

## Prof. Miray ÇELİKBİLEK ERSUNDU

### Personal Information

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### International Researcher IDs

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Yoksis Researcher ID: 215160

### Biography

Prof. Dr. Miray Çelıkbılek Ersundu received her BSc, MSc and PhD degrees from Istanbul Technical University, Department of Metallurgical and Materials Engineering in 2008, 2009 and 2013, respectively. In 2014, she started to work as a faculty member in the Department of Metallurgical and Materials Engineering at Yıldız Technical University. She was awarded the title of associate professor and full professor in 2018 and 2023, respectively. She continues to carry out her research at the Glass Research Laboratory of which she is the co-founder.

Prof. Dr. Miray Çelıkbılek Ersundu is in the vision of developing solutions for the main problems of today's world such as, energy efficiency, recycling, and carbon emissions, by using the new generation glass and glass-ceramics developed for many advanced technological application areas. Recently, she has focused on glass and glass nanocomposites with color conversion properties, and by synthesizing lanthanides and quantum dots together directly in thermally and chemically durable glass matrices, she prevented the stability and decay problems of quantum dots and ensured that the light properties were preserved for a long time. She paved the way for the integration of glass and glass nanocomposites into next-generation opto-electronic and photonic applications such as solid-state lighting (LED), luminescent solar concentrators for use in building integrated photovoltaics, three-dimensional volumetric displays, optical temperature sensors and anti-counterfeiting applications.

To date, Prof. Dr. Miray Çelıkbılek Ersundu has worked as the principal investigator in 5 TUBITAK (1 International), 1 Ministry of Industry, 1 KOSGEB, 16 BAP projects, and as a researcher in 1 Horizon Europe, 7 TUBITAK (1 International), 1 KOSGEB and 11 BAP projects. She has 50 articles published in internationally indexed journals, 3 international book chapters, 77 international and 7 national conference presentations. As of August 2023, her articles were cited 1888 times according to the Google Scholar citation index (h-index 23), and 1447 times according to the web of science index (h-index 21). In addition, she has 3 national and international patent applications that are still under examination.

In 2022, she was deemed worthy of the Turkish Academy of Sciences (TÜBA)-Outstanding Young Scientist (GEBİP) award and became a member of the TÜBA Young Academy.

Miray Çelikbilek Ersundu is married and has one little boy named Demir.

## Education Information

Doctorate, Istanbul Technical University, Kimya Metalurji Fakültesi, Metalurji Ve Malzeme Mühendisliği Bölümü, Turkey  
2009 - 2013

Postgraduate, Istanbul Technical University, Kimya Metalurji Fakültesi, Metalurji Ve Malzeme Mühendisliği Bölümü,  
Turkey 2008 - 2009

Undergraduate, Istanbul Technical University, Kimya Metalurji Fakültesi, Metalurji Ve Malzeme Mühendisliği Bölümü,  
Turkey 2004 - 2008

## Foreign Languages

French, C1 Advanced

English, B2 Upper Intermediate

## Dissertations

Doctorate, Tellürit Sistemlerin Camlaşma Davranışlarının, Cam Özelliklerinin ve Termokromik Davranışlarının  
İncelenmesi, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Metalurji Ve Malzeme Mühendisliği, 2013

Postgraduate, TeO<sub>2</sub>-WO<sub>3</sub> Sisteminin Termal ve Mikroyapısal İncelenmesi, İstanbul Teknik Üniversitesi, Fen Bilim  
Enstitüsü, Üretim Metalurjisi , 2009

## Research Areas

Metallurgical and Materials Engineering, Material science and engineering, Optical Properties, Electrical and Magnetic  
Properties, Glass Technology and Glass Ceramics, Nanomaterials, Thermal Properties, Engineering and Technology

## Academic Titles / Tasks

Professor, Yıldız Technical University, Faculty Of Chemical And Metallurgical Engineering, Department Of Metallurgical  
And Materials Engineering, 2023 - Continues

Associate Professor, Yıldız Technical University, Faculty Of Chemical And Metallurgical Engineering, Department Of  
Metallurgical And Materials Engineering, 2018 - 2023

Assistant Professor, Yıldız Technical University, Faculty Of Chemical And Metallurgical Engineering, Department Of  
Metallurgical And Materials Engineering, 2018 - 2018

Assistant Professor, Yıldız Technical University, Faculty Of Chemical And Metallurgical Engineering, Department Of  
Metallurgical And Materials Engineering, 2014 - 2018

## Courses

Graduation Project, Undergraduate, 2018 - 2019

Seramik Teknolojilerinde Tasarım Uygulamaları, Undergraduate, 2019 - 2020, 2018 - 2019

Basic Metallurgical Diagrams, Postgraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017

Principles of Extractive Metallurgy, Undergraduate, 2018 - 2019

Glass Technology, Undergraduate, 2019 - 2020, 2018 - 2019

Thermodynamics of Solution, Undergraduate, 2018 - 2019  
Üretim Metalurjisi Termodinamiği , Doctorate, 2017 - 2018  
Thermodynamics of Materials, Undergraduate, 2018 - 2019  
Metallurgy Kinetics, Undergraduate, 2018 - 2019  
Materials Thermodynamics 2, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016  
Principles of Extractive Metallurgy , Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016  
Kinetics, Undergraduate, 2016 - 2017, 2015 - 2016  
Metalurji Laboratuvarı, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016  
Ore Dressing, Undergraduate, 2017 - 2018, 2016 - 2017  
Tasarım Uygulamaları, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016  
Bitirme Çalışması, Undergraduate, 2016 - 2017, 2015 - 2016, 2014 - 2015  
Materials Thermodynamics 1, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016  
Glass Technology, Undergraduate, 2015 - 2016, 2014 - 2015  
Hydrometallurgy, Undergraduate, 2014 - 2015

