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International Researcher IDs
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Publons / Web Of Science ResearcherID: CAG-3092-2022
ScopusID: 24073596500
Yoksis Researcher ID: 141337

Education Information

Doctorate, Erciyes University, Fen Bilimleri Enstitüsü, Turkey 2003 - 2009

Dissertations

Doctorate, Lityum iyon pillerde katot aktif madde olarak kullanılan LiMn2O4 bileşiğinin elektrokimyasal performansının artırılması, Erciyes University, Fen Bilimleri Enstitüsü, -, 2009
Postgraduate, Kobalt katkılanmış lityum içerme bileşiklerinin sentezi karakterizasyonu ve doldurulabilir lityum piller , Erciyes University, Fen Bilimleri Enstitüsü, -, 2003

Research Areas

Chemistry, Natural Sciences, Engineering and Technology

Academic Titles / Tasks

Associate Professor, Kayseri University, Mühendislik, Mimarlık ve Tasarım Fakültesi, Mühendislik Temel Bilimleri Bölümü, 2022 - Continues
Associate Professor, Erciyes University, Fen Fakültesi, Kimya , 2015 - 2015
Assistant Professor, Erciyes University, Fen Fakültesi, Kimya , 2013 - 2014
Research Assistant PhD, Erciyes University, Fen Fakültesi, Kimya , 2009 - 2012
Research Assistant, Erciyes University, Fen Fakültesi, Kimya , 2000 - 2009

Academic and Administrative Experience

Director of the Center, Erciyes University, 2015 - 2016
Deputy Director of the Center, Erciyes University, 2014 - 2015

Courses

Yüzey Analiz Yöntemleri , Postgraduate, 2022 - 2023
Gıda Analizleri , Associate Degree, 2023 - 2024
İş Sağlığı ve Güvenliği, Associate Degree, 2023 - 2024
Katı Hal Kimyası , Postgraduate, 2023 - 2024
Bilgisayar Uygulamaları , Associate Degree, 2023 - 2024
Genel Kimya , Associate Degree, 2022 - 2023
Kimya, Undergraduate, 2022 - 2023

Jury Memberships

Post Graduate, Post Graduate, Ege Üniversitesi, September, 2023
Post Graduate, Post Graduate, Erciyes Üniversitesi, July, 2023
Post Graduate, Post Graduate, Erciyes Üniversitesi, March, 2023
Doctorate, Doctorate, Erciyes Üniversitesi, August, 2022
Doctorate, Doctorate, Erciyes Üniversitesi, August, 2022
Post Graduate, Post Graduate, Erciyes Üniversitesi, August, 2022
Post Graduate, Post Graduate, Abdullah Gül Üniversitesi, April, 2015

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Environmentally friendly nanoflower Al2O3@carbon spheres as adsorbent for dispersive solid-phase microextraction of copper and lead in food and water samples**
TOKALIOĞLU Ş., Demirişler M. S., ŞAHAN H., PATAT Ş.
Analytical Methods, vol.15, no.43, pp.5846-5854, 2023 (SCI-Expanded)

II. **In Situ Synthesis of Reduced Graphite Oxide-Li2ZnTi3O8 Composite as a High Rate Anode Material for Lithium-Ion Batteries**
Yildiz S., Sahan H.
JOURNAL OF THE ELECTROCHEMICAL SOCIETY, vol.166, no.10, 2019 (SCI-Expanded)

III. **Effect of silver coating on electrochemical performance of 0.5Li(2)MnO(3).0.5 LiMn1/3Ni1/3Co1/3O2 cathode material for lithium-ion batteries**
Sahan H., Goktepe H., PATAT Ş., Yildiz S., Ozdemir B., ÜLGEN A., Mukerjee S., Abraham K. M.
JOURNAL OF SOLID STATE ELECTROCHEMISTRY, vol.23, no.5, pp.1593-1604, 2019 (SCI-Expanded)

