



# ÖMER ŞAHİN

## PROF.

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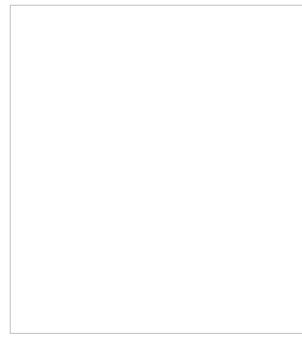
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### Learning Knowledge

Doctorate

1994 - 1999

Istanbul Technical University, Fen Bilimleri Enstitüsü, Kimya Mühendisliği , Turkey

Postgraduate

1992 - 1994

Istanbul Technical University, Fen Bilimleri Enstitüsü, Chemical Engineering,

Turkey

Undergraduate

1987 - 1991

Istanbul Technical University, Kimya-Metalurji, Kimya Mühendisliği, Turkey

### Academic Titles / Tasks

Professor

2021 - Continues

Istanbul Technical University, Kimya-Metalurji, Kimya Mühendisliği

Professor

2009 - 2021

Siirt University, Faculty Of Engineering-Architecture, Department Of Chemistry  
Engineering

Associate Professor

2003 - 2008

Harran University, Faculty Of Arts And Sciences, Department Of Chemistry

Assistant Professor

2003 - 2003

Harran University, Faculty Of Arts And Sciences, Department Of Chemistry

Research Assistant

1994 - 2003

Harran University, Faculty Of Arts And Sciences, Department Of Chemistry

1. Şahin Ö., Hacıyakupoğlu S., Reyhancan İ. A., Durmayaz A., Ünlü C., Şenkal B. F., Project Supported by Higher Education Institutions, Nükleer Reaktör Teknolojisinde Tıpta ve Endüstrideki İyonizan Radyasyonları Zırhlama Amacıyla Yenilikçi Kompozit Malzemelerin Araştırılması Gelişirtilmesi ve Üretimi, 2023 - Continues
2. Şahin Ö., EKİNCİ A., Büyükkamber K., Project Supported by Higher Education Institutions, Metal katalizörler Yüklenmiş Karbon Küreciklerin Hidrotermal ve Ultrasonik Piroliz Yöntemi ile Üretimi ve Sodyum Borhidrür Yakıt Pilli Uygulamaları, 2022 - Continues
3. Şahin Ö., Gürbüz H., KUTLUAY S., Genceli Güner F. E., Kenar M. E., Project Supported by Higher Education Institutions, Grafit Karbon Nitrür ve SilikaJel Destek Malzemelerine Metal Katalizörlerin Yüklenmesi ve Sodyum Borhidrürün Hidrolizinde Kullanımı, 2022 - Continues
4. Kutluay S., Şahin Ö., Haskan N., Project Supported by Higher Education Institutions, Grafen/metal oksit nanokompozitlerin USP yöntemi ile üretimi ve CO<sub>2</sub> adsorpsiyonu için uygulanması, 2022 - 2024
5. Şahin Ö., Kutluay S., Gürbüz H., Genceli Güner F. E., Kenar M. E., Project Supported by Higher Education Institutions, Grafit Karbon Nitrür ve SilikaJel Destek Malzemelerine Metal Katalizörlerin Yüklenmesi ve Sodyum Borhidrürün Hidrolizinde Kullanımı, 2022 - 2023
6. Şahin Ö., Kutluay S., BOREN, Ulusal Bor Araştırma Enstitüsü Projesi, Potasyum Tetraborat Tetrahidratın ve Ultrasaf Borik Asitin Kristalizasyonla Üretiminde Partikül Boyutunun Kontrolü/Kekleme Sorunun Giderilmesi (TENMAK-BOREN, 2020-30-06-30-001), 2020 - 2023
7. Şahin Ö., BOREN, Ulusal Bor Araştırma Enstitüsü Projesi, Potasyum Tetraborat Tetrahidratın ve Ultrasaf Borik Asitin Kristalizasyonla Üretiminde Partikül Boyutunun Kontrolü/Kekleme Sorunun Giderilmesi (TENMAK-BOREN, 2020-30-06-30-001), 2020 - 2023
