

Asst. Prof. KENAN ŐENTÜRK

Personal Information

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International Researcher IDs

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Education Information

Doctorate, Yeditepe University, Fen Bilimleri Enstitüsü, Fizik (Dr), Turkey 2003 - 2011

Postgraduate, Istanbul Technical University, Nükleer Enerji Enstitüsü, Nükleer Enerji (YI) (Tezli), Turkey 1999 - 2003

Undergraduate, Marmara University, Fen-Edebiyat Fakültesi, Fizik Bölümü, Turkey 1995 - 1999

Foreign Languages

English, C2 Mastery

Dissertations

Doctorate, Technological studies of multidimensional magnetohydrodynamics and liquid metals: Gallium-indium-tin, Yeditepe University, Fen Bilimleri Enstitüsü, Fizik (Dr), 2011

Postgraduate, Nükleer sistemlerin sınır elemanları yöntemi ile ısıl-hidrolik analizi, Istanbul Technical University, Nükleer Enerji Enstitüsü, Nükleer Enerji (YI) (Tezli), 2003

Research Areas

Natural Sciences, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Istanbul Gelisim University, FACULTY OF ENGINEERING AND ARCHITECTURE, MECHATRONICS ENGINEERING, 2018 - Continues

Assistant Professor, Beykent University, Faculty Of Engineering-Architecture, Department Of Energy Systems Engineering, 2011 - 2018

Research Assistant, Yeditepe University, Fen-Edebiyat Fakültesi, Fizik Bölümü, 2000 - 2011

Academic and Administrative Experience

Head of Unit Accreditation Board, Istanbul Gelisim University, FACULTY OF ENGINEERING AND ARCHITECTURE, MECHATRONICS ENGINEERING, 2020 - Continues

Head of Department, Istanbul Gelisim University, 2021 - 2022

Beykent University, 2017 - 2018

Beykent University, 2015 - 2018

Beykent University, 2012 - 2015

Courses

Physics II, Undergraduate, 2022 - 2023, 2018 - 2019

Katı Hal Elektronik, Postgraduate, 2022 - 2023

PHYSICS, Undergraduate, 2022 - 2023

Fizik III, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019

Physics II, Undergraduate, 2021 - 2022, 2020 - 2021

Fizik I, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019

Physics I, Undergraduate, 2021 - 2022, 2020 - 2021

Advising Theses

Şentürk K., İş sağlığı ve güvenliği algılarının radyasyona maruz kalma sıklığı kapsamında değerlendirilmesi (bazı özel sektör çalışanlarına yönelik uygulama), Postgraduate, U.UÇAK(Student), 2021

Terzi Ü., Şentürk K., Güneş enerjisi çatı uygulamaları için bir matematiksel model önerisi, Postgraduate, N.HEDEF(Student), 2018

Terzi Ü., Şentürk K., Genetik Algoritma Kullanılarak Rüzgar Türbinleri için Mikro Konumlandırma, Postgraduate, B.KÜYÜK(Student), 2018

Şentürk K., Okmeydanı Kentsel Dönüşüm Projesinin fotovoltaik sistemler açısından incelenmesi, Postgraduate, H.ALPER(Student), 2017

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Exploration of the improving effect of Cd-doping on structural, photocatalytic, and biological properties of ZnO nanoparticles**
Yalcin B., Arda L., Yalcin I. E., Şentürk K., Alphan M. C., Akcan D., Ozyigit I. I.
JOURNAL OF NANOPARTICLE RESEARCH, vol.25, pp.1-20, 2023 (SCI-Expanded)
- II. **The role of defects in the structural and photocatalytic properties of Mg/B co-doped ZnO nanoparticles**
ŞENTÜRK K., Yalcin B., Yalcin I., Alphan M., ŞENGÜL M. T., TAV C., YAHŞİ U., Arda L.
Journal of Materials Science: Materials in Electronics, vol.34, no.9, 2023 (SCI-Expanded)
- III. **Obtaining plasma parameters by Langmuir probes and optical emission spectroscopy in low-pressure DC plasma**
ŞENTÜRK K., Sen T., Coruhlu T., Shahzad A., Aslan N.
Radiation Effects and Defects in Solids, vol.178, no.7-8, pp.912-928, 2023 (SCI-Expanded)
- IV. **Structural, optical, magnetic, photocatalytic activity and related biological effects of CoFe₂O₄ ferrite nanoparticles**
Yalcin B., Ozcelik S., İÇİN K., Senturk K., ÖZÇELİK B., Arda L.
Journal of Materials Science: Materials in Electronics, vol.32, no.10, pp.13068-13080, 2021 (SCI-Expanded)
- V. **Effect of mg doping on morphology, photocatalytic activity and related biological properties of Zn_{1-x}MgxO nanoparticles**
Yalçin B., Akcan D., Yalçin I. E., Alphan M. C., Sentürk K., ÖZYİĞİT İ. İ., Arda L.
Turkish Journal of Chemistry, vol.44, no.4, pp.1177-1199, 2020 (SCI-Expanded)

