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Personal Information

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Education Information

Doctorate, Gazi University, Fen Bilimleri Enstitüsü, Fizik (Dr), Turkey 2004 - 2007

Post Graduate, Tokat Gaziosmanpaşa University, Fen Bilimleri Enstitüsü, Fizik (YI) (Tezli), Turkey 2001 - 2004

Under Graduate, Tokat Gaziosmanpaşa University, Fen-Edebiyat Fakültesi, Fizik Bölümü, Turkey 1997 - 2001

Research Areas

Nuclear physics

Academic Titles / Tasks

Associate Professor, Gazi University, Fen Fakültesi, Fizik Bölümü, 2011 - Continues

Research Assistant, Gazi University, Fen Fakültesi, Fizik Bölümü, 2008 - 2011

Assistant Professor, Gazi University, Fen Fakültesi, Fizik Bölümü, 2008 - 2008

Research Assistant, Gazi University, Fen Fakültesi, Fizik Bölümü, 2005 - 2008

Research Assistant, Tokat Gaziosmanpaşa University, Fen Bilimleri Enstitüsü, Fizik (YI) (Tezli), 2002 - 2004

Professional Experience

Head of Department, Gazi University, Polatlı Fen-Edebiyat Fakültesi, Fizik Bölümü, 2012 - 2013

Courses

İleri Nükleer Fizik 1, Doctorate, 2017 - 2018

Advising Theses

BÖLÜKDEMİR M. H. , Radyo frekans parçacık hızlandırıcı için bağdaştırıcı tasarımı, üretimi ve deneyleri, Doctorate, E.ÇİÇEK(Student), 2020

BÖLÜKDEMİR M. H. , Investigation Of Interactions Of Proton And Carbom Beams With Tissue Equivalent Targets, Doctorate, F.EKİNCİ(Student), 2019

BÖLÜKDEMİR M. H. , Investigation Of Scattering Doses Using Error Calculations In Radiotherapy For Patients With Implants, Post Graduate, S.AYAN(Student), 2016

