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Research Areas

Natural Sciences

Academic Titles / Tasks

Associate Professor, Marmara University, Vocational School of Health Services, Medical Services and Techniques Department, 2022 - Continues

Associate Professor, University of Notre Dame, 2021 - 2022

Assistant Professor, Uskudar University, Health Services Vocational School, 2017 - 2021

Research Assistant, Isik University, 2012 - 2017

Researcher, Istanbul University, 2010 - 2013

Published journal articles indexed by SCI, SSCI, and AHCI

- I. Monte Carlo simulation analysis of radiation attenuation properties induced by arsenic accumulation in femur and tibia bones of rats exposed to sodium arsenite diet
Gökçe Y., Akman F., KILIÇOĞLU MEHMETCİK Ö., Ali Üncü Y., Özdoğan H.
Radiation Physics and Chemistry, vol.225, 2024 (SCI-Expanded)
- II. A pilot study of diabetes effects on radiation attenuation characteristics of tibia and femur of rats
Gökçe Y., Akman F., KILIÇOĞLU MEHMETCİK Ö., ÜNCÜ Y. A., Özdoğan H.
Applied Radiation and Isotopes, vol.208, 2024 (SCI-Expanded)
- III. Assessment of neutron and gamma-ray shielding characteristics in ternary composites: Experimental analysis and Monte Carlo simulations
Akman F., KILIÇOĞLU MEHMETCİK Ö., Oğul H., Ozdogan H., Kacal M., Polat H.
Radiation Physics and Chemistry, vol.219, 2024 (SCI-Expanded)
- IV. Gamma, charged particle and neutron radiation shielding capacities of ternary composites having polyester/barite/tungsten boride
Akman F., Ozdogan H., Kilicoglu Ö., Oğul H., Agar O., Kacal M., Polat H., Tursucu A.
Radiation Physics and Chemistry, vol.212, 2023 (SCI-Expanded)
- V. Investigation of the effect of cement type on nuclear shield performance of heavy concrete
Kilicoglu Ö., More C. V., KARA Ü., Davraz M.
Radiation Physics and Chemistry, vol.209, 2023 (SCI-Expanded)
- VI. Nuclear radiation shielding performance of borosilicate glasses: Numerical simulations and theoretical analyses

