

Assoc. Prof. Umut KARAGÜZEL

Personal Information

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International Researcher IDs

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Education Information

Doctorate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Turkey 2010 - 2016

Postgraduate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Turkey 2008 - 2010

Undergraduate, Istanbul Technical University, Turkey 2003 - 2008

Foreign Languages

English, C2 Mastery

German, B1 Intermediate

Dissertations

Doctorate, Frezeyle tornalama operasyonunun geometrik, kuvvet ve ısıl modellenmesi, Istanbul Technical University, Fen Bilimleri Enstitüsü, 2016

Postgraduate, Zirkonyum esash kalın camısı metalin frezelenmesinin sonlu elemanlar analizi, Istanbul Technical University, Fen Bilimleri Enstitüsü, 2010

Research Areas

Mechanical Engineering, Engineering and Technology

Academic Titles / Tasks

Associate Professor, Yildiz Technical University, Faculty Of Mechanical Engineering, 2023 - Continues

Associate Professor, Isik University, 2022 - 2023

Assistant Professor, Isik University, 2016 - 2023

Research Assistant, Istanbul Technical University, 2009 - 2016

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Transient multi-domain thermal modeling of interrupted cutting with coated tools**
Karaguzel U.
International Journal of Advanced Manufacturing Technology, vol.116, no.1-2, pp.345-361, 2021 (SCI-Expanded)
- II. **Effect of scanning strategies and laser parameters on metal-composite joining**
Kuzu A. T., Karaguzel U., Erbay B., Bakkal M.
Materials and Manufacturing Processes, vol.36, no.10, pp.1199-1207, 2021 (SCI-Expanded)
- III. **A thermo-mechanical model of drill margin-borehole surface interface contact conditions in dry drilling of thick CFRP laminates**
Karpay Y., Karaguzel U., Bahtiyar O.
International Journal of Machine Tools and Manufacture, vol.154, 2020 (SCI-Expanded)

Articles Published in Other Journals

- I. **Sıcak Dövmeye Kalıplarına Infrared (Kızıl Ötesi) Yöntemi ile Ön Isıtma Uygulanmasına Yönelik Deneysel ve Teorik Analiz**
KARAGÜZEL U., KUZU A. T., Korap V., Çilingir H., BAKKAL M.
Makina Tasarım ve İmalat Dergisi, vol.18, no.1, pp.9-23, 2020 (Peer-Reviewed Journal)
- II. **Ti6Al4V ALAŞIMININ TALAŞLI İMALATI SIRASINDA TERMAL KAMERA İLE SICAKLIK ÖLÇÜMÜ VE SONLU ELEMANLARLA MODELLENMESİ**
KARAGÜZEL U.
Mühendislik Bilimleri ve Tasarım Dergisi, vol.7, 2019 (Peer-Reviewed Journal)
- III. **Consistent Simulation Strategy for Heat Sources and Fluxes in Milling**
Putz M., Oppermann C., Semmler U., Bräunig M., KARAGÜZEL U.
Procedia CIRP, vol.62, 2017 (Scopus)
- IV. **Mechanical and Thermal Modeling of Orthogonal Turn-milling Operation**
KARAGÜZEL U., BAKKAL M., BUDAK E.
Procedia CIRP, vol.58, pp.287-292, 2017 (Scopus)
- V. **Modeling of Heat Fluxes During Machining and Their Effects on Thermal Deformation of the Cutting Tool**
Putz M., Schmidt G., Semmler U., Oppermann C., Bräunig M., KARAGÜZEL U.
Procedia CIRP, vol.46, 2016 (Scopus)

Refereed Congress / Symposium Publications in Proceedings

- I. **EXPERIMENTAL INVESTIGATION OF FORCE, TORQUE AND TEMPERATURE VALUES DURING HOLE DRILLING OF CFRP COMPOSITE**
KARAGÜZEL U.
2nd International Conference on Scientific Research and Innovation, Turkey, 11 September 2021
- II. **Analytical and Numerical Modeling of Heat Dissipation in Dry Drilling of Thick CFRP Laminates**
KARAGÜZEL U., KARPAT Y., Bahtiyar O.
9th International Symposium on Machining (UTIS 2018), Turkey, 08 November 2018
- III. **Development of Turn-Milling Machine Tool Program Parameters Based On Basic Cutting Geometry**
Kaveh R. B., KARAGÜZEL U., ÖZLÜ E., BUDAK E.
8th International Symposium on Machining (UTIS 2017), Turkey, 02 November 2017
- IV. **Heat Sources and Fluxes in Milling: Comparison of Numerical, Analytical and Experimental Results**
Putz M., Oppermann C., Bräunig M., KARAGÜZEL U.
16th CIRP Conference on Modeling of Machining Operations, France, 15 June 2017

Scientific Refereeing

INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY, Journal Indexed in SCI-E, January 2023