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Personal Information

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International Researcher IDs

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Education Information

Doctorate, Ondokuz Mayıs University, Fen Bilimleri Enstitüsü, Fizik (Dr), Turkey 2002 - 2007

Postgraduate, Ondokuz Mayıs University, Fen Bilimleri Enstitüsü, Fizik (YI) (Tezli), Turkey 2002 - 2002

Undergraduate, Ondokuz Mayıs University, Eğitim Fakültesi, Matematik ve Fen Bilimleri Eğitimi Bölümü, Turkey 1994 - 1998

Dissertations

Doctorate, Yüklü parçacıklar için bazı bileşiklerin durdurma gücü hesaplamaları, Ondokuz Mayıs University, Fen Bilimleri Enstitüsü, Fizik (Dr), 2007

Postgraduate, Elektronik uyarmaların kuantum Monte Carlo uygulamaları, Ondokuz Mayıs University, Fen Bilimleri Enstitüsü, Fizik (YI) (Tezli), 2002

Academic Titles / Tasks

Professor, Ondokuz Mayıs University, Sağlık Bilimleri Enstitüsü, Radyolojik Bilimler Anabilim Dalı (Disiplinlerarası), 2019 - Continues

Associate Professor, Ondokuz Mayıs University, Fen-Edebiyat Fakültesi, Fizik Bölümü, 2013 - 2019

Assistant Professor, Ondokuz Mayıs University, Fen-Edebiyat Fakültesi, Fizik Bölümü, 2009 - 2014

Research Assistant, Ondokuz Mayıs University, Fen-Edebiyat Fakültesi, Fizik Bölümü, 1998 - 2009

