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International Researcher IDs

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Publons / Web Of Science ResearcherID: U-3487-2018

ScopusID: 6701531692

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Education Information

Doctorate, Ataturk University, Fen Bilimleri Enstitüsü, Fizik, Turkey 2004 - 2009

Postgraduate, Ataturk University, Fen Bilimleri Enstitüsü, Fizik Eğitimi, Turkey 2001 - 2004

Undergraduate, Ataturk University, Kâzım Karabekir Eğitim Fakültesi, Fizik Öğretmenliği, Turkey 1997 - 2001

Foreign Languages

Arabic, B1 Intermediate

English, B2 Upper Intermediate

Dissertations

Doctorate, NdBa₂Cu₃O₇-? Süperiletken İnce Filmlerinde Yapay Çivileme Merkezleri, Atatürk Üniversitesi, Fen Bilimleri Enstitüsü, Fizik, 2009

Postgraduate, Öğrencilerin Yetenek, İlgi ve Değerlerinin Fizik Öğrenme Başarısına Etkisi, Atatürk Üniversitesi, Fen Bilimleri Enstitüsü, Fizik Eğitimi, 2004

Research Areas

Physics, Interdisciplinary Physics and Related Science and Technology Areas, Materials Science, Intensive Article 2: Electronic Structure, Electric, Magnetic and Optical Properties, Superconductivity, Natural Sciences

Academic Titles / Tasks

Associate Professor, Ataturk University, Kâzım Karabekir Eğitim Fakültesi, Matematik ve Fen Bilimleri Eğitimi, 2016 - Continues

Assistant Professor, Ataturk University, Kâzım Karabekir Eğitim Fakültesi, Matematik ve Fen Bilimleri Eğitimi, 2009 - 2016

Research Assistant, Ataturk University, Kâzım Karabekir Eğitim Fakültesi, Matematik ve Fen Bilimleri Eğitimi, 2003 - 2009

Courses

Nanophysics, Postgraduate, 2020 - 2021

Advising Theses

Sönmez E., Boya duyarlı güneş gözelerinde karşıt elektrot olarak kullanılan tek tabaka grafen üzerinde büyütülmüş CuInSe₂ ince filmlerinin karakteristiklerinin incelenmesi, Doctorate, A.AKDAĞ(Student), 2020

Sönmez E., CdS/CdTe güneş hücrelerinde MoS₂ ince filminin ara tabaka olarak kullanılması ve etkisi, Doctorate, A.EFE(Student), 2020

SÖNMEZ E., Kimyasal püskürtme yöntemi ile hazırlanan çinko oksit nanoçubukların üretimi, karakterizasyonu ve boya duyarlı güneş pili uygulamaları, Postgraduate, M.Büyükaydın(Student), 2018

SÖNMEZ E., Fizik dersi optik ünitesi öğretiminde jigsaw tekniğinin 10. sınıf öğrencilerinin akademik başarısına etkisi, Postgraduate, M.Yavuz(Student), 2016

SÖNMEZ E., Düşük sıcaklıklarda bor nitrid eldesi ve karakterizasyonu, Postgraduate, E.Demiray(Student), 2016

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Safety Assessments of Nickel Boride Nanoparticles on the Human Pulmonary Alveolar Cells by Using Cell Viability and Gene Expression Analyses**
Türkez H., Arslan M. E., Sönmez E., Tatar A., Geyikoğlu F., Açıkyıldız M., Mardinoglu A.
BIOLOGICAL TRACE ELEMENT RESEARCH, vol.199, no.7, pp.2602-2611, 2021 (SCI-Expanded)
- II. **Effect of in-/ex-situ annealing temperature on the optical, structural and gas sensing dynamics of CdS nanostructured thin films**
Gormez A. E., Basyooni M. A., Zaki S. E., EKER Y. R., SÖNMEZ E., YILMAZ M.
SUPERLATTICES AND MICROSTRUCTURES, vol.142, 2020 (SCI-Expanded)
- III. **Europium incorporation dynamics within NiO films deposited by sol-gel spin coating: Experimental and theoretical studies**
Goumri-Said S., Khan W., Boubaker K., Turgut G., Sonmez E., Minar J., Bououdina M., Kanoun M. B.
MATERIALS RESEARCH BULLETIN, vol.118, 2019 (SCI-Expanded)
- IV. **Microarray assisted toxicological investigations of boron carbide nanoparticles on human primary alveolar epithelial cells**
Türkez H., Arslan M. E., SÖNMEZ E., GEYİKOĞLU F., Açıkyıldız M., TATAR A.
Chemico-Biological Interactions, vol.300, pp.131-137, 2019 (SCI-Expanded)
- V. **Synthesis, characterization and cytotoxicity of boron nitride nanoparticles: emphasis on toxicogenomics**
Türkez H., Arslan M. E., SÖNMEZ E., Açıkyıldız M., TATAR A., GEYİKOĞLU F.
Cytotechnology, vol.71, no.1, pp.351-361, 2019 (SCI-Expanded)
- VI. **Toxicogenomic responses of human alveolar epithelial cells to tungsten boride nanoparticles.**
Türkez H., Arslan M. E., SÖNMEZ E., TATAR A., Açıkyıldız M., GEYİKOĞLU F.
Chemico-biological interactions, vol.273, pp.257-265, 2017 (SCI-Expanded)
- VII. **Cytotoxicity analysis of tellurium dioxide nanoparticles on cultured human pulmonary alveolar epithelial and peripheral blood cell cultures.**
AYDIN N., ARSLAN M. E., SÖNMEZ E., TÜRKEZ H.
BIOMEDICAL RESEARCH-INDIA, vol.28, no.7, pp.3300-3304, 2017 (SCI-Expanded)
- VIII. **Toxicity assessment of hydroxyapatite nanoparticles in rat liver cell model in vitro**
SÖNMEZ E., CACCIORATE I., BAKAN F., TÜRKEZ H., MOKHTAR Y. I., TOGAR B., Dİ STEFANO A.
HUMAN & EXPERIMENTAL TOXICOLOGY, vol.35, no.10, pp.1073-1083, 2016 (SCI-Expanded)
- IX. **Genotoxicity in primary human peripheral lymphocytes after exposure to lithium titanate**

nanoparticles in vitro

Akbaba G. B., Turkez H., SÖNMEZ E., TATAR A., YILMAZ M.