IV. **A novel and green synthesis of mixed phase CoO@Co3O4@C anode material for lithium ion batteries**
Sahan H., Goektepe H., Yildiz S., Caymaz C., PATAT Ş.
IONICS, vol.25, no.2, pp.447-455, 2019 (SCI-Expanded)

V. **Dispersive Solid-Phase Extraction of Rhodium from Water, Street Dust, and Catalytic Converters Using a Cellulose-Graphite Oxide Composite**
YAVUZ E., TOKALIOĞLU Ş., Sahan H., Kacer M., PATAT Ş.
ANALYTICAL LETTERS, vol.50, no.1, pp.63-79, 2017 (SCI-Expanded)

VI. **Vortexing/shaking-free solid phase extraction of lead(II) by using an urchin-like NiCo2O4 hollow microsphere adsorbent**
YAVUZ E., TOKALIOĞLU Ş., Sahan H., Berberoglu A., PATAT Ş.
MICROCHIMICA ACTA, vol.184, no.4, pp.1191-1198, 2017 (SCI-Expanded)

VII. **Ionic liquid coated carbon nanospheres as a new adsorbent for fast solid phase extraction of trace copper and lead from sea water, wastewater, street dust and spice samples**
TOKALIOĞLU Ş., YAVUZ E., Sahan H., Colak S. G., Ocakoglu K., Kacer M., PATAT Ş.
TALANTA, vol.159, pp.222-230, 2016 (SCI-Expanded)

VIII. **Effect of silver and carbon double coating on the electrochemical performance of LiFePO4 cathode material for lithium ion batteries**
Goktepe H., Sahan H., PATAT Ş.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.41, no.23, pp.9774-9779, 2016 (SCI-Expanded)

IX. **Nanosized spongelike Mn3O4 as an adsorbent for preconcentration by vortex assisted solid phase extraction of copper and lead in various food and herb samples**
YAVUZ E., TOKALIOĞLU Ş., Sahan H., PATAT Ş.
FOOD CHEMISTRY, vol.194, pp.463-469, 2016 (SCI-Expanded)

X. **Graphite Oxide Solid-Phase Extraction of Copper(II) and Lead(II) from Water, Food, Tobacco, and Hair**
YAVUZ E., TOKALIOĞLU Ş., Sahan H., Yilmaz B., PATAT Ş.
ANALYTICAL LETTERS, vol.49, no.14, pp.2193-2206, 2016 (SCI-Expanded)

XI. **Spectrophotometric determination of basic fuchsin from various water samples after vortex assisted solid phase extraction using reduced graphene oxide as an adsorbent**
Tokahoglu S., YAVUZ E., Aslantas A., Sahan H., Taskin F., PATAT Ş.
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY, vol.149, pp.378-384, 2015 (SCI-Expanded)

XII. **Synergetic action of doping and coating on electrochemical performance of lithium manganese spinel as an electrode material for lithium-ion batteries**
Sahan H., Ates M. N., Dokan F., ÜLGEN A., PATAT Ş.
BULLETIN OF MATERIALS SCIENCE, vol.38, no.1, pp.141-149, 2015 (SCI-Expanded)

XIII. **Nano sponge Mn2O3 as a new adsorbent for the preconcentration of Pd(II) and Rh(III) ions in sea water, wastewater, rock, street sediment and catalytic converter samples prior to FAAS determinations**
YAVUZ E., TOKALIOĞLU Ş., Sahan H., PATAT Ş.
TALANTA, vol.128, pp.31-37, 2014 (SCI-Expanded)

XIV. **Improvement of cycling stability of LiMn2O4 cathode by Fe2O3 surface modification for Li-ion battery**
Sahan H., Dokan F., ÜLGEN A., PATAT Ş.
IONICS, vol.20, no.3, pp.323-333, 2014 (SCI-Expanded)

XV. **Effects of TiO2 source on the electrochemical performance of Li4Ti5O12**
Dokan F., Şahan H., Özdemir B., ÖZDEMİR N., PATAT Ş.
Acta Physica Polonica A, vol.125, no.2, pp.650-651, 2014 (SCI-Expanded)

