Res. Asst. PhD EMİNE ALTINKAYA

Personal Information

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International Researcher IDs
ScholarID: oBYc4gUAAAAJ
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ScopusID: 57188961806
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Education

Doctorate, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Turkey 2012 - 2016
Postgraduate, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Turkey 2010 - 2012
Undergraduate, Aydin Adnan Menderes University, Kimya, Turkey 2006 - 2010

Foreign Languages

English

Dissertations

Doctorate, Characterization and determination of electroactive properties of nanoparticle- reinforced cellulose actuators, Dokuz Eylul University, Fen Bilimleri Enstitüsü, 2016

Research Areas

Avesis Research Areas: Natural Sciences, Engineering and Technology
WoS Research Areas: Engineering Computing & Technology (Eng), Natural Sciences (Sci), Life Sciences (Life)

Academic Positions

Research Assistant PhD, Manisa Celal Bayar University, MÜHENDİSLİK VE DOĞA BİLİMLERİ FAKÜLTESİ, BİYOMÜHENDİSLİK, 2020 - Present
Research Assistant, Canakkale Onsekiz Mart University, Mühendislik Fakültesi, 2013 - 2020

Courses

Postgraduate
0, Postgraduate, 2002-2003

Undergraduate

Biopolymers, Undergraduate, 2023-2024
Physical Chemistry, Undergraduate, 2023-2024
General Chemistry, Undergraduate, 2023-2024, 2021-2022
Organic Chemistry, Undergraduate, 2021-2022
Bioengineering Laboratory 1, Undergraduate, 2021-2022

Articles

I. **Carbon dots synthesized from cabbage and nettle: characterization and biological activity**
Altinkaya E., Şentürk T.
JOURNAL OF THE SCIENCE OF FOOD AND AGRICULTURE, vol.106, no.15, pp.9894-9905, 2026 (SCI-Expanded, Scopus)

II. **Synthesis of carbon dots and carbon dot loaded alginate beads using macroalgae Stypopodium schimperi as a precursor and heavy metal phycoremediation**
Şentürk T., Altınkaya E., Taşkın E.
JOURNAL OF APPLIED PHYCOLOGY, vol.38, pp.1629-1645, 2026 (SCI-Expanded, Scopus)

III. **The Effect of Carbon Dots Obtained from Different Biological Sources on Corn Seed Germination**
Şentürk T., Altınkaya E.
JOURNAL OF AGRICULTURAL SCIENCES-TARIM BILIMLERI DERGISI, vol.32, no.2, pp.498-511, 2026 (SCI-Expanded, Scopus, TRDizin)

IV. **Single-step hydrothermal synthesis of Plantago major-based carbon dots: therapeutic and antimicrobial properties**
ALTINKAYA E.
Diamond and Related Materials, vol.158, 2025 (SCI-Expanded, Scopus)

V. **Green synthesis of silver nanoparticles using Catalpa bignonioides fruit**
Altınkaya E.
Biotech Studies, vol.34, pp.9-17, 2025 (Scopus, TRDizin)

VI. **Development of Multifunctional Bio-based Cotton Composite**
ALTINKAYA E.
Tekstil ve Konfeksiyon, vol.31, no.4, pp.264-273, 2021 (SCI-Expanded, Scopus)

VII. **The effect of gold electrode thicknesses on electromechanical performance of Nafion-based Ionic Polymer Metal Composite actuators**
YILMAZ KARAMAN Ö., Sen I., Gurses B. O., ÖZDEMİR O., Cetin L., SARIKANAT M., SEKİ Y., Sever K., Altinkaya E.
Composites Part B: Engineering, vol.165, pp.747-753, 2019 (SCI-Expanded, Scopus)

VIII. **Characterization and analysis of motion mechanism of electroactive chitosan-based actuator**
Altınkaya E., SEKİ Y., Çetin L., Gürses B. O., ÖZDEMİR O., Sever K., SARIKANAT M.
Carbohydrate Polymers, vol.181, pp.404-411, 2018 (SCI-Expanded, Scopus)

IX. **Development of a traceable molecular hygiene control method (TMHCM) for human DNA content in foods**
Şakalar E., Ergün Ş. Ö., UYSAL PALA Ç., Akar E., Ataşoğlu C.
Food Chemistry, vol.225, pp.167-174, 2017 (SCI-Expanded, Scopus)