8. Kılınç D., Şahin Ö., Project Supported by Higher Education Institutions, Farklı Polimerik Malzemelerle Desteklenmiş Schiff Bazı Nikel Komplekslerinin Sentezi, Karakterizasyonu, Hidroliz Ve Hidrojenasyon Reaksiyonlarındaki Katalitik Aktivitesinin İncelenmesi, 2017 - 2022
9. Ece M. Ş., Şahin Ö., Kutluay S., Project Supported by Higher Education Institutions, Nanoboyutlu Silika Kaplı Manyetitlerin ve Bunların Metal Bileşiklerinin Sentezlenmesi ve Güneş Pilleri, Hidrojen Üretimi, Fotokataliz, Hidrojenasyon Reaksiyonları ve Gaz Adsopsiyonunda Kullanımının Araştırılması (Proje No: MAÜ.BAP.18.SHMYO.030), 2018 - 2021
10. Ece M. Ş., Şahin Ö., Kutluay S., Project Supported by Higher Education Institutions, x Nanoboyutlu Silika Kaplı Manyetitlerin ve Bunların Metal Bileşiklerinin Sentezlenmesi ve Güneş Pilleri, Hidrojen Üretimi, Fotokataliz, Hidrojenasyon Reaksiyonları ve Gaz Adsopsiyonunda Kullanımının Araştırılması (Proje No: MAÜ.BAP.18.SHMYO.030), 2018 - 2021
11. Şahin Ö., Baytar O., Demir H., İzgi M. S., Project Supported by Higher Education Institutions, Yer fistığı kabuğundan aktif karbon üretilmesi ve potasyum borhidrür hidrolizinde kullanılan ikili metal bor katalizörleri için destek malzemesi olarak kullanılması, 2018 - 2020
12. Şahin Ö., Horoz S., TUBITAK Project, Zn<sub>2</sub>sno<sub>4</sub>-Mn: Sb<sub>2</sub>s<sub>3</sub>, Zn<sub>2</sub>sno<sub>4</sub>-Ni: Sb<sub>2</sub>s<sub>3</sub>, Zn<sub>2</sub>sno<sub>4</sub>-Fe: Sb<sub>2</sub>s<sub>3</sub>, Zn<sub>2</sub>sno<sub>4</sub>-Co: Sb<sub>2</sub>s<sub>3</sub> Yarı İletken Nanokristallerinin Fotovoltaik, Yapısal, Biçimsel Ve Optiksel Özelliklerinin İncelenmesi, 2017 - 2020
13. Şahin Ö., İzgi M. S., Demirci S., Baytar O., Project Supported by Higher Education Institutions, Bioatıklardan Aktif Karbon Eldesi ve Katatalizör Destek Malzemesi Olarak Kullanılması, 2018 - 2019
14. Şahin Ö., Horoz S., Ekinci A., Project Supported by Higher Education Institutions, Zn<sub>2</sub>SnO<sub>4</sub> - CdZnS ve Zn<sub>2</sub>SnO<sub>4</sub> - Mn: CdZnS Kuantum Noktalarının Yapısal, Optiksel ve Fotovoltaik Özelliklerinin Karşılaştırılıp İncelenmesi, 2017 - 2018
15. Şahin Ö., Project Supported by Higher Education Institutions, Susam sapından aktif karbon eldesi ve Aspergillus niger amiloglukozidazın immobilazasyonunda kullanılması, 2017 - 2018
16. Şahin Ö., Baytar O., Horoz S., Project Supported by Higher Education Institutions, NanoBoyutta Farklı Katalizörlerin Sentezlenmesi Ve Fotokatalitik Uygulamaları, 2016 - 2017
17. Şahin Ö., Adıgüzel V., Demirci S., TUBITAK Project, Karsılıklı Dörtlü Na<sup>+</sup>,Zn<sup>2+</sup>/Cl<sup>-</sup>, H<sub>2</sub>PO<sub>2</sub>-//H<sub>2</sub>O Sisteminin Faz Dengelerinin ve Çözünürlük özelliklerinin 25, 40 ve 60oC'de İncelenmesi, 2014 - 2016
18. Koç H., Şahin Ö., Horoz S., Project Supported by Higher Education Institutions, Kimyasal depolama yöntemi kullanılarak Sb<sub>2</sub>S<sub>3</sub> ince filmlerin eldesi ve karakterizasyonu, 2014 - 2016
19. Balbay A., Şahin Ö., Demirtaş S., Project Supported by Higher Education Institutions, Siirt ilinde güneş enerjili