XVI. **Effects of TiO₂ Source on the Electrochemical Performance of Li₄Ti₅O₁₂**
KILIÇ DOKAN F., ŞAHAN H., ÖZDEMİR N., Ozdemir B., PATAT Ş.
ACTA PHYSICA POLONICA A, no.2, pp.650-651, 2014 (SCI-Expanded)

XVII. **Synthesis and Characterization of Spinel Li₄Ti₅O₁₂ Anode Material by CTAB Assisted Sol-Gel Method**
KILIÇ DOKAN F., ŞAHAN H., Ozdemir B., ÖZDEMİR N., PATAT Ş.
ACTA PHYSICA POLONICA A, no.2, pp.648-649, 2014 (SCI-Expanded)

XVIII. **Preconcentration of Ag and Pd ions using graphite oxide and 2,6-diaminopyridyne from water, anode slime and catalytic converter samples**
Yildirim G., TOKALIOĞLU Ş., Sahan H., PATAT Ş.
RSC ADVANCES, vol.4, no.35, pp.18108-18116, 2014 (SCI-Expanded)

XIX. **Synthesis and Characterization of Spinel Li4Ti5O12 Anode Material by CTAB Assisted SolGel Method**
Kiliç Dokan F., Şahan H., Özdemır B., Özdemır N., Patat Ş.
Acta Physica Polonica A, vol.125, pp.648-650, 2013 (SCI-Expanded)

XX. **Ultralayered Co3O4 as a new adsorbent for preconcentration of Pb(II) from water, food, sediment and tobacco samples**
YAVUZ E., TOKALIOĞLU Ş., Sahan H., PATAT Ş.

TALANTA, vol.115, pp.724-729, 2013 (SCI-Expanded)

XXI. **The Effect of Multiple Cation (Al, Si, Ti, Co) Doping on Electrochemical Performance of LiMn₂O₄ Cathode Active Material**
KILIÇ DOKAN F., ŞAHAN H., Veziroglu S., Tas N. A., AYDIN A., PATAT Ş.
ACTA PHYSICA POLONICA A, no.2, pp.365-367, 2013 (SCI-Expanded)

XXII. **Improvement of Cycling Stability of LiMn₂O₄ Cathode by Al₂O₃ Surface Coating for Li-Ion Batteries**
ŞAHAN H., Goktepe H., KILIÇ DOKAN F., AYDIN A., Veziroglu S., PATAT Ş.
ACTA PHYSICA POLONICA A, no.2, pp.368-370, 2013 (SCI-Expanded)

XXIII. **The effect of multiple cation (Al, Si, Ti, Co) doping on electrochemical performance of limn2o4 cathode active material**
Dokan F., Sahan H., Veziroglu S., Ta N. A., AYDIN A., PATAT Ş.
Acta Physica Polonica A, vol.123, no.2, pp.365-367, 2013 (SCI-Expanded)

XXIV. **Improvement of cycling stability of limn2o4 cathode by Al2O3 surface coating for li-ion batteries**
Sahan H., Göktepe H., Dokan F., AYDIN A., Veziroglu S., PATAT Ş.
Acta Physica Polonica A, vol.123, no.2, pp.368-370, 2013 (SCI-Expanded)

XXV. **A graphene/Co3O4 nanocomposite as a new adsorbent for solid phase extraction of Pb(II), Cu(II) and Fe(III) ions in various samples**
YAVUZ E., TOKALIOĞLU Ş., Sahan H., PATAT Ş.
RSC ADVANCES, vol.3, no.46, pp.24650-24657, 2013 (SCI-Expanded)

XXVI. **Synthesis and Electrochemical Properties of Carbon-Mixed LiEr0.02Fe0.98PO4 Cathode Material for Lithium-ion Batteries**
Goktepe H., Sahan H., ÜLGEN A., PATAT Ş.
JOURNAL OF MATERIALS SCIENCE & TECHNOLOGY, vol.27, no.9, pp.861-864, 2011 (SCI-Expanded)

