

Assoc. Prof. ÖVGÜ CEYDA YELGEL

Personal Information

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Education Information

Doctorate, University of Exeter, College Of Engineering, Mathematics And Physical Sciences, England 2010 - 2013

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Thermoelectric Properties of V-VI Semiconductor Alloys and Nanocomposites, University of Exeter, College Of Engineering, Mathematics And Physical Sciences, 2013

Research Areas

Renewable energy, Material science and engineering, Interdisciplinary Physics and Related Science and Technology Areas, Condensed Matter 1: Structural, Mechanical and Thermal Properties, Intensive Article 2: Electronic Structure, Electric, Magnetic and Optical Properties

Academic Titles / Tasks

Associate Professor, Recep Tayyip Erdogan University, Mühendislik Fakültesi, Elektrik Ve Elektronik Mühendisliği Bölümü, 2019 - Continues

Associate Professor, Recep Tayyip Erdogan University, Mühendislik Fakültesi, Malzeme Bilimi Ve Nanoteknoloji Muhendisligi, 2018 - 2019

Research Assistant PhD, University of Manchester, Department Of Physics And Astronomy, Physics, 2017 - 2019

Research Assistant PhD, Recep Tayyip Erdogan University, Muhendislik Fakultesi, Malzeme Bilimi Ve Nanoteknoloji Muhendisligi, 2014 - 2018

Research Assistant, University of Exeter, College Of Engineering, Mathematics And Physical Sciences, 2010 - 2012

Academic and Administrative Experience

Head of Department, Recep Tayyip Erdogan University, Mühendislik Ve Mimarlık Fakültesi, Elektrik Ve Elektronik Mühendisliği, 2020 - Continues

Courses

GÜÇ SİSTEMLERİNİN ANALİZİ, Undergraduate, 2021 - 2022
OLASILIK VE İSTATİSTİK, Undergraduate, 2020 - 2021
YENİLENEBİLİR ENERJİ KAYNAKLARI, Undergraduate, 2020 - 2021
YAPAY ZEKA, Undergraduate, 2021 - 2022
RASTGELE SÜREÇLER, Undergraduate, 2021 - 2022
OLASILIK, Undergraduate, 2020 - 2021
OLASILIK, Undergraduate, 2019 - 2020
GÜÇ SİSTEMLERİNE GİRİŞ, Undergraduate, 2020 - 2021
YENİLENEBİLİR ENERJİ KAYNAKLARI, Undergraduate, 2019 - 2020
RASTGELE SÜREÇLER, Undergraduate, 2020 - 2021
GÜÇ SİSTEMLERİNE GİRİŞ, Undergraduate, 2019 - 2020

Jury Memberships

Post Graduate, Post Graduate, Recep Tayyip Erdoğan Üniversitesi, October, 2021

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **Theoretical and experimental evaluation of thermoelectric performance of alkaline earth filled skutterudite compounds**
Yelgel Ö. C. , Ballıkaya S.
JOURNAL OF SOLID STATE CHEMISTRY, vol.284, 2020 (Journal Indexed in SCI)
- II. **Thermoelectric transport behaviours of n-type Mg-2 (Si,Sn,Ge) quaternary solid solutions**
Yelgel O. C. , Yelgel C.
JOURNAL OF MAGNESIUM AND ALLOYS, vol.7, no.3, pp.514-521, 2019 (Journal Indexed in SCI)
- III. **Structural and electronic properties of MoS₂, WS₂, and WS₂/MoS₂ heterostructures encapsulated with hexagonal boron nitride monolayers**
Yelgel C., Yelgel O. C. , Gulseren O.
JOURNAL OF APPLIED PHYSICS, vol.122, no.6, 2017 (Journal Indexed in SCI)
- IV. **Structural and Electronic Properties of MoS₂, WS₂, and WS₂/MoS₂ Heterostructures Intercalated with Bilayer Hexagonal Boron Nitride**
YELGEL C., YELGEL Ö. C. , gulseren o.
JOURNAL OF APPLIED PHYSICS, vol.xx, pp.1-25, 2017 (Journal Indexed in SCI)
- V. **Thermoelectric properties of Mg₂X (X = Si, Ge) based bulk and quantum well systems**
Yelgel O. C.
JOURNAL OF APPLIED PHYSICS, vol.121, no.3, 2017 (Journal Indexed in SCI)
- VI. **Theoretical study of thermoelectric properties of p-type Mg-2 Si_{1-x}Sn_x solid solutions doped with Ga**
Yelgel O. C.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.691, pp.151-158, 2017 (Journal Indexed in SCI)
- VII. **Theoretical study of thermoelectric properties of n-type doped Mg₂Si_{0.4}Sn_{0.6} solid solutions**
Yelgel O. C.
PHILOSOPHICAL MAGAZINE, vol.96, no.6, pp.560-575, 2016 (Journal Indexed in SCI)
- VIII. **Thermoelectric properties of Bi₂Se₃/Bi₂Te₃/Bi₂Se₃ and Sb₂Te₃/Bi₂Te₃/Sb₂Te₃ quantum well systems**
Yelgel O. C. , Srivastava G. P.
PHILOSOPHICAL MAGAZINE, vol.94, no.18, pp.2072-2099, 2014 (Journal Indexed in SCI)