- VI. **Investigation on surface, electrical and optical properties of ITO-Ag-ITO coated glass**
ASLAN N., ŞEN T., ÇORUHLU T., ŞENTÜRK K., KESKİN S. S., Şeker S., DOBROVOLSKY A.
PROBLEMS OF ATOMIC SCIENCE AND TECHNOLOGY, 2014 (SCI-Expanded)
- VII. **Investigation of antimicrobial activity and morphological properties of metal coated textile surfaces**
Aslan N., Şentürk K., Şen T., Çoruhlu T., Vartürk İ., Şeker S., Shahidi S., Dobrovolskiy A., Tsiolko V., Matsevich S., et al.
Problems of Atomic Science and Technology, vol.94, no.6, pp.208-211, 2014 (SCI-Expanded)
- VIII. **Numerical solutions of liquid metalflows by incompressible magneto-hydrodynamics with heat transfer**
Şentürk K., Tessarotto M., Aslan N.
International Journal for Numerical Methods in Fluids, vol.60, no.11, pp.1200-1221, 2009 (SCI-Expanded)
- IX. **An investigation into the biocidal effect of high voltage AC/DC atmospheric corona discharges on bacteria, yeasts, fungi and algae**
Korachi M., Turan Z., Şentürk K., Şahin F., Aslan N.
Journal of Electrostatics, vol.67, no.4, pp.678-685, 2009 (SCI-Expanded)

Articles Published in Other Journals

- I. **DESIGN AND CONTROL OF A MOBILE STEWARD PLATFORM WITH FOUR INDEPENDENT WHEELS**
AKKAYA E. E., ÖZER M., ŞENTÜRK K., ÖZTÜRK V., ALKAN Ü.
Mugla Journal of Science and Technology, vol.8, no.1, pp.19-25, 2022 (Peer-Reviewed Journal)
- II. **Thermal Energy Storage Technologies for Sustainability: Systems Design, Assessment and Applications**
NOBERİ C., ŞENTÜRK K., HALAT O. M., KAYA A.
Journal of Sustainable Economics and Management Studies (ECOMAN), 2021 (Peer-Reviewed Journal)
- III. **EXACT SOLUTION OF THE CAUCHY PROBLEM FOR 2 D SCALAR CONSERVATION LAWS WITH CONSTANT COEFFICIENTS IN A CLASS OF DISCONTINUOUS FUNCTIONS**
RESULOV M., ŞENTÜRK K.
BEYKENT UNIVERSITY JOURNAL OF SCIENCE AND ENGINEERING, vol.5, no.1, pp.27-47, 2012 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **Yenilenebilir Enerji Kaynakları**
Şentürk K.
in: Endüstri Mühendisliğine Giriş Temel Bilgiler El Kitabı, Prof. Dr. KENAN ÖZDEN, Prof. Dr. TARIK ÇAKAR, Editor, Nobel Yayın Dağıtım, Ankara, pp.387-425, 2022
- II. **Cold Atmospheric Plasma Treatment of Turkish Tea**
Çoruhlu T., Akkaya E. E., Şen T., Şentürk K.
in: Contemporary Studies in Natural Sciences, Semra BENZER, Berrin TOPUZ, Editor, Akademisyen Kitabevi, Ankara, pp.61-80, 2020
- III. **THE PROPERTIES OF COTTON TEXTILE DEPOSITED BY COPPER AND SILVER USING MAGNETRON SPUTTERING COATING TECHNIQUE**
Şen T., Oraltay G., Şentürk K., Çoruhlu T., Aslan N.
in: Contemporary Studies in Natural Sciences, Semra BENZER, Berrin TOPUZ, Editor, Akademisyen Kitabevi, Ankara, pp.81-97, 2020