## Advising Theses

Çelikbilek Ersundu M., Cam Seramik Malzemelerin Kimyasal Temperleme ile Güçlendirilmesi, Doctorate, A.Caner(Student), Continues  
Çelikbilek Ersundu M., Development of ZrO<sub>2</sub>-SiO<sub>2</sub> glass ceramics and investigation of their optical and mechanical properties, Doctorate, Y.Çelik(Student), Continues  
Çelikbilek Ersundu M., Development of NIR Excited Lanthanide-Doped Monolithic Glasses For Volumetric Displays, Doctorate, N.Vahedighrehchopogh(Student), Continues  
Çelikbilek Ersundu M., Enerji Tasarrufu Sağlayan Low-E Kaplamalı Camların Geliştirilmesi, Postgraduate, H.Can(Student), Continues  
Çelikbilek Ersundu M., Üst enerji dönüşüm yöntemi ile lüminesans özellikli nadir toprak elementi katkılı camların geliştirilmesi, Doctorate, B.Özlem(Student), Continues  
Çelikbilek Ersundu M., Investigation the effect of electric field assisted ion exchange process on chemical tempering efficiency, Postgraduate, Ö.Doğukan(Student), Continues  
Çelikbilek Ersundu M., İnce Camların Kimyasal Temperleme Prosesine Banyo Kirliliğinin Etkilerinin İncelenmesi ve Banyo Tuzunun Rejenerasyonu , Doctorate, N.Özben(Student), Continues  
Çelikbilek Ersundu M., Fosfat -Esaslı Camların Çözünme Davranışlarının İncelenmesi ve Kontrollü Salımlı Gübre Olarak Kullanılabilirliklerinin Araştırılması, Postgraduate, B.Kuzu(Student), 2021  
Çelikbilek Ersundu M., Fotovoltaik sistemlerde kullanılan desenli ince camların kimyasal temperlenmesi, Postgraduate, G.Terzi(Student), 2020  
Çelikbilek Ersundu M., İnce Camların Kimyasal Temperlenmesi, Postgraduate, B.Demir(Student), 2020  
Çelikbilek Ersundu M., Investigation of Luminescence and Up-conversion Properties of Holmium, Thulium and Ytterbium Ions Triply-doped Tellurite Glasses, Postgraduate, N.Vahedighrehchopogh(Student), 2020  
Çelikbilek Ersundu M., Farklı Al<sub>2</sub>O<sub>3</sub> Oranlarına Sahip Alümina Silikat ve Soda Kireç Silikat Camların Kimyasal Temperlenme Davranışlarının İncelenmesi, Postgraduate, A.Caner(Student), 2019  
Çelikbilek Ersundu M., Alümina Silikat ve Soda Kireç Silikat Camların Kimyasal Temperlenmesinde Kalınlık ve Kesme Etkisinin İncelenmesi, Postgraduate, B.Kayacan(Student), 2018  
Çelikbilek Ersundu M., Synthesis and Investigation of Transition Metal Oxide-doped Heavy Metal Oxide Glasses for Their Evaluation as Large Band Gap Semiconductors, Postgraduate, N.Gedikoğlu(Student), 2018  
Çelikbilek Ersundu M., ZnTe Kuantum Nokta Katkılı Camların Geliştirilmesi ve Kuantum Kısıtlama Özelliklerinin İncelenmesi, Postgraduate, İ.Tunç(Student), 2017

### Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Glass-based LED system for indoor horticulture: enhanced plant growth through Sm<sup>3+</sup> and Tm<sup>3+</sup> co-doped luminescent glasses**  
EKİM U., İltter E., Özhan E., Temürhan Y., ÇELİKBİLEK ERSUNDU M., ERSUNDU A. E.  
Physical Chemistry Chemical Physics, vol.25, no.34, pp.23150-23163, 2023 (SCI-Expanded)
- II. **The coupling of blue emitting carbon dots with Eu<sup>3+</sup>/Tb<sup>3+</sup> 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)
- III. **Thermal, optical, structural, and electrical properties of ZnO–MoO<sub>3</sub>–TeO<sub>2</sub> glasses**  
ÇELİKBİLEK ERSUNDU M., ERSUNDU A. E., Bošák O., Kubliha M., Kostka P.  
Ceramics International, vol.49, no.8, pp.12950-12958, 2023 (SCI-Expanded)
- IV. **Bright white light emission from blue emitting carbon dot-coated Dy<sup>3+</sup>-doped luminescent glasses**  
özlem B., Korkmaz U., EROL E., Alai M. o., Meray Z., Altuerk R. G., Ersundu M., Ersundu A. E.  
JOURNAL OF ALLOYS AND COMPOUNDS, vol.926, 2022 (SCI-Expanded)
- V. **Recyclability of CsPbBr<sub>3</sub> quantum dot glass nanocomposites for their long-standing use in white LEDs**  
Vahedigharehchopogh N., EROL E., Kibrisli O., Genc A., ÇELİKBİLEK ERSUNDU M., ERSUNDU A. E.  
JOURNAL OF MATERIALS CHEMISTRY C, vol.10, no.42, pp.16088-16099, 2022 (SCI-Expanded)
- VI. **Ultra-stable Eu<sup>3+</sup>/Dy<sup>3+</sup>co-doped CsPbBr<sub>3</sub> 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)
- VII. **Synthesis and characterization of newly developed phosphate-based glasses through experimental gamma-ray and neutron spectroscopy methods: Transmission and dose rates**  
KAVAZ E., Ersundu M., ERSUNDU A. E., Tekin H.  
CERAMICS INTERNATIONAL, vol.48, no.10, pp.13842-13849, 2022 (SCI-Expanded)
- VIII. **CdSe and CsPbBr<sub>3</sub> quantum dot Co-doped monolithic glasses as tunable wavelength convertors**  
Kibrisli O., Erol E., ERSUNDU A. E., Ersundu M.  
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.55, no.10, 2022 (SCI-Expanded)
- IX. **Color tunable emission from Eu<sup>3+</sup> and Tm<sup>3+</sup> co-doped CsPbBr<sub>3</sub> quantum dot glass nanocomposites**  
Erol E., Kibrisli O., Ersundu M., ERSUNDU A. E.  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, vol.24, no.3, pp.1486-1495, 2022 (SCI-Expanded)
- X. **Structural properties and dissolution behavior of new generation controlled release phosphate glass fertilizers**  
ÇELİKBİLEK ERSUNDU M., Kuzu B., ERSUNDU A. E.  
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.576, 2022 (SCI-Expanded)
- XI. **Recent progress in lanthanide-doped luminescent glasses for solid-state lighting applications-a review**  
EROL E., Vahedigharehchopogh N., Kibrisli O., ÇELİKBİLEK ERSUNDU M., ERSUNDU A. E.  
JOURNAL OF PHYSICS-CONDENSED MATTER, vol.33, no.48, 2021 (SCI-Expanded)
- XII. **Robust CsPbBr<sub>3</sub> and CdSe/Dy<sup>3+</sup>+CdSe quantum dot doped glass nanocomposite hybrid coupling as color converter for solid-state lighting applications**  
Kibrishi O., Erol E., Çelikkbilek Ersundu M., Ersundu A. E.  
CHEMICAL ENGINEERING JOURNAL, vol.420, 2021 (SCI-Expanded)
- XIII. **Novel HMO-Glasses with Sb<sub>2</sub>O<sub>3</sub> and TeO<sub>2</sub> for Nuclear Radiation Shielding Purposes: A Comparative**