- Kilicoglu Ö., Akman F., Ogul H., Agar O., KARA Ü.
Radiation Physics and Chemistry, vol.204, 2023 (SCI-Expanded)
- VII. **Ionized and non-ionized radiation effects on coronary stent implantation**
Kilicoglu Ö., Sayyed M., KARA Ü., Aladag H. İ., KARADEM K. B.
Applied Radiation and Isotopes, vol.192, 2023 (SCI-Expanded)
- VIII. **Feasibility of a novel shield of nuclear radiation with W-Ni-Fe-Co and La-Bi alloys alternative to Pb and ordinary concrete absorbers**
Akman F., Kilicoglu Ö., Agar O.
Progress in Nuclear Energy, vol.156, 2023 (SCI-Expanded)
- IX. **Evaluation of F-18 FDG radiopharmaceuticals through Molecular Docking and radiation effects**
Kilicoglu O., Sepay N., Ozgenc E., Gundogdu E., KARA Ü., Alomairy S., Al-Buriahi M.
Applied Radiation and Isotopes, vol.191, 2023 (SCI-Expanded)
- X. **Investigating the effect of gamma-ray interaction on the stability and physicochemical properties of turmeric and ginger using Monte Carlo simulation**
Vahapoglu B., KILIÇOĞLU MEHMETCİK Ö., ÇEBİ N., Ayseli M. T., KARA Ü., SAĞDIÇ O., Çapanoğlu Güven E.
RADIATION PHYSICS AND CHEMISTRY, vol.201, 2022 (SCI-Expanded)
- XI. **Comparison of Monte Carlo simulations and theoretical calculations of nuclear shielding characteristics of various borate glasses including Bi, V, Fe, and Cd**
Ozdogan H., Kilicoglu Ö., Akman F., Agar O.
APPLIED RADIATION AND ISOTOPES, vol.189, 2022 (SCI-Expanded)
- XII. **Pre-clinic study of radiopharmaceutical for Covid-19 inactivation: Dose distribution with Monte Carlo Simulation**
Kilicoglu Ö., KARA Ü., ÖZGENÇ E., ATLIHAN GÜNDÖĞDU E.
APPLIED RADIATION AND ISOTOPES, vol.188, 2022 (SCI-Expanded)
- XIII. **Micro Pb filled polymer composites: Theoretical, experimental and simulation results for gamma-ray shielding performance**
Kilicoglu Ö., V. More C., Akman F., Dilsiz K., Ogul H., Kacal M. R., Polat H., Agar O.
RADIATION PHYSICS AND CHEMISTRY, vol.194, 2022 (SCI-Expanded)
- XIV. **Science mapping for radiation shielding research**
Kilicoglu Ö., MEHMETCİK H.
RADIATION PHYSICS AND CHEMISTRY, vol.189, 2021 (SCI-Expanded)
- XV. **Elastic properties and radiation shielding ability of ZnO-P2O5/B2O3 glass system**
Alothman M. A., Alrowaili Z. A., Al-Baradi A. M., Kilicoglu Ö., Mutuwong C., Al-Buriahi M. S.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.32, no.14, pp.19203-19217, 2021 (SCI-Expanded)
- XVI. **Synthesis, physical, linear optical and nuclear radiation shielding characteristics of B2O3-BaO-PbO-SrO₂ glasses**
Abouhaswa A. S., Tekin H. O., Ahmed E. M., Kilicoglu Ö., Rammah Y. S.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.32, no.13, pp.18163-18177, 2021 (SCI-Expanded)
- XVII. **Physical, thermal, optical, structural and nuclear radiation shielding properties of Sm₂O₃ reinforced borotellurite glasses**
KILIÇ G., Issa S. A. M., İLİK E., Kilicoglu Ö., İŞSEVER U. G., El-Mallawany R., Issa B., Tekin H. O.
CERAMICS INTERNATIONAL, vol.47, no.5, pp.6154-6168, 2021 (SCI-Expanded)
- XVIII. **The impact of polymer additive for N95 masks on gamma-ray attenuation properties**
Kilicoglu Ö., KARA Ü., Inanc I.
MATERIALS CHEMISTRY AND PHYSICS, vol.260, 2021 (SCI-Expanded)
- XIX. **A journey for exploration of Eu₂O₃ reinforcement effect on zinc-borate glasses: Synthesis, optical, physical and nuclear radiation shielding properties**
KILIÇ G., Issa S. A. M., İLİK E., Kilicoglu Ö., Tekin H. O.
CERAMICS INTERNATIONAL, vol.47, no.2, pp.2572-2583, 2021 (SCI-Expanded)

