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International Researcher IDs

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Publons / Web Of Science ResearcherID: P-3028-2019

ScopusID: 56369351300

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Education Information

Doctorate, Kocaeli University, Fen Bilimleri Enstitüsü, Turkey 2014 - 2023

Postgraduate, Kocaeli University, Fen Bilimleri Enstitüsü, Kimya Mühendisliği Anabilim Dalı, Turkey 2011 - 2014

Undergraduate, Kocaeli University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, Turkey 2007 - 2011

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Metanolden reformlama tepkimeleri ile hidrojen üretimi için reaktör sistemi tasarımı ve simülasyonu: katalizör geliştirilmesi ve kinetik model çalışmaları, Kocaeli University, Fen Bilimleri Enstitüsü, 2023

Postgraduate, Sol-jel yöntemi ile mezogözenekli nano-alümina ve CoMo/Al₂O₃ katalizörlerinin hazırlanması ve karakterizasyonu, Kocaeli Üniversitesi, Fen Bilimleri Enstitüsü, Kimya Mühendisliği Anabilim Dalı, 2014

Research Areas

Chemical Engineering and Technology, Catalysis and Catalytic Processes, Chemical Process System Engineering, Process Design, Engineering and Technology

Academic Titles / Tasks

Research Assistant PhD, Kocaeli University, Mühendislik Fakültesi, Kimya Mühendisliği, 2012 - Continues

Courses

Introduction to Heterogeneous Catalysis, Undergraduate, 2023 - 2024
Numerical Methods in Chemical Engineering, Undergraduate, 2023 - 2024
Computer Aided Equipment Design, Undergraduate, 2023 - 2024
Literature Survey and Technical Writing, Undergraduate, 2023 - 2024

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Methanol steam reforming kinetics using a commercial CuO/ZnO/Al₂O₃ catalyst: Simulation of a reformer integrated with HT-PEMFC system**
Özcan O., Akin A. N.
International Journal of Hydrogen Energy, vol.48, no.60, pp.22777-22790, 2023 (SCI-Expanded)
- II. **Comparison of a commercial water-gas shift catalyst and La modified Cu-based catalysts prepared by deposition-precipitation in methanol steam reforming**
Özcan O., Akin A. N.
TURKISH JOURNAL OF CHEMISTRY, vol.46, no.4, pp.1069-1080, 2022 (SCI-Expanded)
- III. **Thermodynamic modelling and optimization of oxy-reforming and oxy-steam reforming of biogas by RSM**
Özcan M. D., Özcan O., Akin A. N.
Environmental Technology (United Kingdom), vol.41, no.1, pp.14-28, 2020 (SCI-Expanded)
- IV. **Thermodynamic analysis of methanol steam reforming to produce hydrogen for HT-PEMFC: An optimization study**
Özcan O., Akin A. N.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.44, no.27, pp.14117-14126, 2019 (SCI-Expanded)
- V. **Preparation of Ni-CeO₂/MgAl hydrotalcite-like catalyst for biogas oxidative steam reforming**
Özcan M. D., Özcan O., Kibar M. E., Akin A. N.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.34, no.3, pp.1128-1142, 2019 (SCI-Expanded)
- VI. **Optimization, modeling and characterization of sol-gel process parameters for the synthesis of nanostructured boron doped alumina catalyst supports**
Kibar M. E., Özcan O., Dusoova-Teke Y., Yonel-Gumruk E., Akin A. N.
MICROPOROUS AND MESOPOROUS MATERIALS, vol.229, pp.134-144, 2016 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

- I. **Kinetic Modeling and Simulation Study of Methanol Steam Reforming Over a Commercial CuO/ZnO/Al₂O₃ Catalyst**
Özcan O., Akin A. N.
The Sixth International Hydrogen Technologies Congress (IHTEC-2022), Çanakkale, Turkey, 23 - 26 January 2022, pp.82-84
- II. **Hydrogen Production by Methanol Steam Reforming on a Commercial Water Gas Shift Catalyst**
Özcan O., Akin A. N.
NCC-8 National Catalysis Congress, Ankara, Turkey, 9 - 12 September 2021
- III. **Catalytic Activities of La₂O₃-Al₂O₃ Supported Copper-Based Nanocatalysts for Methanol Steam Reforming**
Özcan O., Akin A. N.
ASC-5. 5th Anatolian School of Catalysis from fundamentals to applications, İzmir, Turkey, 8 - 11 September 2019
- IV. **Biyogazın Oksidatif Buhar Reformlaması İçin Hidrotalsit Benzeri Ni-Ce Katalizörleri: Mg/Al Oranının Rolü**
Doğan Özcan M., Özcan O., Akin A. N.

