

## Res. Asst. CAN ERDOĞAN

### Personal Information

Office Phone: [+90 312 210 4272](tel:+903122104272)

Email: [cane@metu.edu.tr](mailto:cane@metu.edu.tr)

Web: <https://avesis.metu.edu.tr/cane>

### International Researcher IDs

ScholarID: LMIKRCKAAAAJ

ORCID: 0000-0002-7560-0700

Publons / Web Of Science ResearcherID: ABA-1621-2020

ScopusID: 57215656370

Yoksis Researcher ID: 306783

### Education Information

Doctorate, Middle East Technical University, Faculty of Engineering, Department of Aerospace Engineering, Turkey 2021  
- Continues

Postgraduate, Middle East Technical University, Faculty of Engineering, Department of Aerospace Engineering, Turkey  
2018 - 2021

Undergraduate, Middle East Technical University, Faculty of Engineering, Department of Aerospace Engineering, Turkey  
2012 - 2018

### Dissertations

Postgraduate, NUMERICAL IMPLEMENTATION AND ANALYSIS OF A POROUS PLASTICITY MODEL FOR DUCTILE  
DAMAGE PREDICTION, Middle East Technical University, Faculty of Engineering, Department of Aerospace Engineering,  
2021

### Research Areas

Aeronautical and Space Engineering

### Academic Titles / Tasks

Research Assistant, Middle East Technical University, Faculty of Engineering, Department of Aerospace Engineering,  
2019 - Continues

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

- I. **Phase field modeling of fatigue crack growth retardation under single cycle overloads**  
Waseem S., ERDOĞAN C., YALÇINKAYA T.  
International Journal of Fatigue, vol.179, 2024 (SCI-Expanded)
- II. **A numerical ballistic performance investigation of ArmoX 500T steel through ductile damage models**

Göçmen Y., ERDOĞAN C., YALÇINKAYA T.

Engineering Fracture Mechanics, vol.292, 2023 (SCI-Expanded)

III. **A Numerical Study on the Ballistic Performance of Projectiles Formed by Shaped Charge**

Göçmen Y., ERDOĞAN C., YALÇINKAYA T.

Journal of Applied Mechanics, Transactions ASME, vol.90, no.11, 2023 (SCI-Expanded)

IV. **Ductile failure of Inconel 718 during flow forming process and its numerical investigation**

Erdoğan C., Vural H., Karakaş A., Fenercioglu T. O., Yalçinkaya T.

Engineering Failure Analysis, vol.152, 2023 (SCI-Expanded)

V. **Potential of high compressive ductility of ultrafine grained copper fabricated by severe plastic deformation**

Asano M., Yuasa M., Miyamoto H., Tanaka T., Erdoğan C., Yalçinkaya T.

Metals, vol.10, no.11, pp.1-12, 2020 (SCI-Expanded)

## **Refereed Congress / Symposium Publications in Proceedings**

I. **Phase Field Fracture Modelling of Crack Initiation and Propagation in Dual-Phase Microstructures**

Tatli B., Erdoğan C., Ozcan M. E., Yalçinkaya T.

3rd International Workshop on Plasticity, Damage and Fracture of Engineering Materials, IWPDF 2023, İstanbul, Turkey, 4 - 06 October 2023, vol.61, pp.12-19

II. **Dwell fatigue fracture in Ti microstructures through crystal plasticity and phase field fracture frameworks**

Bulut O., Erdoğan C., Yalçinkaya T.

3rd International Workshop on Plasticity, Damage and Fracture of Engineering Materials, IWPDF 2023, İstanbul, Turkey, 4 - 06 October 2023, vol.61, pp.3-11

III. **Experimental identification of uncoupled ductile damage models and application in flow forming of IN718**

Vural H., Erdoğan C., Karakaş A., Fenercioglu T. O., Yalçinkaya T.

26th International ESAFORM Conference on Material Forming, ESAFORM 2023, Krakow, Poland, 19 - 21 April 2023, vol.28, pp.807-816

IV. **Phase field modeling of ductile fracture and application in metal forming**

Waseem S., Erdoğan C., Yalçinkaya T.

26th International ESAFORM Conference on Material Forming, ESAFORM 2023, Krakow, Poland, 19 - 21 April 2023, vol.28, pp.1593-1602

V. **Effect of process parameters on the ductile failure behavior of flow forming process**

Erdoğan C., Vural H., Fenercioglu T. O., Yalçinkaya T.

23rd European Conference on Fracture, ECF 2022, Funchal, Portugal, 27 June - 01 July 2022, vol.42, pp.1643-1650

VI. **Numerical analysis of ballistic impact through FE and SPH methods**

Göçmen Y., Vural H., Erdoğan C., Yalçinkaya T.

23rd European Conference on Fracture, ECF 2022, Funchal, Portugal, 27 June - 01 July 2022, vol.42, pp.1736-1743

VII. **Numerical analysis and extension of a porous plasticity model for ductile failure**

Erdoğan C., Yalçinkaya T.

2nd International Workshop on Plasticity, Damage and Fracture of Engineering Materials, Ankara, Turkey, 18 - 20 August 2021, pp.117

VIII. **Ductile failure prediction during the flow forming process**

Vural H., Erdoğan C., Fenercioglu T. O., Yalçinkaya T.

2nd International Workshop on Plasticity, Damage and Fracture of Engineering Materials, IWPDF 2021, Ankara, Turkey, 18 - 20 August 2021, vol.35, pp.25-33

IX. **Formulation and Implementation of a New Porous Plasticity Model**

Yalçinkaya T., Erdoğan C., Tandoğan İ. T., Cocks A.

1st International Workshop on Plasticity, Damage and Fracture of Engineering Materials (IWPDF), Ankara, Turkey,

## **Metrics**

Publication: 14

Citation (WoS): 18

Citation (Scopus): 48

H-Index (WoS): 3

H-Index (Scopus): 5