Res. Asst. PhD BERNA KÖRPINAR

Personal Information

Office Phone: +90 236 201 3194 Extension: 3194
Email: berna.korpinar@cbu.edu.tr
Web: https://avesis.mcbu.edu.tr/berna.korpinar

International Researcher IDs
ScholarID: Io0t27wAAAAJ
ORCID: 0000-0002-9149-5234
Publons / Web Of Science ResearcherID: FFL-8874-2022
ScopusID: 57210316437
Yoksis Researcher ID: 328833

Education

Doctorate, Ege University, Fen Bilimleri Enstitüsü , Kimya , Turkey 2020 - 2025
Postgraduate, Ege University, Fen Bilimleri Enstitüsü , Kimya, Turkey 2018 - 2019
Undergraduate, Ege University, Fen Fakültesi , Kimya, Turkey 2013 - 2018

Foreign Languages

English

Dissertations

Doctorate, PREPARATION OF COMPOSITES OF LOW AND HIGH DENSITY OXIDIZED POLYETHYLENE WITH VARIOUS INORGANIC SALTS, HIGH ENERGY GAMMA RAYS RETENTION, INVESTIGATION OF THEIR MECHANICAL AND THERMAL PROPERTIES , Ege University, Fen Bilimleri Enstitüsü, Kimya, 2025
Postgraduate, Radyasyondan korunmak için tungsten oksit-polimer kompozitlerinin hazırlanması gama ışınlarını tutma ve termal özelliklerinin incelenmesi, Ege University, 2019

Research Areas

Avesis Research Areas: Polymers and Their Applications, Composites, nanocomposites, Characterization of Polymers, New Technologies in Polymer Chemistry, Polymeric Adsorbents, Polymeric Films, Polymeric Materials, Recycling of Polymers, Thermodynamics, High Performance Polymers
WoS Research Areas: Chemistry Inorganic & Nuclear, Chemistry Multidisciplinary, Chemistry Applied, Chemistry Analytical, Polymer Science, Chemistry Physical, Chemistry Organic
Scopus Research Areas: Polymers and Plastics, Physical and Theoretical Chemistry, Organic Chemistry, Inorganic Chemistry, Process Chemistry and Technology, Filtration and Separation

Academic Positions

Research Assistant, Manisa Celal Bayar University, Mühendislik Ve Doğa Bilimleri Fakültesi, Kimya, 2020 - Present

Articles

I. **Brominated functional copolymers: Synthesis, characterization, and thermal degradation kinetics**
KÖRPINAR B.
Polymer, vol.367, 2026 (SCI-Expanded, Scopus)

II. **Novel radiation shielding materials based on boron carbide doped low-density oxidized polyethylene plates containing Bi2O3/WO3/PbO nano powders: Computational and experimental evaluation**
KÖRPINAR B., AKAT H., Öztürk B. C., Çam N. F.
Nuclear Instruments and Methods in Physics Research, Section B: Beam Interactions with Materials and Atoms, vol.579, 2026 (SCI-Expanded, Scopus)

III. **Synthesis and investigation of the thermal properties of dihydroxyl-functionalized benzoxazine polyesters**
KÖRPINAR B.
Niğde Ömer Halisdemir Üniversitesi Mühendislik Bilimleri Dergisi, vol.18, no.0, 2026 (TRDizin)

IV. **Design and investigation thermal performance of crosslinked poly(ethylene maleate) networks based on allyl- and diallyl- benzoxazines**
KÖRPINAR B.
Journal of Polymer Research, vol.33, no.6, 2026 (SCI-Expanded, Scopus)

V. **Environmental and Non-Toxic New Radiation Shielding Materials Alternative to Lead: Preparation, Evaluation of Their Effectiveness on Gamma Attenuation Coefficients, and Investigation of Thermal Properties**
KÖRPINAR B., AKAT H.
Polymers for Advanced Technologies, vol.37, no.2, 2026 (SCI-Expanded, Scopus)

VI. **Synthesis and characterization of novel hydrogels based on synthetic rubber: investigation of swelling behavior and heavy metal adsorption capacity**
KÖRPINAR B., Tirek A., AKAT H.
Separation Science and Technology (Philadelphia), vol.61, no.11, pp.1812-1824, 2026 (SCI-Expanded, Scopus)