13. Ulusal Kimya Mühendisliği Kongresi (UKMK-13), Van, Turkey, 3 - 06 September 2018

- V. **Thermodynamic modelling of oxy-reforming and oxy-steam reforming of biogas by using Aspen Plus: An optimization study by RSM**
Özcan Doğan M., Özcan O., Akın A. N.
6th European Conference on Renewable Energy Systems (ECRES2018), İstanbul, Turkey, 25 - 27 June 2018
- VI. **Thermodynamic optimization of methanol steam reforming for HT-PEMFC grade hydrogen production based on Aspen Plus Software**
Özcan O., Akın A. N.
6th European Conference on Renewable Energy Systems (ECRES2018), İstanbul, Turkey, 25 - 27 June 2018
- VII. **Ultrasound-assisted Preparation of Cu-based Nanocatalysts: Structural Evaluation of La Addition**
Özcan O., Akın A. N.
4th Anatolian School of Catalysis (ASC-4), İzmir, Turkey, 11 - 14 September 2017
- VIII. **Effect of biogas composition in oxidative reforming over Ni-Ce/MgAl hydrotalcite like catalyst**
Özcan Doğan M., Özcan O., Akın A. N.
13 th European Congress on Catalysis – EuropaCat-XIII, Florence, Italy, 27 - 31 August 2017
- IX. **Preparation and hydrodesulfurization performance of B promoted alumina supported Co Mo sulfide catalysts**
Özcan O., Kibar M. E., Düşova Teke Y., Yönel Gümrük E., Akın A. N.
XXII. International Conference on Chemical Reactors, London, England, 19 - 23 September 2016
- X. **Partial Oxidation of Biogas for Hydrogen Production over Ce-Promoted Ni/Mgal Hydrotalcite-Like Catalyst**
Engintepe E., Doğan M., Özcan O., Kibar M. E., Akın A. N.
IEEEES-8, Antalya, Turkey, 1 - 04 May 2016, pp.823-825
- XI. **Synthesis Gas Production from Tri Reforming and Partial Oxidation of Simulated Biogas over Ni/ZrO₂-MgO-Al₂O₃**
Doğan M., Engintepe E., Özcan O., Kibar M. E., Akın A. N.
8th International Exergy, Energy and Environment Symposium, Antalya, Turkey, 1 - 04 May 2016
- XII. **Influence of Boron Loading Sequence on HDS Catalyst Activity**
Düşova Teke Y., Yönel Gümrük E., Özcan O., Kibar M. E., Akın A. N.
8th International Exergy, Energy and Environment Symposium, Antalya, Turkey, 01 May 2016 - 04 May 2106, pp.672-675
- XIII. **Oxidative Steam Reforming of Biogas by over NiCe/MgAl Hydrotalcite-like catalysts**
Doğan M., Özcan O., Kibar M. E., Akın A. N.
NCC 6, Bursa, Turkey, 27 - 30 April 2016, pp.114
- XIV. **Investigation of the Effects of Boric acid on Boria Alumina Catalyst Support**
Yonel Gumruk E., Dusova Teke Y., Seckin C., Özcan O., Kibar M. E., Akın A. N.
4th Nano Today Conference, Dubai, United Arab Emirates, 6 - 10 December 2015
- XV. **Modelling and Optimization of Sol Gel Process Parameters to Synthesize Nano Structured Boria Alumina Catalysts Supports Response Surface Methodology Approach**
Özcan O., Düşova Teke Y., Kibar M. E., Seçkin C., Yönel Gümrük E., Akın A. N.
12. European Congress on Catalysis, Kazan, Russia, 30 August - 04 September 2015
- XVI. **Development of a hydroprocessing catalyst containing Boron and Nano-boron compounds**
Yönel Gümrük E., Kartal Berker A. M., Özcan O., Kibar M. E., Akın A. N.
Nanotech Advanced Materials & Applications Innovation Conference and Expo, Washington, United States Of America, 15 - 18 June 2014
- XVII. **One-Pot Sol-Gel Synthesis of Cobalt-Molybdenum-Alumina Catalysts**
Özcan O., Akın A. N.
5th National Catalysis Conference, Adana, Turkey, 23 - 26 April 2014, pp.326
- XVIII. **Preparation of mesoporous γ -alumina by Sol-Gel method**
Özcan O., Akın A. N.
11th European Congress on Catalysis – EuropaCat-XI, Lyon, France, 1 - 06 September 2013

XIX. Alglerden Yakıt Üretim Teknolojileri

Özcan O., Kibar M. E., Akın A. N.

3.İleri Teknolojiler Çalıştayı İTÇ 2012, İstanbul, Turkey, 4 - 06 October 2012

XX. Üçüncü Nesil Biyoyakıt Üretiminde Kullanılacak Nanokatalizörlerin Sol-Jel Yöntemi ile Sentezi

Özcan O., Kibar M. E., Akın A. N.

3.İleri Teknolojiler Çalıştayı, İTÇ 2012, İstanbul, Turkey, 4 - 06 October 2012

XXI. Preparation and Characterization of Co-Mo/Al₂O₃ Catalysts Prepared by Sol-Gel Method For Catalytic Hydrotreatment Reaction of Algae-Oil

Özcan O., Kibar M. E., Akın A. N.

EFCATS Summer School 2012, Milan, Italy, 11 - 15 September 2012

XXII. SOL-GEL YÖNTEMİYLE BOR-ALUMİNA DESTEK MALZEMESİNİN HAZIRLANMASI

Teke Düşova Y., Özcan O., Kibar M. E., Seçkin C., Yönel Gümrük E., Akın A. N.

11. Ulusal Kimya Mühendisliği Kongresi 2014, Eskişehir, Turkey, 2 - 05 September 2014

XXIII. Hidrojen Sülfürden Elektroliz Yöntemi İle Hidrojen Üretim Teknolojisinin İncelenmesi

Özcan O., Akay R. G., Akın A. N.

İleri Teknolojiler Çalıştayı (İTÇ 2011), İstanbul, Turkey, 09 December 2011, pp.81-88

Patent

Gümrük E., Seçkin Ö. C., Teke Y., Akın A. N., Özcan O., Kibar M. E., A METHOD FOR PRODUCTION OF A CATALYST SUPPORTING MATERIAL, Patent, CHAPTER C Chemistry; Metallurgy, The Invention Registration Number: WO/2017/048205 , Standard Registration, 2017

Metrics

Publication: 34

Citation (WoS): 97

Citation (Scopus): 115

H-Index (WoS): 4

H-Index (Scopus): 5