

## Asst. Prof. TAYFUN ÇETİN

### Personal Information

**Email:** tayfuncetin@hakkari.edu.tr

**Web:** <https://avesis.hakkari.edu.tr/tayfuncetin>

### International Researcher IDs

ScholarID: I7bjFPsAAAAJ

Yoksis Researcher ID: 302173

### Education Information

Doctorate, Karabuk University, Fen Bilimleri Enstitüsü, İmalat Mühendisliği (Dr), Turkey 2014 - 2019

Undergraduate, Karabuk University, Mühendislik Fakültesi, Metalurji Ve Malzeme Mühendisliği Bölümü, Turkey 2014 - 2016

Postgraduate, Fırat University, Fen Bilimleri Enstitüsü, Metalurji Eğitimi (YI) (Tezli), Turkey 2010 - 2014

Undergraduate, Fırat University, Teknik Eğitim Fakültesi, Metal Eğitimi Bölümü, Turkey 2006 - 2010

### Dissertations

Doctorate, GAZ ATOMİZASYON YÖNTEMİYLE AM60 TOZU ÜRETİMİ VE KARAKTERİZASYONU, Karabuk University, Fen Bilimleri Enstitüsü, İmalat Mühendisliği (Dr), 2019

Postgraduate, Dupleks paslanmaz çeliğin Ni3Al ile kaplanabilirliğinin araştırılması, Fırat University, Fen Bilimleri Enstitüsü, Metalurji Eğitimi (YI) (Tezli), 2014

### Research Areas

Metallurgical and Materials Engineering, Material science and engineering, Production Metallurgy

### Academic Titles / Tasks

Hakkari University, Yüksekova Meslek Yüksekokulu, Elektrik Ve Enerji Bölümü, 2020 - Continues

Hakkari University, Yüksekova Meslek Yüksekokulu, Elektrik Ve Enerji Bölümü, 2019 - Continues

### Academic and Administrative Experience

Hakkari University, 2020 - Continues

Hakkari University, 2019 - Continues

### Courses

Koruyucu Bakım Arıza, Associate Degree, 2019 - 2020

Temel Elektrik Elektronik, Associate Degree, 2019 - 2020

Teknolojinin Bilimsel İlkeleri, Associate Degree, 2019 - 2020  
Temel Tesilat İşlemleri, Associate Degree, 2019 - 2020  
Boru Kaynakçılığı, Associate Degree, 2019 - 2020  
Bilgi Teknolojileri ve Uygulamaları, Undergraduate, 2018 - 2019  
Yabancı Dilde Okuma ve Konuşma, Undergraduate, 2018 - 2019  
Ticari Matematik, Associate Degree, 2018 - 2019  
Tribology, Undergraduate, 2018 - 2019  
Dynamics of Machinery, Undergraduate, 2017 - 2018  
Hidrolik ve Pnömatik, Undergraduate, 2017 - 2018  
Bitirme Projesi II, Undergraduate, 2017 - 2018  
Mechanical Vibrations, Undergraduate, 2017 - 2018  
Graduation Thesis, Undergraduate, 2017 - 2018  
Raylı Sistemler Mühendisliği Labaratuvarı, Undergraduate, 2017 - 2018  
Mekanik Titreşimler, Undergraduate, 2017 - 2018  
Makine Dinamiği, Undergraduate, 2017 - 2018  
Bitirme Tezi, Undergraduate, 2017 - 2018  
Railway System Engineering Laboratory, Undergraduate, 2017 - 2018  
Micro and Nanotechnology, Undergraduate, 2016 - 2017  
Algorithms and Data Structures, Undergraduate, 2016 - 2017  
Bilgisayar Programlama, Undergraduate, 2016 - 2017  
Bilgisayar Programlama II, Undergraduate, 2015 - 2016

