

# Eda CEVIK

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[Google Scholar](#) | [Orcid](#) | [ResearchGate](#) | [LinkedIn](#)

## Education

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### Middle East Technical University (METU)

Ankara, Turkey

*M.S. in Metallurgical and Materials Engineering (MetE)*

August 2025 – February 2023

Advisor: [Prof. Dr. H. Emrah UNALAN](#)

GPA: 3.43/4.00

### Middle East Technical University (METU)

Ankara, Turkey

*B.S. in Metallurgical and Materials Engineering (MetE)*

January 2023 – September 2018

GPA: 2.97/4.00

## Research Experience

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### Middle East Technical University (METU)

Ankara, Turkey

#### *Junior Researcher*

Center for Solar Energy Research and Applications (GUNAM)

August 2025 – December 2023

Project PI: [Assoc. Prof. Talat OZDEN](#)

Research Projects

- TUBITAK 1001: Development of a Colored Photovoltaic Panel for BIPV Applications with Selective Transmissive and Absorptive Metal Oxide Nanoparticles

#### *Graduate Researcher*

*Metallurgical and Materials Engineering (MetE)*

August 2025 – February 2023

Advisor: [Prof. Dr. H. Emrah UNALAN](#)

[METU MetE Nanolab](#)

#### *Undergraduate Researcher*

*Metallurgical and Materials Engineering (MetE)*

February 2021 – February 2023

Advisor: [Prof. Dr. H. Emrah UNALAN](#)

Research Projects

- Horizon 2020 - Research and innovation - European Union: Study of Innovative composite thin films based on metallic nanowire networks and functional oxides for application in smart windows (INSTEAD)

## Professional Experience

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### Sisecam

Ankara, Turkey

#### Production Intern

September 2022 – August 2022

- Observed the entire float glass production line and studied thin film applications via magnetron sputtering for low-E glass, gaining insights into advanced coating technologies and manufacturing processes.

### Turkish Aerospace Industry (TUSAS)

Ankara, Turkey

#### Long Term Intern (R&D)

December 2022 – September 2022

- Conducted research on aluminum casting techniques for the transmission systems of the TUSAŞ T-929 Atak 2 helicopter. Analyzed casting methods to enhance durability and performance, contributing to the development of more efficient and reliable components.

### Istanbul Technical University (ITU)

Ankara, Turkey

#### Intern

September 2021 – November 2021

Supervisor: Prof. Dr. Servet Ibrahim TIMUR

- Conducted experiments in the Electrometallurgy Laboratory, focusing on optimizing the synthesis and characterization of Au nanowires.

## Publications

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1. Pepe, Y., Tutel, Y., Akkoyun, S., Asci, N., **Cevik, E.**, Karatay, A., ... & Elmali, A. (2024). Enhanced Nonlinear Optical Limiter in the Visible Spectral Region Based on Fe-and Co-Doped NiO Nanoparticles within PVP Nanofibers. *ACS Applied Nano Materials*.
2. Pepe, Y., Tutel, Y., Akkoyun, S., Asci, N., **Cevik, E.**, Karatay, A., ... & Elmali, A. (2024). Visible-light optical limiting of vanadia–polyvinylpyrrolidone nanofibers. *Journal of Materials Science*, 59(10), 4102-4117.
3. Pepe, Y., Tutel, Y., Ucar, A. D., **Cevik, E.**, Karatay, A., Unalan, H. E., & Elmali, A. (2024). Enhanced nonlinear absorption and photoluminescence properties of Zn, Fe, Cu, V and Ni doped MoO<sub>3</sub> transition metal oxide thin films. *Physica Scripta*, 99(2), 025216.
4. Pepe, Y., Akkoyun, S., Asci, N., **Cevik, E.**, Tutel, Y., Karatay, A., ... & Elmali, A. (2023). Investigation of the Defect and Intensity-Dependent Optical Limiting Performance of MnO<sub>2</sub> Nanoparticle-Filled Polyvinylpyrrolidone Composite Nanofibers. *ACS omega*, 8(50), 47954-47963.
5. Pepe, Y., **Cevik, E.**, Tutel, Y., Karatay, A., Unalan, H. E., & Elmali, A. (2023). Promoting the optical limiting behavior in poly (methyl methacrylate)/ $\alpha$ -MnO<sub>2</sub> nanocomposite films through modulation of in-gap states by metal doping. *Materials Chemistry and Physics*, 309, 128452.
6. Unal, N., **Cevik, E.**, Pepe, Y., Asci, N., Akkoyun, S., Tutel, Y., ... & Elmali, A. (2025). Enhanced optical limiting performance of transition metal vanadate-filled nanofibers. *Materials Today Communications*, 44, 112054.

## Posters

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1. "Nanometer-Thick Co-Doped MoO<sub>3</sub> Films and Full-Device with Enhanced Electrochromic Properties" - MRS Fall Meeting 2023
2. "Flexible Non-Enzymatic Hydrogen Peroxide Sensor Based on Spray-Coated 2D-TiO<sub>2</sub> and Silver Nanowire Layers on PET Substrates" - E-MRS Spring Meeting 2025
3. "Enhanced Electrochromic Properties of Ultrasonically Spray-Coated 2D TiO<sub>2</sub> for High Performance Electrochromic Devices" - NanoTR 2019
4. "Development of Spray Coated Color-Tunable Photonic Glasses Using Metal Oxide Nanoparticles for BIPV Applications"- NanoTR 2019

## Honors and Awards

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### 2023 INTERNATIONAL POSTGRADUATE EDUCATION SCHOLARSHIP

*Turkish Ministry of National Education*

- Received a prestigious award covering all expenses for the entire duration of my PhD in the United States. This includes full tuition fee, health insurance, and an additional scholarship for living expenses.

### Special Success Award

*Turkish Education Foundation*

September 2025 – February 2023

### Honor Student

*Middle East Technical University (METU)*

- 2018-2019 Spring Semester
- 2019-2020 Fall Semester
- 2020-2021 Spring Semester

## Skills

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### Language

- English: Fluent
- Turkish: Native Language

### IT

- OriginLab
- ImageJ
- MatLab
- ECLab
- MS Office (Word, Excel, PowerPoint)

**Material Characterization**

- Scanning Electron Microscopy (SEM) User of the Nanolab (August 2025 – December 2023)
- X-ray Diffraction Spectroscopy (XRD)
- Electrochemical Characterization Techniques
- Zeta-Potential Measurements
- UV-Vis Spectrometry
- Ultrasonic Spray Deposition

**Teaching**

- Training new undergraduate and graduate students in research concepts and technical procedures.