### **Analysis with Traditional and Novel Shields**

Almised G., Tekin H. O., Issa S. A. M., Ersundu M., Ersundu A. E., Kılıç G., Zakaly H. M. H., Ene A.  
MATERIALS, vol.14, no.15, 2021 (SCI-Expanded)

- XIV. **A thorough investigation of the Bi<sub>2</sub>O<sub>3</sub>-PbCl<sub>2</sub>-TeO<sub>2</sub> system: Glass forming region, thermal, physical, optical, structural, mechanical and radiation shielding properties**  
ERSUNDU A. E., Sayyed M., Kıbrıslı O., Akıllı V., ÇELİKBİLEK ERSUNDU M.  
JOURNAL OF ALLOYS AND COMPOUNDS, vol.857, 2021 (SCI-Expanded)
- XV. **A straightforward approach for high-end anti-counterfeiting applications based on NIR laser-driven lanthanide doped luminescent glasses**  
Vahedigharehchopogh N., Kıbrıslı O., Erol E., Çelikbilek Ersundu M., Ersundu A. E.  
JOURNAL OF MATERIALS CHEMISTRY C, vol.9, no.6, pp.2037-2046, 2021 (SCI-Expanded)
- XVI. **Size-controlled emission of long-time durable CsPbBr<sub>3</sub> perovskite quantum dots embedded tellurite glass nanocomposites**  
Erol E., Kıbrıslı O., Çelikbilek Ersundu M., Ersundu A. E.  
CHEMICAL ENGINEERING JOURNAL, vol.401, 2020 (SCI-Expanded)
- XVII. **Noninvasive Optical Temperature Sensing Behavior of Ho<sup>3+</sup> and Ho<sup>3+</sup>/Er<sup>3+</sup> Doped Tellurite Glasses Through Up and Down-Converted Emissions**  
Kıbrıslı O., Erol E., Vahedigharehchopogh N., Yousef E. S., Çelikbilek Ersundu M., Ersundu A. E.  
Sensors And Actuators A-Physical, vol.315, pp.112321, 2020 (SCI-Expanded)
- XVIII. **The synergistic effect of Er<sup>3+</sup> and Ho<sup>3+</sup> on temporal color tuning of upconversion emission in a glass host via a facile excitation modulation technique for anti-counterfeiting applications**  
Erol E., Kıbrıslı O., Vahedigharehchopogh N., Çelikbilek Ersundu M., Ersundu A. E.  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, vol.22, no.44, pp.25963-25972, 2020 (SCI-Expanded)
- XIX. **Stress in ion exchanged soda-lime silicate and sodium aluminosilicate glasses: Experimental and theoretical comparison**  
Macrelli G., Özben N., Kayaalp A. C., ÇELİKBİLEK ERSUNDU M., Sökmen İ.  
International Journal of Applied Glass Science, vol.11, no.4, pp.730-742, 2020 (SCI-Expanded)
- XX. **Investigation the effect of weathering on chemically strengthened flat glasses**  
Gösterişlioğlu Y., Ersundu A. E., Çelikbilek Ersundu M., Sökmen İ.  
Journal of Non-Crystalline Solids, vol.544, 2020 (SCI-Expanded)
- XXI. **A comparative study on WO<sub>3</sub> + MoO<sub>3</sub> containing TeO<sub>2</sub> and Sb<sub>2</sub>O<sub>3</sub>-based heavy metal oxide glasses**  
ERSUNDU A. E., ÇELİKBİLEK ERSUNDU M., Gedikoğlu N.  
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.541, 2020 (SCI-Expanded)
- XXII. **Instantaneous Color Tuning of Upconversion Emission in a Novel Lanthanide-Doped Monolithic Glass via Excitation Modulation**  
Kıbrıslı O., Vahedigharehchopogh N., Ersundu A. E., Çelikbilek Ersundu M.  
JOURNAL OF PHYSICAL CHEMISTRY C, vol.124, pp.10687-10695, 2020 (SCI-Expanded)
- XXIII. **A comparative investigation on thermal, structural and optical properties of W and Nb-doped VO<sub>2</sub>-based thermochromic thin**  
Ersundu A. E., Çelikbilek Ersundu M., Doğan E., Güven M.  
THIN SOLID FILMS, vol.700, 2020 (SCI-Expanded)
- XXIV. **Color tunability and white light generation through up-conversion energy transfer in Yb<sup>3+</sup> sensitized Ho<sup>3+</sup>/Tm<sup>3+</sup> doped tellurite glasses**  
Vahedigharehchopogh N., Kıbrıslı O., Ersundu A. E., Çelikbilek Ersundu M.  
Journal of Non-Crystalline Solids, vol.525, 2019 (SCI-Expanded)
- XXV. **Physical, mechanical and gamma-ray shielding properties of highly transparent ZnO-MoO<sub>3</sub>-TeO<sub>2</sub> glasses**  
Çelikbilek Ersundu M., Ersundu A. E., Gedikoglu N., Şakar E., Buyiikyıldız M., Kurudirek M.  
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.524, 2019 (SCI-Expanded)
- XXVI. **Dy<sup>3+</sup> doped tellurite glasses for solid-state lighting: An investigation through physical, thermal, structural and optical spectroscopy studies**