TOXICOLOGY AND INDUSTRIAL HEALTH, vol.32, no.8, pp.1423-1429, 2016 (SCI-Expanded)

- X. **Investigation of Structural, Morphological, Optical, and Electrical Properties of Al Doped ZnO Thin Films Via Spin Coating Technique**
YILMAZ M., TATAR D., SÖNMEZ E., ÇIRAK Ç., AYDOĞAN Ş., Gunturkun R.
SYNTHESIS AND REACTIVITY IN INORGANIC METAL-ORGANIC AND NANO-METAL CHEMISTRY, vol.46, no.4, pp.489-494, 2016 (SCI-Expanded)
- XI. **A study of Eu incorporated ZnO thin films: An application of Al/ZnO:Eu/p-Si heterojunction diode**
Turgut G., Duman S., SÖNMEZ E., Ozcelik F. S.
MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS, vol.206, pp.9-16, 2016 (SCI-Expanded)
- XII. **Health risk assessments of lithium titanate nanoparticles in rat liver cell model for its safe applications in nanopharmacology and nanomedicine**
Turkez H., SÖNMEZ E., Dİ STEFANO A., MOKHTAR Y. I.
CYTOTECHNOLOGY, vol.68, no.2, pp.291-302, 2016 (SCI-Expanded)
- XIII. **In vitro genotoxicity evaluation of tungsten (VI) oxide nanopowder using human lymphocytes.**
AKBABA G. B., TÜRKİZ H., SÖNMEZ E., AKBABA U., AYDIN E., TATAR A., TURGUT G., ÇERİĞ S.
BIOMEDICAL RESEARCH-INDIA, vol.27, no.1, pp.229-234, 2016 (SCI-Expanded)
- XIV. **CYTOTOXICITY AND GENOTOXICITY OF IRON OXIDE NANOPARTICLES: AN IN VITRO BIOSAFETY STUDY**
SÖNMEZ E., AYDIN E., TÜRKİZ H., ÖZBEK E., TOGAR B., MERAL K., ÇETİN D., CACCIATORE I., Dİ STEFANO A.
ARCHIVES OF BIOLOGICAL SCIENCES, vol.68, no.1, pp.41-50, 2016 (SCI-Expanded)
- XV. **Influences of Pr and Ta doping concentration on the characteristic features of FTO thin film deposited by spray pyrolysis**
TURGUT G., KOÇYİĞİT A., SÖNMEZ E.
CHINESE PHYSICS B, vol.24, no.10, 2015 (SCI-Expanded)
- XVI. **Hepatic effects of yttrium oxide nanoflowers: in vitro risk evaluation**
SÖNMEZ E., Turkez H., Aydın E., ÖZGERİŞ F. B., Öztetik E., Kerli S., CACCIATORE I., STEFANO A. D.
TOXICOLOGICAL AND ENVIRONMENTAL CHEMISTRY, vol.97, no.5, pp.599-608, 2015 (SCI-Expanded)
- XVII. **Determination of certain sol-gel growth parameters of nickel oxide films**
TURGUT G., SÖNMEZ E., Duman S.
CERAMICS INTERNATIONAL, vol.41, no.2, pp.2976-2989, 2015 (SCI-Expanded)
- XVIII. **Evaluation of an Nd doping effect on characteristic properties of tin oxide**
TURGUT G., SÖNMEZ E., Duman S.
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol.30, pp.233-241, 2015 (SCI-Expanded)
- XIX. **The effect of annealing temperature on the electrical characterization of Co/n type GaP Schottky diode**
Orak I., Ejderha K., SÖNMEZ E., Alanyalioglu M., TÜRÜT A.
MATERIALS RESEARCH BULLETIN, vol.61, pp.463-468, 2015 (SCI-Expanded)
- XX. **The effect of Mo and F double doping on structural, morphological, electrical and optical properties of spray deposited SnO₂ thin films**
Turgut G., Sönmez E., Aydın S., Dilber R., Turgut Ü.
CERAMICS INTERNATIONAL, vol.40, pp.12891-12898, 2014 (SCI-Expanded)
- XXI. **Characteristic evaluation on spray-deposited WFTO thin films as a function of W doping ratio**
Turgut G., Keskenler E. F., Aydın S., Tatar D., Sönmez E., Dogan S., Duzgun B.
RARE METALS, vol.33, pp.433-441, 2014 (SCI-Expanded)
- XXII. **A Study of Pb-Doping Effect on Structural, Optical, and Morphological Properties of ZnO Thin Films Deposited by Sol-Gel Spin Coating**
TURGUT G., SÖNMEZ E.
METALLURGICAL AND MATERIALS TRANSACTIONS A-PHYSICAL METALLURGY AND MATERIALS SCIENCE, no.8,

