Res. Asst. PhD BAHAR ŞÖLEN AKDEMİR GÜNER

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International Researcher IDs
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Publons / Web Of Science ResearcherID: ADY-2962-2022
ScopusID: 57222383818
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Education

Doctorate, Gebze Technical University, Nanoteknoloji Enstitüsü, Nanobilim ve Nanomühendislik, Turkey 2019 - 2025
Postgraduate, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Nanobilim Ve Nanomühendislik Ana Bilim Dalı, Turkey 2016 - 2019
Undergraduate, Anadolu University, Mühendislik - Mimarlık Fakültesi, Malzeme Bilimi Ve Mühendisliği Bölümü, Turkey 2009 - 2014

Foreign Languages

English, C1 Advanced

Dissertations

Postgraduate, Production and application of electroactive polymers by using piezoelectric nanomaterials, Dokuz Eylul University, Fen Bilimleri Enstitüsü, 2019

Research Areas

Avesis Research Areas: Technical Textiles, Composites, Polymeric Materials, Nanomaterials
WoS Research Areas: Metallurgy & Metallurgical Engineering, Nanoscience & Nanotechnology, Materials Science Textiles, Materials Science Composites
Scopus Research Areas: Polymers and Plastics, Renewable Energy, Sustainability and the Environment, Multidisciplinary

Academic Positions

Research Assistant PhD, Manisa Celal Bayar University, Mühendislik Ve Doğa Bilimleri Fakültesi, Metalurji Ve Malzeme Mühendisliği, 2017 - Present
Research Assistant, Gebze Technical University, 2019 - 2025

Articles

I. **Spectroscopic decoding of solvent treatments in PEDOT:PSS via XPS and EPR analysis of charge transport**
Akdemir B. Ş., Kol S., Kizildag N., Oral A. Y.
MATERIALS RESEARCH EXPRESS, vol.12, no.7, 2025 (SCI-Expanded, Scopus)

II. **Laser induced graphene enhancing polyvinylidene fluoride (PVDF) films for advanced applications**
Askan V. C., Akdemir B. Ş., Aydemir N., Oral A. Y.
MATERIALS RESEARCH EXPRESS, vol.12, no.6, 2025 (SCI-Expanded, Scopus)

III. **Preface: Proceedings of the 10th International Advances in Applied Physics and Materials Science Congress & Exhibition**
Oral A. Y., Aşkan V. C., AKDEMİR B. Ş., Kocaman F.
AIP Conference Proceedings, vol.2380, 2021 (Scopus)

IV. **Effect of Curing Conditions and $BaTiO_3$ Nanoparticle Addition on Dielectric Constant of PDMS for EAP Applications**
Akdemir B. Ş., Kusoglu I. M.
ACTA PHYSICA POLONICA A, vol.139, no.2, pp.145-150, 2021 (SCI-Expanded, Scopus)

V. **Yeni Bir Tahribatsız Muayene Yöntemi: Bakteri Kültürüyle Mikro Hata Tespiti**
DURMUŞ H., AKDEMİR B. Ş.
Muş Alparslan Üniversitesi Fen Bilimleri Dergisi, vol.8, no.1, pp.707-714, 2020 (Peer-Reviewed Journal)

Papers Presented at Peer-Reviewed Scientific Conferences

I. **High-Volume Industrial Waste Integration in Ceramic Tile Formulations**
AKDEMİR B. Ş., SIRAKAYA Ö. N., MEDE N.
6th International Congress on Ceramics, Glass, Enamel, Glaze and Pigment (SERES26), Eskişehir, Turkey, 14 October 2026, (Summary Text)

II. **UV-Vis-NIR Absorption Spectroscopy as a Supporting Technique in Understanding the Electrical Conductivity Behavior of the PEDOT:PSS Films**
AKDEMİR YILMAZ B. Ş., KIZILDAĞ N., ORAL A. Y.
10th International Congress on Energy Efficiency and Energy Related Materials (ENEFM), Fethiye, Turkey, 8 - 11 October 2024

III. **Effect of Post-Treatments on the Electrical Conductivity of PEDOT:PSS Films Deposited by Spin Coating**
AKDEMİR YILMAZ B. Ş., KIZILDAĞ N., ORAL A. Y.
18th International Nanoscience and Nanotechnology Conference (NANOTR-18), İstanbul, Turkey, 26 - 28 August 2024

IV. **An Investigation on the Electrical Conductivity Mechanism of PEDOT: PSS Insights from UV-Vis-NIR Absorption Spectroscopy and Solvent Interaction Studies**
AKDEMİR YILMAZ B. Ş., KIZILDAĞ N., ORAL A. Y.
6th International Conference on Photonics Research (INTERPHOTONICS), Fethiye, Turkey, 18 - 24 April 2024, (Summary Text)