- tarımsal sulamanın araştırılması, 2014 - 2016
20. Şahin Ö., Project Supported by Other Official Institutions, Sülfirik Asitle kolemanitten borik asit ve tinkolden boraks pentahidrat üretiminde kristalizasyon prosesinin incelenmesi (ETİ MADEN İŞLETMELERİ GENEL MÜDÜRLÜĞÜ, 400.02[TGD.2014/3]), 2014 - 2016
  21. Şahin Ö., Kutluay S., Project Supported by Other Official Institutions, Sülfirik Asitle Kolemanitten Borik Asit ve Tinkalden Boraks Pentahidrat Üretiminde Kristalizasyon Prosesinin İncelenmesi (ETİ MADEN İŞLETMELERİ GENEL MÜDÜRLÜĞÜ, 400.02[TGD.2014/3]), 2014 - 2016
  22. Şahin Ö., Balbay A., Saka C., Ekinci A., Project Supported by Higher Education Institutions, Modifiye edilmiş çeşitli katalizörler varlığında Sodyum Bor hidrürde elde edilen hidrojenin yakıt pillerinde kullanımı, 2014 - 2015
  23. Saka C., Şahin Ö., Kaya M., Project Supported by Higher Education Institutions, Sepiyolit ve bentonit killeri üzerine soğuk plazma etkisinin incelenmesi ve elde edilen adsorbentler ile boyar maddelerin adsorpsiyonu, 2014 - 2015
  24. Ceyhan A. A., Şahin Ö., BOREN, Ulusal Bor Araştırma Enstitüsü Projesi, Amonyum Floroborat Üretimi ve Üretim Parametrelerinin Belirlenmesi, 2013 - 2015
  25. Şahin Ö., Izgi M. S., TUBITAK Project, Lityum Metaborat Dihidratın Kristalizasyonu ve Kristalizasyonuna Etki Eden Çeşitli Parametrelerin Belirlenmesi, 2011 - 2014
  26. Demir H., Şahin Ö., TUBITAK Project, Potasyum pentaborat tetrahidrat ve lityum tetraborat trihidratın üretimi ve üretim şartlarının belirlenmesi, 2008 - 2010
  27. Şahin Ö., Ağırtaş M. S., TUBITAK Project, Yeni bir yöntem kullanarak yüksek döküm yoğunluklu bor oksit üretimi, 2007 - 2008
  28. Şahin Ö., TUBITAK Project, Lityum ve potasyum tetraboratların üretim koşullarının belirlenmesi, 2005 - 2007