- pp.3675-3685, 2014 (SCI-Expanded)
- XXIII. **The Risk Evaluation of Tungsten Oxide Nanoparticles in Cultured Rat Liver Cells for Its Safe Applications in Nanotechnology**
Turkez H., SÖNMEZ E., TURKEZ O., Mokhtar Y. I., di Stefano A., TURGUT G.
BRAZILIAN ARCHIVES OF BIOLOGY AND TECHNOLOGY, vol.57, no.4, pp.532-541, 2014 (SCI-Expanded)
- XXIV. **The variation of the features of SnO₂ and SnO₂:F thin films as a function of V dopant**
Turgut G., SÖNMEZ E., YILMAZ M., ÇÖGENLİ M. S., Yılmaz M., TURGUT Ü., DİLBER R.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.25, no.6, pp.2808-2828, 2014 (SCI-Expanded)
- XXV. **Synthesis and characterization of Mo doped SnO₂ thin films with spray pyrolysis**
TURGUT G., SÖNMEZ E.
SUPERLATTICES AND MICROSTRUCTURES, vol.69, pp.175-186, 2014 (SCI-Expanded)
- XXVI. **Evaluation of cytotoxic, oxidative stress and genotoxic responses of hydroxyapatite nanoparticles on human blood cells**
Turkez H., YOUSEF M. I., SÖNMEZ E., TOGAR B., Bakan F., SOZIO P., STEFANO A. D.
JOURNAL OF APPLIED TOXICOLOGY, vol.34, no.4, pp.373-379, 2014 (SCI-Expanded)
- XXVII. **An investigation of Zn/ZnO:Al/p-Si/Al heterojunction diode by sol-gel spin coating technique**
TURGUT G., DUMAN S., ÖZÇELİK F., SÖNMEZ E., GÜRBULAK B.
Journal of Sol-Gel Science and Technology, vol.71, no.3, pp.589-596, 2014 (SCI-Expanded)
- XXVIII. **Comparison of some physical properties for SnO₂, SnO₂: F and SnO₂: Sb films deposited on glass substrates**
TATAR D., TURGUT G., SÖNMEZ E., DÜZGÜN B.
JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, vol.15, pp.1026-1031, 2013 (SCI-Expanded)
- XXIX. **A study on characterization of Al/ZnS/p-Si/Al heterojunction diode synthesized by sol-gel technique**
Turgut G., Keskenler E. F., Aydın S., Dogan S., Duman S., Sönmez E., Esen B., Duzgun B.
MATERIALS LETTERS, vol.102, pp.106-108, 2013 (SCI-Expanded)
- XXX. **Effect of Nb doping on structural, electrical and optical properties of spray deposited SnO₂ thin films**
Turgut G., Keskenler E. F., Aydın S., Sönmez E., Dogan S., Duzgun B., Ertuğrul M.
SUPERLATTICES AND MICROSTRUCTURES, vol.56, pp.107-116, 2013 (SCI-Expanded)
- XXXI. **Enhanced critical current density using Nd₂O₃ nano-islands on NdBa₂Cu₃O_{7-δ} thin films prepared by PLD**
SÖNMEZ E., ERTUĞRUL M.
EUROPEAN PHYSICAL JOURNAL-APPLIED PHYSICS, vol.62, no.1, 2013 (SCI-Expanded)
- XXXII. **Doping of Nb to the Ba and Cu sites in the Y_{0.6}Gd_{0.4}Ba₂Cu₃O_{7-δ}**
Yılmaz M., SÖNMEZ E., Doğan O.
Journal of Low Temperature Physics, vol.171, pp.107-119, 2013 (SCI-Expanded)
- XXXIII. **Study of Structural and Optical Properties of Zinc Oxide Rods Grown on Glasses by Chemical Spray Pyrolysis**
Sönmez E., Aydın S., Yılmaz M., Yurtcan M. T., Karacalı T., Ertuğrul M.
JOURNAL OF NANOMATERIALS, 2012 (SCI-Expanded)
- XXXIV. **Enhancement of Photoluminescence Lifetime of ZnO Nanorods Making Use of Thiourea**
SÖNMEZ E., Meral K.
JOURNAL OF NANOMATERIALS, 2012 (SCI-Expanded)
- XXXV. **Optical properties of ZnO nanorods on glass via spray deposition of solution containing zinc chloride and thiourea**
SÖNMEZ E., KARACALI T., EKINCI A. E., ERTUĞRUL M.
IEEE Transactions on Nanotechnology, vol.10, no.3, pp.532-536, 2011 (SCI-Expanded)
- XXXVI. **INVESTIGATION OF EFFECTIVENESS OF DEMONSTRATION-SIMULATION BASED INSTRUCTION IN TEACHING ENERGY CONSERVATION AT 7 TH GRADE**
Aggul F., YALÇIN M., AÇIKYILDIZ M., SÖNMEZ E.

Articles Published in Other Journals

- I. **Investigating the Effect of Yttrium Oxide Nanoparticle in U87MG Glioma and PC3 Prostate Cancer: Molecular Approaches**
Aydın Karataş E., Bayındırh K. N., Özdemir Tozlu Ö., Sönmez E., Kerli S., Türkez H., Yazıcı A.
İğdır Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.11, no.3, pp.2307-2318, 2021 (Peer-Reviewed Journal)
- II. **Expression profiling and pathway analysis of iron oxide nanoparticles toxicity on human lung alveolar epithelial cell line using microarray analysis,**
TÜRKEZ H., ARSLAN M. E., SÖNMEZ E., TATAR A., GEYİKOĞLU F., AÇIKYILDIZ M.
Hacettepe Journal of Biology and Chemistry, vol.48, no.4, pp.309-318, 2020 (Peer-Reviewed Journal)
- III. **FİZİK DERSİ OPTİK ÜNİTESİ ÖĞRETİMİNDE JİGSAWTEKİNİNİN 10. SINIF ÖĞRENCİLERİNİN AKADEMİK BAŞARISINAETKİSİ**
MERAL Y., SÖNMEZ E., DİLBER R.
The Journal of Akademik Social Science, vol.5, pp.1-13, 2017 (Peer-Reviewed Journal)
- IV. **Choosing the Right Antioxidant Supplement for Protecting Liver from Toxicity of Engineered Nanoparticles A Comprehensive In Vitro Screening**
TÜRKEZ H., SÖNMEZ E., AYDIN E., HACİMÜFTÜOĞLU A., ÖZTETİK E.
Applied Mechanics and Materials, vol.835, pp.57-62, 2016 (Peer-Reviewed Journal)
- V. **Boron Compounds Counteracts Oxidative Stress Mediated Genotoxicity Induced by Fe3O4 Nanoparticles In Vitro**
TÜRKEZ H., SÖNMEZ E., TATAR A.
Applied Mechanics and Materials, vol.835, pp.84-90, 2016 (Peer-Reviewed Journal)
- VI. **Process and Characterization of Ni Doped ZnO Nanoparticles**
EFE A., YILMAZ M., BUDAK H. F., AKDAĞ A., BÜYÜKAYDIN M., CAN M., TURGUT G., SÖNMEZ E.
Process and Characterization of Ni Doped ZnO Nanoparticles, pp.56-63, 2016 (Peer-Reviewed Journal)
- VII. **2006 Öğrenci Seçme Sınavında Çıkmış Olan Fizik Sorularının Kapsam Geçerliliğinin Analizi**
KARAMAN İ., DİLBER R., SÖNMEZ E.
Kazım Karabekir Eğitim Fakültesi Dergisi, vol.16, pp.79-110, 2007 (Peer-Reviewed Journal)
- VIII. **STUDENTS PERCEPTIONS REGARDING SOME PHYSICAL CONCEPTS**
DİLBER R., SÖNMEZ E., KARAMAN İ.
BALKAN PHYSICS LETTERS, vol.15, pp.44-50, 2007 (Peer-Reviewed Journal)
- IX. **APPLICATION OF A QUESTIONNAIRE TO DESCRIBE PHYSICS STUDENTS ATTITUDES ABOUT LABORATORY ACTIVITIES**
DİLBER R., SÖNMEZ E., ÖZAY KÖSE E., SEZEK F., DOĞAN S.
Balkan Physics Letter, vol.15, pp.13-21, 2007 (Peer-Reviewed Journal)
- X. **Öğretim Teknolojileri ve Materyal Geliştirme Dersinin Öğrenci Açısından Önemine Yönelik Bir Çalışma**
SÖNMEZ E., DİLBER R., KARAMAN İ.
Kazım Karabekir Eğitim Fakültesi Dergisi, vol.13, pp.112-119, 2006 (Peer-Reviewed Journal)
- XI. **Fizikte Öğrenme Güçlüklerinin Saptanmasına Yönelik Bir Çalışma**
TURGUT Ü., KARAMAN İ., SÖNMEZ E., DİLBER R., ŞİMŞEK Ö.
Kazım Karabekir Eğitim Fakültesi Dergisi, vol.13, pp.431-437, 2006 (Peer-Reviewed Journal)
- XII. **Fizik Bölümü Öğrencilerinin Laboratuarlara Karşı Tutumlarının Değerlendirilmesi ve Karşılaşılan Sorunların Tespit Edilmesi üzerine Bir araştırma**
DİLBER R., SÖNMEZ E., DOĞAN S., SEZEK F.
Çukurova Üniversitesi Eğitim Fakültesi Dergisi, vol.1, pp.102-110, 2006 (Peer-Reviewed Journal)
- XIII. **Fizik Laboratuvarlarında Kullanılan Deney Malzemeleri Üzerine Bir Çalışma**
SÖNMEZ E., DİLBER R., KARAMAN İ.

