cu(II) doped TiO₂**
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- IX. **Desalination and detoxification of textile wastewater by novel photocatalytic electrolysis membrane reactor for ecosafe hydroponic farming**
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- X. **Development of Oshawa hydrogen hub in Canada: A case study**
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- XI. **A comparative review on clean hydrogen production from wastewaters**
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- XII. **Application of electro dialysis membrane process to recovery sulfuric acid and wastewater in the chalcopryrite mining industry**
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- XIII. **Desalination and fate of nutrient transport in domestic wastewater using electro dialysis membrane process**
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- XIV. **Combinations of two-phase anaerobic biological treatment process with for treatment of industrial dye manufacturing wastewater**
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- XV. **Application of an electro dialysis process to recover nitric acid from aluminum finishing industry waste**
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- XVI. **Chloride or sulfate? Consequences for ozonation of textile wastewater**
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- XVII. **Comparison of ozonation and coagulation decolorization methods in real textile wastewater**
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- XVIII. **A multifaceted aggregation and toxicity assessment study of sol-gel-based TiO₂ nanoparticles during textile wastewater treatment**
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- XIX. **Functionalization of cotton fabric with nanosized TiO₂ coating for self-cleaning and antibacterial property enhancement**
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XXI. An experimental study on manganese(II) removal with manganese dioxide recycling

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Kitaplar

I. Ion-exchange membranes in electrolysis process

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I. An Electrolyser Design for Membraneless Electrolysis by Using 3D Printing

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II. Water Footprint of Renewable Hydrogen Production Technologies

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III. Life Cycle Impact Analysis of Various Hydrogen Production Methods for Public Transportation Sector

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V. The Treatment of Dye Industry Wastewater by Solar Photo-Fenton Effect of Residual Hydrogen Peroxide on COD :a Laboratory scale study

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VI. Comparison of Treatment Efficiency of Dye Production Industry Wastewater by Fenton, Post-Fenton

and Photo-Fenton Method

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- VII. **Replacing Chloride in Textile Dyeing and the Synergistic Effects on a Hybrid Wastewater Treatment System**
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- VIII. **Ecosafefarming By Solar Treatment and Desalination by Biologically Treated Brackish Wastewater**
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- IX. **Car Wash Industry in Turkey: Decrease Water Pollution by Wastewater Reuse**
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- X. **Evaluation of Hydrogen Production in Electrodialysis Process Treating Industrial Saline Wastewater**
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- XI. **Micropollutant Removal from a Secondary Treated Municipal Wastewater by Electrodialysis**
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- XII. **Decolorization and Detoxification of Textile Wastewater by Innovative and Cost Effective Ion-Exchange Process**
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- XIII. **Decreasing Toxicity and Increasing Biodegradability of Dye Production Industrial Wastewater by Pre-Ozonation and Fenton Oxidation Cost-Benefit Analysis of Wastewater Reuse System in a Circular Economy Perspective**
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- XIV. **Tackling Toxicity İn Ozonated Textile Wastewater For Enhanced Biological Treatment**
ÖKTEM Y. A., YÜZER B., AYDIN M. İ., ÖKTEN H. E., MERİÇ PAGANO S., SELÇUK H.
5th European Conference on Environmental Applications of Advanced Oxidation Processes, Prag, Çek Cumhuriyeti, 25 - 29 Haziran 2017
- XV. **Recovery of Biologically Treated Textile Wastewater by Ozonation and Subsequent Electrodialysis Membrane Desalination System**
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- XVI. **Pilot scale Application of Ion Exchange and Nanofiltration Membrane Processes for Zero Waste Approach in Aluminum Industry**
AYDIN M. İ., YÜZER B., YILDIZ H., ERDEM B., SELÇUK H.
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- XVII. **Color Removal and Detoxification of Textile Wastewater by Using Polymer Based Coagulation and Ozonation Processes**
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- XVIII. **Investigation Design and Cost Analysis of Efficient Reverse Osmosis System RO for the Marmara Sea Water**
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- XIX. **Copper Doping on TiO₂ Nanoparticles for Development of Self Cleaning and Anti Bacterial Cotton Fabric**

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- XX. **Color Removal from Biologically Treated Textile Wastewater and Cost Analysis**
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- XXI. **Caustic Recovery In Textile Industry By Using Nanofiltration And Evaporation Processes**
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- XXII. **Acid Recovery from Aluminium Anodizing Process via Ion Change Resin**
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- XXIII. **Application of Nanofiltration Membrane Process for Recovery and Reuse of Salt in the Segregated Reactive Dyeing Wastewater**
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- XXIV. **Biochemical Methane Potential Of Membrane Concentrates A Case Study Of Textile Wastewaters**
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- XXV. **Sulfate Removal from Textile Wastewaters and Biochemical Methane Potential of Treated Wastewater**
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- XXVII. **Fate, Transport and Treatment of TiO₂ Nano Particles in the Textile Wastewater**
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KANTÜRK FİGEN A., Ülgen B. E., AYDIN M. İ., COŞKUNER FİLİZ B., TAŞ Z., Yükseköğretim Kurumları Destekli Proje, Atk sularından boyar maddelerin ve ağır metallerin eş zamanlı uzaklaştırılması için manyetik aktif karbon sentezi, performans analizi ve yaşam döngüsü değerlendirmesi, 2024 - Devam Ediyor

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KANTÜRK FİGEN A., AYDIN M. İ., COŞKUNER FİLİZ B., Yıldırım B., Yükseköğretim Kurumları Destekli Proje, Bor Katkılı Perovskit Tipi Elektrokatalizörlerin Sentezi ve Fotoelektrokimyasal Reaktörde Hidrojen Üretimi, 2024 - Devam Ediyor

DİNCER İ., JAVANI N., GENÇELİ H., KANTÜRK FİGEN A., SORGULU F., ÖZTÜRK M., AKGÜN İ., ERDEMİR D., AYDIN M. İ., GÜRSU H., Yükseköğretim Kurumları Destekli Proje, Yeşil Hidrojen Üretim Sisteminin Geliştirilmesi ve Kurulması, 2024 - Devam Ediyor

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Dinçer İ., Aydın M. İ., Diğer Uluslararası Fon Programları, A Feasibility Study on the Development of Oshawa Hydrogen Economy Hub, 2020 - 2021

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Selçuk H., Öngen A., Nemlioğlu S., Aydın M. İ., Yüzer B., Enerji ve Tabii Kaynaklar Bakanlığı, İstanbul DGKÇ Santrali-A Üniteleri İçin Uygun Deniz Suyu Entegre Memran Arıtma Sisteminin Araştırılması ve Projelendirilmesi, 2016 - 2019

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Akademik Dolaşım Faaliyetleri

Doktora Sonrası Araştırma, Doktora Sonrası Araştırma, Ontario Tech Üniversitesi, Kanada, 2019 - 2021

Metrikler

Yayın: 54

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Atıf (Scopus): 597

H-İndeks (WoS): 10

H-İndeks (Scopus): 11

Burslar

2219 - Yurt Dışı Doktora Sonrası Araştırma Burs Programı, TÜBİTAK, 2019 - 2021