XXVII. **A Novel Method to Improve the Electrochemical Performance of LiMn2O4 Cathode Active Material by CaCO3 Surface Coating**
Sahan H., Goktepe H., PATAT Ş.
JOURNAL OF MATERIALS SCIENCE & TECHNOLOGY, vol.27, no.5, pp.415-420, 2011 (SCI-Expanded)

XXVIII. **Improvement of the electrochemical performance of LiMn2O4 cathode active material by lithium borosilicate (LBS) surface coating for lithium-ion batteries**
Sahan H., Goktepe H., PATAT Ş., ÜLGEN A.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.509, no.11, pp.4235-4241, 2011 (SCI-Expanded)

XXIX. **Effect of the Cr2O3 coating on electrochemical properties of spinel LiMn2O4 as a cathode material for lithium battery applications**
Sahan H., Goktepe H., PATAT Ş., ÜLGEN A.
SOLID STATE IONICS, vol.181, no.31-32, pp.1437-1444, 2010 (SCI-Expanded)

XXX. **Improved of cathode performance of LiFePO4/C composite using different carboxylic acids as carbon sources for lithium-ion batteries**
Goktepe H., Sahan H., Kilic F., PATAT Ş.
IONICS, vol.16, no.3, pp.203-208, 2010 (SCI-Expanded)

XXXI. **Enhanced cyclability of triple-metal-doped LiMn2O4 spinel as the cathode material for rechargeable lithium batteries**
Goktepe H., Sahan H., PATAT Ş., ÜLGEN A.
IONICS, vol.15, no.2, pp.233-239, 2009 (SCI-Expanded)

XXXII. **Synthesis and cycling performance of double metal doped LiMn2O4 cathode materials for rechargeable lithium ion batteries**
Sahan H., Goktepe H., PATAT Ş.
INORGANIC MATERIALS, vol.44, no.4, pp.420-425, 2008 (SCI-Expanded)

XXXIII. **The effect of LBO coating method on electrochemical performance of LiMn2O4 cathode material**
Sahan H., Goktepe H., PATAT Ş., ÜLGEN A.
SOLID STATE IONICS, vol.178, no.35-36, pp.1837-1842, 2008 (SCI-Expanded)

Articles Published in Other Journals

I. **SİLANONLARIN ELEKTRONİK YAPILARININ VE HİDRASYON MEKANİZMALARININ TEORİK İNCELENMESİ**
Şahan H., Göktepe H., Ünal D., Sarıpınar E.
Erciyes Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.20, no.1, pp.77-86, 2004 (Peer-Reviewed Journal)

Books & Book Chapters

I. **Lityum Bataryaların Elektrokimyasal Performansının Artırılması**
Şahan H.
Türkiye Alim Kitapları , Riga, 2014

Refereed Congress / Symposium Publications in Proceedings

I. **In Situ Synthesis of Reduced Graphite Oxide-Li2ZnTi3O8 Composite As a High Rate Anode Material for Lithium-ion Batteries**
Yıldız S., Şahan H., Patat Ş., Kabak İ.
7 th International Symposium on Materials for Energy Storage and Conversion , Muğla, Turkey, 17 - 21 July 2023, pp.1

II. **Cu YÜZEY KAPLAMA İLE SPİNEL LiMn2O4 KATOT AKTİF MADDENİN ELEKTROKİMYASAL DÖNGÜ KARARLIĞININ İYİLEŞTİRİLMESİ**
Şahan H., Şanlı F., Taş Y., Yılmaz Y., Patat Ş.
SAVUNMA SANAYİ SEMPOZYUMU VE SERGİSİ-2022, Kayseri, Turkey, 13 - 15 October 2022, pp.38-42