Books & Book Chapters

- I. **Süperiletkenler**
SÖNMEZ E.
in: Fiziğin Bilim ve Teknolojideki Uygulamaları, Yener D., Editor, Pegem A Yayıncılık, Ankara, pp.229-241, 2019
- II. **Yarıiletkenler**
SÖNMEZ E.
in: Fiziğin Bilim ve Teknolojideki Uygulamaları, Yener D., Editor, Pegem A Yayıncılık, Ankara, pp.242-257, 2019
- III. **Yarıiletkenler**
SÖNMEZ E.
in: Fiziğin Bilim ve Teknolojideki Uygulamaları, Dünder Yener, Editor, Pegem Akademi, Ankara, pp.243-258, 2019
- IV. **Süperiletkenler**
SÖNMEZ E.
in: Fiziğin Bilim ve Teknolojideki Uygulamaları, Dünder Yener, Editor, Pegem Akademi, Ankara, pp.229-242, 2019

Refereed Congress / Symposium Publications in Proceedings

- I. **Bilim, Astronomi ve Kayak Eğitimi (BAK) Kampı'na Katılan Ortaokul Öğrencilerinin Deneyimlerinin İncelenmesi**
SÖNMEZ E., OKTAY Ö.
1. Uluslararası İnfomal Öğrenme Kongresi (ICIL), Nevşehir, Turkey, 1 - 03 November 2019, pp.177-183
- II. **Molecular Genetic and Biochemical Responses in Primary Human Airway Epithelial, Liver Hepatocytes and Peripheral Blood Cell Cultures Exposed to Zinc Oxide Based Nanoparticles in Vitro**
AYDIN KARATAŞ E., Bayındır K., TÜRKEZ H., SÖNMEZ E., ÖZTETİK E., ÖZDEMİR TOZLU Ö.
INTERNATIONAL SYMPOSIUM ON APPLIED SCIENCES AND ENGINEERING, Erzurum, Turkey, 26 - 28 November 2018, pp.230
- III. **Molecular genetic responses in primary human airway epithelial, liver hepatocytes and peripheral blood cell cultures exposed to iron-zinc oxide based nanoparticles in vitro**
AYDIN KARATAŞ E., SÖNMEZ E., ÖZTETİK E., TÜRKEZ H.
6th International Congress on Molecular Biology and Biotechnology, Afyon, Turkey, 22 - 25 December 2017
- IV. **Nickel boride nanoparticle toxicity and microarray analysis on human pulmonary alveolar cells**
TÜRKEZ H., ARSLAN M. E., SÖNMEZ E., TATAR A., GEYİKOĞLU F.
International Multidisciplinary Symposium on Drug Research and Development, Erzurum, Turkey, 5 - 07 October 2017
- V. **Effect of Jigsaw Technique on 10th Grade Students' Academic Success**
DİLBER R., SÖNMEZ E., Meral Y.
II. Uluslararası İğdır Sempozyumu, 9 - 11 October 2017
- VI. **Molecular genetic responses in different human primary cell cultures exposed to aluminum-zinc oxide based nanoparticles in vitro**
Öztetik E., Aydın E., SÖNMEZ E., Aydın N., Turkez H.
European Biotechnology Congress, Dubrovnik, Croatia, 25 - 27 May 2017, vol.256
- VII. **Toxico-genomic approaches of cobalt boride nanoparticles on human pulmonary alveolar cells**
TÜRKEZ H., ARSLAN M. E., SÖNMEZ E., TATAR A., GEYİKOĞLU F.
19th International Conference on Healthcare Life-Science Research (ICHLSR), 28-29 July 2017, Barcelona, Spain, 28 - 29 July 2017
- VIII. **CuInSe₂ Thin Films As a Counter Electrode of Dye-Sensitized Solar Cell**
AKDAĞ A., YILMAZ M., SÖNMEZ E., GÜLEN M., SÖNMEZOĞLU S.

