

Asst. Prof. ERDİNÇ EROL

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: ABH-6021-2022

ScopusID: 57192692848

Yoksis Researcher ID: 261996

Education

Post Doctorate, Abdullah Gul University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, Turkey 2023 - 2024

Doctorate, Yıldız Technical University, Faculty Of Chemical And Metallurgical Engineering, Turkey 2018 - 2022

Postgraduate, Karamanoglu Mehmetbey University, Turkey 2015 - 2017

Undergraduate, Gebze Technical University, Turkey 2010 - 2015

Foreign Languages

English

Dissertations

Doctorate, Katı hal aydınlatma uygulamaları için CsPbBr₃ perovskit kuantum nokta ve lantanit katkılı cam

nanokompozitlerin geliştirilmesi, Yıldız Technical University, Faculty Of Chemical And Metallurgical Engineering, 2022

Postgraduate, İki adımlı elektrokimyasal kaplama yöntemiyle yeni nesil Cu₂XSnS₄ (X= Co+2, Fe+2, Mn+2, Ni+2, Zn+2)

ince filmlerinin sentezi ve karşıt elektrot olarak boya-duyarlı güneş pili uygulamaları, Karamanoglu Mehmetbey

University, 2017

Research Areas

Lighting Technology, Renewable energy, Material science and engineering, Semiconductor and Superconductor Materials, Optical Properties, Glass Technology and Glass Ceramics, Material Characterization, Nanomaterials

Academic Positions

Assistant Professor, Manisa Celal Bayar University, Mühendislik Ve Doğa Bilimleri Fakültesi, Metalurji Ve Malzeme Mühendisliği, 2025 - Present

Research Assistant, Manisa Celal Bayar University, Mühendislik Ve Doğa Bilimleri Fakültesi, Metalurji Ve Malzeme Mühendisliği, 2021 - 2025

Research Assistant, Yildiz Technical University, Faculty Of Chemical And Metallurgical Engineering, 2018 - 2021
Research Assistant, Manisa Celal Bayar University, Mühendislik Ve Doğa Bilimleri Fakültesi, Metalurji Ve Malzeme Mühendisliği, 2017 - 2018

Courses

Undergraduate

Malzeme Bilimi II, Undergraduate, 2024 - 2025

Thermodynamics of Materials, Undergraduate, 2024 - 2025

Journal articles indexed in SCI, SSCI, and AHCI

- I. **The coupling of blue emitting carbon dots with Eu³⁺/Tb³⁺ co-doped luminescent glasses for utilization in white light emitting diodes**
Korkmaz U., Özlem B., EROL E., Alas M. Ö., Genç Altürk R., ÇELİKBİLEK ERSUNDU M., ERSUNDU A. E.
Physical Chemistry Chemical Physics, vol.25, no.16, pp.11452-11463, 2023 (SCI-Expanded)
- II. **Bright white light emission from blue emitting carbon dot-coated Dy³⁺-doped luminescent glasses**
Özlem B., Korkmaz U., EROL E., Alas M. Ö., Meray Z., Genç Altürk R., ÇELİKBİLEK ERSUNDU M., ERSUNDU A. E.
Journal of Alloys and Compounds, vol.926, 2022 (SCI-Expanded)
- III. **Recyclability of CsPbBr₃ quantum dot glass nanocomposites for their long-standing use in white LEDs**
Vahedigharehchopogh N., Erol E., Kırışlı O., Genç A., Çelikbilek Ersundu M., Ersundu A. E.
Journal of Materials Chemistry C, vol.10, no.42, pp.16088-16099, 2022 (SCI-Expanded)
- IV. **Ultra-stable Eu³⁺/Dy³⁺ co-doped CsPbBr₃ quantum dot glass nanocomposites with tunable luminescence properties for phosphor-free WLED applications**
EROL E., Vahedigharehchopogh N., EKİM U., Uza N., ÇELİKBİLEK ERSUNDU M., ERSUNDU A. E.
Journal of Alloys and Compounds, vol.909, 2022 (SCI-Expanded)
- V. **CdSe and CsPbBr₃ quantum dot Co-doped monolithic glasses as tunable wavelength convertors**
Kıbrıslı O., EROL E., ERSUNDU A. E., ÇELİKBİLEK ERSUNDU M.
Journal of Physics D: Applied Physics, vol.55, no.10, 2022 (SCI-Expanded)
- VI. **Color tunable emission from Eu³⁺ and Tm³⁺ co-doped CsPbBr₃ quantum dot glass nanocomposites**
EROL E., Kıbrıslı O., ÇELİKBİLEK ERSUNDU M., ERSUNDU A. E.
Physical Chemistry Chemical Physics, vol.24, no.3, pp.1486-1495, 2022 (SCI-Expanded)
- VII. **Recent progress in lanthanide-doped luminescent glasses for solid-state lighting applications - A review**
EROL E., Vahedigharehchopogh N., Kıbrıslı O., ÇELİKBİLEK ERSUNDU M., ERSUNDU A. E.
Journal of Physics Condensed Matter, vol.33, no.48, 2021 (SCI-Expanded)
- VIII. **Robust CsPbBr₃ and CdSe / Dy³⁺+CdSe quantum dot doped glass nanocomposite hybrid coupling as color converter for solid-state lighting applications**
Kırışlı O., Erol E., Çelikbilek Ersundu M., Ersundu A. E.
Chemical Engineering Journal, vol.420, 2021 (SCI-Expanded)
- IX. **A straightforward approach for high-end anti-counterfeiting applications based on NIR laser-driven lanthanide doped luminescent glasses**
Vahedigharehchopogh N., Kırışlı O., EROL E., ÇELİKBİLEK ERSUNDU M., ERSUNDU A. E.
Journal of Materials Chemistry C, vol.9, no.6, pp.2037-2046, 2021 (SCI-Expanded)
- X. **Size-controlled emission of long-time durable CsPbBr₃ perovskite quantum dots embedded tellurite glass nanocomposites**
Erol E., Kırışlı O., Çelikbilek Ersundu M., Ersundu A. E.
Chemical Engineering Journal, vol.401, 2020 (SCI-Expanded)