VII. **Development of nanocomposites comprising starch and bismuth (III) oxide: An exploration of their viability as substitute materials for shielding high-energy radiation**
KÖRPINAR B., AKAT H., ÇAM N. F., Canbaz Öztürk B.
Journal of Composite Materials, vol.59, no.16, pp.2009-2022, 2025 (SCI-Expanded, Scopus)

VIII. **Novel starch–tungsten (VI) oxide biocomposites: Preparation, characterization, and comparisons between experimental and theoretical photon attenuation coefficients**
KÖRPINAR B., Öztürk B. C., Çam N. F., AKAT H.
International Journal of Biological Macromolecules, vol.270, 2024 (SCI-Expanded, Scopus)

IX. **A new thiol-based oxidized polyethylene adsorbent for heavy metal ions removal from aqueous solutions**
Körpınar B., AKAT H.
POLYMER BULLETIN, vol.81, no.5, pp.4593-4607, 2024 (SCI-Expanded, Scopus)

X. **Poly(2-ethyl hexyl acrylate-co-methyl allyl polyethylene glycols ether-co-acrylic acid) pressure-sensitive adhesives: synthesis, characterization, investigations of adhesive and thermal properties**
Körpınar B., Çay E. A., AKAT H.
POLYMER BULLETIN, vol.80, no.6, pp.6777-6791, 2023 (SCI-Expanded, Scopus)

XI. **\Preparation of poly(styrene-co-acrylic acid)-zinc oxide composites: Experimental and theoretical investigation of gamma radiation shielding properties**
KÖRPINAR B., Saltan F.
Applied Radiation and Isotopes, vol.181, 2022 (SCI-Expanded, Scopus)

XII. **Styrene-based unsaturated polyester-tungsten(VI) oxide composites: Preparation and investigation of their radiation shielding and thermal properties**
KÖRPINAR B., Öztürk B. C., Füsun Çam N., AKAT H.
Radiation Effects and Defects in Solids, vol.177, no.7-8, pp.629-641, 2022 (SCI-Expanded, Scopus)

XIII. **Thiol-ended polycaprolactone: Synthesis, preparation and use in Pb(II) and Cd(II) removal from water samples**
Körpınar B., Erdem Yayayürük A., YAYAYÜRÜK O., AKAT H.
MATERIALS TODAY COMMUNICATIONS, vol.29, 2021 (SCI-Expanded, Scopus)

XIV. **Gamma Radiation Shielding and Thermal Properties of the polystyrene / Tungsten (VI) Oxide Composites**
KÖRPINAR B., Öztürk B. C., ÇAM N., AKAT H.
Erzincan Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.14, no.2, pp.395-407, 2021 (TRDizin)

XV. **Investigations on thermal and radiation shielding properties of the poly(hydroxyethyl methacrylate-*co*-styrene)/tungsten(VI) oxide composites**
KÖRPINAR B., CANBAZ ÖZTÜRK B., Cam N. F., AKAT H.
PROGRESS IN NUCLEAR ENERGY, vol.126, 2020 (SCI-Expanded, Scopus)

XVI. **Synthesis, Characterization and Thermal Degradation Kinetics of Poly(methylmethacrylate-co-methacrylic acid)**
KÖRPINAR B., AKAT H.
Erzincan Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.13, no.1, pp.134-143, 2020 (TRDizin)

XVII. **Synthesis, characterization and computational investigation of poly(styrene-*co*-1-methylpyrenyl methacrylate): its efficiency as a macrophotoinitiator**
KÖRPINAR B., Saltan F., AKAT H., KINAL A.
INTERNATIONAL JOURNAL OF POLYMER ANALYSIS AND CHARACTERIZATION, vol.25, no.3, pp.134-146, 2020 (SCI-Expanded, Scopus)

XVIII. **Radiation shielding properties of Poly(hydroxylethyl methacrylate)/Tungsten(VI) oxide composites**
KÖRPINAR B., CANBAZ ÖZTÜRK B., Cam N. F., AKAT H.
MATERIALS CHEMISTRY AND PHYSICS, vol.239, 2020 (SCI-Expanded, Scopus)

Books

I. **SOL-JEL Reaksiyonu İle elde edilen TiO2'in akıllı Ambalajlarda Oksijen Sensörü Olarak Kullanılması**
Körpınar B., Arslan O., Erdemir K. Y., Barut B., Abalı Y. (Editor)
SİDAS MEDYA LTD. ŞTİ., Manisa, 2024

