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Publons / Web Of Science ResearcherID: IYS-5706-2023

ScopusID: 56748181000

Yoksis Researcher ID: 135175

Education Information

Doctorate, Gazi University, Fen Bilimleri Enstitüsü, Kimya Mühendisliği (Dr), Turkey 2009 - 2015

Postgraduate, Gazi University, Fen Bilimleri Enstitüsü, Kimya Mühendisliği (YI) (Tezli), Turkey 2004 - 2008

Undergraduate, Suleyman Demirel University, Mühendislik-Mimarlık Fakültesi, Çevre Mühendisliği Pr., Turkey 1997 - 2001

Associate Degree, Akdeniz University, Health Services Vocational School, Department Of Medical Services And Techniques, Turkey 1995 - 1997

Dissertations

Doctorate, Asidik katalizör sentezi, karakterizasyonu, katalitik aktivitesinin gliserol esterleşme reaksiyonunda incelenmesi, Gazi University, Fen Bilimleri Enstitüsü, Kimya Mühendisliği (Dr), 2015

Postgraduate, Amberlit-35 katalizörünün gözenek yapısının üç (3D) boyutlu rastgele ağ modeli üzerinden modellenmesi ve ağ boyutu etkisinin incelenmesi, Gazi University, Fen Bilimleri Enstitüsü, Kimya Mühendisliği (YI) (Tezli), 2008

Research Areas

Engineering and Technology

Academic Titles / Tasks

Associate Professor, Bilecik Seyh Edebali University, Mühendislik Fakültesi, Kimya Mühendisliği, 2020 - Continues

Courses

Ekoloji, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017

Genel Kimya I, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018

Bitirme Ödevi, Undergraduate, 2019 - 2020

İLERİ TAŞINIM OLAYLARI, Postgraduate, 2019 - 2020, 2018 - 2019

İLERİ ISI AKTARIMI, Postgraduate, 2019 - 2020, 2017 - 2018

YÜKSEK LİSANS TEZ ÇALIŞMASI, Postgraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017
Kimya Mühendisliği Laboratuvarı I, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017
Enstrümantal Analiz, Undergraduate, 2019 - 2020
UZMANLIK ALAN DERSİ, Postgraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017
Aletli Analiz Ve Laboratuvarı, Undergraduate, 2019 - 2020
Genel Kimya Laboratuvarı, Undergraduate, 2018 - 2019, 2016 - 2017
Kimya Mühendisliği Laboratuvarı II, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016
Lisans Araştırma Projesi, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017
Genel Kimya II, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017
Kimya ve Proses Mühendisliği Temel Prensipleri, Undergraduate, 2018 - 2019
Polimer Teknolojisi, Postgraduate, 2018 - 2019
MALZEME SENTEZİ, KARAKTERİZASYONU VE UYGULAMALARI, Doctorate, 2018 - 2019
Kimyasal Reaksiyon Mühendisliği, Undergraduate, 2018 - 2019
Proses Enstrümantasyonu, Undergraduate, 2018 - 2019, 2016 - 2017
Korozyon, Undergraduate, 2018 - 2019, 2015 - 2016
Proses Optimizasyonu, Undergraduate, 2018 - 2019
KATALİZÖR SENTEZİ VE REAKSİYONLARI, Postgraduate, 2017 - 2018, 2016 - 2017
Çevre Kimyası ve Teknolojisi, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016
Yeni ve Yenilenebilir Enerji Kaynakları, Undergraduate, 2015 - 2016
Isı Transferi, Undergraduate, 2015 - 2016

Advising Theses

Şimşek V., Bilyalı değirmenlerde çimento üretim kapasitesinin artırılması ve enerji tüketiminin azaltılmasına yönelik optimizasyon çalışmaları ve bunların sürdürülebilir ekolojiye etkisi, Postgraduate, F.Meriç(Student), 2023
Şimşek V., Yer karosu üretiminde kullanılan Bien firmasına ait sıran asit dayanımı özelliğinin geliştirilmesi, Postgraduate, C.Karataş(Student), 2019