Refereed Congress / Symposium Publications in Proceedings

- I. **PLAZMAYLA AKTİFLEŞTİRİLMİŞ SU İLE AZOT GÜBRESİ ÜRETİMİ**
ÇORUHLU T., COŞKUN M. F., DADASHBABA M., ŞENTÜRK K., ASLAN N., TURAN M., AKKAYA E. E., FOOTITT S., ŞEN T.
6th International Congress of Agriculture, Environment and Health, Aydın, Turkey, 19 - 21 October 2023
- II. **PLASMA TECHNOLOGY IN PRODUCTION CHAIN FROM SEED TO SPOON FOR ENHANCEMENT OF PLANT GROWTH AND AGRICULTURAL YIELD OF TEA**
ÇORUHLU T., DADASHBABA M., AKKAYA E. E., ASLAN N., ŞEN T., ŞENTÜRK K.
INTERNATIONAL TEA CONGRESS "INDUSTRIAL, CULTURAL AND ECONOMIC DIMENSIONS", Lenkeran, Azerbaijan, 13 May 2022, pp.137-138
- III. **Elektrikli Araçlarda Batarya Yönetim ve Soğutma Sistemi**
BABAL E. Y., NARİN B., ASLAN F. T., SÜRENOĞLU T., ŞENTÜRK K.
Uluslararası Katılımlı Mekatronik Öğrenci Konferansı (MEKON), Turkey, 25 June 2021
- IV. **Effects of Cold Plasma Treatment on Seed Germination and Seedling Growth of Turkish Tea**
ÇORUHLU T., AKKAYA E. E., ŞENTÜRK K., ŞEN T.
IWOPA 2021 3rd INTERNATIONAL WORKSHOP ON PLASMA AGRICULTURE, GREIFSWALD, Germany, 01 March 2021
- V. **Silver and Copper Thin Films Coated by Magnetron Sputtering Method**
ŞEN T., ŞENTÜRK K., ORALTAY R. G., ÇORUHLU T., ASLAN N.
The 1st International Şişli Science Congress 24-25 October 2019, 24 - 25 October 2019
- VI. **Plasma Agriculture: Opportunities and Suggestions for Turkey**
ÇORUHLU T., ŞEN T., ŞENTÜRK K., AKKAYA E.
The 1st International Şişli Science Congress, 24 - 25 October 2019
- VII. **Preparation, growth, and optical properties of (Cu/Co)co-doped ZnO thin films**
AKCAN D., YALÇIN B., ŞENTÜRK K., yalçın i. e., ALPHAN M. C., GÜLER A., BOYRAZ C., ARDA L.
ICCMMS-2019, 14 - 19 October 2019
- VIII. **Structure, Optical and Biological Properties Of Mn-Doped ZnO Nanoparticles**
ALPHAN M. C., YALÇIN B., ŞENTÜRK K., YALÇIN İ. E., AKCAN D., ARDA L.
International Conference on Condensed Matter and Materials Science, ICCMMS-2019, 14-19 October 2019, 14 - 19 October 2019
- IX. **Preparation and Characterization of Mg/B co-doped ZnO Nanoparticles**
ŞENTÜRK K., ARDA L.
International Conference on Condensed Matter and Materials Science, ICCMMS2019, 14 - 19 October 2019
- X. **Structural, optical and magnetic properties of Cu/Ni co-doped ZnO Films**
GÜNGÖR A., AKCAN D., YALÇIN B., ŞENTÜRK K., YALÇIN İ. E., ALPHAN M. C., ARDA L.
International Conference on Condensed Matter and Materials Science, ICCMMS2019, 14 - 19 October 2019
- XI. **The Observation of Surface Plasmon Resonance Effect in ITO-Titanium-ITO Multilayer Films on Thin Glass Prepared by Magnetron Sputtering**
ÇORUHLU T., ASLAN N., ŞEN T., ŞENTÜRK K., LİSİCHKİS R., POKROWSKY P.
ICG Annual Meeting 32nd Şişecam Glass Symposium, 22 - 25 October 2017
- XII. **Application of Photovoltaic Systems on Urban Regeneration Projects**
ŞENTÜRK K., KİRİŞÇİ H. A., İŞIKDAĞ Ü.
Intelligent Infrastructures for Sustainable and Resilient Future Energy Systems, 24 - 27 May 2017
- XIII. **Surface Properties of Antibacterial Textiles Deposited by Silver and Copper**
ŞEN T., ÖZEN F., ŞENTÜRK K., ÇORUHLU T., ASLAN N., KORACHİ M.
International Conference on Electrical Discharges with Liquids (ICEDL 2016), COST TD1208 3th Annual meeting "Electrical discharges with liquids for future applications, 13 March 2016 - 17 March 2017
- XIV. **Obtaining useful properties of different materials by using magnetron sputtering**
ŞENTÜRK K., ŞEN T., ÇORUHLU T., VARTÜRK İ., KORACHİ M., ASLAN N.
2015 IEEE International Conference on Plasma Sciences (ICOPS), 24 - 28 May 2015
- XV. **Synthesis and characterization of ITO-Titanium-ITO trilayers prepared by DC magnetron sputtering**
ÇORUHLU T., ASLAN N., ŞEN T., GÜRİSOY G., ŞENTÜRK K., CASSELL D., LİSİCHKİS R., POKROWSKY P.
NANOTR-10, 17 - 21 June 2014