- IX. **Thermoelectric properties of p-type $(\text{Bi}_2\text{Te}_3)_x(\text{Sb}_2\text{Te}_3)_{1-x}$ single crystals doped with 3 wt. % Te**
Yelgel O. C. , Srivastava G. P.
JOURNAL OF APPLIED PHYSICS, vol.113, no.7, 2013 (Journal Indexed in SCI)
- X. **Thermoelectric properties of n-type $\text{Bi}_2(\text{Te}_{0.85}\text{Se}_{0.15})_3$ single crystals doped with CuBr and SbI₃**
Yelgel O. C. , Srivastava G. P.
PHYSICAL REVIEW B, vol.85, no.12, 2012 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **Theoretical Study of Thermal Conductivities of n- and p-type Doped $\text{Mg}_2\text{Si}_{1-x}\text{Sn}_x$ Thermoelectric Solid Solutions**
YELGEL Ö. C.
Sakarya University Journal Of Science, vol.21, no.6, pp.1-10, 2017 (National Refreed University Journal)

Books & Book Chapters

- I. **Recent Advances on Mg_2XIV Based Thermoelectric Materials: A Theoretical Approach**
YELGEL Ö. C.
in: Advanced Thermoelectric Materials, Chong Rae Park, Editor, Scrivener Publishing Llc - Wiley-Vch Verlag
Weinheim Gmbh, Beverly, pp.229-266, 2019

Refereed Congress / Symposium Publications in Proceedings

- I. **Thermal Conductivities of n- and p-typed $\text{Mg}_2\text{Si}_{1-x}\text{Sn}_x$ Thermoelectric Solid Solution**
YELGEL Ö. C.
INTERNATIONAL CONFERENCE ON PROGRESS IN APPLIED SCIENCE 2017 - ICPAS 2017, 4 - 06 January 2017
- II. **Detailed Theoretical Investigation and Comparison of the Thermal Conductivities of n- and p-type Bi_2Te_3 Based Alloys**
YELGEL Ö. C. , Srivastava G. P.
Mater. Res. Soc. Symp. Proc., San Francisco, United States Of America, 1 - 07 April 2013, no.1543, pp.1-6
- III. **A Detailed Theoretical Study of the Thermal Conductivity of $\text{Bi}_2(\text{Te}_{0.85}\text{Se}_{0.15})_3$ Single Crystals**
YELGEL Ö. C. , Srivastava G. P.
Mater. Res. Soc. Symp. Proc, Boston, United States Of America, 1 - 07 December 2012, no.1404, pp.1-6

Supported Projects

Yelgel Ö. C. , Tören M., MOLLAHASANOĞLU H., TUBITAK Project, Termoelektrik Soğutucuların Yağlı Tip Dağıtım Transformatörlerinin Faydalı Ömürlerine Etkisinin İncelenmesi, 2021 - 2022