X. **Electromechanical characterization of multilayer graphene-reinforced cellulose composite containing 1-ethyl-3-methylimidazolium diethylphosphonate ionic liquid**
Akar E., SEKİ Y., ÖZDEMİR O., Şen I., SARIKANAT M., Gürses B. O., YILMAZ O., Çetin L., Sever K.
Science and Engineering of Composite Materials, vol.24, no.2, pp.289-295, 2017 (SCI-Expanded, Scopus)

XI. **Electromechanical performance of chitosan-based composite electroactive actuators**
Altinkaya E., SEKİ Y., Yilmaz Ö. C., Çetin L., ÖZDEMİR O., Şen I., Sever K., Gürses B. O., SARIKANAT M.
Composites Science and Technology, vol.129, pp.108-115, 2016 (SCI-Expanded, Scopus)

XII. **Improvement of the electromechanical performance of carboxymethylcellulose-based actuators by**

graphene nanoplatelet loading
ÖZDEMİR O., KARAKUZU R., SARIKANAT M., SEKİ Y., Akar E., Cetin L., YILMAZ O., Sever K., Sen I., Gurses B. O.
Cellulose, vol.22, no.5, pp.3251-3260, 2015 (SCI-Expanded, Scopus)

XIII. **Application of carboxymethylcellulose hydrogel based silver nanocomposites on cotton fabrics for antibacterial property**
Bozaci E., Akar E., Ozdogan E., DEMİR A., ALTINIŞIK TAĞAÇ A., SEKİ Y.
Carbohydrate Polymers, vol.134, pp.128-135, 2015 (SCI-Expanded, Scopus)

XIV. **A simultaneous analytical method for duplex identification of porcine and horse in the meat products by EvaGreen based real-time PCR**
Sakalar E., Ergün S. Ö., Akar E.
Korean Journal for Food Science of Animal Resources, vol.35, no.3, pp.382-388, 2015 (SCI-Expanded, Scopus)

XV. **Effects of PEG loading on electromechanical behavior of cellulose-based electroactive composite**
Ozdemir O., Karakuzu R., Sarikanat M., Akar E., Seki Y., Cetin L., Sen I., Gurses B. O., Yilmaz O. C., Sever K., et al.
Cellulose, vol.22, no.3, pp.1873-1881, 2015 (SCI-Expanded, Scopus)

XVI. **Evaluating of Agave americana fibers for biosorption of dye from aqueous solution**
ALTINIŞIK TAĞAÇ A., SEKİ Y., Ertas S., Akar E., Bozacı E., SEKİ Y.
Fibers and Polymers, vol.16, no.2, pp.370-377, 2015 (SCI-Expanded, Scopus)

XVII. **Electroactive behavior of graphene nanoplatelets loaded cellulose composite actuators**
Sen I., SEKİ Y., SARIKANAT M., Cetin L., Gurses B. O., ÖZDEMİR O., Yilmaz O. C., Sever K., Akar E., Mermer O.
Composites Part B: Engineering, vol.69, pp.369-377, 2015 (SCI-Expanded, Scopus)

XVIII. **Investigation of the effects of PWM parameters on ionic polymer metal composite actuators**
YILMAZ O., Cetin L., Gurses B. O., Sen I., ÖZDEMİR O., SARIKANAT M., SEKİ Y., Sever K., Akar E., Mermer O.
Smart Materials and Structures, vol.23, no.9, 2014 (SCI-Expanded, Scopus)

XIX. **Using of activated carbon produced from spent tea leaves for the removal of malachite green from aqueous solution**
Akar E., ALTINIŞIK TAĞAÇ A., SEKİ Y.
Ecological Engineering, vol.52, pp.19-27, 2013 (SCI-Expanded, Scopus)

XX. **Development of antimicrobial cotton fabric using bionanocomposites**
ALTINIŞIK TAĞAÇ A., Bozacı E., Akar E., SEKİ Y., Yurdakoc K., DEMİR A., Özdogan E.
Cellulose, vol.20, no.6, pp.3111-3121, 2013 (SCI-Expanded, Scopus)

XXI. **Preparation of pH- and ionic-strength responsive biodegradable fumaric acid crosslinked carboxymethyl cellulose**
Akar E., ALTINIŞIK TAĞAÇ A., SEKİ Y.
Carbohydrate Polymers, vol.90, no.4, pp.1634-1641, 2012 (SCI-Expanded, Scopus)