E-MRS 2017 Spring Meeting, Strasbourg, France, 22 - 26 May 2017

- IX. **Properties of CuInSe₂ Thin Film Grown on Graphene by Electrochemical System**
YILMAZ M., AKDAĞ A., SÖNMEZ E.
E-MRS 2017, Strasbourg, France, 22 - 26 May 2017
- X. **Periferik insan kan, alveolar epitel ve primer insan karaciğer hepatosit hücrelerinde ZnO katkılı kobalt (Cu-ZnO) nanopartiküllerinin oluşturduğu moleküler yanıtların araştırılması**
ÖZDEMİR Ö., AYDIN KARATAŞ E., SÖNMEZ E., ÖZTETİK E., TÜRKEZ H.
5. İlaç Kimyası: İlaç Etkin Maddesi Tasarımı, Sentezi, Üretimi ve Standardizasyonu Kongresi, Antalya, Turkey, 30 March - 02 April 2017
- XI. **Bor Karbür Nanopartikülünün Sentezi, Karakterizasyonu ve İnsan Primer Alveolar Epitel Hücre Kültürü Üzerinde ki Toksikogenomik Etkileri**
TÜRKEZ H., ARSLAN M. E., SÖNMEZ E., AYDIN E.
5. ilaç kimyası kongresi, Antalya, Turkey, 30 March - 02 April 2017
- XII. **Toxicogenomic Responses of Human Alveolar Epithelial Cells to Tungsten Boride Nanoparticles**
TÜRKEZ H., ARSLAN M. E., SÖNMEZ E., TATAR A., AÇIKYILDIZ M., GEYİKOĞLU F.
International Conference on Medicine and Science: Milano 2016., 27 - 28 December 2016
- XIII. **Nanotoxicity evaluation of tellurium dioxide nanoparticles on human airway epithelial and whole blood cells in vitro**
Nurşah A., SÖNMEZ E., TÜRKEZ H.
3rd International Conference on Advanced Technology & Sciences (ICAT'16), Konya, Turkey, 1 - 03 September 2016
- XIV. **Synthesis Characterization and Cytotoxicity of Boron Nitride BN Nanoparticles Emphasis on Toxicogenomics**
TÜRKEZ H., ARSLAN M. E., SÖNMEZ E., AÇIKYILDIZ M., TATAR A., GEYİKOĞLU F.
1st International Cell Death Research Congress, 4 - 07 May 2016
- XV. **Expression Profiling and Pathway Analysis of Iron Oxide Fe₂O₃ Nanoparticles Toxicity on Human Lung Alveolar Epithelial Cell Line hpaepic Using Microarray Analysis**
TÜRKEZ H., ARSLAN M. E., ÖZDEMİR Ö., SÖNMEZ E., AÇIKYILDIZ M., TATAR A.
1st International Cell Death Research Congress, 4 - 07 May 2016
- XVI. **Structural and Morphological Properties of Al doped ZnO Nanoparticles**
AKDAĞ A., BUDAK H. F., YILMAZ M., EFE A., BÜYÜKAYDIN M., CAN M., TURGUT G., SÖNMEZ E.
IPCAP2016, Turkey, 25 - 27 February 2016
- XVII. **Process and Characterization of Ni Doped ZnO Nanoparticles**
EFE A., YILMAZ M., BUDAK H. F., AKDAĞ A., BÜYÜKAYDIN M., CAN M., TURGUT G., SÖNMEZ E.
IPCAP2016, 25 - 27 February 2016
- XVIII. **Boron Compounds Counteracts Oxidative Stress Mediated Genotoxicity Induced By Fe₃O₄ Nanoparticles In Vitro**
TÜRKEZ H., SÖNMEZ E., TATAR A.
2nd International Conference on Advanced Engineering Technology (2nd ICAET) by Incheon National University, 11 - 13 December 2015
- XIX. **Choosing the Right Antioxidant Supplement For Protecting Liver From Toxicity of Engineered Nanoparticles A Comprehensive In Vitro Screening**
TÜRKEZ H., SÖNMEZ E., AYDIN E., HACİMÜFTÜOĞLU A., ÖZTETİK E.
2nd ICAET, International Conference, Advanced Engineering and Technology, Seoul, South Korea, 11 - 13 December 2015
- XX. **Fabrication of superconducting YBCO microwave microstrip resonators**
Ertuğrul M., Aras G., Hasar U. C., Yurtcan M. T., Sönmez E., Şimşek Ö.
10th IEEE Regional Symposium on Micro and Nano Electronics, RSM 2015, Kuala-Terengganu, Malaysia, 19 - 21 August 2015
- XXI. **Boron compounds counteracts oxidative stress mediated genotoxicity induced by Fe₃O₄ nanoparticles in vitro**

TÜRKEZ H., SÖNMEZ E., TATAR A.

2nd international conference on advanced engineering technology (2nd ICAET), Incheon, South Korea, 11 - 13 December 2015