III. **NEW AND ECOLOGICAL METHOD FOR THE PRODUCTION OF Cr2O3 FROM CHROMITE ORE**
Şahan H., Xu H.
Türkiye 27. Uluslararası Madencilik Kongresi ve Sergisi (IMCET 2022), Antalya, Turkey, 22 - 25 March 2022, pp.670-681

IV. **Separation and pre-concentration of beryllium from street sediment and water samples by tannic acid functionalised graphene aerogel prior to GFAAS determination**
Yavuz E., Tokalıoğlu Ş., Şahan H., Patat Ş.
9 th International Conference on Instrumental Methods of Analysis: Modern Trends and Applications, Kalamata, Greece, 20 - 24 September 2015, pp.303

V. **Solid phase extraction of lead by a nanosized urchin-like NiCo2O4 adsorbent prior to determination FAAS**
Yavuz E., Tokalıoğlu Ş., Şahan H., Patat Ş.
9 th International Conference on Instrumental Methods of Analysis: Modern Trends and Applications, Kalamata, Greece, 20 - 24 September 2015, pp.302

VI. **In vivo copper nanoparticle synthesis from copper-polluted water using common water weed (Elodea canadensis)**
Duman F., Şahan H., Öçsoy İ.
14th International Symposium on Aquatic Plants, Edinburgh, England, 14 - 18 September 2015, pp.87

VII. **Electrochemical performance of silver coated Li1.3Mn0.666Co0.167Ni0.167O2.4 cathode active material for rechargeable Li-ion batteries**
Şahan H.
1st International Symposiumon Materialsfor EnergyStorage andConversion, Ankara, Turkey, 7 - 09 September 2015, pp.143

VIII. **SYNTHESIS, CHARACTERIZATION AND IMPROVEMENT OF alpha-Co(OH)(2) FOR SUPERCAPACITOR APPLICATIONS**

Aydin A., PATAT Ş., ÜLGEN A., Sahan H., Fatma K. D., Veziroglu S.
International Conference on Optimization of Electrical and Electronic Equipment (OPTIM), Romania, 22 - 24 May 2014, pp.1087-1091

IX. **Electrochemical performance of polyaniline coated LiMn 2 O 4 cathode active material for lithium ion batteries**
Sahan H., Dokan F., Aydin A., Ozdemir B., Ozdemir N., PATAT Ş.
3rd International Advances in Applied Physics and Materials Science Congress, APMAS 2013, Antalya, Turkey, 24 - 28 April 2013, vol.1569, pp.61-64

X. **Influence of succinic acid and polyethylene glycol (PEG) additives on electrochemical performance of lithium-ion batteries**
Goktepe H., Sahan H., Dokan F., Veziroglu S., Aydin A., PATAT Ş.
2nd International Advances in Applied Physics and Materials Science Congress, APMAS 2012, Antalya, Turkey, 26 - 29 April 2012, vol.1476, pp.265-268

XI. **Cycling behaviour of Barium doped LiMn2O4 cathode materials for Li-ion secondary batteries**
Şahan H.
Energy Challenges foradvanced materials and Processes (EnCAMP), Nevşehir, Turkey, 25 May 2011 - 29 May 2022, pp.6

XII. **Carboxylic acid-assisted cathode performance of LiFePO4/C composit using three carboxylic acids as carbon sources for lithium–ion batteries**
Şahan H.
Energy Challenges foradvanced materials and Processes (EnCAMP), Nevşehir, Turkey, 25 - 29 May 2011, pp.7

XIII. **Improved of cathode performance of LiFePO4/C composite using tartaric acid and ascorbic acid as carbon sources for lithium-ion batteries**
Şahan H.
8. International Electrochemistry Meeting in Turkey, Antalya, Turkey, 8 - 11 October 2009, pp.217

XIV. **Enhancement of Electrochemical Performance of Spinel LiMn2O4 Cathode Material for lithium-ion batteries**
Şahan H.
8. International Electrochemistry Meeting in Turkey, Antalya, Turkey, 8 - 11 October 2009, pp.223