- XX. **Sodium dodecatungstophosphate hydrate-filled polymer composites for nuclear radiation shielding**
Tekin H. O., Kacal M. R., Issa S. A. M., Polat H., Susoy G., Akman F., Kilicoglu Ö., Gillette V. H.
MATERIALS CHEMISTRY AND PHYSICS, vol.256, 2020 (SCI-Expanded)
- XXI. **Fabrication, physical characteristic, and gamma-photon attenuation parameters of newly developed molybdenum reinforced bismuth borate glasses**
Tekin H. O., Abouhaswa A. S., Kilicoglu Ö., Issa S. A. M., AKKURT İ., Rammah Y. S.
PHYSICA SCRIPTA, vol.95, no.11, 2020 (SCI-Expanded)
- XXII. **Two-step investigation on fabrication and characterization of iron-reinforced novel composite materials for nuclear-radiation shielding applications**
Tekin H. O., Akman F., Issa S. A. M., Kacal M. R., Kilicoglu Ö., Polat H.
JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS, vol.146, 2020 (SCI-Expanded)
- XXIII. **An in-depth investigation from mechanical durability to structural and nuclear radiation attenuation properties: B₂O₃-Na₂O-Bi₂O₃-Nb(2)O(5)glasses experience**
Saddeek Y. B., Tekin H. O., Issa S. A. M., Kilicoglu Ö., Elshami W., Alharbi T.
PHYSICA SCRIPTA, vol.95, no.10, 2020 (SCI-Expanded)
- XXIV. **Radiation attenuation properties of removable partial dentures (RPD)**
KARA Ü., Kilicoglu Ö., KARAİBRAHİMOĞLU A., Cavdarli K., İNCE F.
MATERIALS CHEMISTRY AND PHYSICS, vol.253, 2020 (SCI-Expanded)
- XXV. **Alkaline phosphate glasses and synergistic impact of germanium oxide (GeO₂) additive: Mechanical and nuclear radiation shielding behaviors**
Saddeek Y. B., Issa S. A. M., Guclu E. E. A., Kilicoglu Ö., SÜSOY DOĞAN G., Tekin H. O.
CERAMICS INTERNATIONAL, vol.46, no.10, pp.16781-16797, 2020 (SCI-Expanded)
- XXVI. **Optical, structural and gamma ray shielding properties of dolomite doped lithium borate glasses for radiation shielding applications**
KARA Ü., Issa S. A. M., Yıldız Yorgun N., Kilicoglu Ö., Rashad M., Abuzaid M. M., KAVAZ E., Tekin H. O.
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.539, 2020 (SCI-Expanded)
- XXVII. **Relationship between melting-conditions and gamma shielding performance of fluoro-sulfo-phosphate (FPS) glass systems: A comparative investigation**
Abuzaid M. M., SÜSOY DOĞAN G., Issa S. A. M., Elshami W., Kilicoglu Ö., Tekin H. O.
CERAMICS INTERNATIONAL, vol.46, no.10, pp.15255-15269, 2020 (SCI-Expanded)
- XXVIII. **Structural and gamma-ray attenuation coefficients of different OAD films for nuclear medicine applications**
KARA Ü., Kilicoglu Ö., ERSOY S.
RADIATION PHYSICS AND CHEMISTRY, vol.172, 2020 (SCI-Expanded)
- XXIX. **Bioactive glasses with TiO₂ additive: Behavior characterization against nuclear radiation and determination of buildup factors**
Kilicoglu Ö., Tekin H. O.
CERAMICS INTERNATIONAL, vol.46, no.8, pp.10779-10787, 2020 (SCI-Expanded)
- XXX. **Improvement of radiation shielding properties of some tellurovanadate based glasses**
Saddeek Y. B., Issa S. A. M., Alharbi T., Tekin H. O., Kilicoglu Ö., Erguzel T. T., Aly K., Ahmad M.
PHYSICA SCRIPTA, vol.95, no.3, 2020 (SCI-Expanded)
- XXXI. **The impact of Cr₂O₃ additive on nuclear radiation shielding properties of LiF-SrO-B₂O₃ glass system**
SÜSOY DOĞAN G., Guclu E. E. A., Kilicoglu Ö., Kamislioglu M., Al-Buriahi M. S., Abuzaid M. M., Tekin H. O.
MATERIALS CHEMISTRY AND PHYSICS, vol.242, 2020 (SCI-Expanded)
- XXXII. **Bioactive glasses and direct effect of increased K₂O additive for nuclear shielding performance: A comparative investigation**
Kilicoglu Ö., Tekin H. O.
CERAMICS INTERNATIONAL, vol.46, no.2, pp.1323-1333, 2020 (SCI-Expanded)
- XXXIII. **Newly developed tellurium oxide glasses for nuclear shielding applications: An extended investigation**

