



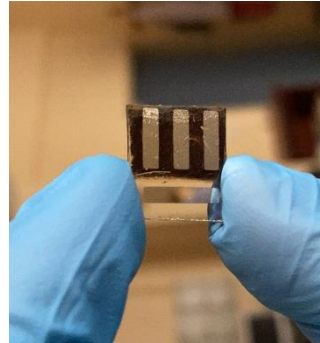
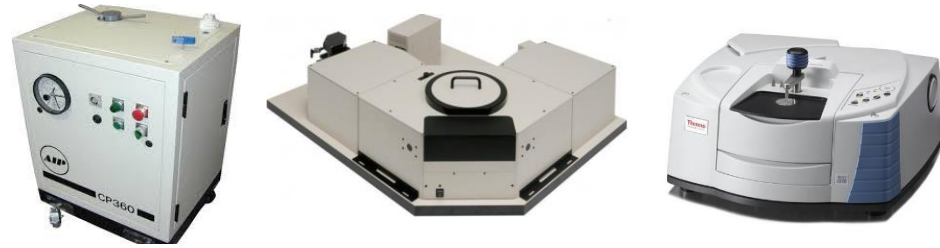
Salih Alper Akalın

Dokuz Eylul University

***Center for Production and Application of Electronic
Materials (DEU – EMUM)***

alper.akalin@deu.edu.tr

- Silicon and Semiconductor Technologies
- Nanomaterials Production Technologies
- Surface Processing Technologies
- Sensor Technologies
- Nanoscience Education
- Characterization and Analysis



«Production and Development of Hole Transport Materials in
New Generation Perovskite Solar Cells»

*Development of perovskite solar cells with Li, Mg and Li, Cu
co-doped NiOx HTM layer deposited by RF-magnetron sputter*

Research Team



- *Administration*
 - Dr. Mustafa Erol (Material Science)
 - Dr. Aylin Altinisik Tagac (Chemistry Science)
 - Dr. Tuncay Dikici (Mechanics)
- *Team Members*
 - Dr. Mustafa Erol (Head of Team)
 - MSc. Salih Alper Akalın (PhD Candidate)
 - MSc. Begum Uzunbayir (PhD Candidate)
- *Areas of Experience*
 - Inorganic semiconductor thin films (NiOx, TiO₂, ZnO etc.)
 - Deposition
 - Doping
 - Characterization

Project Idea

Experience in

- Production sputtering targets with or without dopants:
 - Deposition of Inorganic HTM layers
 - Deposition of Inorganic ETM layers

Needs:

- Partners who have experience in perovskite layer

Possible Project:

- All-inorganic PSK



This project is co-financed by the
European Union and the Republic of Turkey
Bu proje Avrupa Birliđi ve Türkiye Cumhuriyeti tarafından
finanse edilmektedir

Salih Alper Akalın

Dokuz Eylul University
Center for Production and Application of Electronic
Materials
(DEU-EMUM)
Turkey

+90 554 629 56 39
alper.akalin@deu.edu.tr
emum.deu.edu.tr/en/