Papers Presented at Peer-Reviewed Scientific Conferences

I. **BORON NITRIDE/METAL OXIDE REINFORCED OXIDIZED POLYETHYLENE WAX COMPOSITES FOR GAMMA RADIATION SHIELDING**
KÖRPINAR B., AKAT H.
5th INTERNATIONAL EGE CONGRESS ON SCIENTIFIC RESEARCH (EGECON), Muğla, Turkey, 22 - 23 July 2026, (Full Text)

II. **SYNTHESIS AND STRUCTURAL ANALYSIS OF NEXT GENERATION SILICONE MODIFIED EPOXY RESINS FOR HYBRID COATINGS WITH SUPERIOR WEATHERING AND CORROSIVE RESISTANCE**
Koşar S., KÖRPINAR B., AKAT H.
UBAK 4th INTERNATIONAL CONGRESS ON SCIENTIFIC RESEARCH AND INNOVATION, Bursa, Turkey, 14 December 2025, (Summary Text)

III. **Reaktif Ekstrüksiyon Yoluyla Geri Dönüştürülmüş Polipropilenin Terma ve Mekanik Özelliklerinin Geliştirilmesi**

Gülgeç B., KÖRPINAR B., AKAT H.
EFES INTERNATIONAL SCIENTIFIC RRSEARCH AND INNOVATION CONGRESS-III, İzmir, Turkey, 30 September 2025, (Full Text)

IV. **STİREN BÜTADİEN KAUÇUK ESASLI HİDROJELLERİN SENTEZİ VE METAL ADSORBANI OLARAK DEĞERLENDİRİLMESİ**
Tirek A., AKAT H., KÖRPINAR B.
4. Uluslararası Mühendislik ve Fen Bilimleri Kongresi, İstanbul, Turkey, 27 July 2024, (Full Text)

V. **Eriyik aşılama metoduyla sentetik atık takviyeli kompozitler geliştirilmesi ve mekanik özelliklerinin incelenmesi**
Demircan E., Gülgeç B., KÖRPINAR B., AKAT H.
13. Uluslararası Lif ve Polimer Araştırmaları Sempozyumu, Bolu, Turkey, 04 November 2023, (Full Text)

VI. **Sepiyolit-Nişasta Kompoziti Radyasyon Emici Olarak Kullanılabilir Mi?**
USTA S., KÖRPINAR B., AKGÜL B.
ANADOLU 10th INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES ANADOLU 10th INTERNATIONAL CONFERENCE ON APPLIED SCIENCESTürkiye/Diyarbakır, Diyarbakır, Turkey, 15 October 2022, (Full Text)

VII. **Radiation shielding of styrene-based unsaturated polyestertungsten(VI) oxide composites**
KÖRPINAR B., CANBAZ ÖZTÜRK B., AKAT H., ÇAM N. F.
ISCMP, 2021, Türkiye/Burdur, Burdur, Turkey, 29 September 2021, (Summary Text)

VIII. **Based on natural waste seeds polymeric composite materials with and their physical properties**
Karatekin Z. A., KÖRPINAR B., AKAT H.
ISCMP, 2021,Türkiye/Burdur, Burdur, Turkey, 29 September 2021, (Full Text)

Funded Projects

KÖRPINAR B., Barut B., ARSLAN O., Erdemir K. Y., ABALI Y., Project Supported by Higher Education Institutions, Gıda Bozunma Ürünlerinin Tespitinde Kullanılacak Olan Nanoteknolojik Sensör Eldesi, 2022 - 2023
ABALI Y., ERDEMİR K. Y., BARUT B., ARSLAN O., KÖRPINAR B., Project Supported by Higher Education Institutions, Gıda Bozunma Ürünlerinin Tespitinde Kullanılacak Olan Nanoteknolojik Sensörlerin Eldesi, 2022 - 2024
KÖRPINAR B., TUBITAK Project, Poli(HEMA)-Tungsten Kompozitinin Gamma Işınlarına Karşı Radyasyon Tutma Potansiyelinin İncelenmesi, 2017 - 2018

Metrics

Publication: 27
Citation (WoS): 102
Citation (Scopus): 106
H-Index (WoS): 6
H-Index (Scopus): 6