- Kibrisli O, Ersundu A. E., Çelikkilek Ersundu M.  
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.513, pp.125-136, 2019 (SCI-Expanded)
- XXVII. **Crystallization behaviour and growth kinetics of ZnTe in soda-lime-silica glass nanocomposites**  
Ersundu M.  
PHYSICS AND CHEMISTRY OF GLASSES-EUROPEAN JOURNAL OF GLASS SCIENCE AND TECHNOLOGY PART B,  
vol.60, pp.15-20, 2019 (SCI-Expanded)
- XXVIII. **Crystallization behavior of W<sub>03</sub>-Mo<sub>03</sub>-Te<sub>02</sub> glasses**  
Gedikoğlu N, Ersundu A. E., Aydın S., Çelikkilek Ersundu M.  
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.501, pp.93-100, 2018 (SCI-Expanded)
- XXIX. **Investigating the influence of transition metal oxides on temperature dependent optical properties of PbCl<sub>2</sub>-Te<sub>02</sub> glasses for their evaluation as transparent large band gap semiconductors**  
Gedikoğlu N, Çelikkilek Ersundu M., Kostka P., Bašinová N., Ersundu A. E.  
JOURNAL OF ALLOYS AND COMPOUNDS, vol.748, pp.687-693, 2018 (SCI-Expanded)
- XXX. **The heavy metal oxide glasses within the W<sub>03</sub>-Mo<sub>03</sub>-Te<sub>02</sub> system to investigate the shielding properties of radiation applications**  
Ersundu A. E., Buyukyildiz M., Çelikkilek Ersundu M., Şakar E., Kurudirek M.  
PROGRESS IN NUCLEAR ENERGY, vol.104, pp.280-287, 2018 (SCI-Expanded)
- XXXI. **Investigation on gamma and neutron radiation shielding parameters for BaO/SrO-Bi<sub>2</sub>O<sub>3</sub>-B<sub>2</sub>O<sub>3</sub> glasses**  
Sayyed M. I., Lakshminarayana G., Dong M. G., Çelikkilek Ersundu M., Ersundu A. E., Kityk I. V.  
RADIATION PHYSICS AND CHEMISTRY, vol.145, pp.26-33, 2018 (SCI-Expanded)
- XXXII. **Investigation of radiation shielding properties for MeO-PbCl<sub>2</sub>-Te<sub>02</sub> (MeO = Bi<sub>2</sub>O<sub>3</sub>, Mo<sub>03</sub>, Sb<sub>2</sub>O<sub>3</sub>, W<sub>03</sub>, ZnO) glasses**  
Sayyed M. I., Çelikkilek Ersundu M., Ersundu A. E., Lakshminarayana G., Kostka P.  
RADIATION PHYSICS AND CHEMISTRY, vol.144, pp.419-425, 2018 (SCI-Expanded)
- XXXIII. **Evaluation of physical, structural properties and shielding parameters for K<sub>2</sub>O-W<sub>03</sub>-Te<sub>02</sub> glasses for gamma ray shielding applications**  
Çelikkilek Ersundu M., Ersundu A. E., Sayyed M. I., Lakshminarayana G., Aydın S.  
JOURNAL OF ALLOYS AND COMPOUNDS, vol.714, pp.278-286, 2017 (SCI-Expanded)
- XXXIV. **Investigation of gamma radiation shielding properties of lithium zinc bismuth borate glasses using XCOM program and MCNP5 code**  
Dong M. G., Sayyed M. I., Lakshminarayana G., Çelikkilek Ersundu M., Ersundu A. E., Nayar P., Mahdi M. A.  
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.468, pp.12-16, 2017 (SCI-Expanded)
- XXXV. **Crystallization kinetics of new heavy metal oxide glasses within the Sb<sub>2</sub>O<sub>3</sub>-Na<sub>2</sub>O-W<sub>03</sub>-PbO system**  
Çelikkilek Ersundu M., Ersundu A. E., Soltani M. T., Baazouzi M.  
CERAMICS INTERNATIONAL, vol.43, pp.491-497, 2017 (SCI-Expanded)
- XXXVI. **Structure and crystallization kinetics of lithium tellurite glasses**  
Çelikkilek Ersundu M., Ersundu A. E.  
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.453, pp.150-157, 2016 (SCI-Expanded)
- XXXVII. **The Te<sub>02</sub>-Na<sub>2</sub>O System: Thermal Behavior, Structural Properties, and Phase Equilibria**  
Kavaklioglu K. B., Aydın S., Çelikkilek M., Ersundu A. E.  
INTERNATIONAL JOURNAL OF APPLIED GLASS SCIENCE, vol.6, pp.406-418, 2015 (SCI-Expanded)
- XXXVIII. **Thermochromic behavior of tellurite glasses**  
Celikkilek M., ERSUNDU A. E., Zayim E., Aydın S.  
JOURNAL OF ALLOYS AND COMPOUNDS, vol.637, pp.162-170, 2015 (SCI-Expanded)
- XXXIX. **Characterization of new Sb<sub>2</sub>O<sub>3</sub>-based multicomponent heavy metal oxide glasses**  
Ersundu A. E., Çelikkilek M., Baazouzi M., Soltani M. T., Troles J., Aydın S.  
JOURNAL OF ALLOYS AND COMPOUNDS, vol.615, pp.712-718, 2014 (SCI-Expanded)
- XL. **Preparation and and characterization of Te<sub>02</sub>-W<sub>03</sub>-Li<sub>2</sub>O glasses**  
Çelikkilek M., Ersundu A. E., Aydın S.  
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.378, pp.247-253, 2013 (SCI-Expanded)