XV. **Effect of Multiple Cation Substituting on Electrochemical Performance of Spinel LiMn2O4 Cathode Material**
Şahan H.
8. International Electrochemistry Meeting in Turkey, Antalya, Turkey, 8 - 11 October 2009, pp.220

XVI. **Effect of the CaCO3 coating on the electrochemical properties of LiMn2O4 as a cathode material for lithium battery applications**
Şahan H.
8. International Electrochemistry Meeting in Turkey, Antalya, Turkey, 8 - 11 October 2009, pp.42

Supported Projects

Şahan H., Şen Ü., TUBITAK Project, Yüksek Kapasitede Hidrojen Ve Metan Depolanması Için Bor Esaslı Gözenekli Malzemelerin Geliştirilmesi, 2015 - 2022
Şahan H., Hançer M., TUBITAK Project, Nanokil kullanarak yanmaya karşı dirençli halojensiz polimer üretimi, 2011 - 2022
Şahan H., Duman F., Şahin U., Tokalıoğlu Ş., Atıcı T., TÜBİTAK - AB COST Project, Sularda Patlama Yapan Mikro Alglerin Manyetik Özellikli Biyosentetik Maghemit (?-Fe2O3) Nanopartikülleri ile Toplanması ve Biyoyakıt Eldesi, 2016 - 2018
Şahan H., Project Supported by Other Private Institutions, İnce Film Elektrolit ile Nanokompozit Elektrot İçeren Şarjedilebilir Lityum iyon Pil Geliştirilmesi, 2015 - 2015
Şahan H., Göktepe H., Patat Ş., TUBITAK Project, Şarj Edilebilir Ticari Lityum Düğme Piller İçin Optimize Edilmiş LiFePO4 Katot Aktif Maddesinin Üretilmesi ve Elektrokimyasal Performansının Artırılması, 2010 - 2011

Activities in Scientific Journals

FRONTIERS IN MATERIALS, Editor, 2022 - Continues
FRONTIERS IN ENERGY RESEARCH, Assistant Editor/Section Editor, 2021 - 2022

Scientific Refereeing

Frontiers in Materials, SCI Journal, October 2023
JOURNAL OF ALLOYS AND COMPOUNDS, SCI Journal, August 2023
NANOTECHNOLOGY, SCI Journal, July 2023
JOURNAL OF ALLOYS AND COMPOUNDS, SCI Journal, June 2023
Frontiers in Materials, SCI Journal, February 2023
Project Supported by Higher Education Institutions, BAP Research Project, Kayseri University, Turkey, December 2022
MATERIALS CHEMISTRY AND PHYSICS, SCI Journal, November 2022
MATERIALS CHEMISTRY AND PHYSICS, SCI Journal, October 2022
JOURNAL OF SOLID STATE ELECTROCHEMISTRY, SCI Journal, August 2022
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JOURNAL OF ALLOYS AND COMPOUNDS, SCI Journal, November 2021
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JOURNAL OF MATERIOMICS, SCI Journal, December 2020
ELECTROCHIMICA ACTA, SCI Journal, August 2020
MATERIALS CHEMISTRY AND PHYSICS, SCI Journal, May 2020
ELECTROCHIMICA ACTA, SCI Journal, December 2019
JOURNAL OF ALLOYS AND COMPOUNDS, SCI Journal, December 2019
INORGANIC CHEMISTRY FRONTIERS, SCI Journal, August 2019
JOURNAL OF ALLOYS AND COMPOUNDS, SCI Journal, March 2018
JOURNAL OF ALLOYS AND COMPOUNDS, SCI Journal, October 2015

Metrics

Publication: 51
Citation (WoS): 565
Citation (Scopus): 582
H-Index (WoS): 15
H-Index (Scopus): 14

Congress and Symposium Activities

Otomotiv Teknoloji Platformu (OTEP) Batarya Çalışma Grubu Toplantısı , Invited Speaker, Kocaeli, Turkey, 2023