V. **An investigation on the electrical conductivity of PEDOT:PSS impregnated cotton interlock knitted fabrics**
AKDEMİR YILMAZ B. Ş., ORAL A. Y., KIZILDAĞ N.
13th International Fiber and Polymer Research Symposium (ULPAS), Bolu, Turkey, 3 - 04 November 2023, (Full Text)

VI. **The Effects of the Preparation Method and Post Treatment on the Electrical Conductivity and Absorption Behavour of the PEDOT:PSS Films**
AKDEMİR YILMAZ B. Ş., KIZILDAĞ N., ORAL A. Y.

13th International Advances in Applied Physics & Materials Science Congress & Exhibition (APMAS), Fethiye, 11 - 17 October 2023, (Summary Text)

VII. **The Optimization of the Electrical Conductivity of PEDOT:PSS Films by Secondary Doping Using Polar Organic Solvents As a Preliminary Study for Efficient Thermoelectric Textiles**
AKDEMİR YILMAZ B. Ş., KIZILDAĞ N., ORAL A. Y.
17th International Nanoscience and Nanotechnology Conference (NANOTR), İzmir, Turkey, 27 - 29 August 2023, (Summary Text)

VIII. **The Conformational Change Optimization of PEDOT:PSS Chains by Secondary Doping Treatment**
AKDEMİR YILMAZ B. Ş., KIZILDAĞ N., ORAL A. Y.
10th International Congress on Microscopy & Spectroscopy (INTERM2023), Fethiye, 13 - 19 April 2023, (Summary Text)

IX. **The Effect of MWCNT layer formation technique on the Dielectric Properties of MWCNT-PDMS Composite Structure**
AKDEMİR B. Ş., KUŞOĞLU İ. M.
4th International Scientific Research Congress (IBAD-2019), Uppsala, Sweden, 25 - 26 April 2019, (Summary Text)

X. **Synthesis and Characterization of the AG and CU Doped Hydroxiapetite**
TÜRK A., SARGIN F., KANBUR K., AKDEMİR B. Ş., TÜRKMEN İ.
V. International Conference on Engineering and Natural Science, 12 - 16 June 2019

XI. **The Effect of Boric Acid Addition on Physical Properties of Traditional Sanitaryware Ceramics**
AKDEMİR B. Ş., TÜRKMEN İ., SARGIN F., KANBUR K., YALAMAÇ E.
V. International Multidisciplinary Congress of EURASIA (IMCOFE 2018), Barcelona, Spain, 24 - 26 July 2018, pp.43, (Summary Text)

XII. **The Effect of Barium Titanate Nanoparticles On The Dielectric Constant of Polydimethylsiloxane Nanocomposite For Electroactive Polimer Applications**
AKDEMİR B. Ş., KUŞOĞLU İ. M.
14th Nanoscience and Nanotechnology Conference, İzmir, Turkey, 22 - 25 September 2018, (Summary Text)

XIII. **In Vitro Biodegredation of ion Substituted Hydroxyapatıie Powders**
KANBUR K., SARGIN F., TÜRKMEN İ., AKDEMİR YILMAZ B. Ş., TÜRK A.
3rd International Conference on Engineering Technology and Applied Sciences (ICETAS 2018), Skopje, Macedonia, 17 - 21 July 2018, pp.190, (Summary Text)

XIV. **Synthesis of the Ag and Cu Doped Hydroxyapatite**
SARGIN F., TÜRK A., KANBUR K., AKDEMİR YILMAZ B. Ş., TÜRKMEN İ.
3rd International Conference on Engineering Technology and Applied Sciences (ICETAS 2018), Skopje, Macedonia, 17 - 21 July 2018, pp.198, (Summary Text)

XV. **In Vitro Biodegredation of Ion Substituted Hydroxyapatite Powders**
SARGIN F., KANBUR K., TÜRKMEN İ., AKDEMİR B. Ş., TÜRK A.
3rd International Conference on Engineering Technology and Aplied Sciences (ICETAS 2018), 17 - 21 July 2018

Funded Projects

Akdemir B. Ş., Oral A. Y., Kızıldağ N., TUBITAK Project, 1002 - Quick Support Program, The Development of MXene-Based P-type Thermoelectric Ink for Thermoelectric Textiles, 2024 - 2025

Metrics

Publication: 20
Citation (WoS): 9
Citation (Scopus): 9
H-Index (WoS): 2

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