- XXII. **Nanotoxicity of Flower Like Yttrium Oxide Nanosheets in Human Primary Lung Epithelial Cell**
MARINELLI L., FORNASARI E., S CERASA L., SÖNMEZ E., TÜRKEZ H., AYDIN E., KERLİ S., CACCIATORE I., Dİ STEFANO A.
Micro and Nanotechnologies to Overcome Biological Barriers, Naples, Italy, 12 - 14 November 2015
- XXIII. **Nanotoxicity of flower like yttrium oxide nanosheets in human primary lung epithelial cells**
Lisa M., Erika F., Ceresa L., SÖNMEZ E., TÜRKEZ H., AYDIN E., KERLİ S., Ivana c., Antonio D. s.
Micro and nanotechnologies to overcome biological barriers, 12 - 14 November 2015
- XXIV. **The Effect of Bazal Noise Reduction Method for Improving the Limit of Detection LOD of the Microsensor on In Vivo Neurotransmitter Analysis**
KOÇ H., GÜLŞAH K., GEYİKOĞLU M. D., MUHAMMET EMİN D., ACAR M., ÇAVUŞOĞLU B., ÖZBEK İ. Y., ORAL E. A., HACİMÜFTÜOĞLU A., SÖNMEZ E., et al.
ELECTROTECH 2015, 2 - 04 November 2015
- XXV. **Fabrication of a New Ceramic based Microelectrode for Measurement of Neurotransmitters in the Central Nervous System**
ACAR M., SHAMSI H., OĞUZHAN O., KOÇ H., ÖZBEK İ. Y., ÇAVUŞOĞLU B., ORAL E. A., HACİMÜFTÜOĞLU A., SÖNMEZ E., KARACALI T., et al.
ELECTROTECH '15, 2 - 04 October 2015
- XXVI. **Fabrication of A New Ceramic Based Microelectrode for Measurement of Neurotransmitter In The Central Nervous System**
Acar M., Shamsi H., Oyar O., Özbek İ. Y., Hacımüftüoğlu A., Çavuşoğlu B., Oral E. A., Karacalı T., Sönmez E., Ertuğrul M., et al.
DAKAM, Electrotech '15,III. International Electrical & Electronic Engineering and Technologies Conference, İstanbul, Turkey, 2 - 03 October 2015
- XXVII. **Fabrication of a New Ceramic-based Microelectrode for Measurement of Neurotransmitters in the Central Nervous System**
ACAR M., KOÇ H., ÖZBEK İ. Y., HACİMÜFTÜOĞLU A., ÇAVUŞOĞLU B., ORAL E. A., KARACALI T., SÖNMEZ E., ERTUĞRUL M., EFEOĞLU H.
ELECTROTECH, 2 - 03 October 2015
- XXVIII. **A study of Fe doped ZnO thin films coated by sol gel spin coating**
SÖNMEZ E., TURGUT G.
ISTEC 2015 International Science and Technology Conference, St. Petersburg, Russia, 2 - 04 September 2015
- XXIX. **Simple Low Cost and Easy to Implementable Package of SiC Diode for High Temperature Applications**
ERTUĞRUL M., HASAR U. C., SÖNMEZ E., TATAR D., MAVİ A., BALTA V.
57th Electronic Materials Conference, 24 - 26 June 2015
- XXX. **Low Cost and Easy to Implementable Package of SiC Diodefor High Temperature Applications**
ERTUĞRUL M., TATAR D., SÖNMEZ E., MAVİ A., BALTA V.
57th Electronic Materials Conference, Columbus, United States Of America, 24 - 26 June 2015
- XXXI. **Structure and charateristics of yttrium doped nio thin films prepared by using spin coating**
BÜYÜKAYDIN M., TURGUT G., SÖNMEZ E.
NANOTR11, Ankara, Turkey, 22 - 25 June 2015
- XXXII. **The effect of Baseline Noise reduction method for improving The Limit od Detection LOD of The Microsensor on in vivo Neorutransmitter Analysis**
KOÇ H., kadihasanoğlu g., Geyikoğlu M. D., Dertli M. E., ACAR M., ÇAVUŞOĞLU B., ÖZBEK İ. Y., ORAL E. A., HACİMÜFTÜOĞLU A., SÖNMEZ E., et al.
23. Sinyal İşleme ve İletişimi Kurultayı, Malatya, Turkey, 16 - 19 May 2015, pp.201-205
- XXXIII. **Improving the limit of detection (LOD) of microsensor used in detection of brain diseases via wavelet filter**
KOC H., KADIHASANOGLU G., GEYIKOGLU M. D., DERTLI M. E., ÇAVUŞOĞLU B., ÖZBEK İ. Y., ORAL E. A.,

HACİMÜFTÜOĞLU A., HACİMÜFTÜOĞLU A., SÖNMEZ E., et al.

2015 23rd Signal Processing and Communications Applications Conference, SIU 2015 - Proceedings, Malatya, Turkey, 16 - 19 May 2015, pp.1676-1679

XXXIV. Improving the limit of detection (LOD) of microsensor used in detection of brain diseases via wavelet filter

KOC H., KADIHASANOĞLU G., GEYIKOĞLU M. D., DERTLİ M. E., ÇAVUŞOĞLU B., OZBEK İ. Y., ORAL E. A., HACİMÜFTÜOĞLU A., HACİMÜFTÜOĞLU A., SÖNMEZ E., et al.

2015 23rd Signal Processing and Communications Applications Conference, SIU 2015 - Proceedings, Malatya, Turkey, 16 - 19 May 2015, pp.1676-1679

XXXV. Microelectrod fabrication for diagnosis and treatment of brain disorders

ACAR M., ACAR M., SHAMSI H., OYAR O., OZBEK İ. Y., HACİMÜFTÜOĞLU A., ÇAVUŞOĞLU B., ORAL E. A., KARACALI T., SÖNMEZ E., et al.

2015 23rd Signal Processing and Communications Applications Conference, SIU 2015 - Proceedings, Malatya, Turkey, 9 - 11 May 2015, pp.2058-2061

XXXVI. Artificial Pinning Centers for Superconducting Microwave Resonators

Ertuğrul M., Aras G., Hasar U. C., Yurtcan M. T., Sönmez E., Şimşek Ö.

9th International Conference on Magnetic and Superconducting Materials (MSM15), Antalya, Turkey, 30 April - 03 May 2015, pp.101

XXXVII. Hepatic Effects of Yttrium Oxide Nanoflowers In Vitro Risk Evaluation

SÖNMEZ E., TÜRKEZ H., AYDIN E., ÖZGERİŞ F. B., ÖZTETİK E., KERLİ S., IVANA C., ANTONIO D. S.

1st International Congress On Applied Biological Sciences, 16 - 20 September 2015

XXXVIII. Improving the limit of detection (LOD) of microsensor used in detection of brain diseases via wavelet filter Beyin Hastalıklarının Tanısında Kullanılan Mikrosensörün Dalgacık Filtre Kullanılarak Algılama Alt Sinirinin İyileştirilmesi

Koc H., Kadihasanoglu G., Geyikoglu M. D., DERTLİ M. E., ÇAVUŞOĞLU B., ÖZBEK İ. Y., ORAL E. A., HACİMÜFTÜOĞLU A., SÖNMEZ E., KARACALI T., et al.