#### Published journal articles indexed by SCI, SSCI, and AHCI

1. **Potential of nickel oxide catalyst from banana peel extract via green synthesis method in both photocatalytic reduction of methylene blue and generation of hydrogen from sodium borohydride hydrolysis**  
Şahin Ö., Baytar O., Kutluay S., Ekinci A.  
Journal of Photochemistry and Photobiology A: Chemistry, vol.448, 2024 (SCI-Expanded)
2. **Highly active hydrogen production from hydrolysis of potassium borohydride by caffeine carbon quantum dot-supported cobalt catalyst in ethanol solvent by hydrothermal treatment**  
Onat E., Sait Izgi M., Şahin Ö., Saka C.  
International Journal of Hydrogen Energy, vol.51, pp.362-375, 2024 (SCI-Expanded)
3. **Green and active hydrogen production from hydrolysis of ammonia borane by using caffeine carbon quantum dot-supported ruthenium catalyst in methanol solvent by hydrothermal treatment**  
Izgi M. S., Onat E., Şahin Ö., Saka C.  
International Journal of Hydrogen Energy, vol.51, pp.180-192, 2024 (SCI-Expanded)
4. **Facile “Green” synthesis of a novel Co-W-B catalyst from Rheum ribes shell extract and its effect on sodium borohydride hydrolysis: Kinetic mechanism**  
Ekinci A., Genli N., Şahin Ö., Baytar O.  
International Journal of Hydrogen Energy, vol.51, pp.796-808, 2024 (SCI-Expanded)
5. **Biogenic Synthesized Bare and Boron-Doped Copper Oxide Nanoparticles from Thymbra spicata ssp. spicata: In Silico and In Vitro Studies**  
Cengiz M., Baytar O., Şahin Ö., Kutlu H. M., AYHANCI A., Vejselova Sezer C., Gür B.  
Journal of Cluster Science, vol.35, no.1, pp.265-284, 2024 (SCI-Expanded)
6. **Novel adsorbent for malachite green from okra stalks waste: synthesis, kinetics and equilibrium studies**  
Yıldız H., Gülsen H., Şahin Ö., Baytar O., Kutluay S.  
International Journal of Phytoremediation, vol.26, no.3, pp.369-381, 2024 (SCI-Expanded)
7. **Green synthesis of NiO from watermelon seed shell extract for the evaluation of H<sub>2</sub> production from NaBH<sub>4</sub> hydrolysis and photocatalytic reduction of methylene blue**