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **A study on heat capacity of oxide and nitride nuclear fuels by using Einstein-Debye approximation**
Eser E., Duyuran B., Bolukdemir M. H. , Koc H.
Nuclear Engineering and Technology, vol.52, no.6, pp.1208-1212, 2020 (Journal Indexed in SCI Expanded)
- II. **Electromagnetic simulations, manufacturing and low power measurements of a 352.21 MHz RF power coupler for the SANAEM RFQ project**
Cicek E., BÖLÜKDEMİR M. H. , Kilic I., Yasatekin B., Alacakir A.
JOURNAL OF INSTRUMENTATION, vol.13, 2018 (Journal Indexed in SCI)
- III. **Kinetic Study on the OSL Technique Using Human Blood Sample**
KOÇ K., Tanir G., Aksoy G., BÖLÜKDEMİR M. H.
NEUROQUANTOLOGY, vol.16, no.4, pp.41-46, 2018 (Journal Indexed in SCI)
- IV. **Calculation of thermophysical properties of copper compounds in CuCl production cycle**
BÖLÜKDEMİR M. H. , Koc H., Eser E.
JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS, vol.112, pp.258-261, 2018 (Journal Indexed in SCI)
- V. **Measurement of the distribution of radiation in the area surrounding the target mass using optically stimulated luminescence technique**
Tanir A. G. , Yedek H., KOÇ K., BÖLÜKDEMİR M. H.
APPLIED RADIATION AND ISOTOPES, vol.119, pp.23-27, 2017 (Journal Indexed in SCI)
- VI. **Direct Determination of Radiation Dose in Human Blood**
Tanir A. G. , Gulec O., ŞAHİNER E., BÖLÜKDEMİR M. H. , KOÇ K., MERİÇ N., Keles S. K.
NEUROQUANTOLOGY, vol.14, no.1, pp.28-35, 2016 (Journal Indexed in SCI)
- VII. **On the stopping power for low energy positrons**
Tanir G., Bolukdemir M. H. , Keles S., Goker I.
Chinese Journal of Physics, vol.50, no.3, pp.425-433, 2012 (Journal Indexed in SCI Expanded)
- VIII. **Measurement of dose given by Co-60 in radiotherapy with TLD-500**
Tanir G., Cengiz F., BÖLÜKDEMİR M. H.
RADIATION PHYSICS AND CHEMISTRY, vol.81, no.4, pp.355-357, 2012 (Journal Indexed in SCI)
- IX. **The effect of the initial exciton numbers on 54,56Fe(p, xp) Pre-Equilibrium Reactions**
Bolukdemir M. H. , Tel E., Aydin A., Okuducu S., Kaplan A.
Physics of Atomic Nuclei, vol.74, no.2, pp.209-215, 2011 (Journal Indexed in SCI Expanded)
- X. **Investigation of some structural fusion materials for (n, α) reactions at the 14-15 MeV energy region**
Tel E., Sahan M., Aydin A., Bolukdemir M. H. , Sahan H., Ugur F. A.
Journal of Fusion Energy, vol.30, no.1, pp.26-33, 2011 (Journal Indexed in SCI Expanded)
- XI. **Neutron skin effect of some Mo isotopes in pre-equilibrium reactions**
Bolukdemir M. H. , Tel E., Okuducu S., Akti N. N.
Pramana - Journal of Physics, vol.76, no.3, pp.457-469, 2011 (Journal Indexed in SCI Expanded)
- XII. **Investigation of the neutron emission spectra of some deformed nuclei for (n,xn) reactions up to 26 MeV energy**
Kaplan A., Buyukuslu H., Tel E., Aydin A., Bolukdemir M. H.
Indian Journal of Physics, vol.85, no.11, pp.1615-1629, 2011 (Journal Indexed in SCI Expanded)
- XIII. **An alternative view on the kinetics of optical stimulated luminescence decay**
Tanir G., BÖLÜKDEMİR M. H.
JOURNAL OF RADIOANALYTICAL AND NUCLEAR CHEMISTRY, vol.285, no.3, pp.563-568, 2010 (Journal Indexed in SCI)
- XIV. **Investigation of coulomb and pairing effects using new developed empirical formulas for proton-induced reaction cross sections**
Tel E., Aydin E. G. , Aydin A., Kaplan A., Bolukdemir M. H. , Okuducu S.
Physics of Atomic Nuclei, vol.73, no.3, pp.412-419, 2010 (Journal Indexed in SCI Expanded)
- XV. **Theoretical cross sections of 209Bi, 232Th, 235U and 238U on deuteron-induced reactions**
Buyukuslu H., Kaplan A., Tel E., Aydin A., Yildirim G., Bolukdemir M. H.