Papers Presented at Peer-Reviewed Scientific Conferences

I. **Conversion of Waste Seagrass into Carbon Dots: Synthesis and Characterization**
YEŞİLADA E., İNAM A., ALTINKAYA E.
4th International Aquatic Biotechnology Symposium, NAPOLİ, Italy, 9 - 11 September 2026, (Summary Text)

Funded Projects

ŞENTÜRK T., AY E., ALTINKAYA E., BATIR M. B., TUBITAK Project, 1002 - Quick Support Program, Alg Biyokütlesinden Elde Edilen Karbon Noktaların Yağ Asitleriyle Fonksiyonelleştirilmesi ve In Vitro Yara İyileştirme Potansiyelinin İncelenmesi, 2026 - 2027

ALTINKAYA E., YEŞİLADA E., İNAM A., Project Supported by Higher Education Institutions, BAP Other, Atık Deniz Çayırı Biyokütlesi Kaynaklı Karbon Nokta ile Güçlendirilmiş Nişasta Bazlı Biyobozunur Deniz Ürünü Ambalaj Filminin Geliştirilmesi ve Karakterizasyonu, 2026 - Present

Mutaf Kılıç T., Altınkaya E., Project Supported by Higher Education Institutions, BAP Other, Linum Usitatissimum Kaynaklı Karbon Nokta Sentezi ve Antikanser Aktivitesinin İncelenmesi, 2025 - 2026
ALTINKAYA E., AYKIN H., MUTAF KILIÇ T., Project Supported by Higher Education Institutions, BAP Other, Scirpoides Holoschoenus Bitkisinden Fiber Elde Edilmesi ve Karakterizasyonu, 2025 - 2026
ŞENTÜRK T., TAŞKIN E., ALTINKAYA E., Project Supported by Higher Education Institutions, BAP Research Project, Stypopodium Schimperi Prekürsörlü Karbon Noktaların ve Karbon Nokta Yüklü Aljinat Boncukların Ağır Metal Remediasyonu, 2025 - 2026
Mutaf Kılıç T., Altınkaya E., Project Supported by Higher Education Institutions, BAP Research Project, Floresan Özellikli Karbon Nokta İçeren Yeni Nesil Gıda Ambalajı Geliştirilmesi ve Karakterizasyonu, 2024 - 2026
ÇÖVEN F. O., ÖNCÜ ÖNER T., ALTINKAYA E., Gümüş Nano Partikül Katkılı Floresan Karbon Noktaların Üretimi, Karakterizasyonu Ve Kitosan Esaslı Yara Örtüsü Geliştirilmesinde Kullanımı, 2024 - Present
Altınkaya E., Mutaf Kılıç T., Project Supported by Higher Education Institutions, BAP Other, Gümüş Nano Partikül Katkılı Salvia Officinalis Prekürsörlü Karbon Kuantum Noktaların Sentezlenmesi ve Karakterizasyonu, 2024 - 2025
ALTINKAYA E., MUTAF KILIÇ T., Project Supported by Higher Education Institutions, Çöven Otu (Saponaria Officinalis L.) Sulu Ekstraktı İle Gümüş Nanopartiküllerin (Agnps) Biyojenik Sentezinin Optimizasyonu ve Antioksidan Aktivitesinin Belirlenmesi, 2022 - 2023
ALTINKAYA E., ALTINIŞIK TAĞAÇ A., BOZACI E., Pamuklu Kumaş Yüzeylere Iyonik Sıvı- Kil Nanokompozitlerinin Uygulanması Ve Multi-Fonksiyonel Özelliklerin Belirlenmesi, 2022 - 2023
ALTINKAYA E., Project Supported by Higher Education Institutions, DNA temelli çoklu tanı metotlarının geliştirilmesi ile Yer fıstığı Arachis hypogaea Bezelye Pisum sativum ve Antep fıstığı Pistacia veranın gıdalarda tespiti, 2015 - 2016
SEKİ Y., ÇETİN L., SEVER K., SARIKANAT M., İyonik Polimer Metal Kompozit Aktüatörlerin (Eyleyiciler) Üretimi Kontrolü Ve Biyomimetik Uygulamalarda Kullanımı, 2012 - 2015

Metrics

Publication: 40
Citation (WoS): 536
Citation (Scopus): 667
H-Index (WoS): 10
H-Index (Scopus): 11

Non Academic Experience

DYO Boya Fabrikaları, Proje araştırma görevlisi