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

- I. **Ti<sub>2</sub>N<sub>Tx</sub> MXene materials derived from Ti<sub>2</sub>AlN MAX phases: Their characterization and electrocatalytic activity toward hydrazine electrooxidation**  
Ulaş B., ÇETİN T., Topuz M., Akınay Y.  
International Journal of Hydrogen Energy, vol.82, pp.892-900, 2024 (SCI-Expanded)
- II. **Ti<sub>3</sub>C<sub>2</sub>T<sub>x</sub> MXene-functionalized Hydroxyapatite/Halloysite nanotube filled poly- (lactic acid) coatings on magnesium: In vitro and antibacterial applications**  
Topuz M., Akınay Y., Karatas E., ÇETİN T.  
Journal of Magnesium and Alloys, vol.12, no.9, pp.3758-3771, 2024 (SCI-Expanded)
- III. **An Efficient Supported Cu(I) Catalyst for the Amination of Aryl Halides with Sodium Azide**  
Fekri S., Mansoori Y., Akınay Y., ÇETİN T., John M.  
ChemNanoMat, vol.10, no.6, 2024 (SCI-Expanded)
- IV. **Novel Ti<sub>3</sub>C<sub>2</sub>X<sub>2</sub> MXene supported BaMnO<sub>3</sub> nanoparticles as hydrazine electrooxidation catalysts**  
Ulaş B., ÇETİN T., KAYA Ş., Akınay Y., DEMİR KIVRAK H.  
International Journal of Hydrogen Energy, vol.58, pp.726-736, 2024 (SCI-Expanded)
- V. **Novel g-C<sub>3</sub>N<sub>4</sub> nanorods/Cu<sub>3</sub>BiS<sub>3</sub> nanocomposites: Outstanding photocatalysts with p-n heterojunction for impressively detoxification of water under visible light**  
Hemmati-Eslamli P., Habibi-Yangjeh A., Akınay Y., ÇETİN T.  
Journal of Photochemistry and Photobiology A: Chemistry, vol.443, 2023 (SCI-Expanded)
- VI. **Synthesis and characterization of Pd doped MXene for hydrogen production from the hydrolysis of methylamine borane: Effect of cryogenic treatment**  
Karataş ., ÇETİN T., Akınay Y., Gülcan M.  
Journal of the Energy Institute, vol.109, 2023 (SCI-Expanded)
- VII. **Rh (0) nanoparticles impregnated on two-dimensional transition metal carbides, MXene, as an effective nanocatalyst for ammonia-borane hydrolysis**  
Karataş ., ÇETİN T., Akkuş İ. N., Akınay Y., Gülcan M.  
International Journal of Energy Research, vol.46, no.8, pp.11411-11423, 2022 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Recent progress of electromagnetic wave absorbers: A systematic review and bibliometric approach**  
Aknay Y., GÜNEŞ Ü., Çolak B., ÇETİN T.  
ChemPhysMater, vol.2, no.3, pp.197-206, 2023 (Scopus)
- II. **Experimental Investigation of the Mechanical and Microstructure Properties of S49 Rail Steel**  
RIDVANOĞULLARI A., ÇETİN T., AKKAŞ M.  
European Journal of Technique, vol.11, no.1, pp.43-46, 2021 (Peer-Reviewed Journal)
- III. **Plasma Sprayed Alumina-Titania Based Coatings on Magnesium Substrates**  
AKKAŞ M., ÇETİN T., Buluş E., Sakarya Buluş G.  
Journal of Materials and Electronic Devices, vol.6, no.1, pp.6-10, 2020 (Peer-Reviewed Journal)
- IV. **Production and Characterization of Natural Sourced Hydroxyapatite Added Polystyrene Tissue Scaffolds by Electrospinning**  
Sakarya Buluş G., Buluş E., AKKAŞ M., ÇETİN T., Yaman E., Tuğçe A.  
Journal of Materials and Electronic Devices, vol.6, no.1, pp.11-17, 2020 (Peer-Reviewed Journal)
- V. **Use of Nanofiber Membranes Produced by Electrospinning Technique in Textile Industry Applications**  
Sakarya Buluş G., Buluş E., AKKAŞ M., ÇETİN T.  
Journal of Materials and Electronic Devices, vol.6, no.1, pp.1-6, 2020 (Peer-Reviewed Journal)
- VI. **EFFECT OF WC REINFORCED ON MICROSTRUCTURE AND MECHANICAL PROPERTIES OF CUALMN ALLOYS PRODUCED BY HOT PRESSING METHOD**  
ÇETİN T., AKKAŞ M.  
European Journal of Technique, vol.10, no.1, pp.173-183, 2020 (Peer-Reviewed Journal)
- VII. **Gaz Atomizasyon Yöntemi ile AZ31 Mg Tozu Üretiminde Gaz Basıncının Etkisinin Araştırılması**  
AKKAŞ M., EM AKRA K. M., ÇETİN T., BOZ M.  
Gümüşhane Üniversitesi Fen Bilimleri Dergisi, vol.9, no.2, pp.215-221, 2019 (Peer-Reviewed Journal)
- VIII. **Investigation of Gas Pressure Effect on Powder Characterization of Al-12Si Alloy Produced by Gas Atomization Method**  
EM AKRA K. M., ÇETİN T., OCAK A. O., AKKAŞ M., BOZ M.  
International Science and Technology Journal, no.16, pp.1-14, 2019 (Peer-Reviewed Journal)
- IX. **GAZ ATOMİZASYON YÖNTEMİ İLE AM60 MAGNEZYUM ALAŞIM TOZU ÜRETİMİ VE KARAKTERİZASYONU**  
AKKAŞ M., ÇETİN T., BOZ M.  
Süleyman Demirel Üniversitesi Uluslararası Teknolojik Bilimler Dergisi, vol.10, no.3, pp.1-9, 2018 (Peer-Reviewed Journal)
- X. **Gaz atomizasyonu yöntemi ile Al12Si tozu üretimi ve karakterizasyonu**  
AKKAŞ M., ÇETİN T., BOZ M.  
Dicle Üniversitesi Mühendislik Fakültesi Mühendislik Dergisi, vol.9, no.2, pp.795-804, 2018 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Hydrogen Evolution Reaction Behavior of Pd-Doped MXene Catalysts**  
ÇETİN T.  
SMART MATERIALS 2023, Roma, Italy, 13 - 14 April 2023
- II. **Porous Cryo-Dried MXene Supported Pd (0) Nanoparticles for The Methylamine-Borane Hidrolysis as An Effective and Stable Catalyst**  
KARATAŞ Y., AKINAY Y., GÜLCAN M., ÇETİN T.  
NANOSCIENCE & NANOTECHNOLOGY CONFERENCE, Ankara, Turkey, 5 - 08 September 2022
- III. **Synthesis of BaO Modified MXene catalyst for the hydrogen evolution reaction**