- Tekin H. O., Kassab L. R. P., Kilicoglu Ö., Magalhaes E. S., Issa S. A. M., da Silva Maltos G. R.
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.528, 2020 (SCI-Expanded)
- XXXIV. The influence of gallium (Ga) additive on nuclear radiation shielding effectiveness of Pd/Mn binary alloys**
Tekin H. O., Kilicoglu Ö.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.815, 2020 (SCI-Expanded)
- XXXV. Synthesis and nuclear radiation shielding characterization of newly developed germanium oxide and bismuth oxide glasses**
Tekin H. O., Kassab L. R. P., Issa S. A. M., Bordon C. D. S., Guclu E. E. A., da Silva Mottos G. R., Kilicoglu Ö.
CERAMICS INTERNATIONAL, vol.45, no.18, pp.24664-24674, 2019 (SCI-Expanded)
- XXXVI. Characterization of copper oxide and cobalt oxide substituted bioactive glasses for gamma and neutron shielding applications**
Kilicoglu Ö.
CERAMICS INTERNATIONAL, vol.45, no.17, pp.23619-23631, 2019 (SCI-Expanded)
- XXXVII. Characterization of SiO₂-PbO-CdO-Ga₂O₃ glasses for comprehensive nuclear shielding performance: Alpha, proton, gamma, neutron radiation**
Tekin H. O., KAVAZ E., Papachristodoulou A., Kamislioglu M., Agar O., Guclu E. E. A., Kilicoglu Ö., Sayyed M. I.
CERAMICS INTERNATIONAL, vol.45, no.15, pp.19206-19222, 2019 (SCI-Expanded)
- XXXVIII. Synergistic effect of La₂O₃ on mass stopping power (MSP)/projected range (PR) and nuclear radiation shielding abilities of silicate glasses**
Kilicoglu Ö., Altunsoy E. E., Agar O., Kamislioglu M., Sayyed M. I., Tekin H. O., Tarhan N.
RESULTS IN PHYSICS, vol.14, 2019 (SCI-Expanded)
- XXXIX. Gamma, neutron shielding and mechanical parameters for lead vanadate glasses**
Mahmoud I. S., Issa S. A. M., Saddeek Y. B., Tekin H. O., Kilicoglu Ö., Alharbi T., Sayyed M. I., Erguzel T. T., Elsaman R.
CERAMICS INTERNATIONAL, vol.45, no.11, pp.14058-14072, 2019 (SCI-Expanded)
- XL. Characterization of a broad range gamma-ray and neutron shielding properties of MgO-Al₂O₃-SiO₂-B₂O₃ and Na₂O-Al₂O₃-SiO₂ glass systems**
Tekin H. O., KAVAZ E., Altunsoy E. E., Kamislioglu M., Kilicoglu Ö., Agar O., Sayyed M. I., Tarhan N.
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.518, pp.92-102, 2019 (SCI-Expanded)
- XLI. The Mass stopping power/projected range and nuclear shielding behaviors of barium bismuth borate glasses and influence of cerium oxide**
KAVAZ E., Tekin H. O., Agar O., Altunsoy E. E., Kilicoglu Ö., Kamislioglu M., Abuzaid M. M., Sayyed M. I.
CERAMICS INTERNATIONAL, vol.45, no.12, pp.15348-15357, 2019 (SCI-Expanded)
- XLII. Er₂O₃ effects on photon and neutron shielding properties of TeO₂-Li₂O-ZnO-Nb₂O₅ glass system**
Agar O., KAVAZ E., Altunsoy E. E., Kilicoglu Ö., Tekin H. O., Sayyed M. I., Erguzel T. T., Tarhan N.
RESULTS IN PHYSICS, vol.13, 2019 (SCI-Expanded)
- XLIII. Radiation shielding features using MCNPX code and mechanical properties of the PbO-Na₂O-B₂O₃-CaO-Al₂O₃-SiO₂ glass systems**
Issa S. A. M., Saddeek Y. B., Sayyed M. I., Tekin H. O., Kilicoglu Ö.
COMPOSITES PART B-ENGINEERING, vol.167, pp.231-240, 2019 (SCI-Expanded)
- XLIV. An extensive investigation on gamma-ray and neutron attenuation parameters of cobalt oxide and nickel oxide substituted bioactive glasses**
Tekin H. O., KAVAZ E., Altunsoy E. E., Kilicoglu Ö., Agar O., Erguzel T. T., Sayyed M.
CERAMICS INTERNATIONAL, vol.45, no.8, pp.9934-9949, 2019 (SCI-Expanded)
- XLV. A comparative study on gamma photon shielding features of various germanate glass systems**
Dong M. G., Agar O., Tekin H. O., Kilicoglu Ö., Kaky K. M., Sayyed M. I.
COMPOSITES PART B-ENGINEERING, vol.165, pp.636-647, 2019 (SCI-Expanded)
- XLVI. Photon and neutron shielding characteristics of samarium doped lead alumino borate glasses containing barium, lithium and zinc oxides determined at medical diagnostic energies**
Almatari M., Agar O., Altunsoy E. E., Kilicoglu Ö., Sayyed M. I., Tekin H. O.
RESULTS IN PHYSICS, vol.12, pp.2123-2128, 2019 (SCI-Expanded)