Expert, Joint Research Center, Institute For Transuranium Elements, 2006 - 2007

Academic and Administrative Experience

Ondokuz Mayıs University, 2019 - Continues

Ondokuz Mayıs University, 2016 - 2019

Ondokuz Mayıs University, 2014 - 2016

Ondokuz Mayıs University, 2011 - 2014

Courses

ANT304 SPOR BİYOMEKANIĞI, Undergraduate, 2018 - 2019, 2017 - 2018

TBFİZ107 Fizik I, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017

FFİ608 NÜKLEER FİZİK II, Postgraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017
RAD623 Radyasyon Fiziği, Postgraduate, 2018 - 2019, 2017 - 2018
FİZ438 PARÇACIK FİZİĞİ, Undergraduate, 2018 - 2019
TBFİZ106 FİZİK II, Undergraduate, 2018 - 2019, 2017 - 2018, 2015 - 2016
FZÖ252 MODERN FİZİK LABORATUVARI, Undergraduate, 2018 - 2019, 2016 - 2017
FİZ252 MODERN FİZİK LABORATUVARI, Undergraduate, 2018 - 2019, 2017 - 2018
FFİ607 NÜKLEER FİZİK I, Postgraduate, 2018 - 2019, 2016 - 2017
TBFİZ105 Fizik I, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017
NÜKLEER REAKSİYONLAR, Postgraduate, 2018 - 2019
RAD629 NÜKLEER TIP FİZİĞİ, Postgraduate, 2018 - 2019
FZÖ401 Kuantum Mekaniği I, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017
Radyasyon Fiziği ve Radyasyondan Korunma, Doctorate, 2017 - 2018
RAD629 NÜKLEER TIP FİZİĞİ, Undergraduate, 2017 - 2018
FZÖ402 KUANTUM MEKANIĞI II, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016
RAD701 Radyasyon Fiziği, Postgraduate, 2016 - 2017
BİP210 Sunucu İşletim Sistemi, Associate Degree, 2016 - 2017
BİP214 Araştırma Yöntem ve Teknikleri, Associate Degree, 2016 - 2017
FFİ706 NÜKLEER YAPI TEORİSİ, Doctorate, 2016 - 2017, 2015 - 2016
RAD630 Foton Elektron Dozimetri, Postgraduate, 2016 - 2017
BİP220 Girişimcilik A, Associate Degree, 2016 - 2017
TGT207 Radyasyon Güvenliği ve Radyasyondan Korunma, Associate Degree, 2016 - 2017
BİP112 Web Editörü, Associate Degree, 2015 - 2016
TBFİZ102 Fizik II, Undergraduate, 2015 - 2016
FFİ846 UZMANLIK ALANI, Postgraduate, 2015 - 2016
BİP208 Sistem Analizi ve Tasarımı, Associate Degree, 2015 - 2016
TBFİZ101 Fizik I, Undergraduate, 2015 - 2016
FFİ946 UZMANLIK ALANI, Doctorate, 2015 - 2016
FİZ301 Kuantum Mek. I, Undergraduate, 2015 - 2016
FFİ402 Nükleer Fizik II, Postgraduate, 2015 - 2016
Nükleer Fizik I , Postgraduate, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011
Sayısal Çözümleme, Doctorate, 2013 - 2014
Uzmanlık Alanı (Dk.), Undergraduate, 2013 - 2014
Nükleer Reaksiyonlar, Doctorate, 2013 - 2014
G.Fizik II (Elk. Müh.), Undergraduate, 2013 - 2014
G.Fizik II (İnşaat Müh.), Undergraduate, 2013 - 2014
Kuantum Mekaniği II, Undergraduate, 2013 - 2014, 2012 - 2013
Modern Fizik Lab. , Undergraduate, 2013 - 2014, 2012 - 2013, 2011 - 2012
Kuantum Mekaniği I, Undergraduate, 2013 - 2014
Uzmanlık Alanı (Y.L.), Undergraduate, 2013 - 2014
Tİpta Fiziksel Yöntemler , Undergraduate, 2013 - 2014, 2011 - 2012
G.Fizik I (Elk. Müh.), Undergraduate, 2013 - 2014
Sensörler, Associate Degree, 2012 - 2013
Parçacık Fiziği , Undergraduate, 2012 - 2013, 2011 - 2012, 2010 - 2011
Nükleer Fizik II , Postgraduate, 2012 - 2013, 2011 - 2012, 2010 - 2011
Sunucu İşletim Sistemleri, Associate Degree, 2011 - 2012
Fizik II (Elk.Elektronik Müh.), Undergraduate, 2011 - 2012
Temel İnternet Uygulamaları, Associate Degree, 2011 - 2012
Nükleer Fizik Lab. , Undergraduate, 2011 - 2012, 2010 - 2011
Temel Bilgisayar Uygulamaları, Associate Degree, 2011 - 2012
Temel Bilgisayar Ve İnternet Uygulamaları, Undergraduate, 2011 - 2012
Modern Fizik , Undergraduate, 2011 - 2012

Yazılım Kurulumu ve Yönetimi, Associate Degree, 2011 - 2012, 2010 - 2011
Araştırma Yöntem ve Teknikleri, Associate Degree, 2011 - 2012
Fizik I (Harita Müh.), Undergraduate, 2010 - 2011
Bilgisayar Tek. I (Fen. Ed. Fak. Tarih Blm.), Undergraduate, 2010 - 2011
Nükleer Fizik, Undergraduate, 2010 - 2011
Mesleki Yabancı Dil I , Associate Degree, 2010 - 2011
Fizik (Diş. Hek.), Undergraduate, 2010 - 2011
Web Editörü , Associate Degree, 2010 - 2011
Radyasyon Algılama ve Ölçme, Postgraduate, 2010 - 2011
Bilgisayar Tek. I , Undergraduate, 2010 - 2011

Advising Theses

Mustafa Çağatay T., Zonguldak ili sahilleri kum örneklerinin doğal radyoaktivite seviyelerinin incelenmesi, Postgraduate, C.KÜÇÜK(Student), 2012