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Photocatalytic Degradation of Neonicotinoids—A Comparative Study of the Efficacy of Hybrid Photocatalysts**
Yarbay R. Z., Şimşek V., Bogdan L., Tomašić V.
Processes, vol.12, no.3, pp.1-16, 2024 (SCI-Expanded)
- II. **Nanocrystalline PbS thin film produced by alkaline chemical bath deposition: Effect of inhibitor levels and temperature on the physicochemical properties**
ŞİMŞEK V., ÇAĞLAYAN M. O.
International Journal of Materials Research, vol.114, no.12, pp.1047-1057, 2023 (SCI-Expanded)
- III. **The effect of different immobilization strategies on the electrochemical performance of enzymatic carbonaceous electrodes developed using carbonized biomass sources**
Küçükayar Ş. F., ŞİMŞEK V., ÇAĞLAYAN M. O., Üstündağ Z., ŞAHİN S.
Microchemical Journal, vol.193, 2023 (SCI-Expanded)
- IV. **Treatment of textile dye via economic fungi/MCM-41 bio-based adsorbent: Application of neural network approach**
ŞİMŞEK V., YARBAY R. Z., MARTTİN V., GÜL Ü. D.
Journal of Cleaner Production, vol.421, 2023 (SCI-Expanded)
- V. **Cd/SBA-15 heterogeneous catalyst used for acetic acid conversion: Pseudo-homogeneous kinetic model, response surface methodology, and historical data design**
ŞİMŞEK V.

Zeitschrift fur Physikalische Chemie, vol.237, no.9, pp.1443-1456, 2023 (SCI-Expanded)

- VI. **Investigation of Graphene Oxide/Mesoporous Silica Supports for Enhanced Electrochemical Stability of Enzymatic Electrodes**
Kaya Ş., ŞİMŞEK V., ŞAHİN S.
Catalysis Letters, 2023 (SCI-Expanded)
- VII. **Corrosion resistance of commercial glazes of floor tiles**
Karatas C., ŞİMŞEK V.
Materialprüfung/Materials Testing, vol.64, no.12, pp.1860-1870, 2022 (SCI-Expanded)
- VIII. **Characterization and catalytic performance evaluation of a novel heterogeneous mesoporous catalyst for methanol–acetic acid esterification**
ŞİMŞEK V., ŞAHİN S.
Journal of Porous Materials, vol.26, no.6, pp.1657-1665, 2019 (SCI-Expanded)
- IX. **Investigation of Catalytic Sustainability of Silica-Based Mesoporous Acidic Catalysts and Ion-Exchange Resins in Methyl Acetate Synthesis and Characterizations of Synthesized Catalysts**
ŞİMŞEK V.
Arabian Journal for Science and Engineering, vol.44, no.6, pp.5301-5310, 2019 (SCI-Expanded)
- X. **Characterization and Catalytic Performance of Modified SBA-16 in Liquid Phase Reaction**
Veli S., Pinar A.
International Journal of Chemical Reactor Engineering, vol.16, no.8, 2018 (SCI-Expanded)
- XI. **Esterification of Lauric Acid with Glycerol in the Presence of STA/MCM-41 Catalysts**
ŞİMŞEK V., DEĞİRMENCİ L., Murtezaoglu K.
International Journal of Chemical Reactor Engineering, vol.15, no.2, 2017 (SCI-Expanded)
- XII. **Optical and surface properties of the in doped GaAs layer deposition using thermionic vacuum arc method**
PAT S., Özen S., Şenay V., KORKMAZ Ş., ŞİMŞEK V.
Scanning, vol.38, no.4, pp.297-302, 2016 (SCI-Expanded)
- XIII. **Synthesis of a silicotungstic acid SBA-15 catalyst for selective monoglyceride production**
ŞİMŞEK V., DEĞİRMENCİ L., MÜRTEZAOĞLU K.
Reaction Kinetics, Mechanisms and Catalysis, vol.117, no.2, pp.773-788, 2016 (SCI-Expanded)
- XIV. **Sustainable activity of hydrothermally synthesized mesoporous silicates in acetic acid esterification**
ŞİMŞEK V., Değirmenci L., Mürtezaoğlu K.
Turkish Journal of Chemistry, vol.39, no.3, pp.683-696, 2015 (SCI-Expanded)

Articles Published in Other Journals

- I. **Investigation of the Effects of Different H₂SO₄, HCl, HNO₃ and HClO₄ Liquid Acid Media on the Synthesis of CdTe Semiconductor Thin Films for Solar Cells**
Yıldırım A. K., Şimşek V.
Journal of the Turkish Chemical Society Section A: Chemistry, vol.11, no.2, pp.591-600, 2024 (Scopus)
- II. **3D Stochastic Network Modeling and Investigation of Network Size Effect on the Porous Media Structure of Ion Exchange Catalyst Amberlyst-35 with Computer Programs**
ŞİMŞEK V., MÜRTEZAOĞLU K.
GAZI UNIVERSITY JOURNAL OF SCIENCE, 2023 (Scopus)
- III. **Synthesis and Characterization of Fe/SBA-15 Heterogeneous Catalysts for Methyl Acetate Production**
ŞİMŞEK V.
Avrupa Bilim ve Teknoloji Dergisi, vol.28, pp.21-28, 2021 (Peer-Reviewed Journal)
- IV. **Reactive RED 120 Boyarmaddesinin Silika EsaslıGözenekli Malzeme Üzerine Absorpsiyon Koşullarınınİncelenmesi**
ŞİMŞEK V., PAT Z., MÜRTEZAOĞLU K.