2015 23rd Signal Processing and Communications Applications Conference, SIU 2015, Malatya, Turkey, 16 - 19 May 2015, pp.1676-1679

XXXIX. Microelectrod fabrication for diagnosis and treatment of brain disorders Beyin Hastalıklarının Tani Ve Tedavisi İçin Mikroelektrot Fabrikasyonu

ACAR M., Shamsi H., Oyar O., ÖZBEK İ. Y., HACİMÜFTÜOĞLU A., ÇAVUŞOĞLU B., ORAL E. A., KARACALI T., SÖNMEZ E., ERTUĞRUL M., et al.

2015 23rd Signal Processing and Communications Applications Conference, SIU 2015, Malatya, Turkey, 16 - 19 May 2015, pp.2058-2061

XL. New Silicon Based Multisite Microelectrode Fabrication for Neurotransmitter Concentration Detection

SHAMSİ H., ACAR M., OYAR O., ÖZBEK İ. Y., HACİMÜFTÜOĞLU A., ORAL E. A., ÇAVUŞOĞLU B., SÖNMEZ E., KARACALI T., ERTUĞRUL M., et al.

10th Nanoscience and Nanotechnology Conference, June 2014, Istanbul, TURKEY, Turkey, 17 - 21 July 2014

XLI. Surface Decoration using Pd Nanoislands for YBCO Superconducting Thin Film using Pulsed Laser Deposition

ERTUĞRUL M., İSKENDEROĞLU D., SÖNMEZ E., YURTCAN M. T.

41st International Conference on Metallurgical Coatings and Thin Films (ICMCTF), San Diego, United States Of America, 28 April - 01 May 2014

XLII. Preparation and Characterization of Li doped and undoped ZnO thin films by spin coating technique

YILMAZ M., AYDIN S., TURGUT G., TATAR D., SÖNMEZ E.

International Semiconductor Science and Technology Conference, İstanbul, Turkey, 2014, İstanbul, Turkey, 13 - 15 January 2014, pp.88

XLIII. Comparison Spray Pyrolysis and Spin Coating Technique For Doubly Doped Tin Oxide

KOÇYİĞİT A., BATTAL A., TATAR D., TURGUT G., SÖNMEZ E., DÜZGÜN B.

International Semiconductor Science and Technology Conference, 13 - 15 January 2014

- XLIV. **Studies of NiNiO₂ Cathode Material Prepared by Solid State Reaction Tehnique for Lithium-ion Batteries**
YILMAZ M., TURGUT G., KESKENLER E. F., AYDIN S., SÖNMEZ E., ERTUĞRUL M.
9. Nanobilim ve Nanoteknoloji Konferansı, 24 - 28 June 2013
- XLV. **Characterization of Boron doped ZnO Thin Films**
TURGUT G., KESKENLER E. F., AYDIN S., DOĞAN S., YILMAZ M., SÖNMEZ E., ERTUĞRUL M.
9th Nanoscience and Nanotechnology Conference, Erzurum, Turkey, 2013, Erzurum, Turkey, 24 - 28 June 2013, pp.92
- XLVI. **Studies of LiNiO₂ Cathode Material Prepared by Solid State Reaction Technique for Lithium ion Batteries**
YILMAZ M., TURGUT G., KESKENLER E. F., AYDIN S., SÖNMEZ E., ERTUĞRUL M.
9th Nanoscience and Nanotechnology Conference, Erzurum, Turkey, 2013, Erzurum, Turkey, 24 - 28 June 2013, pp.173
- XLVII. **Exceptional enhancement of photoluminescence lifetime of ZnO nanorodsmaking use of thiourea**
SÖNMEZ E., MERAL K., KOÇYİĞİT A., BATTAL A., TATAR D., TURGUT G., DÜZGÜN B., ERTUĞRUL M.
9th International Conference on Nanoscience and Nanotechnologies, 3 - 06 July 2012
- XLVIII. **The Characterization of NiO thin films on different substrates by spray pyrolysis method**
İSKENDEROĞLU D., Çınar K., SÖNMEZ E., TURGUT G., AYDIN S., ERTUĞRUL M., DÜZGÜN B.
8. Nanobilim ve Nanoteknoloji Konferansı, 25 - 29 June 2012
- XLIX. **The Characterization of NiO Thin Films on Different Substrates by Spray Pyrolysis**
TATAR D., ÇINAR DEMİR K., SÖNMEZ E., TURGUT G., AYDIN S., COŞKUN C., ERTUĞRUL M.
NanoTR-8, 24 - 29 June 2012
- L. **Photoluminescence Properties of Zinc Oxide Single Crystals Thin Films Grown on Silicon by the Pulse Laser Deposition**
Sönmez E., Yurtcan M. T., Aydın S., Morkoç Karadeniz S., Tuzluca F. N., Ertuğrul M.
5. Ulusal Nanobilim ve Nanoteknoloji Konferansı (NanoTR5), Eskişehir, Turkey, 8 - 12 June 2009, pp.271
- LI. **Synthesis and characterization LiCoO₂ and LiNi_{1-x}Co_xO₂ for lithium ion batteries**
Yılmaz M., Turgut G., Aydın S., Yurtcan M. T., Sönmez E., Mavi A., Ertuğrul M.
7th Nanoscience and Nanotechnology Conference, Istanbul, Turkey, 2011, İstanbul, Turkey, 27 June - 01 July 2011, pp.4
- LII. **Advances in Applied Physics Materials Science Congress**
YILMAZ M., SÖNMEZ E., AYDIN S., TURGUT G., DEMİR Y., ERTUĞRUL M.
Advances in Applied Physics Materials Science Congress, 12 - 15 May 2011
- LIII. **Synthesis and Characterization LiNi(1-x)Co(x)O(2) Cathode Materials For Lithium Ion Bateriaes**
YILMAZ M., SÖNMEZ E., AYDIN S., TURGUT G., DEMİR Y., ERTUĞRUL M.
Advances in Applied Physics & Materials Science, Turkey, 12 May 2011
- LIV. **Electrical, Structural and Optical Properties of Spray Deposited Undoped and Fluorine and Antimony Doped SnO₂ Thin Films**
TATAR D., TURGUT G., SÖNMEZ E., AYDIN S., DÜZGÜN B.
Türk Fizik Derneği 27. Uluslararası Fizik Kongresi, 14 September - 17 October 2010
- LV. **Synthesis and Characterization of Li₄Ti₅O₁₂ for lithium ion batteries**
Yurtcan M. T., Yılmaz M., Aydın S., Sönmez E., Demir Y., Ertuğrul M.
Turkish Physical Society 27th International Physics Congress, Istanbul, Turkey, 2010, İstanbul, Turkey, 14 - 17 September 2010, pp.710
- LVI. **Electrical, Sturctural and Optical Properties of Spray Deposited Undoped and Fluorine and Antimony Doped SnO₂ Thin Films**
İSKENDEROĞLU D., TURGUT G., SÖNMEZ E., AYDIN S., DÜZGÜN B.
Turkish Physical Society 27th International Physics Congress, 14 - 17 September 2010
- LVII. **Structural and electrical properties of spray deposited pure and Sb doped tin oxide**
TURGUT G., İSKENDEROĞLU D., AYDIN S., SÖNMEZ E., DÜZGÜN B.
6. Nanobilim ve Nanoteknoloji Konferansı, 15 - 18 June 2010