Yelgel Ö. C. , TUBITAK Project, Termoelektrik Taşınım Özelliklerinin Nanotel Yapılı Malzemeler İçin İncelenmesi, 2021 - 2022

BAL ALTUNTAŞ D., YELGEL Ö. C. , Project Supported by Higher Education Institutions, Dikalkojen nanoyapılar kullanılarak yeni nesil biyosensörlerin geliştirilmesi, 2017 - 2019

YELGEL Ö. C. , TUBITAK Project, N- ve P-Tip Katkılı Mg_2X (X=Si, Ge, Sn) Tabanlı Sistemlerin Termoelektrik Özelliklerinin Teorik Olarak İncelenmesi, 2016 - 2017

YELGEL Ö. C. , Project Supported by Higher Education Institutions, N- ve P-Tip Katkılı Mg_2X (X=Si, Ge, Sn) Tabanlı Kuantum Kuyu Sistemlerinin Termoelektrik Özelliklerinin Teorik Olarak İncelenmesi, 2016 - 2017

Memberships / Tasks in Scientific Organizations

International Thermoelectric Society (ITS), Member, 2012 - Continues

Materials Research Society, Member, 2011 - Continues

Scientific Refereeing

TUBITAK Project, 1002 - Quick Support Program, Recep Tayyip Erdogan University, Turkey, October 2021

JOURNAL OF ALLOYS AND COMPOUNDS, SCI Journal, August 2021

JOURNAL OF ALLOYS AND COMPOUNDS, SCI Journal, May 2021

FRONTIERS IN MATERIALS, National Scientific Refreed Journal, January 2021

JOURNAL OF ALLOYS AND COMPOUNDS, SCI Journal, November 2020

JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T, Journal Indexed in SSCI, October 2020

MATERIALS RESEARCH EXPRESS, SCI Journal, October 2020

Journal of Alloys and Compounds, SCI Journal, August 2019

Journal of Physics and Chemistry of Solids, SCI Journal, February 2019

Intermetallics, SCI Journal, December 2018

Journal of Alloys and Compounds, SCI Journal, July 2018

Scientific Reports, SCI Journal, May 2018

Philosophical Magazine, SCI Journal, March 2018

International Journal of Hydrogen Energy, SCI Journal, July 2017

Journal of Applied Physics, SCI Journal, March 2017

Journal of Alloys and Compounds, SCI Journal, November 2016

International Journal of Applied Mathematics and Theoretical Physics, SCI Journal, March 2015

American Journal of Applied Sciences, SCI Journal, March 2015

Philosophical Magazine, SCI Journal, January 2015

Materials Research Society symposia proceedings, SCI Journal, January 2013

Edit Congress and Symposium Activities

10th International Scientific Research Congress Science and Engineering, Session Moderator, Ankara, Turkey, 2021

7th International Scientific Research Congress Science and Engineering, Attendee, Ankara, Turkey, 2020

ISTANBUL INTERNATIONAL CONFERENCE ON PROGRESS IN APPLIED SCIENCE 2017 - ICPAS 2017, Attendee, İstanbul, Turkey, 2017

Materials Research Society Spring Meeting and Exhibit, Attendee, New York, United States Of America, 2013

Materials Research Society Fall Meeting and Exhibit, Attendee, Massachusetts, United States Of America, 2011

VII International Workshop on Semiconductor Surface Passivation, Attendee, Kraków, Poland, 2011

Citations

Total Citations (WOS):82

h-index (WOS):4

Scholarships

2008 YLSY Bursu, University, 2008 - 2013

Awards

YELGEL Ö. C. , Üniversite Akademik Tesvik Birinciligi, RECEP TAYYIP ERDOGAN UNIVERSITESI GELISTIRME VAKFI, May 2017

YELGEL Ö. C. , Outstanding Author (Mukemmel Yazarlik), Journal of Applied Physics, May 2013

YELGEL Ö. C. , Gazi Üniversitesi Fen Edebiyat Fakültesi Fakülte İkinciligi ve Bölüm İkinciligi Odulu, Gazi Üniversitesi, June 2008