Bilecik Şeyh Edebali Üniversitesi Fen Bilimleri Dergisi, vol.6, pp.237-246, 2019 (Peer-Reviewed Journal)

V. Investigation of Lauric Acid Conversion with the STA Incorporated Heterogeneous Catalysts in the Liquid Phase Reaction

ŞİMŞEK V., MÜRTEZAOĞLU K.

Bilecik Şeyh Edebali Üniversitesi Fen Bilimleri Dergisi, vol.6, no.1, pp.91-103, 2019 (Peer-Reviewed Journal)

VI. Characterizations and Catalytic Activities Investigation of Synthesized Solid-Based Heterogeneous Catalysts in the Esterification Reaction.

ŞİMŞEK V., MÜRTEZAOĞLU K.

Eskişehir Technical University Journal of Science and Technology A- Applied Sciences and Engineering, vol.19, no.2, pp.422-432, 2018 (Peer-Reviewed Journal)

Books & Book Chapters

I. FEN BİLİMLERİ

ŞİMŞEK V., AY F., BAŞAR K.

in: Tüm Dersler Soru Bankası(4.SINIF), Ceyda AKIN, Hande Merve KANCA, Editor, ÜNLÜ YAYINLARI, İstanbul, pp.230-301, 2017

II. MATEMATİK

ŞİMŞEK V., İNCE S.

in: Tüm Dersler Soru Bankası(4.SINIF), Ceyda AKIN, Hande Merve KANCA, Editor, ÜNLÜ YAYINLARI, İstanbul, pp.112-227, 2017

III. 4 SINIF MATEMATİK GEZGİNKLERİ

ŞİMŞEK V.

Kıda Yayınları, İstanbul, 2016

IV. 2 SINIF MATEMATİK GEZGİNLERİ

ŞİMŞEK V.

Kıda Yayınları, İstanbul, 2016

V. MATEMATİK GEZGİNLERİ 4

ŞİMŞEK V.

ÜNLÜ YAYINLAR, İstanbul, 2015

VI. MATEMATİK GEZGİNLERİ 2

ŞİMŞEK V.

ÜNLÜ YAYINLAR, İstanbul, 2015

Refereed Congress / Symposium Publications in Proceedings

I. INVESTIGATION OF THE USEABILITY OF WASTE ARTICHOKE LEAVES FOR REMOVAL OF THE REACTIVE ORANGE 16 DYESTUFF BY BIOSORPTION METHOD

PAT Z., ŞİMŞEK V.

Mediterranean International Conference on Research in Applied Sciences, Antalya, Turkey, 22 April 2022

II. Production of carbonized electrode materials from biomass and its use in electrochemical biosensing applications

Küçükayar Ş. F., ŞAHİN S., ŞİMŞEK V.

3rd International Eurasian Conference on Science, Engineering and Technology, Ankara, Turkey, 15 - 17 December 2021

III. Optimization studies in ball mills to increase cement production capacity and reduce energy consumption

KAYA F. M., ŞİMŞEK V.