- Baytar O., Ekinci A., Şahin Ö., Kutluay S.  
Materials Science and Engineering: B, vol.296, 2023 (SCI-Expanded)
8. **Microwave application as an alternative method to increase the efficiency of PtC catalyst in PEMFCs**  
Şahin Ö., Yilmaz A., Ekinci A.  
Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, vol.237, no.6, pp.1329-1336, 2023 (SCI-Expanded)
9. **Effect of environmentally friendly and efficient metal-free hydrochars as catalysts on sodium borohydride hydrolysis**  
Baytar O., Şahin Ö., Ekinci A.  
Fuel, vol.346, 2023 (SCI-Expanded)
10. **Synthesized PdNi/C and PdNiZr/C catalysts for single cell PEM fuel cell cathode catalysts application**  
Şahin Ö., Akdag A., Horoz S., Ekinci A.  
Fuel, vol.346, 2023 (SCI-Expanded)
11. **Effects of H<sub>2</sub>/O<sub>2</sub> and H<sub>2</sub>/O<sub>3</sub> gases on PtMo/C cathode PEMFCs performance operating at different temperatures**  
Şahin Ö., Akdag A., Horoz S., Ekinci A.  
International Journal of Hydrogen Energy, vol.48, no.44, pp.16829-16840, 2023 (SCI-Expanded)
12. **Optimizing hydrogen production from alkali hydrides using supported metal catalysts**  
Karabulut A., İzgi M. S., Demir H., Şahin Ö., Horoz S.  
Ionics, vol.29, no.5, pp.1975-1982, 2023 (SCI-Expanded)
13. **Physical and Electrochemical Effect of Bimetallic Pd-Mo Nanoalloys Supported on Vulcan XC-72R Carbon as Cathode Catalysts for Proton Exchange Membrane Fuel Cell**  
Şahin Ö., Akdag A., Horoz S., EKİNCİ A.  
ELECTROCATALYSIS, vol.14, no.2, pp.202-212, 2023 (SCI-Expanded)
14. **High solar cell efficiency of lanthanum-alloyed activated carbon-supported cadmium sulfide as a promising semiconductor nanomaterial**  
Batur E., Baytar O., Horoz S., Kutluay S., Şahin Ö.  
JOURNAL OF THE AUSTRALIAN CERAMIC SOCIETY, vol.59, no.1, pp.9-18, 2023 (SCI-Expanded)
15. **Superior incident photon-to-current conversion efficiency of Mo-doped activated carbon supported CdS-sensitized solar cells**  
Batur E., Kutluay S., Baytar O., Şahin Ö., Horoz S.  
ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH, vol.30, no.8, pp.19766-19775, 2023 (SCI-Expanded)
16. **Iodine adsorption and electrochemical double-layer capacitor characteristics of activated carbon prepared from low-cost biomass**  
Saka C., Yardim Y., Sahin Ö., Baytar O.  
INTERNATIONAL JOURNAL OF PHYTOREMEDIATION, vol.25, no.1, pp.74-81, 2023 (SCI-Expanded)
17. **Green synthesis of copper oxide and manganese oxide nanoparticles from watermelon seed shell extract for enhanced photocatalytic reduction of methylene blue**  
Ekinci A., Kutluay S., Şahin Ö., Baytar O.  
INTERNATIONAL JOURNAL OF PHYTOREMEDIATION, vol.25, no.6, pp.789-798, 2023 (SCI-Expanded)
18. **Oxygen plasma treated petroleum coke adsorbent: characterization, synthesis, mechanism, and application for enhancement of malachite green removal**  
Saka C., Olcenoglu G. E., Sahin Ö.  
INTERNATIONAL JOURNAL OF ENVIRONMENTAL ANALYTICAL CHEMISTRY, vol.103, no.5, pp.1186-1202, 2023 (SCI-Expanded)
19. **Investigation of the properties of Cr-doped CdZnS nanocrystals with the best IPCE (%) value**  
Şahin Ö., Horoz S.  
JOURNAL OF THE AUSTRALIAN CERAMIC SOCIETY, vol.58, no.5, pp.1709-1714, 2022 (SCI-Expanded)
20. **An Investigation of the Effect of CuMoB Nanocatalysts on Efficient Hydrogen Production**  
Demirci S., İzgi M. S., Beştaş H., Şahin Ö.  
Russian Journal of Applied Chemistry, vol.95, no.9, pp.1418-1426, 2022 (SCI-Expanded)