- XLI. Glass Formation and Characterization Studies in the TeO<sub>2</sub>-WO<sub>3</sub>-Na<sub>2</sub>O System**  
Çelikbilek M., Ersundu A. E., Aydın S.  
JOURNAL OF THE AMERICAN CERAMIC SOCIETY, vol.96, pp.1470-1476, 2013 (SCI-Expanded)
- XLII. Thermal and microstructural characterization and crystallization kinetic studies in the TeO<sub>2</sub>-B<sub>2</sub>O<sub>3</sub> system**  
Yardimci D., Çelikbilek M., Ersundu A. E., Aydın S.  
MATERIALS CHEMISTRY AND PHYSICS, vol.137, pp.999-1006, 2013 (SCI-Expanded)
- XLIII. Phase equilibria and glass formation studies in the (1-x)TeO<sub>2</sub>-xCdO (0.05 ≤ x ≤ 0.33 mol) system**  
Karaduman G., Ersundu A. E., Celikbilek M., Solak N., Aydın S.  
JOURNAL OF THE EUROPEAN CERAMIC SOCIETY, vol.32, no.3, pp.603-610, 2012 (SCI-Expanded)
- XLIV. Characterization of B<sub>2</sub>O<sub>3</sub> and/or WO<sub>3</sub> containing tellurite glasses**  
Ersundu A. E., Çelikbilek M., Aydın S.  
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.358, pp.641-647, 2012 (SCI-Expanded)
- XLV. Glass formation area and characterization studies in the CdO-WO<sub>3</sub>-TeO<sub>2</sub> ternary system**  
Ersundu A. E., Celikbilek M., Solak N., Aydın S.  
JOURNAL OF THE EUROPEAN CERAMIC SOCIETY, vol.31, no.15, pp.2775-2781, 2011 (SCI-Expanded)
- XLVI. Investigation on thermal and microstructural characterization of the TeO<sub>2</sub>-WO<sub>3</sub> system**  
Celikbilek M., Ersundu A. E., Solak N., Aydın S.  
JOURNAL OF ALLOYS AND COMPOUNDS, vol.509, no.18, pp.5646-5654, 2011 (SCI-Expanded)
- XLVII. Crystallization kinetics of the tungsten-tellurite glasses**  
Celikbilek M., Ersundu A. E., Solak N., Aydın S.  
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.357, no.1, pp.88-95, 2011 (SCI-Expanded)
- XLVIII. Stability of the delta-TeO<sub>2</sub> phase in the binary and ternary TeO<sub>2</sub> glasses**  
Ersundu A. E., Karaduman G., Celikbilek M., Solak N., Aydın S.  
JOURNAL OF THE EUROPEAN CERAMIC SOCIETY, vol.30, no.15, pp.3087-3092, 2010 (SCI-Expanded)
- XLIX. Effect of rare-earth dopants on the thermal behavior of tungsten-tellurite glasses**  
Ersundu A. E., Karaduman G., Celikbilek M., Solak N., Aydın S.  
JOURNAL OF ALLOYS AND COMPOUNDS, vol.508, no.2, pp.266-272, 2010 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Geçiş Metal Oksit Katkılı PbCl<sub>2</sub>-TeO<sub>2</sub> Camların Yapısal ve Optik İncelenmesi**  
Çelikbilek Ersundu M.  
Afyon Kocatepe Üniversitesi Fen ve Mühendislik Bilimleri Dergisi, vol.17, pp.218-226, 2017 (Peer-Reviewed Journal)
- II. **Microstructural and Thermal Characterization of the TeO<sub>2</sub>-WO<sub>3</sub> System**  
Çelikbilek Ersundu M., Karaduman G., Ersundu A. E., Solak N., Tatar D., Aydın S.  
Ceramic Materials, vol.62, no.4, pp.556-559, 2010 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **A Review of Scanning Electron Microscopy Investigations in Tellurite Glass Systems**  
Ersundu A. E., Çelikbilek Ersundu M., Aydın S.  
in: Current Microscopy Contributions to Advances in Science and Technology, Méndez-Vilas A., Editor, Formatex, Badajoz, pp.1105-1114, 2013
- II. **Crystallization Kinetics in Amorphous Materials**  
Çelikbilek Ersundu M., Ersundu A. E., Aydın S.  
in: Advances in Crystallization Processes, Yitzhak Mastai, Editor, Intech, Rijeka, pp.127-162, 2012

## Refereed Congress / Symposium Publications in Proceedings

- I. **The Effect of Bath Contamination on Chemical Strengthening via Different forms of Sodium Compounds**  
Demir B., Çalı A., Özben N., Ersundu A. E., Çelikkilek Ersundu M., Sökmen İ.  
Şişecam International Glass Conference combined with 34th Şişecam Glass Symposium, İstanbul, Turkey, 21 - 22 November 2019, pp.167
- II. **The Effect of Different Calcium Compounds on Bath Contamination in Chemical Strengthening Process**  
Çalı A., Özben N., Demir B., Çelikkilek Ersundu M., Ersundu A. E., Sökmen İ.  
Şişecam International Glass Conference combined with 34th Şişecam Glass Symposium, İstanbul, Turkey, 21 - 22 November 2019, pp.166
- III. **Investigation of White Light Generation in Rare Earth Doped Tellurite Glass Nanocomposites for Solid State Lighting**  
Vahedigharehchopogh N., Kırışlı O., Çelikkilek Ersundu M., Ersundu A. E.  
Şişecam International Glass Conference combined with 34th Şişecam Glass Symposium, İstanbul, Turkey, 21 - 22 November 2019, pp.153
- IV. **Rare-Earth / Quantum-Dot Glass Nanocomposites For White Light Emitting Diodes**  
Vahedigharehchopogh N., Kırışlı O., Çelikkilek Ersundu M., Ersundu A. E.  
International Materials Technologies and Metallurgy Conference 2019 (MTM 2019), İstanbul, Turkey, 31 October - 01 November 2019, pp.219
- V. **Photoluminescence Enhancement of Dy<sup>3+</sup>-Doped Tellurite Glasses Through Nanoparticle Doping for Solid-state Lighting Applications**  
Ersundu A. E., Kırışlı O., Çelikkilek Ersundu M.  
21st YUCOMAT 2019 Conference, Podgorica, Serbia And Montenegro, 2 - 06 September 2019, pp.53
- VI. **Patterned Glass Strengthening with Chemical Tempering via Bath Technology**  
Terzi G., Öğüt B., Kaçar E. D., Yıldız T., Gökçen E., Çelikkilek Ersundu M., Ersundu A. E., Sökmen İ.  
25th International Congress on Glass (ICG 2019), Massachusetts, United States Of America, 9 - 14 June 2019, pp.89
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Vahedigharehchopogh N., Kırışlı O., Çelikkilek Ersundu M., Ersundu A. E.  
25th International Congress on Glass (ICG 2019), Massachusetts, United States Of America, 9 - 14 June 2019, pp.91
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Kırışlı O., Ersundu A. E., Çelikkilek Ersundu M.  
25th International Congress on Glass (ICG 2019), Massachusetts, United States Of America, 9 - 14 June 2019, pp.160
- X. **The Effect of Weathering on Chemical Strengthened Thin Glasses**  
Gösterişlioğlu Y. A., Güldalı B., Terzi G., Kaçar E. D., Simurka L., Çelikkilek Ersundu M., Ersundu A. E., Sökmen İ.  
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Kayaalp A. C., Kayacan B., Özben N., Simurka L., Sökmen İ., Ersundu A. E., Çelikkilek Ersundu M.  
The 17th Young Researchers' Conference Materials Science and Engineering, Belgrade, Serbia And Montenegro, 5 -