Published journal articles indexed by SCI, SSCI, and AHCI

- I. Relationship between dose and stopping power values for electrons in skin and muscle tissues
Yüksel Z., Tufan M. Ç.
RADIATION AND ENVIRONMENTAL BIOPHYSICS, vol.60, no.1, pp.135-140, 2021 (SCI-Expanded)
- II. Investigation of gamma-ray attenuation parameters of some materials used in dental applications
Abbasova N., Yüksel Z., Abbasov E., Gulbicim H., Tufan M. Ç.
RESULTS IN PHYSICS, vol.12, pp.2202-2205, 2019 (SCI-Expanded)
- III. Estimating the effect of electron beam interactions with biological tissues
Yüksel Z., Tufan M. Ç.
CANADIAN JOURNAL OF PHYSICS, vol.96, no.12, pp.1338-1348, 2018 (SCI-Expanded)
- IV. Stopping power and dose calculations with analytical and Monte Carlo methods for protons and prompt gamma range verification
USTA M., Tufan M. Ç., AYDIN G., BOZKURT A.
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT, vol.897, pp.106-113, 2018 (SCI-Expanded)
- V. Determination of radioactivity levels of salt minerals on the market
Yüksel Z., Tufan M. Ç.
CANADIAN JOURNAL OF PHYSICS, vol.96, no.7, pp.784-785, 2018 (SCI-Expanded)
- VI. Stopping power and range calculations in human tissues by using the Hartree-Fock-Roothaan wave functions
USTA M., Tufan M. C.
RADIATION PHYSICS AND CHEMISTRY, vol.140, pp.43-50, 2017 (SCI-Expanded)
- VII. The investigation of vermiculite as an alternating shielding material for gamma rays
Gulbicin H., Tufan M. Ç., TÜRKAN M. N.
RADIATION PHYSICS AND CHEMISTRY, vol.130, pp.112-117, 2017 (SCI-Expanded)
- VIII. Natural radioactivity measurements and dose assessments in sand samples collected from Zonguldak beaches in Turkey
AYTEKİN H., Tufan M. Ç., KÜÇÜK C.
JOURNAL OF RADIOANALYTICAL AND NUCLEAR CHEMISTRY, vol.303, no.3, pp.2227-2232, 2015 (SCI-Expanded)
- IX. Natural radioactivity measurements in building materials used in Samsun, Turkey
Tufan M. Ç., Disci T.
RADIATION PROTECTION DOSIMETRY, vol.156, no.1, pp.87-92, 2013 (SCI-Expanded)

- X. **Stopping power and CSDA range calculations for incident electrons and positrons in breast and brain tissues**
 Tufan M. Ç., Namdar T., Gümüş H.
 RADIATION AND ENVIRONMENTAL BIOPHYSICS, vol.52, no.2, pp.245-253, 2013 (SCI-Expanded)
- XI. **Radioactivity concentrations in soil and dose assessment for Samsun City Centre, Turkey**
 Tufan M. Ç., Bostancı S.
 RADIATION PROTECTION DOSIMETRY, vol.151, no.3, pp.532-536, 2012 (SCI-Expanded)
- XII. **A study on the calculation of stopping power and CSDA Range for incident positrons**
 Tufan M. Ç., Gümüş H.
 JOURNAL OF NUCLEAR MATERIALS, vol.412, no.3, pp.308-314, 2011 (SCI-Expanded)
- XIII. **Calculation of the electronic stopping cross-sections of compounds for low energy protons by using molecular orbitals**
 Tufan M. Ç., Gümüş H., Kabadayı O.
 NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS, vol.256, no.1, pp.118-121, 2007 (SCI-Expanded)

Articles Published in Other Journals

- I. **Stopping Power Dependence of D_{max} Values for Biological Targets**
 YÜKSEL Z., TUFAN M. Ç.
 JOURNAL OF ANATOLIAN PHYSICS AND ASTRONOMY, vol.2, no.1, pp.35-39, 2021 (Peer-Reviewed Journal)
- II. **PREDICTING STOPPING POWER AND RANGEVALUE FOR HIGH ENERGY ELECTRONS IN THEMUSCLE AND SKIN TISSUES**
 YÜKSEL Z., TUFAN M. Ç.
 Black Sea Journal of Engineering and Science, vol.1, no.2, pp.35-40, 2018 (Peer-Reviewed Journal)
- III. **Consequences of a Radiological Dispersal Event with Nuclear and Radioactive Sources**
 Joseph M., Hamilton D., Klaus L., TUFAN M. Ç., Gabriele T., Wolfgang W., Berthou V., von Zweidorff A.
 SCIENCE & GLOBAL SECURITY, vol.15, no.2, pp.107-132, 2007 (Peer-Reviewed Journal)
- IV. **Range and Stopping Power Calculations in Nucleonica**
 TUFAN M. Ç., Galy J., Magill J.
 European Commission, Joint Research Centre, Institute for Transuranium Elements, 2006 (Non Peer-Reviewed Journal)