ÇETİN T., AKINAY Y.

GRAPHENE SUMMIT 2021, Oregon, United States Of America, 22 - 23 July 2021

IV. **Effect of Cr Addition on Microstructure and Mechanical Properties of Cu Al Mn Alloys Produced by Hot Pressing Method**

ÇETİN T., GÖK M. G., AKKAŞ M.

International Materials Technologies and Metallurgy Conference 2019 – MTM 2019, İstanbul, Turkey, 31 October - 02 November 2019

V. **Effect of Ni Addition on Microstructure and Mechanical Properties of Cu-Al-Mn Alloys Produced by Hot Pressing Method**

ÇETİN T., AKKAŞ M., GÖK M. G.

International Materials Technologies and Metallurgy Conference 2019 – MTM 2019, İstanbul, Turkey, 31 October - 01 November 2019

VI. **Dublex Paslanmaz Çeliğin Farklı Basınçlarda Üretilen Ni<sub>3</sub>Al İle Kaplanması 4 Uluslararası Kaynak Teknolojileri Konferansı ve Sergisi**

KATI N., ÇETİN T., OZAN S., ÇALIGÜLÜ U., ÇAY V. V.

2016, 11 - 13 May 2016, pp.255-264

## Supported Projects

ÇETİN T., Project Supported by Higher Education Institutions, MXene Esaslı İleri Malzemelerinin Geliştirilmesi ve Uygulanması: Enerji Üretim Aktiviteleri, 2023 - Continues

Çetin T., Project Supported by Higher Education Institutions, 2024 - 2026

Çetin T., Akınay Y., Project Supported by Higher Education Institutions, Ti<sub>2</sub>AlN ve Ti<sub>3</sub>AlC<sub>2</sub> MAX Fazlarından Türetilen Mxene Malzemelerinin Süper İletkenlik Davranışlarının 0-100 K Sıcaklık Aralığında İncelenmesi, 2024 - 2025

ÇETİN T., Project Supported by Higher Education Institutions, Platin Yüklenmiş MXene Fazının Hidrojen Üretim Performansının İncelenmesi, 2022 - 2023

ÇETİN T., Project Supported by Higher Education Institutions, MXene / Sn ile güçlendirilmiş Al Alaşımli Kompozitlerin Hazırlanması ve Özellikleri, 2021 - 2022

ÇETİN T., Project Supported by Higher Education Institutions, Toz metalürjisi yöntemi ile üretilen Cu-Al-Mn alaşımının, mekanik özellikleri üzerine alaşım elementlerinin etkisinin incelenmesi, 2019 - 2020

ÇETİN T., Project Supported by Higher Education Institutions, Gaz Atomizasyon Yöntemiyle AM60 Tozu Üretimi ve Karakterizasyonu, 2016 - 2019

## Metrics

Publication: 23

Citation (Scopus): 152

H-Index (Scopus): 6