- XVI. **Antibacterial surface modification for medical purposes by magnetron sputtering and plasma torch systems**
ASLAN N., KORACHÍ M., ŞENTÜRK K., ÇORUHLU T., ŞEN T., Şeker S., VARTÜRK İ.
NANOTR-10, 17 - 21 June 2014
- XVII. **Antibacterial properties of textiles coated by magnetron sputtering method**
ASLAN N., KORACHÍ M., ŞEN T., ÇORUHLU T., ŞENTÜRK K., VARTÜRK İ., Şeker S.
PLASMATECH-2014, 28 - 30 April 2014
- XVIII. **Preparation and Characterization of Ito-Metal-Ito Multilayer Thin Films Deposited by DC Magnetron Sputtering**
ÇORUHLU T., ŞENTÜRK K.
Advanced Materials World Congress, 16 - 19 September 2013
- XIX. **Fabrication and Characterization of Magnetron Sputtered TCO-metal-TCO Multilayers**
ÇORUHLU T., ASLAN N., ŞEN T., GÜRİSOY G., ŞENTÜRK K., BERNHARD N., POKROWSKY P.
International Conference in Advanced Manufacturing for Multifunctional Miniaturised Devices, 15 - 16 July 2013
- XX. **Antibacterial Properties of Textiles by Magnetron Sputtering Coating Technique**
ŞENTÜRK K., ŞEN T., ÇORUHLU T., Şeker S., VARTÜRK İ., KORACHÍ M., ASLAN N.
The International Istanbul Textile Congress 2013, 30 May - 01 June 2013
- XXI. **Novel Plasma Needle as a Sterilizing Tool on Oral Microorganisms**
GÜROL C., ASLAN N., ŞENTÜRK K., KORACHÍ M.
IADR General Session, 14 - 17 July 2010
- XXII. **Magneto-rotational instability of laboratory liquid metals**
ASLAN N., ŞENTÜRK K.
6 th International Conference on Electromagnetic Processing of Materials Proceedings, 19 - 23 October 2009
- XXIII. **The plasma discharge system for effective sterilization of water and solid surfaces**
ŞENTÜRK K., TURAN Z., ASLAN N., KORACHÍ M.
26 th International Physics Congress, 24 - 27 September 2009
- XXIV. **Magneto-hydrodynamics solver for heated and magnetized liquids**
ŞENTÜRK K.
International Workshop on Numerical Simulations of Magnetohydrodynamic Flows, 14 - 15 November 2007
- XXV. **Electromagnetic breaking by the numerical solutions of incompressible MHD equations with fluctuation distribution scheme on triangular grids**
ASLAN N., TESSAROTTO M., ŞENTÜRK K., ÇOKER E. G.
EUROMECH colloquium 475: Fluid dynamics in high magnetic fields, 1 - 03 March 2006
- XXVI. **VISINC-MHD: A visual incompressible MHD code with dual time stepping and a matrix distribution algorithm**
ASLAN N., TESSAROTTO M., ŞENTÜRK K.
56th Annual Meeting American Physical Society, Division of Fluid Dynamics, 23 - 25 November 2003
- XXVII. **2D Modelling and simulation of EM brake for liquid steel**
ASLAN N., TESSAROTTO M., ŞENTÜRK K.
56th Annual Meeting American Physical Society, Division of Fluid Dynamics, 23 - 25 November 2003

Supported Projects

ŞENTÜRK K., PLAZMA TEKNOLOJİSİ İLE ÇEVRE DOSTU SIVI AZOT GÜBRESİ ÜRETİMİ, 2023 - Continues
Acıman T., Erdoğan K., Şentürk K., Barışkan M. A., Gönen S., Project Supported by Higher Education Institutions, PLC Cihazlarının Siber Güvenlik Açıklıklarının Yapay Zeka Destekli Analizi ve Uzman Sistem Yardımıyla Saldırı Tespiti, 2024 - 2026
Şentürk K., TUBITAK Project, Smart Shower System Project for Water Saving and Awareness Raising, 2024 - 2025
Onur F., Şentürk K., TUBITAK Project, Görme Engelli Bireyler İçin Yapay Zeka Ve Siber Güvenlik Özelliklerine Sahip Akıllı Gözlük, 2023 - 2024

ŞENTÜRK K., Flow control of liquid metals under external Electric and Magnetic Fields and technological applications,
2007 - 2010