EurasianBiochem2021, 24 - 26 November 2021

- IV. **Effects of Fe/Si Loading Ratio onto Synthesis, Characterization and Catalytic Activity of Fe/SBA-15 Catalysts in the Liquid Phase Reaction**
ŞİMŞEK V.
1st International Conference on Applied Engineering and Natural Sciences, 1 - 03 November 2021
- V. **BIOSORPTION ISOTHERM, KINETIC AND THERMODYNAMIC STUDIES FOR THE REMOVAL OF REACTIVE BLUE 19 DYE STUFF USING WASTE BIOMASS OF ARTICHOKE LEAVES**
PAT Z., ŞİMŞEK V.
ISPEC 10th INTERNATIONAL CONFERENCE ON ENGINEERING & NATURAL SCIENCES, Turkey, 16 - 18 May 2021
- VI. **Biosorption Isotherm Kinetic And Thermodynamics Studies For The Removal Of Reactive Blue 19 Dye stuff Using Waste Biomass Of Artichoke Leaves**
PAT Z., ŞİMŞEK V.
10th International Conference On Engineering & Natural Sciences ISPEC, 16 - 18 May 2021
- VII. **Removal of RRD 120 textile dye from industrial wastewater using silica-based mesoporous material.**
ŞİMŞEK V., PAT Z., MÜRTEZAOĞLU K.
10th. International Conference On Research In Engineering, Science Technology, 21 - 23 February 2020
- VIII. **Production of new recipes to improve the resistance of glazes used in ceramic production to acid-acidic environments.**
Karataş C., ŞİMŞEK V., Çağlar C.
2nd INTERNATIONAL EURASIAN CONFERENCE ON BIOLOGICAL AND CHEMICAL SCIENCES, 28 - 29 June 2019
- IX. **Catalytic activity and sustainability investigation of MCM-48 Silica-Based Solid Acid Catalysts for Production of Methyl Acetate**
ŞİMŞEK V.
4TH INTERNATIONAL TURKIC WORLD CONFERENCE ON CHEMICAL SCIENCE AND TECHNOLOGIES, 7 - 10 September 2018
- X. **Catalytic Activities Investigation of Silica-based Mesoporous Catalysts in the Production of Mono-di-trilaurin.**
ŞİMŞEK V., PAT Z., MÜRTEZAOĞLU K.
International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem2018), Turkey, 26 - 27 April 2018
- XI. **Catalytic Activity and Sustainability Investigation of STA/MCM-41, STA/SBA-15 Acidic Catalysts and Ion-exchange Resins in Esterification Reaction.**
ŞİMŞEK V.
4TH International Conference on Engineering and Natural Science (ICENS), 2 - 06 May 2018
- XII. **Synthesis and Characterization of STA Contained Heterogeneous Catalysts by Direct- Hydrothermal Method.**
ŞİMŞEK V., ESER E.
4TH International Conference on Engineering and Natural Science (ICENS), 2 - 06 May 2018
- XIII. **Investigation of the Biosorption Conditions Remazol Brilliant Blue R Dye stuff by Waste Biomass of Artichoke Leaves.**
PAT Z., ŞİMŞEK V.
International Conference on Applications in Chemistry and Chemical Engineering (ICACCHE), 11 - 15 October 2017
- XIV. **Synthesis and Characterization of Silica-Based Eco-Friendly Mesoporous New-Generation Acidic Catalysts.**
ŞİMŞEK V., AVCI P.
International Conference on Technology, Engineer and Science (ICONTESS), 26 - 29 October 2017
- XV. **Synthesis and Characterization of Silica Based Acidic Catalysts with the Impregnation Methods**
ŞİMŞEK V., PAT Z., MÜRTEZAOĞLU K.
1st International Black Sea Congress on Environmental Sciences (IBCESS), 31 August - 03 September 2016, vol.1, pp.247-256
- XVI. **Synthesis of STA SBA 15 Catalysts for Ethyl Acetate Production and Characterizations of Catalysts**

ŞİMŞEK V., MÜRTEZAOĞLU K.

NCC6-The 6th Catalysis Conference 27-30 April 2016 Bursa, 27 April - 30 May 2016

XVII. Esterification Reactions Over Amberlyst IR 120

ŞİMŞEK V., DEĞİRMENCİ L., MÜRTEZAOĞLU K.

ISCRE 23 & APCRE 7, 7 - 10 September 2014

XVIII. Esterification reactions over amberlit IR 120 catalyst

ŞİMŞEK V., DEĞİRMENCİ L., MÜRTEZAOĞLU K., ÖZTÜRK SARIKAYA S. B., GÜNDOĞDU E., GÜNDOĞDU E., AYVAZ H., AYVAZ H.

23rd International symposium on chemical reaction engineering (ISCRE23) and 7th Asia- Pasific chemical reaction engineering symposium (APCRE7), 7 - 10 September 2014

XIX. Silicotungstic acid incorporated mesoporous catalysts and activity tests in ethyl acetate production

ŞİMŞEK V., DEĞİRMENCİ L., MÜRTEZAOĞLU K.

NCC-5 5. Ulusal Kataliz Kongresi, Turkey, 23 - 26 April 2014

XX. Silicotungstic Acid incorporated mesoporous catalysts and activity tests in ethyl acetate production

ŞİMŞEK V., DEĞİRMENCİ L., MÜRTEZAOĞLU K.

National catalysis conference-5(NCC-5), Turkey, 23 - 26 April 2014

XXI. Synthesis and characterization of novel mesoporous acidic MCM 41 and SBA 15 catalysts

ŞİMŞEK V., DEĞİRMENCİ L., MÜRTEZAOĞLU K.

International Porous and Powder Materials Symposium and Exhibition PPM 2013 September, 3 - 07 September 2013

XXII. Synthesis and characterization of tungstosilicic acid anchored SBA 15 STA catalysts

ŞİMŞEK V., DEĞİRMENCİ L., MÜRTEZAOĞLU K.