- XLVII. **The investigation of gamma-ray and neutron shielding parameters of Na₂O-CaO-P₂O₅-SiO₂ bioactive glasses using MCNPX code**
 Tekin H. O., Kilicoglu Ö., KAVAZ E., Altunsoy E. E., Almatari M., Agar O., Sayyed M. I.
 RESULTS IN PHYSICS, vol.12, pp.1797-1804, 2019 (SCI-Expanded)
- XLVIII. **Radiation shielding and mechanical properties of Al₂O₃-Na₂O-B₂O₃-Bi₂O₃ glasses using MCNPX Monte Carlo code**
 Issa S. A. M., Tekin H. O., Elsaman R., Kilicoglu Ö., Saddeek Y. B., Sayyed M. I.
 MATERIALS CHEMISTRY AND PHYSICS, vol.223, pp.209-219, 2019 (SCI-Expanded)
- XLIX. **Classical and quantum capacitances calculated locally considering a two-dimensional Hall bar**
 Guvenilir E., Kilicoglu Ö., Eksi D., Siddiki A.
 PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES, vol.106, pp.283-290, 2019 (SCI-Expanded)
- L. **Shielding features of concrete types containing sepiolite mineral: Comprehensive study on experimental, XCOM and MCNPX results**
 Sayyed M. I., Tekin H. O., Kilicoglu Ö., Agar O., Zaid M. H. M.
 RESULTS IN PHYSICS, vol.11, pp.40-45, 2018 (SCI-Expanded)
- LI. **INVESTIGATION OF WATER EQUIVALENCE AND SHIELDING PROPERTIES OF DIFFERENT SOLID PHANTOMS USING MCNPX CODE**
 Tekin H. O., Sayyed M., Erguzel T. T., Karahan M., Kilicoglu Ö., Mesbahi A., KARA Ü.
 DIGEST JOURNAL OF NANOMATERIALS AND BIOSTRUCTURES, vol.13, no.2, pp.551-562, 2018 (SCI-Expanded)
- LII. **A realistic quantum capacitance model for quantum Hall edge state based Fabry-Perot interferometers**
 Kilicoglu Ö., Eksi D., Siddiki A.
 JOURNAL OF PHYSICS-CONDENSED MATTER, vol.29, no.3, 2017 (SCI-Expanded)
- LIII. **Screening model of metallic nonideal contacts in the integer quantized Hall regime**
 Eksi D., Kilicoglu Ö., Goektas O., Siddiki A.
 PHYSICAL REVIEW B, vol.82, no.16, 2010 (SCI-Expanded)
- LIV. **The current polarization rectification of the integer quantized Hall effect**
 Eksi D., Kilicoglu Ö., AKTAŞ Ş., Siddiki A.
 PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES, vol.42, no.4, pp.1066-1068, 2010 (SCI-Expanded)

