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Education Information

Doctorate, Suleyman Demirel University, Fen Bilimleri Enstitüsü, Fizik Anabilim Dalı, Turkey 2005 - 2011

Postgraduate, Suleyman Demirel University, Fen Bilimleri Enstitüsü, Fizik Anabilim Dalı, Turkey 2003 - 2005

Undergraduate, Suleyman Demirel University, Fen Edebiyat Fakültesi, Fizik Bölümü, Turkey 1998 - 2003

Foreign Languages

English, C2 Mastery

Research Areas

Physics, Nuclear physics, Experimental Methods of Particle and Nuclear Physics, Natural Sciences

Academic Titles / Tasks

Research Assistant PhD, Suleyman Demirel University, Fen Edebiyat Fakültesi, Fizik, 2010 - Continues

Research Assistant, Suleyman Demirel University, Fen Edebiyat Fakültesi, Fizik, 2004 - 2010

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Performance of NaI(Tl) detector for gamma-ray spectroscopy**
AKKURT İ., Waheed F., AKYILDIRIM H., Gunoglu K.
INDIAN JOURNAL OF PHYSICS, vol.96, no.10, pp.2941-2947, 2022 (SCI-Expanded)
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- III. **Role of heavy metal oxides on the radiation attenuation properties of newly developed TBBE-X glasses by computational methods**
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- IV. **Physical, neutron, and gamma-rays shielding parameters for Na₂O-SiO₂-PbO glasses**
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- V. **Monte Carlo simulation of a NaI(Tl) detector efficiency**
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- VI. **Radiation shielding features of zirconolite silicate glasses using XCOM and FLUKA simulation code**
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- VII. **Influence of lead and zinc oxides on the radiation shielding properties of tellurite glass systems**
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- IX. **Evaluation of photon, neutron, and charged particle shielding competences of TeO₂-B₂O₃-Bi₂O₃-TiO₂ glasses**
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- X. **Neutron Shielding Calculation for Barite-Boron-Water**
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- XII. **Oxyfluoro-tellurite-zinc glasses and the nuclear-shielding ability under the substitution of AlF₃ by ZnO**
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- XIII. **Olivine mineral used in concrete for gamma-ray shielding**
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ARABIAN JOURNAL OF GEOSCIENCES, vol.12, no.8, 2019 (SCI-Expanded)
- XIV. **Investigation of Buildup Factor in Gamma-Ray Measurement**
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- XV. **Variation of the Photon Attenuation Coefficients of Pumice Concrete in Different Chemical Media**
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ASIAN JOURNAL OF CHEMISTRY, vol.25, no.6, pp.3279-3281, 2013 (SCI-Expanded)
- XVI. **Photon Attenuation Coefficients of Iron Doped Clay at 662 keV**
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- XVII. **Radiation transmission of concrete including pumice for 662, 1173 and 1332 keV gamma rays**
AKKURT İ., AKYILDIRIM H.
NUCLEAR ENGINEERING AND DESIGN, vol.252, pp.163-166, 2012 (SCI-Expanded)
- XVIII. **Chemical corrosion on gamma-ray attenuation properties of barite concrete**
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- XIX. **The Effect of Pumice Rate on the Gamma Absorption Parameters of Concrete**
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- XX. **Gamma Ray Attenuation Coefficient of Microalloyed Stainless Steel**
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- XXI. **The boronizing effect on the radiation shielding and magnetization properties of AISI 316L austenitic stainless steel**
AKKURT İ., CALIK A., AKYILDIRIM H.
NUCLEAR ENGINEERING AND DESIGN, vol.241, no.1, pp.55-58, 2011 (SCI-Expanded)
- XXII. **Neutron irradiation effects on I-V characteristics of Au/n-GaAs Schottky diodes**
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- XXIII. **Gamma-ray shielding properties of concrete including barite at different energies**
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- XXIV. **Radiation shielding of concrete containing zeolite**
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- XXVI. **Investigation of photon attenuation coefficient for pumice**
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- XXVII. **Natural radioactivity of coals and its risk assessment**
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- XXVIII. **The effect of boronizing on the radiation shielding properties of steel**
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Articles Published in Other Journals