ASPİLSAN ENERJİ 7.PİL TEKNOLOJİLERİ ÇALIŞTAYI , Audience, Kayseri, Turkey, 2022

Scholarships

Lityum Hava Bataryalarının Elektrokimyasal Performansının Artırılması , TUBITAK, 2012 - 2013

Awards

Şahan H., LiNi0.8Co0.1Mn0.1O2 (NCM) KATOT KULLANILARAK CR2025 BUTON (DÜĞME) TİP ŞARJ EDİLEBİLİR LİTYUM PİL ÜRETİMİ MÜHENDİSLİK KATEGORİSİ AKEDEMİSYEN BİRİNCİSİ , 2. Ar-Ge Proje Pazarı Ve Üniversite Tanıtım Günleri, November 2024

Şahan H., Yıldız S., TET PROJE PAZARI 11, Elektrik Ve Elektronik İhracatçılar Birliği , December 2022

Yavuz E., Tokalıoğlu Ş., Şahan H., Patat Ş., Nanotel Spinel Materyal Sentezi ve Kurşunun Önderiştirilmesi için Adsorbent Olarak Kullanımı , Sakarya Üniversitesi , May 2016

Şahan H., Ateş M. N., Patat Ş., Mukerjee S., Abraham K., Geleceğin Pilleri: Şarjedilebilir lityum oksijen pilleri , Türkiye İhracatçılar Meclisi, İstanbul Kimyevi Maddeler Ve Mamülleri İhracatçıları Birliği Ve Akdeniz İhracatçı Birlikeri, 3.Arge Proje Pazarı , September 2013

Şahan H., Kılıç Dokan F., Patat Ş., İstanbul Kimyevi Maddeler ve Mamülleri İhracatçıları Birliği ve Akdeniz İhracatçı Birliği, 2.Arge proje pazarı , Türkiye İhracatçılar Meclisi , September 2012

Şahan H., Bilimsel Çalışma Teşvik Ödülü , Erciyes Üniversitesi Rektörlüğü , March 2011

Akkuş N., Şahan H., Patat Ş., Şarjedilebilir Lityum Pillerde Katot Aktif Madde Olarak Kullanılan LiMn2O4 Bileşiğine CaCO3 Kaplamanın Elektrokimyasal Performansa Etkisi, Ieee, Yıldız Teknik Üniversitesi , June 2010

Ateş M. N., Şahan H., Patat Ş., Li-ion Bataryalar İçin Alternatif Katot Aktif Madde Üretimi, İzmir Yüksek Teknoloji Enstitüsü (İyte), Kimya Mühendisliği Bölümü ,Viii. Ne Üretelim Etkinlikleri Ve Proje Yarışması, December 2009

Ateş M. N., Şahan H., Patat Ş., Türkiye'de Üretilmeyen ve Şarj Edilebilir Li-İyon Pillerde Katot Aktif Madde Olarak Kullanılan LiMn2O4 Bileşiğinin Üretilmesi ve Performansının Artırılması (Referans No: 112), Orta Anadolu Kalkınma Birliği (Orakab) , September 2009

Şahan H., Göktepe H., Patat Ş., Başarı Teşvik Ödülü , Erciyes Üniversitesi Rektörlüğü , November 2007

Kılıç F., Şahan H., Patat Ş., Doldurulabilir Lityum Pillerde Katot Aktif Madde Olarak Kullanılan LiMn2O4 Spineline Ba Katkılamanın Elektrokimsal Performansa Olan Etkisi, İnönü Üniversitesi, Fen Edebiyat Fakültesi Kimya Bölümü Tarafından Düzenlenen 21.Ulusal Kimya Kongresinde, August 2007

Şahan H., Göktepe H., Patat Ş., Doldurulabilir Lityum Pillerde Katot Aktif Madde Olarak Kullanılan LiMn2O4 Bileşiğinin katkılama ile kararlı hale getirilmesi, Ege Üniversitesi, Fen Fakültesi Kimya Bölümü Tarafından Düzenlenen 19.Ulusal Kimya Kongresi, September 2005