07 December 2018, pp.35

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33. Şişecam Cam Sempozyumu, İstanbul, Turkey, 02 November 2018, pp.74
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33. Şişecam Cam Sempozyumu, İstanbul, Turkey, 02 November 2018, pp.101
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33. Şişecam Cam Sempozyumu, İstanbul, Turkey, 02 November 2018, pp.103
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33. Şişecam Cam Sempozyumu, İstanbul, Turkey, 02 November 2018, pp.108-109
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Science and Applications of Thin Films, Conference & Exhibition (SATF 2018), İzmir, Turkey, 17 - 21 September 2018, pp.33
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2018 Glass & Optical Materials Division Annual Meeting (2018 GOMD), Texas, United States Of America, 20 - 24 May 2018, pp.37
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2017 ICG Annual Meeting, İstanbul, Turkey, 22 - 25 October 2017, pp.1
- XXVIII. **Ion Exchange Strengthening of Silicate Glasses**  
Kayaalp A. C., Kayacan B., Özben N., Atılğan S., Öğüt B., Simurka L., Güldiren D., Okan O. B., Kaçar E., Çelikkbilek Ersundu M., et al.  
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Materials Science and Technology Conference and Exhibition (MS&T'12), Pennsylvania, United States Of America, 7 - 11 October 2012, pp.229-236
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Yardımcı D., Çelikbilek Ersundu M., Ersundu A. E., Aydın S.  
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Kavaklıoğlu K., Çelikbilek Ersundu M., Ersundu A. E., Aydın S.  
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Çelikbilek Ersundu M., Yardımcı D., Ersundu A. E., Solak N., Aydın S.  
Materials Science and Technology Conference and Exhibition (MS&T'11), Ohio, United States Of America, 16 - 20 October 2011, pp.55-61
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Ersundu A. E., Çelikbilek Ersundu M., Solak N., Aydın S.  
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2nd International Ceramic, Glass, Porcelain, Enamel, Glaze and Pigment Congress (SERES'11), Eskişehir, Turkey, 10 - 12 October 2011, pp.1
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Çelikbilek Ersundu M., Yardımcı D., Ersundu A. E., Solak N., Aydın S.  
17th International Symposium on Boron, Borides and Related Materials, İstanbul, Turkey, 11 September 2011 - 17 September 2011, pp.291
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Yardımcı D., Çelikbilek Ersundu M., Ersundu A. E., Solak N., Aydın S.  
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- LXVII. **Characterization Studies in the WO<sub>3</sub>-CdO System**  
Çelikbilek Ersundu M., Ersundu A. E., Solak N., Aydın S.  
12th International Conference and Exhibition of the European Ceramic Society, Stockholm, Sweden, 19 - 23 June 2011, pp.1
- LXVIII. **Characterization Studies in the WO<sub>3</sub>-CdO System**  
Çelikbilek Ersundu M., Ersundu A. E., Solak N., Aydın S.  
12th International Conference and Exhibition of the European Ceramic Society (ECERS 2011), Stockholm, Sweden,

19 - 23 June 2011, pp.1

- LXIX. Investigation of the Glass Formation in the TeO<sub>2</sub>-CdO System**  
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3rd International Congress on Ceramics, Osaka, Japan, 14 - 18 November 2010, pp.1
- LXX. Formation of the delta-TeO<sub>2</sub> Phase in the Ternary TeO<sub>2</sub>-WO<sub>3</sub>-CdO System**  
Ersundu A. E., Karaduman G., Çelikbilek Ersundu M., Solak N., Aydın S.  
3rd International Congress on Ceramics, Osaka, Japan, 14 - 18 November 2010, pp.1
- LXXI. Crystallization Kinetics of TeO<sub>2</sub>-B<sub>2</sub>O<sub>3</sub> Glasses**  
Yardimci D., Çelikbilek Ersundu M., Ersundu A. E., Solak N., Aydın S.  
3rd International Congress on Ceramics, Osaka, Japan, 14 - 18 November 2010, pp.1
- LXXII. Characterization Studies in the TeO<sub>2</sub>-WO<sub>3</sub> System**  
Çelikbilek Ersundu M., Ersundu A. E., Solak N., Aydın S.  
15th International Metallurgy & Materials Congress, İstanbul, Turkey, 11 - 13 November 2010, pp.2166-2174
- LXXIII. Characterization Studies in the Glassy Region of the TeO<sub>2</sub>-B<sub>2</sub>O<sub>3</sub> System**  
Yardimci D., Çelikbilek Ersundu M., Ersundu A. E., Solak N., Aydın S.  
Materials Science and Technology Conference and Exhibition (MS&T'10), Texas, United States Of America, 17 - 21 October 2010, pp.179-184
- LXXIV. Kinetic Studies on the Tungsten Tellurite Glasses**  
Çelikbilek Ersundu M., Ersundu A. E., Solak N., Aydın S.  
Materials Science and Technology Conference and Exhibition (MS&T'10), Texas, United States Of America, 17 - 21 October 2010, pp.146-155
- LXXV. Effect of Cooling Conditions on Glass Forming Ability of the TeO<sub>2</sub> - WO<sub>3</sub> System**  
Çelikbilek Ersundu M., Ersundu A. E., Solak N., Aydın S.  
Materials Science and Technology Conference and Exhibition (MS&T'10), Texas, United States Of America, 17 - 21 October 2010, pp.226-232
- LXXVI. Phase Studies in the TeO<sub>2</sub>-WO<sub>3</sub> System**  
Ersundu A. E., Çelikbilek Ersundu M., Karaduman G., Solak N., Aydın S.  
1st International Ceramic, Glass, Porcelain, Enamel, Glaze and Pigment Congress (SERES'09), Eskişehir, Turkey, 12 - 14 October 2009, pp.1181-1188
- LXXVII. Experimental Phase Studies in the TeO<sub>2</sub>-CdO System**  
Karaduman G., Çelikbilek Ersundu M., Ersundu A. E., Solak N., Tatar D., Aydın S.  
11th International Conference and Exhibition of the European Ceramic Society, Krakow, Poland, 21 - 25 June 2009, pp.771-774
- LXXVIII. Microstructural and Thermal Characterization of the TeO<sub>2</sub>-WO<sub>3</sub> System**  
Çelikbilek Ersundu M., Karaduman G., Ersundu A. E., Solak N., Tatar D., Aydın S.  
11th International Conference and Exhibition of the European Ceramic Society, Krakow, Poland, 21 - 25 June 2009, pp.712-715
- LXXIX. Experimental Phase Studies in the TeO<sub>2</sub>-WO<sub>3</sub> System**  
Ersundu A. E., Çelikbilek Ersundu M., Karaduman G., Solak N., Aydın S.  
TMS 2009 Annual Meeting & Exhibition, California, United States Of America, 15 - 19 February 2009, pp.366
- LXXX. Developing the Surface Features of Mg AZ91D Alloy by Micro Arc Oxidation Process**  
Gönüllü Y., Çelikbilek Ersundu M., Özkahraman B., Yılmaz S., Macit K., Yılmaz S.  
14th International Metallurgy & Materials Congress, İstanbul, Turkey, 14 - 16 October 2008, pp.1353-1360
- LXXXI. Farklı Başlangıç Malzemeleri ve Isıl İşlem Koşullarının Termokromik VO<sub>2</sub> İnce Film Eldesine Etkisi**  
Özdemir Yanık M. C., Çelikbilek Ersundu M., Ersundu A. E., Aydın S.  
9. Uluslararası Katılımlı Seramik Kongresi, Afyon, Turkey, 25 - 27 November 2015, pp.146

## Other Publications

1. Tellürit Sistemlerin Camlaşma Davranışlarının, Cam Özelliklerinin ve Termokromik Davranışlarının

## İncelenmesi

ÇELİKBİLEK ERSUNDU M.