April 20-23 2013, 2013, ECCE9 ECAB2 Amsterdam, Netherlands., 20 - 23 April 2013

XXIII. Application of Mercury Porosimetry to Three Dimensional 3D Stochastic Network Model on Acidic Ion Exchange Resins

ŞİMŞEK V., OKTAR N., MÜRTEZAOĞLU K.

Presented in 5th Chemical Engineering Conference for Collaborative Research in Eastern Mediterranean Countries-EMCC5, organized by the Institute on Membrane Technology (ITM-CNR, Italy), 24 - 29 May 2008, pp.182-185

Supported Projects

ŞİMŞEK V., YARBAY R. Z., SAYGILI H., Project Supported by Higher Education Institutions, Sulu ortamdaki fenolün farklı adsorbanlarla gideriminin araştırılması, 2024 - Continues

YARBAY R. Z., ŞİMŞEK V., KUTLUK T., Project Supported by Higher Education Institutions, Biyoyağlayıcı Sentezi İçin Katalitik Reaksiyon Parametrelerinin Yüzey Yanıt Metodolojisi ile Optimizasyonu, 2024 - Continues

ŞİMŞEK V., Project Supported by Higher Education Institutions, Türkiyenin Farklı Tatlı Su Kaynaklarından İzole Edilen Yerli Tür Mikroalglerin Yağ Asidi Metil Esterleri FAME ve Biyodizel Üretim Potansiyellerinin Belirlenmesi, 2022 - Continues

Şimşek V., Project Supported by Higher Education Institutions, Farklı İyonik Karakterli Tekstil Boyarmaddelerin Gözenekli Karbon Malzemeler Üzerine Karanlık Adsorpsiyon Koşullarının Araştırılması, 2022 - 2023

ŞİMŞEK V., ŞAHİN S., Project Supported by Other Official Institutions, Silika kaynaklı mezo-gözenekli destek malzemelerin enzimatik elektrokimyasal sistemlerde kullanımının incelenmesi, 2019 - 2021

PAT Z., ŞİMŞEK V., Project Supported by Higher Education Institutions, "Enginar Yaprakları İle Remazol Brilliant Blue R ve Remazol Brilliant Orange 3R Boyarmaddelerinin Biyosorpsiyon Koşullarının Araştırılması", 2016 - 2018

ŞİMŞEK V., PAT Z., Project Supported by Higher Education Institutions, Reactive Red 120 Boyarmaddesinin Silika Kaynaklı Gözenekli Malzeme Üzerine Adsorpsiyon Koşullarının Araştırılması, 2016 - 2017

ŞİMŞEK V., Project Supported by Higher Education Institutions, Emdirme Yöntemiyle Gözenekli Destek Maddesi, Asidik Katalizörlerin Sentezi ve Katalitik Aktivitelerinin İncelenmesi, 2016 - 2017

ŞİMŞEK V., Project Supported by Higher Education Institutions, STA/MCM-41 Katalizörünün Sentezi, Karakterizasyonu ve

Gözenek Boyut Dağılımının 3D Stokastik Ağ Modeli ile Tayini, 2012 - 2017

ŞİMŞEK V., PAT Z., Project Supported by Higher Education Institutions, Emdirme Yöntemiyle Gözenekli Destek Maddesi Asidik Katalizörlerin Sentezi ve Katalitik Aktivitelerinin İncelenmesi, 2016 - 2016

ŞİMŞEK V., DEĞİRMENCİ L., TUBİTAK Project, SBA 15 Destekli Silikotungstik Asit İçerikli Katalizörlerin Sentezi Karakterizasyonu ve Aktivitelerinin Belirlenmesi 114M005, 2014 - 2015

ŞİMŞEK V., Project Supported by Higher Education Institutions, Amberlit IR 120 Varlığında Laurik Asit ile Gliserinin Esterleşme Reaksiyonu, 2012 - 2015

TUBİTAK Project, Mühendislik Bilim Okulu TUBİTAK 4004 Doğa Eğitimi ve Bilim Okulları Proje No 112B111 Rehber, 2012 - 2013

ŞİMŞEK V., Project Supported by Higher Education Institutions, Gözenekli Malzemelerin 3 D Rastgele Ağ Modeli Üzerinden Modellenmesi Araştırmacı, 2012 - 2013

ŞİMŞEK V., Project Supported by Higher Education Institutions, Asidik Karakterli Yeni Nesil Katalizör SBA 15 Sentezi Karakterizasyonu ve Aktivitelerinin Test Edilmesi, 2012 - 2013