- XI. **The synergistic effect of Er³⁺ and Ho³⁺ on temporal color tuning of upconversion emission in a glass host: Via a facile excitation modulation technique for anti-counterfeiting applications**
EROL E., Kibrisli O., Vahedigharehchopogh N., ÇELİKBİLEK ERSUNDU M., ERSUNDU A. E.
Physical Chemistry Chemical Physics, vol.22, no.44, pp.25963-25972, 2020 (SCI-Expanded)
- XII. **Noninvasive optical temperature sensing behavior of Ho³⁺ and Ho³⁺/Er³⁺ doped tellurite glasses through up and down-converted emissions**
Kıbrıslı O., EROL E., Vahedigharehchopogh N., Yousef E. S., ÇELİKBİLEK ERSUNDU M., ERSUNDU A. E.
Sensors and Actuators, A: Physical, vol.315, 2020 (SCI-Expanded)
- XIII. **Enhancing the electron transfer and band potential tuning with long-term stability of ZnO based dye-sensitized solar cells by gallium and tellurium as dual-doping**
Akin S., Erol E., Sonmezoglu S.
Electrochimica Acta, vol.225, pp.243-254, 2017 (SCI-Expanded)

Books

- I. **Advances in Luminescent Glass Research Towards High-End Applications**
EROL E., ÇELİKBİLEK ERSUNDU M., ERSUNDU A. E.
in: Advances in Glass Research, Shadia Jamil Ikhmayies, Editor, SpringerLink, pp.169-212, 2023

Papers Presented at Peer-Reviewed Scientific Conferences

- I. **Katı Hal Aydınlatma Uygulamaları için CsPbBr₃ Perovskit Kuantum Nokta Katkılı Cam Nanokompozitlerin Geliştirilmesi**
EROL E., ÇELİKBİLEK ERSUNDU M., ERSUNDU A. E.
XI. Uluslararası Katılımlı Seramik Kongresi, Afyonkarahisar, Turkey, 21 - 23 November 2022, (Summary Text)
- II. **Co-Electrodeposited Cu₂(Co/Fe)SnS₄ Catalyst-Based Dye Sensitized Solar Cells with over 5 Efficiency.**
GÜLEN M., EROL E., AKIN S., SÖNMEZOĞLU S.
European Materials Research Society, E-MRS, Warszawa, Poland, 18 - 21 September 2017, (Summary Text)
- III. **Synthesis of CXTS (X= Mn²⁺, Ni²⁺) Thin Films by Two-Step Electrodeposition and Their Application in DSSC as Counter Electrode.**
AKIN S., EROL E., Gülen M., AKMAN E., ÇARBAŞ B., ÖZEL F., SÖNMEZOĞLU S.
European Materials Research Society, E-MRS, Warszawa, Poland, 18 - 21 September 2017, (Summary Text)

Funded Projects

EROL E., ÇELİKBİLEK ERSUNDU M., ERSUNDU A. E., Project Supported by Higher Education Institutions, Katı Hal Aydınlatma Uygulamaları için CsPbBr₃ Perovskit Kuantum Nokta ve Lantanit Katkılı Cam Nanokompozitlerin Geliştirilmesi, 2021 - 2022

Metrics

Publication: 17
Citation (WoS): 319
Citation (Scopus): 356
H-Index (WoS): 9
H-Index (Scopus): 9