- I. **Assessment of Gamma Ray Shielding Properties for Skin**
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- II. **Calculation of Fast Neutron Shielding Parameters for Some Essential Carbohydrates**
AKYILDIRIM H.
Erzincan Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.12, no.2, pp.1141-1148, 2019 (Peer-Reviewed Journal)
- III. **Attenuation Parameters and Effective Atomic Numbers of Concretes Containing Pumice for Some Photon Energies by Experiment, Simulation and Calculation**
AKYILDIRIM H.
European Journal of Science and Technology, vol.14, pp.90-95, 2018 (Peer-Reviewed Journal)
- IV. **Isparta İli nde Radon Gazı Yoğunluğunun Ölçülmesi ve Haritalandırılması**
ÖZKORUCUKLU S., AKYILDIRIM H., ÇAPALI V.
Süleyman Demirel Üniversitesi, Fen Bilimleri Enstitüsü Dergisi, vol.10, no.3, pp.323-327, 2006 (Peer-Reviewed Journal)
- V. **Isparta İli nde radon yoğunluk ölçümleri**
ÖZKORUCUKLU S., AKYILDIRIM H., ÇAPALI V.

Refereed Congress / Symposium Publications in Proceedings

- I. **Calculation of Neutron Shielding Properties of Zeolite Concrete**
Alobaidi s., AKYILDIRIM H., GÜNOĞLU K., AKKURT İ.
ICCESEN-2019, 23 - 27 October 2019
- II. **Determination of the gamma ray attenuation coefficient of magnetite aggregate concretes”**
WAHEED F., GÜNOĞLU K., AKYILDIRIM H., AKKURT İ.
ICCESEN-2019, 23 - 27 October 2019
- III. **A Monte Carlo simulation: To determination the buildup factor**
WAHEED F., AKYILDIRIM H., GÜNOĞLU K., AKKURT İ.
ICCESEN-2019, 23 - 27 October 2019
- IV. **Modeling of 3” x 3” NaI(Tl) Scintillation Detector System by Monte Carlo Code Program**
waheed f., AKYILDIRIM H., GÜNOĞLU K., AKKURT İ.
ICSuSaT 2019, 5 - 07 July 2019
- V. **An Experimental Work on the Total Efficiency of Cylindrical Scintillation Gamma-Ray Detector**
waheed f., GÜNOĞLU K., AKYILDIRIM H., AKKURT İ.
CSuSaT 2019, 5 - 07 July 2019
- VI. **Calculation of neutron shielding properties of zeolite concretes**
ALObaidi S., AKYILDIRIM H., GÜNOĞLU K., AKKURT İ.
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- VII. **An experimental work on the total efficiency of cylindrical scintillation gamma-ray detector**
Waheed F., GÜNOĞLU K., AKYILDIRIM H., AKKURT İ.
2nd International Conference on sustainable Science and Technology (ICSuSaT-2019), İstanbul, Turkey, 5 - 07 July
2019
- VIII. **The Importance of of Buildup Factor for NaI(Tl) Detector System**
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October 2018
- IX. **FLUKA calculation of neutron shielding for 252Cf source**
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October 2018
- X. **Variation of Detector Resolution with the Source-Detector Distance**
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<http://2018.iccesen.org/uploads/2018/proceeding20of20ICCESEN-2018.pdf>, 12 - 16 October 2018
- XI. **FLUKA calculation for neutron shielding from 252Cf source**
AL OBAIDI S., AKYILDIRIM H., GÜNOĞLU K., AKKURT İ.
International Conference on Computational and Experimental Science and Engineering (ICCESEN-2018), 12 - 16
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- XII. **Simulation of attenuation parameters and effective atomic numbers of concretes containing pumice
and olivine**
AKYILDIRIM H.
5th International Conference on Computational and Experimental Science and Engineering (ICCESEN-2018),
Antalya/Kemer, Turkey, 12 - 16 October 2018
- XIII. **An Investigation of Buildup Factor Importance for NaI(Tl) Detector System**
WAHEED F., AKYILDIRIM H., GÜNOĞLU K., AKKURT İ.