- LVIII. Effects of Artificial Pinning Centers on NbBa₂Cu₃O_{7-x} Thin Films Prepared by PLD**
SÖNMEZ E., YILMAZ M., YILMAZ M., DİLBER R., DÜZGÜN B., ERTUĞRUL M.
6th Nanoscience and Nanotechnology Conference, İzmir, Turkey, 2010, İzmir, Turkey, 15 - 18 June 2010, pp.239
- LIX. Electrical, structural and optical properties of spray deposited SnO₂ and SnO₂:F thin films**
TATAR D., TURGUT G., SÖNMEZ E., DÜZGÜN B., ERTUĞRUL M.
6. Ulusal Nanobilim ve Nanoteknoloji Konferansı, Turkey, 15 - 18 June 2010
- LX. Nanostructures for lithium ion batteries**
YILMAZ M., AYDIN S., SÖNMEZ E., DEMİR Y., ERTUĞRUL M.
6th Nanoscience and Nanotechnology Conference, İzmir, Turkey, 2010, İzmir, Turkey, 15 - 18 June 2010, pp.268
- LXI. Nanostructure for lithium ion batteries**
YILMAZ M., AYDIN S., SÖNMEZ E., DEMİR Y., ERTUĞRUL M.
6. Nanobilim ve Nanoteknoloji Konferansı, 15 - 18 June 2010
- LXII. Effects of Nd₂O₃ nano-island prepared by PLD on NdBa₂Cu₃O_{7-δ} thin films**
SÖNMEZ E., TATAR D., DÜZGÜN B., ERTUĞRUL M.
International Conference on nanomaterials and nanosystems, 10 - 13 August 2009
- LXIII. An AFM Study of Morphology and Optical Properties of Zinc Oxide Nanorods Grown on Glasses by Chemical Spray Pyrolysis**
SÖNMEZ E., ERTUĞRUL M., AYDIN S., DİLBER R., MORKOÇ KARADENİZ S.
4. Nanobilim ve Nanoteknoloji Konferansı, 9 - 13 June 2008

Supported Projects

- ORAL E. A., SÖNMEZ E., MAVİ A., AYDIN S., Project Supported by Higher Education Institutions, SiC Diyotun Sıvı Lehim Kullanılarak Paketlenmesi- 2, 2023 - 2024
- TÜRKEZ H., YÜCE KAHRAMAN Ç., SÖNMEZ E., Project Supported by Higher Education Institutions, Alzheimer Hastalığına Karşı Hedeflendirilmiş Terapötik ve Azaltılmış Toksikolojik Potansiyel için Transferrin 1 Antikor Fragmanına Konjuge Edilmiş Memantin Bazlı Lipozomların Üretimi, 2022 - 2023
- ORAL E. A., SÖNMEZ E., AYDIN S., MAVİ A., BALTA V., ERTUĞRUL M., Project Supported by Higher Education Institutions, SiC Diyotun Sıvı Lehim Kullanılarak Paketlenmesi, 2020 - 2023
- Ertuğrul M., Yurtcan M. T., Şimşek Ö., Hasar U. C., Sönmez E., TÜBİTAK Project, YBCO Süperiletken Düzlemsel Mikrodalga Rezonatörünün Performansının İyileştirilmesi ve Fiziksel Özelliklerinin Araştırılması, 2013 - 2017
- Küfrevioğlu Ö. İ., Hacımüftüoğlu A., Efeoğlu H., Ertuğrul M., Malkoç İ., Şengül G., Ekinci D., Mavi A., Karacalı T., Özcan H., et al., TÜBİTAK Project, Beyin Hastalıklarının Tanı ve Tedavisinde Yeni Yöntem In Vivo Mikrosensör Teknolojisi, 2013 - 2017
- SÖNMEZ E., Project Supported by Other Official Institutions, İn Vitro Kosullarda Bor Nanopartikülleri İle Muamele Edilen İnsan Alveolar Epitel Hücrelerinde Gen Ekspresyon Değişiklikleri, 2014 - 2016
- SAĞSÖZ M. E., MALKOÇ İ., HACİMÜFTÜOĞLU A., ORAL E. A., ÇAVUŞOĞLU B., MAVİ A., SÖNMEZ E., EKİNCİ D., TÜBİTAK Project, Beyin Hastalıklarının Tanı Ve Tedavisinde Yeni Yöntem: In Vivo Mikrosensör Teknolojisi, 2013 - 2016
- SÖNMEZ E., Other International Funding Programs, Identification of monolayer of organic groups and DNA primers on nanoparticles by Atomic Force Microscope (AFM), 2013 - 2013

Scientific Research / Working Group Memberships

- Nano-Biomaterials Research Group, The University of Lancaster, İngiltere, <https://senlabs.org/>, 2013 - Continues
- ARBİS, TÜBİTAK, Türkiye, <https://arbis.tubitak.gov.tr/>, 2003 - Continues

Metrics

Publication: 121

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H-Index (WoS): 16

H-Index (Scopus): 16

Non Academic Experience

ATATÜRK ÜNİVERSİTESİ

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