Books & Book Chapters

- I. **Alternative Radiation Shielding Materials for Gamma Rays**
 gülbiçim h., TUFAN M. Ç., TÜRKAN M.
 Lambert Academic Publishing, 2017
- II. **Alternative Radiation Shielding Materials for Gamma Rays: Vermiculite and Vermiculite-Borax Mixture**
 GÜLBİÇİM H., TUFAN M. Ç., TÜRKAN M.
 Lambert Academic Publishing, Düsseldorf, 2017

Refereed Congress / Symposium Publications in Proceedings

- I. **Energy Loss and Depth Dose Calculations in Gonad Tissues for Electron Radiation**
 YÜKSEL Z., TUFAN M. Ç.
 XV. International Conference on Nuclear Structure Properties, Kırıkkale, Turkey, 28 June 2022

- II. The Concept of Effective Charge and Electronic Energy Loss Calculations for Intermediate Energy Electrons and Positrons**
GÜMÜŞ H., TUFAN M. Ç.
XV. International Conference on Nuclear Structure Properties, 28-30 June 2022, Kırıkkale University, Türkiye, Kırıkkale, Turkey, 28 - 30 June 2022
- III. Investigation of Stopping Power and Range Values as a TLD Parameter**
BİLMEZ B., TUFAN M. Ç.
XV. INTERNATIONAL CONFERENCE ON NUCLEAR STRUCTURE PROPERTIES, Kırıkkale, Turkey, 30 June 2022
- IV. Preliminary results for the relationship between dmax and stopping power for incident electron beams**
TUFAN M. Ç., YÜKSEL Z.
4 th Pak-Turk International Conference on Emerging Technologies in the field of Sciences and Engineering (3-4th November, 2021), Pakistan, 03 November 2021
- V. INVESTIGATING THE RELATIONS BETWEEN DOSE AND STOPPING POWER VALUES FOR INCIDENT ELECTRONS**
YÜKSEL Z., TUFAN M. Ç.
XI. INTERNATIONAL CONFERENCE ON NUCLEAR STRUCTURE PROPERTIES, 12 - 14 September 2018
- VI. The Effects of the TF and RHF Electron Densities on the Calculation of Stopping Power for Incident Electrons**
TUFAN M. Ç., YÜKSEL Z.
XI. INTERNATIONAL CONFERENCE ON NUCLEAR STRUCTURE PROPERTIES, 12 - 14 September 2018
- VII. Developing the Alternative Desktop and Web Based Software for Gamma Analysis**
Caner Z., TUFAN M. Ç.
XI. INTERNATIONAL CONFERENCE ON NUCLEAR STRUCTURE PROPERTIES, Trabzon, Turkey, 12 - 14 September 2018
- VIII. Investigation of attenuation coefficients of some stainless steel and aluminium alloys**
caner z., TUFAN M. Ç.
Turkish Physical Society 33rd International Physics Congress, 6 - 10 September 2017
- IX. Investigation of Attenuation Coefficients of Some Stainless Steel and Aluminum Alloys**
Caner Z., Tufan M. Ç.
33rd International Physics Congress of the Turkish-Physical-Society (TPS), Bodrum, Turkey, 6 - 10 September 2017, vol.1935
- X. Mean Excitation Energy Calculationsfor the AtomsZ54**
YÜKSEL Z., TUFAN M. Ç.
X. INTERNATIONAL CONFERENCE ON NUCLEAR STRUCTURE PROPERTIES, 20 - 22 September 2017
- XI. Determination of Radioactivity Levels of Salt Minerals on the Market**
YÜKSEL Z., TUFAN M. Ç.
Turkish Physics Society 33. Physical Congress, Muğla, Turkey, 6 - 10 September 2017
- XII. Stopping Power and Range Calculations for Incident Electrons on Biological Tissues**
YÜKSEL Z., TUFAN M. Ç.
Türk Fizik Derneği 32. Uluslararası Fizik Kongresi, Muğla, Turkey, 6 - 09 September 2016
- XIII. STOPPING POWER AND RANGE CALCULATION FOR ELECTRONS INCIDENT ON THEBIOLOGICAL TISSUES**
YÜKSEL Z., TUFAN M. Ç.
Türk Fizik Derneği 32. Uluslararası Fizik Kongresi, 6 - 09 September 2016
- XIV. The Investigation of Vermiculite and Vermiculite-Borax Mixture as An Altenating Shielding Material For Gamma and X-Rays**
GÜLBİÇİM H., TUFAN M. Ç., TÜRKAN M., BEL T., YÖRÜK A.
VIII. INTERNATIONAL WORKSHOP ON NUCLEAR STRUCTURE PROPERTIES, SKARAYA, Turkey, 7 - 10 September 2015
- XV. Determination of Gamma Radiation Penetration For Vermiculite and Boron Mixed Vermiculite**

