

Asst. Prof. Fuzuli Ağrı Akçay

Personal Information

Office Phone: [+90 212 285 6427](tel:+902122856427)

Fax Phone: [+90 212 000 0000](tel:+902120000000)

Email: akcayfu@itu.edu.tr

Web: <https://avesis.itu.edu.tr/akcayfu>

International Researcher IDs

ORCID: 0000-0002-5116-0069

ScopusID: 57203544674

Yoksis Researcher ID: 257132

Education Information

Doctorate, University of Michigan, Rackham Graduate School, Naval Architecture & Marine Engineering, United States Of America 2010 - 2016

Postgraduate, University of Michigan, Rackham Graduate School, Naval Architecture & Marine Engineering, United States Of America 2010 - 2012

Postgraduate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Gemi İnşaatı Mühendisliği, Turkey 2007 - 2009

Undergraduate Double Major, Istanbul Technical University, Makina Fakültesi, Makina Mühendisliği, Turkey 2004 - 2007

Undergraduate, Istanbul Technical University, Gemi İnşaatı Ve Deniz Bilimleri Fakültesi, Gemi İnşaatı Ve Gemi Makinaları Mühendisliği, Turkey 2001 - 2006

Dissertations

Doctorate, Prediction, Analysis, and Measurement of Ductile Fracture of Metals, University Of Michigan, School Of Engineering, Naval Architecture & Marine Engineering, 2016

Postgraduate, Kısmi Doldurulmuş Dikdörtgen Kesitli Rijit Bir Tankın Serbest Sıvı Yüzeyi Doğal Frekansının Galerkin Yöntemiyle Hesabı, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Gemi İnşaatı Mühendisliği, 2009

Research Areas

Fracture Mechanics, Continuous Mechanics, Mechanical Properties, Metallic Materials

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **A criterion for dynamic ductile fracture initiation of tensile mode**
Akçay F. A., Oterkus E.
CONTINUUM MECHANICS AND THERMODYNAMICS, vol.35, no.3, pp.1087-1101, 2023 (SCI-Expanded)
- II. **Prediction of fracture toughness of metallic materials**
Akçay F. A., Oterkus E.
ENGINEERING WITH COMPUTERS, vol.39, no.1, pp.81-88, 2023 (SCI-Expanded)
- III. **Investigation of strain localization on marine structural steels: Uniaxial tests**
Akçay F. A., Karr D. G., Perlin M.

OCEAN ENGINEERING, vol.216, 2020 (SCI-Expanded)

IV. Structural Characteristic Length in Metallic Glasses

Akçay F. A.

JOURNAL OF MECHANICS, vol.36, no.2, pp.255-264, 2020 (SCI-Expanded)

V. A criterion for ductile fracture based on continuum modeling of energy release rates

Karr D. G., Akçay F. A.

INTERNATIONAL JOURNAL OF FRACTURE, vol.197, no.2, pp.201-212, 2016 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

I. Prediction of ductile fracture loci of aluminum alloys and structural steels using Kaeb concept and MSS criterion

Akçay F. A.

26th International Conference on Fracture and Structural Integrity, IGF26 2021, Turin, Italy, 26 - 28 May 2021, vol.33, pp.279-286

II. Comprehensive Studies on Strength of 3D-printed Aluminum Micro Lattice Structures

Akçay F. A., Wu D., Bai Y.

1st European-Structural-Integrity-Society (ESIS) Virtual European Conference on Fracture (ECF), ELECTRONETWORK, 29 June - 01 July 2020, vol.28, pp.1399-1406

III. Theoretical Prediction of Fracture of Initially Crack-Free Brittle Materials

Akçay F. A.

22nd European Conference on Fracture (ECF) - Loading and Environmental Effects on Structural Integrity, Belgrade, Serbia And Montenegro, 26 - 31 August 2018, vol.13, pp.1695-1701

Metrics

Publication: 8

Citation (WoS): 9

Citation (Scopus): 12

H-Index (WoS): 2

H-Index (Scopus): 2