- Annals of Nuclear Energy, vol.37, no.4, pp.534-539, 2010 (Journal Indexed in SCI Expanded)
- XVI. **Improved Formula for (n, 3He) Fusion Reactions Cross Sections Using Optical Model**
Bolukdemir M. H. , Tel E., Akti N. N. , Aydin A., Okuducu S.
Journal of Fusion Energy, vol.29, no.1, pp.13-18, 2010 (Journal Indexed in SCI Expanded)
- XVII. **Excitation functions of some neutron production targets on (d,2n) reactions**
Kaplan A., Buyukuslu H., Aydin A., Tel E., Yildirim G., Bolukdemir M. H.
Journal of Fusion Energy, vol.29, no.2, pp.181-187, 2010 (Journal Indexed in SCI Expanded)
- XVIII. **Production cross sections of medical ' in radionuclides**
Büyükuslu H., KAPLAN A., Yildirim G., Aydin A., Tel E., BÖLÜKDEMİR M. H.
Kerntechnik, vol.75, no.3, pp.103-108, 2010 (Journal Indexed in SCI Expanded)
- XIX. **Investigation of neutron skin effect with density dependence by using a new calculation method for initial exciton numbers on pre-equilibrium reactions**
Tel E., Bolukdemir M. H. , Okuducu S., Aydin A., Kaplan A.
Physica Scripta, vol.80, no.6, 2009 (Journal Indexed in SCI Expanded)
- XX. **Calculation of nuclear level density parameters of some light deformed medical radionuclides using collective excitation modes of observed nuclear spectra**
Okuducu S., Akti N. N. , Sarac H., Bolukdemir M. H. , Tel E.
Modern Physics Letters A, vol.24, no.33, pp.2681-2691, 2009 (Journal Indexed in SCI Expanded)
- XXI. **The study of (n,d) reaction cross sections for new evaluated semi-empirical formula using optical model**
Boeluekdemir M. H. , Tel E., Okuducu S., Aydin A.
Journal of Fusion Energy, vol.28, no.4, pp.398-403, 2009 (Journal Indexed in SCI Expanded)
- XXII. **New evaluated semi-empirical formula using optical model for 14-15 MeV (n, t) reaction cross sections**
Tel E., Durgu C., Aydin A., Boeluekdemir M. H. , Kaplan A., Okuducu S.
Journal of Fusion Energy, vol.28, no.4, pp.377-384, 2009 (Journal Indexed in SCI Expanded)
- XXIII. **Calculation of radii and density of 7-19B isotopes using effective skyrme force**
Tel E., Okuducu S., Tanir G., Akti N. N. , Bolukdemir M. H.
Communications in Theoretical Physics, vol.49, no.3, pp.696-702, 2008 (Journal Indexed in SCI Expanded)
- XXIV. **Semi-empirical systematics of (n, 2n), (n, α) reactions cross sections at 1415 MeV neutron energy**
Tel E., Okuducu S., Boeluekdemir M. H. , Tanir G.
International Journal of Modern Physics E, vol.17, no.3, pp.567-583, 2008 (Journal Indexed in SCI Expanded)
- XXV. **Irradiation effect on dielectric properties and electrical conductivity of Au/SiO₂/n-Si (MOS) structures**
TATAROĞLU A., Altindal Ş., Boeluekdemir M. H. , Tanir G.
Nuclear Instruments and Methods in Physics Research, Section B: Beam Interactions with Materials and Atoms, vol.264, no.1, pp.73-78, 2007 (Journal Indexed in SCI Expanded)
- XXVI. **Infrared stimulated luminescence-decay shape from NaCl as a function of radiation doses**
Tanir G., BÖLÜKDEMİR M. H.
RADIATION MEASUREMENTS, vol.42, no.10, pp.1723-1726, 2007 (Journal Indexed in SCI)
- XXVII. **IRSL characteristics of NaCl and KCl relative to dosimeter**
Tanir G., Bolukdemir M. H. , Catli S., Tel E.
Radiation Measurements, vol.42, no.1, pp.29-34, 2007 (Journal Indexed in SCI Expanded)
- XXVIII. **Effects of beta-ray irradiation on the C-V and G/ ω -V characteristics of Au/SiO₂/n-Si (MOS) structures**
TATAROĞLU A., Bolukdemir M. H. , Tanir G., Altindal Ş., Bulbul M. M.
Nuclear Instruments and Methods in Physics Research, Section B: Beam Interactions with Materials and Atoms, vol.254, no.2, pp.273-277, 2007 (Journal Indexed in SCI Expanded)
- XXIX. **Activation energy of NaCl as a function of radiation dose**
Tanir G., Bolukdemir M. H.
Journal of Radioanalytical and Nuclear Chemistry, vol.270, no.2, pp.413-416, 2006 (Journal Indexed in SCI

Expanded)

- XXX. **Application of the luminescence single-aliquot technique for dose estimation in the Marmara Sea**
Tanir G., Sencan E., Bolukdemir M. H. , TÜRKÖZ M. B. , Tel E.
Journal of Environmental Radioactivity, vol.84, no.3, pp.409-416, 2005 (Journal Indexed in SCI Expanded)
- XXXI. **Comparison of the decay-rate parameter of the luminescence signal generated by various laboratory radiation doses**
Tanir G., TÜRKÖZ M. B. , Sencan E., Bolukdemir M. H. , Tel E., Okuducu S.
Journal of Radioanalytical and Nuclear Chemistry, vol.265, no.3, pp.399-403, 2005 (Journal Indexed in SCI Expanded)