21. **Surface modification of carbon fibres with electroactive PEDOT/epoxy composites**  
Huner K., Dolas H., Sarac A. S.  
BULLETIN OF MATERIALS SCIENCE, vol.45, no.3, 2022 (SCI-Expanded)
22. **Efficiency of TiO<sub>2</sub>-supported Ni-Mo-Ru-B catalyst for hydrogen production from potassium borohydride hydrolysis**  
Keskin M. S., Şahin Ö., Horoz S.  
JOURNAL OF THE AUSTRALIAN CERAMIC SOCIETY, vol.58, no.3, pp.973-979, 2022 (SCI-Expanded)
23. **Enhancement in incident photon-to-current conversion efficiency of manganese-decorated activated carbon-supported cadmium sulfide nanocomposite**  
Batur E., Baytar O., Horoz S., Şahin Ö., Kutluay S.  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.33, no.20, pp.16286-16296, 2022 (SCI-Expanded)
24. **Co-Mn-B Nanoparticles Supported on Epoxy-Based Polymer as Catalyst for Evolution of H-2 from Ammonia Borane Semi-Methanolysis**  
Çelik Kazıcı H., Izgi M. S., Sahin Ö.  
JOURNAL OF ELECTRONIC MATERIALS, vol.51, no.5, pp.2356-2368, 2022 (SCI-Expanded)
25. **Fabrication and characterization of Fe<sub>3</sub>O<sub>4</sub>/perlite, Fe<sub>3</sub>O<sub>4</sub>/perlite@SiO<sub>2</sub>, and Fe<sub>3</sub>O<sub>4</sub>/perlite@SiO<sub>2</sub>@sulfanilamide magnetic nanomaterials**  
Kutluay S., Sahin Ö., Ece M. S.  
Applied Physics A: Materials Science and Processing, vol.128, no.3, 2022 (SCI-Expanded)
26. **High hydrogen production rate from potassium borohydride hydrolysis with an efficient catalyst: CNT@Ru(0)**  
Keskin M. S., Ağırtaş M. S., Baytar O., Izgi M. S., Şahin Ö., Horoz S.  
DESALINATION AND WATER TREATMENT, vol.250, pp.189-196, 2022 (SCI-Expanded)
27. **Kinetics of catalytic hydrolysis of NaBH<sub>4</sub> solution: Ni-La-B catalyst**  
Ekinci A., Sahin Ö., Horoz S.  
JOURNAL OF THE AUSTRALIAN CERAMIC SOCIETY, vol.58, no.1, pp.113-121, 2022 (SCI-Expanded)
28. **Ternary SLE Measurements for the Systems H<sub>2</sub>O+ZnCl<sub>2</sub>+Zn(H<sub>2</sub>PO<sub>2</sub>)<sub>2</sub> at T=(298, 313 and 333) K**  
Demirci S., Adiguzel V., Sahin Ö., Erge H.  
JOURNAL OF THE CHEMICAL SOCIETY OF PAKISTAN, vol.44, no.1, pp.27-32, 2022 (SCI-Expanded)
29. **Preparation and characterization of activated carbon from hydrochar by hydrothermal carbonization of chickpea stem: an application in methylene blue removal by RSM optimization**  
Genli N., Kutluay S., Baytar O., Sahin Ö.  
INTERNATIONAL JOURNAL OF PHYTOREMEDIATION, vol.24, no.1, pp.88-100, 2022 (SCI-Expanded)
30. **Solid-liquid phase equilibria in the ternary systems H<sub>2</sub>O+ZnCl<sub>2</sub>+NaCl at temperatures of 298, 313 and 333 K**  
Demirci S., Adiguze V., Sahin Ö.  
JOURNAL OF THE SERBIAN CHEMICAL SOCIETY, vol.87, pp.263-273, 2022 (SCI-Expanded)
31. **Development of highly efficient and reusable Ruthenium complex catalyst for hydrogen evolution**  
Kilinc D., Sahin Ö.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.47, no.6, pp.3876-3885, 2022 (SCI-Expanded)
32. **An efficient synergistic Co@CQDs catalyst for hydrogen production from the hydrolysis of NH<sub>3</sub>BH<sub>3</sub>**  
Onat E., Sahin Ö., Izgi M. S., Horoz S.  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.32, no.23, pp.27251-27259, 2021 (SCI-Expanded)
33. **Investigation of high catalytic activity catalyst for high hydrogen production rate: Co-Ru@MOF**  
Onat E., Cevik S., Sahin Ö., Horoz S., Izgi M. S.  
JOURNAL OF THE AUSTRALIAN CERAMIC SOCIETY, vol.57, no.5, pp.1389-1395, 2021 (SCI-Expanded)
34. **Highly improved solar cell efficiency of Mn-doped amine groups-functionalized magnetic Fe<sub>3</sub>O<sub>4</sub>@SiO<sub>2</sub> nanomaterial**  
Kutluay S., Horoz S., Sahin Ö., Ekinci A., Ece M. S.

- INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.45, no.14, pp.20176-20185, 2021 (SCI-Expanded)
35. **Investigation of the kinetic properties of Co-La-Ce-B catalyst for sodium borohydride solutions to generate hydrogen for polymer electrolyte membrane fuel cell**  
Ekinci A., Sahin Ö., Horoz S.  
DESALINATION AND WATER TREATMENT, vol.237, pp.137-145, 2021 (SCI-Expanded)
36. **Catalytic activity of cobalt-boron-fluoride particles with different solvent mediums on sodium borohydride hydrolysis for hydrogen generation**  
Izgi M. S., Sahin Ö., Baytar O., Saka C.  
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, vol.43, no.16, pp.1933-1944, 2021 (SCI-Expanded)
37. **Effect of plasma pretreatment of Co-Cu-B catalyst on hydrogen generation from sodium borohydride methanolysis**  
Sahin Ö., Izgi M. S., Tayboga S., Çelik Kazıcı H.  
REACTION KINETICS MECHANISMS AND CATALYSIS, vol.133, no.2, pp.851-861, 2021 (SCI-Expanded)
38. **Facile synthesis and comprehensive characterization of Ni-decorated amine groups-immobilized Fe<sub>3</sub>O<sub>4</sub>@SiO<sub>2</sub> magnetic nanoparticles having enhanced solar cell efficiency**  
Ece M. S., Ekinci A., Kutluay S., Sahin Ö., Horoz S.  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.32, no.13, pp.18192-18204, 2021 (SCI-Expanded)
39. **Ruthenium-Imine catalyzed KBH<sub>4</sub> hydrolysis as an efficient hydrogen production system**  
Kilinc D., Sahin Ö.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.46, no.40, pp.20984-20994, 2021 (SCI-Expanded)
40. **Production of activated carbon from Elaeagnus angustifolia seeds using H<sub>3</sub>PO<sub>4</sub> activator and methylene blue and malachite green adsorption**  
Baytar O., Ceyhan A. A., Sahin Ö.  
INTERNATIONAL JOURNAL OF PHYTOREMEDIATION, vol.23, no.7, pp.693-703, 2021 (SCI-Expanded)
41. **A comprehensive study on the synthesis, characterization and mathematical modeling of nanostructured Co-based catalysts using different support materials for AB hydrolysis**  
Çelik Kazıcı H., Izgi M. S., Sahin Ö.  
CHEMICAL PAPERS, vol.75, no.6, pp.2713-2725, 2021 (SCI-Expanded)
42. **Synthesis and characterization of Fe:MgZnO/AC as a prospective high photocatalytic material**  
Cevik M. S., Horoz S., Baytar O., Sahin Ö., Ekinci A.  
JOURNAL OF OVONIC RESEARCH, vol.17, no.3, pp.291-298, 2021 (SCI-Expanded)
43. **Synthesis of Co-doped NiO/AC photocatalysts and their use in photocatalytic degradation**  
Bulut N., Baytar O., Sahin Ö., Horoz S.  
JOURNAL OF THE AUSTRALIAN CERAMIC SOCIETY, vol.57, no.2, pp.419-425, 2021 (SCI-Expanded)
44. **SYNTHESIS OF ACTIVATED CARBON IN THE PRESENCE OF HYDROCHAR FROM CHICKPEA STALK AND ITS CHARACTERIZATION**  
Genli N., Sahin Ö., Baytar O., Horoz S.  
JOURNAL OF OVONIC RESEARCH, vol.17, no.2, pp.117-124, 2021 (SCI-Expanded)
45. **Untangling the cobalt promotion role for ruthenium in sodium borohydride dehydrogenation with multiwalled carbon nanotube-supported binary ruthenium cobalt catalyst**  
Avci Hansu T., Sahin Ö., caglar A., DEMİR KIVRAK H.  
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.45, no.4, pp.6054-6066, 2021 (SCI-Expanded)
46. **Fabrication and characterization of 3,4-diaminobenzophenone-functionalized magnetic nanoadsorbent with enhanced VOC adsorption and desorption capacity**  
Sahin Ö., Kutluay S., Horoz S., Ece M. S.  
ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH, vol.28, no.5, pp.5231-5253, 2021 (SCI-Expanded)
47. **Highly active and stable CeO<sub>2</sub> supported nickel-complex catalyst in hydrogen generation**  
Kilinc D., Sahin Ö.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.46, no.1, pp.499-507, 2021 (SCI-Expanded)