International Conference on Computational and Experimental Science and Engineering (ICCESEN-2018), 12 - 16 October 2018

- XIV. **An Experimental Test for neutron shielding**
AL OBAIDI S., GÜNOĞLU K., AKYILDIRIM H., AKKURT İ.
International Conference on Computational and Experimental Science and Engineering (ICCESEN-2018), 12 - 16 October 2018
- XV. **Calculation of the Mass Attenuation Coefficients, Effective Atomic Numbers and Effective Electron Numbers of Some Concrete Containing Pumice and Barite at Different Ratios**
GÜNOĞLU K., AKYILDIRIM H.
International Conference on Applied Mathematics in Engineering (ICAME), 27 - 29 June 2018
- XVI. **FLUKA Calculation for Neutron Shielding**
AKKURT İ., AL OBAIDI S., AKYILDIRIM H., GÜNOĞLU K.
1st International Engineering and Technology Symposium (IETS'18), 3 - 05 May 2018
- XVII. **Attenuation coefficients of concretes containing olivine using Geant4 simulation code for some photon energies**
AKYILDIRIM H., AKKURT İ.
4th international conference on computational and experimental science and engineering (ICCESEN-2017), 4 - 08 October 2017
- XVIII. **Variation of the buildup factor as a function of atomic number for pure single layer materials**
WAHEED F., AKYILDIRIM H., GÜNOĞLU K., AKKURT İ.
4th International Conference on Computational and Experimental Science and Engineering (ICCESEN-2017), Antalya/Kemer, Turkey, 4 - 08 October 2017
- XIX. **Investigation of radiation shielding properties of some steels**
RWASHDY Q., GÜNOĞLU K., AKYILDIRIM H., AKKURT İ.
3rd International Conference on Computational and Experimental Science and Engineering (ICCESEN-2016), Antalya/Kemer, Turkey, 19 - 24 October 2016
- XX. **Photon shielding properties of concretes containing zeolite mineral by FLUKA MC and XCOM codes**
AKYILDIRIM H., AKKURT İ.
2nd International Conference on Computational and Experimental Science and Engineering (ICCESEN 2015), Antalya, Turkey, 14 - 19 October 2015
- XXI. **Estimation of photon attenuation coefficients of concrete containing olivine mineral for several energies by FLUKA code**
AKYILDIRIM H., AKKURT İ.
2nd International Conference on Computational and Experimental Science and Engineering (ICCESEN 2015), Antalya, Turkey, 14 - 19 October 2015
- XXII. **Photon attenuation coefficients of iron doped clay at 662 keV**
AKKURT İ., ERTAN B., GÜNOĞLU K., AKYILDIRIM H., ÇANAKCI H.
International Congress APMAS2012, 26 - 29 April 2012
- XXIII. **The effect of pumice rate on the gamma absorption parameters of concrete**
AKKURT İ., AKYILDIRIM H., ERTAN B., KILINÇARSLAN Ş., BAŞYİĞİT C.
International Congress on Advances in Applied Physics And Material Science (APMAS), 12 - 15 May 2011
- XXIV. **Neutron irradiation effects on I- V characteristics of Au/n-GaAs Schottky diodes**
AKKURT İ., AKYILDIRIM H., ÖZDEMİR A. F., ALDEMİR D. A.
11th Neutron and Ion Dosimetry Symposium (NEUDOS-11), 12 - 16 October 2009, pp.25
- XXV. **Radiation hazards on electrical properties of Schottky diodes**
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- XXVI. **Investigation of radiation shielding properties of of some building materials**
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- XXVII. **Investigation of radiation shielding properties of some building materials**

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6th International Conference of the Balkan-Physical-Union, İstanbul, Turkey, 22 - 28 August 2006, vol.899, pp.533

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