



ÖZGEÇMİŞ

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Bildiği Yabancı Diller (Puan ve Yılı): İngilizce, C1 İleri, 2020
İngilizce, C1 İleri, 2020
Uzmanlık Alanı: Biyomekanik
Katı Cisimler Mekaniği
Kırılma Mekaniği
Mekanik
Mekanik Testler
Sonlu Elemanlar Yöntemi

| Derece | Bölüm/Program | Üniversite | Yıl |
|---------------|----------------------------------|---------------------------|------|
| Doktora | MAKİNE MÜHENDİSLİĞİ (DR) | Bursa Teknik Üniversitesi | 2025 |
| Yüksek Lisans | MAKİNE MÜHENDİSLİĞİ (YL) (TEZLİ) | Bursa Teknik Üniversitesi | 2021 |
| Lisans | MAKİNE MÜHENDİSLİĞİ BÖLÜMÜ | İstanbul Üniversitesi | 2019 |

Yüksek Lisans Tez Başlığı (özeti ekte) ve Tez Danışman(lar)ı:

Bir yük kancasının topoloji optimizasyon ile tasarım ve analizi

Doktora Tezi/S.Yeterlik Çalışması/Tıpta Uzmanlık Tezi Başlığı (özeti ekte) ve Danışman(lar)ı:

Hibrit topoloji optimizasyon platformu geliştirilerek kalıp ve parça tasarımının eş zamanlı gerçekleştirilmesi

| Görev Unvanı | Görev Yeri | Yıl |
|---------------------|---------------------|-------------------|
| Dr. Öğr. Üyesi | Biruni Üniversitesi | 2026-Devam Ediyor |
| Araştırma Görevlisi | Haliç Üniversitesi | 2023-2026 |

ESERLER

A. Uluslararası hakemli dergilerde yayımlanan makaleler:

A1. Akbulut M., Teke İ. T., Ertas A. H., "Natural frequency optimization of composite plates with cutouts", *Journal of Low Frequency Noise Vibration and Active Control*, 2026.

A2. Akbulut M., Teke İ. T., Ertas A. H., "Fatigue behavior and vibration-based integrity management of advanced composite structures: A comprehensive review", *Journal of Low Frequency Noise Vibration and Active Control*, 2026.

A3. Baykara C., Akbulut M., Oz H. R., Teke İ. T., Ertas A. H., "Fatigue performance and damage mechanisms of hybrid adhesive joints: influence of surface coatings and adhesive thickness", *Journal of Adhesion Science and Technology*, 2026.

- A4.** Teke İ. T., Baykara C., Akbulut M., Ertas A. H., "A Predictive Model for Fatigue Performance in Spot Welded and Bolted Joints", *Iranian Journal of Science and Technology - Transactions of Mechanical Engineering*, vol. 49, no. 6, pp. 2521-2546, 2025.
- A5.** Teke İ. T., Ertas A. H., "Fatigue Testing and Life Prediction of Tensile Shear Spot-Welded Joints: A Comprehensive Review with Regression Modeling", *Iranian Journal of Science and Technology - Transactions of Mechanical Engineering*, vol. 49, no. 4, pp. 1619-1647, 2025.
- A6.** Baykara C., Teke İ. T., Ertas A. H., "Carrier skid design for multi-model vehicle bodies: experimental and numerical insights", *World Journal of Engineering*, 2025.
- A7.** Teke İ. T., Ertas A. H., "Hybrid Framework for Structural Analysis: Integrating Topology Optimization, Adjacent Element Temperature-Driven Pre-Stress, and Greedy Algorithms", *Computers, Materials and Continua*, vol. 84, no. 1, pp. 243-264, 2025.
- A8.** Teke İ. T., Ertas A. H., "Pre-stress-integrated FEA for failure prediction in 3D-printed and injection-molded polymers", *Multidiscipline Modeling in Materials and Structures*, vol. 21, no. 6, pp. 1453-1480, 2025.
- A9.** Teke İ. T., Ertas A. H., "Fatigue Resistance in Engineering Components: A Comprehensive Review on the Role of Geometry and Its Optimization", *CMES - Computer Modeling in Engineering and Sciences*, vol. 144, no. 1, pp. 201-237, 2025.
- A10.** Teke İ. T., Ertas A. H., "Enhancing structural analysis efficiency: a comprehensive review and experimental validation of advanced submodeling techniques, introducing the submodeling-density-shape-element removal (S-D-S-ER) method", *Engineering Computations (Swansea, Wales)*, vol. 41, no. 7, pp. 1790-1823, 2024.
- A11.** Teke İ. T., Ertas A. H., "An Experimental Study on Nodular Iron Machined Surfaces Utilizing a Capable 2D Finite Element Model for Precise Surface Roughness Estimation", *Processes*, vol. 12, no. 3, 2024.
- A12.** Teke İ. T., Yilmaz Y., Baykara C., Ertas A. H., "A New Hybrid Method, Density-Shape-Element Removal (D-S-ER), for the Optimization of Continuum Structures", *Mechanics of Solids*, vol. 58, no. 5, pp. 1738-1756, 2023.

E. Ulusal bilimsel toplantılarda sunulan ve bildiri kitaplarında basılan bildiriler:

- E1.** Teke İ. T., Ertas A. H., Enhancing Structural Analysis of Dissimilar Metal Spot-welded Lap-Joints Utilizing Thermal Strain Generation Algorithm, In: *28th International Conference on Fracture and Structural Integrity - 3rd Mediterranean Conference on Fracture and Structural Integrity*, İtalya, 2026.
- E2.** Teke İ. T., Ertas A. H., Assessment of Fatigue Life Under Three-Point Bending: Comparing S-D-S-ER and D-S-ER Techniques, In: *European Conference on Fracture 2024*, Hırvatistan, 2025.
- E3.** Teke İ. T., Ertas A. H., Design optimization of a well-known geometry for minimum weight utilizing the Density-Shape-Element Removal method (D-S-ER), In: *International Conference on Green Energy: Intelligent Transport Systems - Clean Energy Transitions (GreenEnergy 2023)*, Ukrayna, 2024.
- E4.** Teke İ. T., Oktay M., Baykara C., Ertas A. H., Microstructure and Surface Roughness Connection on Machined Ductile Iron: An Experimental Determination, In: *International Conference on Smart Technologies and Applied Research (STAR'2023)*, Türkiye, 2024.
- E5.** Baykara C., Teke İ. T., Ertas A. H., Effects of the single-lap joint on fatigue strength of metals with different surface coatings: a numerical simulation, In: *International Scientific Siberian Transport Forum - TransSiberia 2023*, Rusya, 2023.
- E6.** Teke İ. T., Akbulut M., Ertas A. H., Topology optimization and fatigue analysis of a lifting hook, In: *26th International Conference on Fracture and Structural Integrity*, İtalya, 2021.