48. **Investigation of the effect of magnesium and activated carbon on the photocatalytic degradation reaction of ZnO photocatalyst**  
Cevik M. S., Sahin Ö., Baytar O., Horoz S., Ekinci A.  
DESALINATION AND WATER TREATMENT, vol.209, pp.212-218, 2021 (SCI-Expanded)
49. **A comprehensive new study on the removal of Pb (II) from aqueous solution by sirnak coal-derived char**  
Batur E., Baytar O., Kutluay S., Horoz S., Sahin Ö.  
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50. **High volume hydrogen evolution from KBH<sub>4</sub> hydrolysis with palladium complex catalyst**  
Kilinc D., Sahin Ö.  
RENEWABLE ENERGY, vol.161, pp.257-264, 2020 (SCI-Expanded)
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## **Books & Book Chapters**

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### **2. SİLİKA-KAPLI MANYETİT/AKTİF KARBON MANYETİK NANOPARÇACIKLAR (MNP) KULLANILARAK TOLUENİN GAZ ADSORPSİYON PROSESİNİN OPTİMİZASYONU**

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20. **Investigation of borax pentahydrate crystallization in the CMSMPR system-the effects of CaSO<sub>4</sub>·H<sub>2</sub>O and MgSO<sub>4</sub> impurities**  
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## Academic and Administrative Experience

2017 - 2021	Vice Rector	Siirt University
2009 - 2018	Dean	Siirt University, Faculty Of Engineering
2009 - 2015	Head of Department	Siirt University, Faculty Of Engineering, Chemical Engineering

## Advising Theses

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## Scientific Refereeing

INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, SCI Journal, September 2022  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, SCI Journal, September 2022  
ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH, SCI Journal, September 2022  
JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING, SCI Journal, August 2022  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, SCI Journal, July 2022  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, National Scientific Refreed Journal, July 2022  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, SCI Journal, June 2022  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, SCI Journal, June 2022  
ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH, SCI Journal, June 2022  
ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH, National Scientific Refreed Journal, May 2022  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, SCI Journal, May 2022  
ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH, SCI Journal, March 2022  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, SCI Journal, March 2022  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, SCI Journal, February 2022  
ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH, SCI Journal, February 2022  
ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH, SCI Journal, December 2021  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, SCI Journal, June 2021  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, SCI Journal, June 2021  
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ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH, SCI Journal, September 2020  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, SCI Journal, February 2020  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, SCI Journal, September 2019  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, SCI Journal, September 2019  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, SCI Journal, May 2019  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, SCI Journal, April 2019  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, SCI Journal, March 2018  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, SCI Journal, June 2017  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, SCI Journal, October 2016

## Tasks In Event Organizations

Şahin Ö., Gürmen S., Kumral M., Saygılı G., Derin C. B., Sönmez M. Ş., Kutluay S., Uluslararası Bor Sempozyumu BORON 2022, Scientific Congress, İstanbul, Turkey, Ekim 2022  
Şahin Ö., Baytar O., İzgi M. S., Horoz S., Kutluay S., Ekinci A., INTERNATIONAL CONFERENCE ON APPLICATION IN CHEMISTRY AND CHEMICAL ENGINEERING, Scientific Congress, Belgrade, Serbia, Ekim 2018  
Şahin Ö., Hansu F., İzgi M. S., Ekinci A., Baytar O., International Conference on Applications in Chemistry and Chemical Engineering, Scientific Congress, Sarajevo, Bosnia And Herzegovina, Ekim 2017  
Şahin Ö., İzgi M. S., Horoz S., Baytar O., Ekinci A., Ece M. Ş., Kutluay S., The 3rd International Conference on Applications in Chemistry and Chemical Engineering, Scientific Congress, Bosnia And Herzegovina, Eylül 2016

## Metrics

Publication: 293  
Citation (WoS): 2699  
Citation (Scopus): 3715  
H-Index (WoS): 29

H-Index (Scopus): 36

## Research Areas

Environmental Chemistry and Technology, Inorganic Technologies, Fuels and Combustion Technology, Chemical Reaction Engineering, Catalysis and Catalytic Processes, Separation Operations