Articles Published in Other Journals

- I. **The Effect of the Second Peak formed in Biomaterials used in a Slab Head Phantom on the Proton Bragg Peak**
Ekinci F., BÖLÜKDEMİR M. H.
JOURNAL OF POLYTECHNIC-POLİTEKNİK DERGİSİ, vol.23, no.1, pp.129-136, 2020 (Journal Indexed in ESCI)
- II. **Calculation of Neutron Density Distributions of Tin Isotopes Using the Thomas Fermi Approximation**
ESER E., yalçın a., BÖLÜKDEMİR M. H. , gökbulut m., KOÇ H.
International journal of modern engineering research, vol.6, no.12, pp.59-65, 2016 (Refereed Journals of Other Institutions)
- III. **Usage of attenuation coefficients of some tissue-equivalent materials**
Tanir A. G. , Ketenci F. S. , BÖLÜKDEMİR M. H.
TURKISH JOURNAL OF PHYSICS, vol.39, no.1, pp.69-74, 2015 (Journal Indexed in ESCI)
- IV. **The effects of plaster on radiation doses given to patients**
Karaman O., Tanir A. G. , BÖLÜKDEMİR M. H.
TURKISH JOURNAL OF PHYSICS, vol.39, no.1, pp.31-36, 2015 (Journal Indexed in ESCI)
- V. **Effects of different types of nuclear radiations on optically stimulated luminescence**
TANIR A. G. , BÖLÜKDEMİR M. H. , KIZILIRMAK T. N.
TURKISH JOURNAL OF PHYSICS, vol.37, pp.363-367, 2013 (Refereed Journals of Other Institutions)
- VI. **Application of active OSL Approximation to some experimental optical stimulated luminescence decay**
TANIR A. G. , BÖLÜKDEMİR M. H.
Turkish Journal of Physics, vol.35, no.3, pp.265-272, 2011 (Refereed Journals of Other Institutions)

Books & Book Chapters

- I. **Radyasyon ve Radyasyondan Korunma Fiziği**
Arasoğlu A., Aslan N., Aydın A., Babacan T., Boztosun İ., Bulur E., Engin B., Gümüş H., Kaplan A., Karadağ M., et al.
Palme Yayın Dağıtım, Ankara, 2013
- II. **RADYASYON FİZİĞİNDE İSTATİSTİK**
Uğur G., Uğur Ş., Tanir A. G. , Koç K., Bölükdemir M. H. , Arasoğlu A., Aslan N., Aydın A., Babacan T., Boztosun İ., et al.
in: PHYSICS FOR RADIATION PROTECTION, Prof.Dr. A.Güneş TANIR,Doç.Dr. M. Hicabi BÖLÜKDEMİR,Yrd.Doç. Dr.Kemal KOÇ, Editor, Palme Yayın Dağıtım, Ankara, pp.79-146, 2013

Refereed Congress / Symposium Publications in Proceedings

- I. **Calculation specific heat capacity of Uranium Nitride nuclear fuel**
ESER E., Duyuran B., KOÇ H., BÖLÜKDEMİR M. H.