Articles Published in Other Journals

- I. **An Investigation on Effective Atomic Numbers and Mass Attenuation Coefficients of Some Bioactive Glasses**
 KILIÇOĞLU Ö.
 Avrupa Bilim ve Teknoloji Dergisi, no.15, pp.168-175, 2019 (Peer-Reviewed Journal)
- II. **Determination of Mass Attenuation Coefficients of Different Types of Concretes using Monte Carlo Method**
 KILIÇOĞLU Ö., TEKİN H. O., Singh V.
 Avrupa Bilim ve Teknoloji Dergisi, pp.591-598, 2019 (Peer-Reviewed Journal)
- III. **Calculation of gamma-ray attenuation properties of some antioxidants using Monte Carlo simulation method**
 Tekin H. O., Sayyed M. I., Kilicoglu Ö., Karahan M., Erguzel T. T., KARA Ü., Konuk M.
 BIOMEDICAL PHYSICS & ENGINEERING EXPRESS, vol.4, no.5, 2018 (ESCI)

Refereed Congress / Symposium Publications in Proceedings

- I. **RADIATION ATTENUATION PROPERTIES OF SELECTED ANTI-CANCER DRUGS**
 KILIÇOĞLU Ö.

- III. INTERNATIONAL SCIENTIFIC AND VOCATIONAL STUDIES CONGRESS – SCIENCE AND HEALTH (BILMES SH 2019), Nevşehir, Turkey, 27 - 29 June 2019
- II. Katkılı Biyoaktif Camların Etkin Atom Numaralarının Karşılaştırılması
KILIÇOĞLU Ö.
UTUFEM 19 Uluslararası Türk Dünyası Fen ve Mühendislik Kongresi, Niğde, Turkey, 17 - 18 June 2019
- III. Effective Atomic Numbers And Gamma-Ray Attenuation Properties Of Substituted 45S5 Bioactive Glasses
KILIÇOĞLU Ö.
International Eurasian Conference on Science, Engineering and Technology(EurasianSciEnTech 2018), Ankara, Turkey, 22 - 23 November 2018
- IV. biyoaktif camların zırhlama özellikleri
KILIÇOĞLU Ö.
II. Uluslararası Multidisipliner Akademik Çalışmalar Sempozyumu, İstanbul, Turkey, 16 - 17 November 2018
- V. Gamma-Ray Attenuation Properties of Boron Carbide in Radiological Energy Range Using MCNPX Code
Tekin H. O., Altunsoy E. E., AKINCI F. Ç., Kılıcoglu Ö., Sayyed M. I.
34th International Physics Congress (IPS) of the Turkish-Physical-Society (TPS), Konacık, Turkey, 5 - 09 September 2018, vol.2042
- VI. Investigation of Geometric and Quantum Capacitance of Fabry-Perot-type Interferometers in the Quantum Hall Regime Considering Real Samples
KILIÇOĞLU Ö., EKŞİ D., SIDDİKİ A.
ICPS 2012-31 st International Conference On The Physics of Semiconductors, Zürich, Switzerland, 29 July - 03 August 2012
- VII. "The theoretical investigation of metallic contacts in the non-linear transport regime"
KILIÇOĞLU Ö., EKŞİ D., SIDDİKİ A.
19th International Conference on Electronic Properties of Two-Dimensional Systems (EP2DS-19)and 15th International Conference on Modulated Semiconductor Structures (MSS-15), Tallahassee, United States Of America, 25 - 29 July 2011
- VIII. The multilayered cubic quantum dot under the external fields"
KILIÇOĞLU Ö., AKTAŞ Ş., karaca boz f., OKAN Ş. E.
13. Ulusal Sivil Hal Fiziği Sempozyumu, İstanbul, Turkey, 27 - 29 October 2009
- IX. "The Electronic Properties under Magnetic and Electric Fields of an Electron in Multilayered Cubic Quantum Dot"
KILIÇOĞLU Ö., BEKAR B., karaca boz f., AKTAŞ Ş.
4.Uluslararası Nanobilim Ve Nanoteknoloji Konferansı, İstanbul, Turkey, 9 - 13 June 2008

Metrics

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