Other, 2013

## II. TeO2-WO3 Sisteminin Termal ve Mikroyapısal İncelenmesi

ÇELİKBİLEK ERSUNDU M.

Other, 2009

## Supported Projects

Ersundu A. E., Çelikkbilek Ersundu M., TUBITAK Project, Katı hal aydınlatma sistemleri için lüminesans özellikli yeni nesil camların geliştirilmesi, 2020 - 2028

Ersundu A. E., Çelikkbilek Ersundu M., TUBITAK Project, Yeni nesil güçlendirilmiş fonksiyonel ince cam ve cam seramiklerin geliştirilmesi, 2020 - 2028

Çelikkbilek Ersundu M., Ersundu A. E., Pv K., Horizon Europe Project, AgriPV system with climate, water and light spectrum control for safe, healthier and improved crops production, 2022 - 2026

Bilgin Eran B., Ocak H., Yılmaz Canlı N., Akdaş Kılıç H., Çelikkbilek Ersundu M., TUBITAK Project, Yeni Agregasyon Kaynaklı Emisyon Aktif Kiral Sivi Kristal Malzemeler: Sentez, Mesomorfik, Fotofiziksel Ve Elektro-Optik Özelliklerin İncelenmesi, 2022 - 2024

Ersundu A. E., Çelikkbilek Ersundu M., TUBITAK Project, Development of Dual Quantum Dot-Doped Glass Nanocomposite-Based Luminescent Solar Concentrators, 2022 - 2024

Ersundu A. E., Çelikkbilek Ersundu M., Genç A., Vahedigharehchopogh N., Erol E., Project Supported by Higher Education Institutions, Development of recyclable LEDs for sustainability in energy efficient lighting technologies, 2022 - 2023

ÇELİKBİLEK ERSUNDU M., BEDGE B., İLTER E., Project Supported by Higher Education Institutions, Sera üst cephelerinde kullanıma yönelik kırmızı ışımaya özellikli Eu<sup>3+</sup>/Sm<sup>3+</sup> katkılı lüminesan camların geliştirilmesi, 2022 - 2023

Ersundu A. E., Çelikkbilek Ersundu M., Korkmaz U., Özlem B., Project Supported by Higher Education Institutions, Development of rare earth element doped glasses reinforced with blue glowing carbon dots for white LED applications, 2022 - 2023

ÇELİKBİLEK ERSUNDU M., Paşalar Ö. D., Project Supported by Higher Education Institutions, Elektrik alan destekli iyon değişim prosesinin kimyasal temperleme verimine etkisinin incelenmesi, 2021 - 2023

Ersundu A. E., Çelikkbilek Ersundu M., TÜBİTAK International Bilateral Joint Cooperation Program Project, Full-color tunable emission of lanthanide-doped monolithic glasses upon single beam irradiation for laser-based volumetric displays, 2021 - 2023

ERSUNDU A. E., Kırışlı O., ÇELİKBİLEK ERSUNDU M., Project Supported by Higher Education Institutions, Aydınlatma teknolojisinde kullanılmak üzere yüksek ısı ve kimyasal kararlılıkta CsPbBr<sub>3</sub> perovskit kuantum nokta ve lantanit eş-katkılı cam nanokompozitlerin geliştirilmesi, 2021 - 2022

ÇELİKBİLEK ERSUNDU M., ERSUNDU A. E., Erol E., Project Supported by Higher Education Institutions, Sahtecilik Karşıtı Uygulamalar için CdSe ve CsPbBr<sub>3</sub> Kuantum Nokta Eş-Katkılı Cam Nanokompozitlerin Geliştirilmesi, 2021 - 2022

Çelikkbilek Ersundu M., Ersundu A. E., Genç A., Turan S., TÜBİTAK International Bilateral Joint Cooperation Program Project, Investigation the effect of different plasmonic structure geometries on upconversion efficiency enhancement of RE activated metallic nanoparticles , 2019 - 2022

ÇELİKBİLEK ERSUNDU M., ERSUNDU A. E., Project Supported by Higher Education Institutions, Geniş bant aralıklı kızılötesi lazer camların geliştirilmesi, 2019 - 2021

Çelikkbilek Ersundu M., Öğüt B., TUBITAK Project, Binek Araçların Hafifletilmesi Kapsamında Mekanik Performansı Yüksek Düşük Ağırlıklı Teknolojik Cam Geliştirilmesi, 2018 - 2021

Çelikkbilek Ersundu M., Demir B., Project Supported by Higher Education Institutions, Farklı Sodyum Bileşikleri ile Katılandırılarak Kirletilmiş Tuz Banyolarının Kimyasal Temperleme Verimliliğine Etkisi, 2019 - 2020

ÇELİKBİLEK ERSUNDU M., VAHEDIGHAREHCHOPOGH N., Project Supported by Higher Education Institutions, Holmiyum, Tulyum ve İterbiyum Üçlü Katkılı Tellürit Camların Üst Enerji Dönüşüm Lüminesans Özelliklerinin İncelenmesi, 2019 - 2020

ÇELİKBİLEK ERSUNDU M., Project Supported by Higher Education Institutions, Fotovoltaik Sistemlerde Kullanılan

Desenli İnce Camların Kimyasal Temperlenmesi, 2019 - 2020

ERSUNDU A. E., ÇELİKBİLEK ERSUNDU M., Project Supported by Higher Education Institutions, LED uygulamaları için Ho2O3, Er2O3, Tm2O3 içeren çok bileşenli camların ışımaya özelliklerinin incelenmesi, 2018 - 2020