- GÜLBİÇİM H., TÜRKAN M., TUFAN M. Ç.
NSP-2015 Nuclear Structure Properties, Sakarya, Turkey, 07 September 2015
- XVI. **MCNPX ile Durdurma Gücü Menzil ve Doz Hesaplamaları**
YÜKSEL Z., TUFAN M. Ç., USTA M.
VII. INTERNATIONAL WORKSHOP ON NUCLEAR STUCTURE PROPERTIES, Sinop, Turkey, 27 - 29 October 2014
- XVII. **Protonlar için Çeşitli Organ Dokularının Durdurma Gücü ve Doz Hesaplamaları**
USTA M., TUFAN M. Ç.
VII. INTERNATIONAL WORKSHOP on NUCLEAR STRUCTURE PROPERTIES, Sinop, Turkey, 27 - 29 October 2014
- XVIII. **Elektronlar İçin RHF Yoğunlıklarını Kullanarak Durdurma Gücü ve Menzil Hesaplamaları**
YÜKSEL Z., TUFAN M. Ç.
VII. INTERNATIONAL WORKSHOP ON NUCLEAR STRUCTURE PROPERTIES, Sinop, Turkey, 27 - 29 October 2014
- XIX. **1 750 MeV Enerjili Protonlar için Karbon Azot ve Oksijen için Durdurma Gücü Hesaplamaları**
YÜKSEL Z., TUFAN M. Ç., USTA M.
VI. INTERNATIONAL WORKSHOP ON NUCLEAR STRUCTURE PROPERTIES, Karabük, Turkey, 18 September - 20 October 2013
- XX. **Determination Of Mass Attenuation Coefficients For Vermiculite For Different Gamma Energies**
TÜRKAN M., GÜLBİÇİM H., TUFAN M. Ç., BÖYÜKATA M., KARAÇAVUŞ S.
BSW-2013 Fourth Bozok Science Workshop: Studies on Structure and Dynamics from Nuclei to Clusters, Yozgat, Turkey, 16 May 2013
- XXI. **VIII. INTERNATIONAL WORKSHOP ON NUCLEAR STRUCTURE PROPERTIES**
TÜRKAN M., GÜLBİÇİM H., TUFAN M. Ç., KARAÇAVUŞ S.
Forth Bozok Science Workshop: Studies and Dynamics from Nucleus to Clusters, Yozgat, Turkey, 16 - 18 May 2013
- XXII. **NUCLEONICA A nuclear science portal**
Magill J., Galy J., Dreher R., Hamilton D., TUFAN M. Ç., Normand C., SchwenkFerrero A., Wiese H.
the International Conference on Nuclear Data for Science and Technology, Nice, France, 22 April - 27 May 2007
- XXIII. **Range and Stopping Power Calculations in Nucleonica**
TUFAN M. Ç., Magill J., Galy J.
Nuclear Engineering Science and Technology, Budapest, Hungary, 4 - 08 May 2008