TESNAT-2018, 20 - 22 April 2018

- II. **Determination of the full energy peak efficiency of HPGe detector using Monte Carlo simulation**
UYAR E., BÖLÜKDEMİR M. H. , ESER E.
TESNAT-2018, 20 - 22 April 2018
- III. **A Compact RF Power Coupler Design for the SANAEM RFQ Accelerator**
Cicek E., BÖLÜKDEMİR M. H. , Kilic I., Yasatekin B., Alacakir A.
34th International Physics Congress (IPS) of the Turkish-Physical-Society (TPS), Konacik, Turkey, 5 - 09 September 2018, vol.2042
- IV. **Physics of plasma focus device for nuclear fusion studies**
BÖLÜKDEMİR M. H. , ESER E.
NSP2017-10. International workshop on nuclear structure properties, Karabük, Turkey, 20 - 22 September 2017
- V. **Investigations of thermophysical properties of nuclear fuels (Oxide and Nitride) using Einstein-Debye approximation.**
ESER E., KOÇ H., BÖLÜKDEMİR M. H.
X. International Workshop on Nuclear Structure Properties (NSP2017), 20 - 22 September 2017
- VI. **Küçük ölçekli nükleer füzyon reaktörleri: IEC**
BÖLÜKDEMİR M. H.
Adım Fizik Günleri VI, Balıkesir, Turkey, 19 - 21 June 2017
- VII. **Calculation of Neutron Cross Section for DD Reaction in IEC Fusion Reactor**
Bölükdemir A. S. , BÖLÜKDEMİR M. H. , TANIR A. G.
TESNAT 2017: 3rd International Conference on Theoretical and Experimental Studies in Nuclear Applications and Technology, Adana, Turkey, 10 - 12 May 2017
- VIII. **The distribution of ionizing radiation in the area surrounding the target mass using OSL**
TANIR A. G. , Yedek H., BÖLÜKDEMİR M. H. , KOÇ K.
TESNAT 2017: 3rd International Conference on Theoretical and Experimental Studies in Nuclear Applications and Technology, Adana, Turkey, 10 - 12 May 2017
- IX. **OSL kinetic using AOSL approximation**
TANIR A. G. , Aksoy G., KOÇ K., BÖLÜKDEMİR M. H.
TESNAT 2017: 3rd International Conference on Theoretical and Experimental Studies in Nuclear Applications and Technology, 10 - 12 May 2017
- X. **An Analysis of Dose Distributions for Some Biomaterials and Solid Water Phantom**
BÖLÜKDEMİR M. H. , ayan s., ESER E.
IX. INTERNATIONAL WORKSHOP ON NUCLEAR STRUCTURE PROPERTIES, 1 - 03 September 2016, pp.77
- XI. **Comparison of the Bragg Curves from Liquid Water for Protons**
TANIR A. G. , küşneci e. n. , KOÇ K., BÖLÜKDEMİR M. H.
IX. INTERNATIONAL WORKSHOP ON NUCLEAR STRUCTURE PROPERTIES, 1 - 03 September 2016
- XII. **The Study on the Osl Kinetics from Human Blood Sample**
TANIR A. G. , aksoy g., KOÇ K., BÖLÜKDEMİR M. H.
IX. INTERNATIONAL WORKSHOP ON NUCLEAR STRUCTURE PROPERTIES, 1 - 03 September 2016, pp.32
- XIII. **Analytical Evaluation of the Coulomb Potential for Spherical Nuclei**
ESER E., KOÇ H., BÖLÜKDEMİR M. H.
IX. INTERNATIONAL WORKSHOP ON NUCLEAR STRUCTURE PROPERTIES, 1 - 03 September 2016
- XIV. **The Situation of Inertial Electrostatic Confinement Fusion Reactor in Fusion Studies**
BÖLÜKDEMİR M. H.
IX. INTERNATIONAL WORKSHOP ON NUCLEAR STRUCTURE PROPERTIES, 1 - 03 September 2016, pp.38
- XV. **THE EFFECTS OF TITANIUM ALLOY AND STAINLESS STEEL BIOMATERIALS ON DOSE DISTRIBUTION IN RADIOTHERAPY**
Ayan S., BÖLÜKDEMİR M. H. , Fatih Çağlar K.
9th International Physics Conference of the Balkan Physical Union, 24 - 27 August 2015
- XVI. **Equivalent dose determination using components of IRSL decay curves**
Tanir G., Boeluekdemir M. H.

6TH International Conference of the Balkan Physical Union, İstanbul, Turkey, 22 August 2006 - 26 August 2007, vol.899, pp.528

XVII. NaCl ve KCl'ün IRSL bozunma eğrilerinin sıcaklık bağımlılığına göre kıyaslanması

TANIR A. G. , BÖLÜKDEMİR M. H. , ÇATLI DİNÇ S., TEL E.

9. Ulusal Nükleer Bilimler ve Teknolojileri Kongresi, Turkey, 14 - 16 September 2005

XVIII. NaCl Samples for Optical Luminescence Dosimetry

BÖLÜKDEMİR M. H. , ÇATLI DİNÇ S., TANIR A. G. , TEL E.

Tfd-23 Fizik Kongresi, 13 - 16 September 2005

Supported Projects

BÖLÜKDEMİR M. H. , Project Supported by Higher Education Institutions, Nükleer Füzyon Yapı Materyali Olarak Kullanılan Bazı Çekirdeklerin Nükleer Reaksiyonlarının Bozunmuş Born Dalga Yaklaşımı ile İncelenmesi, 2010 - 2013

Citations

Total Citations (WOS):183

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