Ersundu A. E., Çelikbilek Ersundu M., TÜBİTAK Project, Yüksek aydınlatma verimli beyaz LED eldesi amacıyla kuantum nokta ve nadir toprak elementi ikili katkısının tellürit nanokompozit camların ışımaya ve renk özelliklerine etkisinin incelenmesi, 2017 - 2020

Çelikbilek Ersundu M., Şen O., TÜBİTAK Project, 3D Printer ile Kalıp Üretimi ve Döküm Yöntemlerine Uygulanması, 2018 - 2019

ÇELİKBİLEK ERSUNDU M., Project Supported by Higher Education Institutions, Farklı Alümina Oranlarına Sahip Alümina Silikat ve Soda Kireç Silikat Camlarının Kimyasal Temperleme Davranışlarının İncelenmesi, 2018 - 2019

ÇELİKBİLEK ERSUNDU M., YÜKSELİCİ M. H., Project Supported by Higher Education Institutions, II-VI Kuantum Noktaların Soda-Kireç ve Boro-Silikat Camlarda Kontrollü Kristalizasyonu ve Kuantum Kısıtlama Özelliklerinin İncelenmesi, 2017 - 2019

Ersundu A. E., Çelikbilek Ersundu M., TÜBİTAK Project, Investigation of the effect of structural transformations on electrical conduction properties of transition metal oxide-doped heavy metal oxide glasses, 2017 - 2019

Çelikbilek Ersundu M., Ersundu A. E., Technopark, Türkiye Cam Sektörünün Mevcut Durumu ve Cam Sektörü Açısından Üniversite Sanayi İş Birliği Yol Haritası, 2018 - 2018

ÇELİKBİLEK ERSUNDU M., Project Supported by Higher Education Institutions, Alümina Silikat ve Soda Kireç Silikat Camların Kimyasal Temperlemesinde Kalınlık ve Kesme Etkisinin İncelenmesi, 2018 - 2018

ÇELİKBİLEK ERSUNDU M., Project Supported by Higher Education Institutions, Geçiş Metal Oksit Katkılı Ağır Metal Oksit Camların Geliştirilmesi , Optik ve Elektriksel Özelliklerinin İncelenmesi, 2016 - 2018

ÇELİKBİLEK ERSUNDU M., Project Supported by Higher Education Institutions, ZnTe Kuantum Nokta Katkılı Camların Geliştirilmesi ve Kuantum Kısıtlama Özelliklerinin İncelenmesi, 2016 - 2017

ÇELİKBİLEK ERSUNDU M., Project Supported by Higher Education Institutions, Opto-elektronik uygulamalarda kullanım amacıyla Sb2O3 esaslı ağır metal oksit camların geliştirilmesi, cam özelliklerinin ve camlaşma davranışlarının belirlenmesi, 2015 - 2017

Çelikbilek Ersundu M., Ersundu A. E., KOSGEB, Enerji Tasarrufu Sağlayan Termokromik Kaplamalı Akıllı Camların Geliştirilmesi, 2013 - 2015

Ersundu A. E., Aydın S., TÜBİTAK Project, İyon Değişim Prosesi ile Silika Esaslı Camlara Antibakteriyel Özellik Kazandırılması ve Camların Antibakteriyel Aktivitelerinin ve Yüzey Özelliklerinin İncelenmesi, 2013 - 2015

Ersundu A. E., Çelikbilek Ersundu M., Aydın S., Project Supported by Higher Education Institutions, Soda Kireç Camlara İyon Değişim Prosesi ile Antibakteriyel Özellik Kazandırılması, 2013 - 2015

Ersundu A. E., Çelikbilek Ersundu M., Project Supported by Other Official Institutions, Sıcaklık Etkisiyle Optik Özellik Değiştiren Yeni Nesil Termokromik Kaplamalı Akıllı Camlar, 2013 - 2014

Çelikbilek Ersundu M., Aydın S., Project Supported by Higher Education Institutions, Tellürit Cam Sistemlerin Termokromik Özelliklerinin Araştırılması, 2013 - 2013

Aydın S., Zayim E., TÜBİTAK Project, Termokromik Uygulamalarda Kullanım Amacıyla Alkali Oksit Katkılı Tungsten-Tellürit Cam Sistemlerin Geliştirilmesi Ve Termal, Yapısal, Spektroskopik Açından İncelenmesi, 2011 - 2013

Ersundu A. E., Çelikbilek Ersundu M., Aydın S., Project Supported by Higher Education Institutions, Sodyum-Tellürit Camların Termokromik Uygulamalarda Kullanımı Amacıyla Geliştirilmesi ve Sistemin Termal, Yapısal ve Spektroskopik Açından İncelenmesi, 2011 - 2013

Aydın S., Öveçoğlu M. L., Eryürek G., TÜBİTAK Project, Fiber Optik Kuvvetlendirici Ve Lazer Uygulamalarında Kullanılan TeO2-WO3-CdO Sisteminde Faz Dengelerinin Tespiti Ve Sistemin Termodinamik - Optik İncelenmesi, 2008 - 2010

Çelikbilek Ersundu M., Aydın S., Project Supported by Higher Education Institutions, TeO2-WO3 Sisteminde Faz Dengelerinin Tespiti ve Sistemin Termodinamik - Mikroyapısal - Kinetik İncelenmesi, 2008 - 2008

## Scientific Research / Working Group Memberships

Cam Araştırma Grubu, Yıldız Technical University, Türkiye, [www.glass.yildiz.edu.tr](http://www.glass.yildiz.edu.tr), 2014 - Continues

## Metrics

Publication: 137

Citation (WoS): 968

Citation (Scopus): 1514

H-Index (WoS): 19

H-Index (Scopus): 22

## Awards

Çelikbilek Ersundu M., Turkish Academy of Sciences (TÜBA) Outstanding Young Scientists Award (GEBİP), Türkiye Bilimler Akademisi (Tüba) , November 2022

ÇELİKBİLEK ERSUNDU M., Metalik Fikirler II. Arge Proje Pazarı Birincilik Ödülü, İstanbul Demir ve Demirdışı Metaller İhracatçıları Birliği, November 2013

ÇELİKBİLEK ERSUNDU M., Hayatımın Fikri, Gençlik için Girişimcilik Birincilik Ödülü, AVEA & TOG, November 2009

ÇELİKBİLEK ERSUNDU M., 9. Yönetim Bilimleri Kongresi, İnovasyon Proje Yarışması Birincilik Ödülü, İstanbul Teknik Üniversitesi İşletme Mühendisiği, April 2008