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Personal Information

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Education Information

Doctorate, Gazi University, Fen Bilimleri Enstitüsü, Makine Mühendisliği (Dr), Turkey 2010 - 2017

Post Graduate, Tobb University Of Economics And Technology, Fen Bilimleri Enstitüsü, Makine Mühendisliği (YI) (Tezli), Turkey 2008 - 2010

Under Graduate, Tobb University Of Economics And Technology, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, Turkey 2004 - 2008

Dissertations

Doctorate, Osteoporotik vakalar için çeşitli pedikül vida sistemlerinin çekip çıkarma özelliklerinin deneysel karşılaştırması, Gazi University, Fen Bilimleri Enstitüsü, Makine Mühendisliği (Dr), 2017

Post Graduate, Yaşlandırma ısıl işleminin sic ve al₂o₃ parçacık takviyeli alüminyum alaşımı esaslı kompozit malzemelerin mekanik özelliklerine etkisi, Tobb University Of Economics And Technology, Fen Bilimleri Enstitüsü, Makine Mühendisliği (YI) (Tezli), 2010

Research Areas

Computer Aided Design and Manufacturing, Non-traditional manufacturing methods, Material, Biomechanics, Mechanical Testing

Academic Titles / Tasks

Assistant Professor, Gazi University, Mühendislik Fakültesi, Makina Mühendisliği, 2020 - Continues

Professional Experience

Deputy Director of the Center, Gazi University, Araştırma Ve Uygulama Merkezleri, Proje Koordinasyon Uygulama Ve Araştırma Merkezi Müdürlüğü, 2020 - 2021

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

1. **Reproducibility of Replicated Trabecular Bone Structures from Ti6Al4V Extralow Interstitials Powder by Selective Laser Melting**

Balci A., Kucukaltun F., AYCAN M. F. , USTA Y., DEMİR T.

ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, vol.46, is.3, pp.2527-2541, 2021 (Journal Indexed in SCI)

- II. **Comparison of biomechanical properties of implant systems used in treatment of proximal femur fractures**
AYCAN M. F.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.34, is.2, pp.812-818, 2019 (Journal Indexed in SCI)
- III. **Investigation on manufacturability of bone plates used in humerus fractures by additive manufacturing method**
AYCAN M. F.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.34, is.4, pp.2007-2016, 2019 (Journal Indexed in SCI)
- IV. **Investigation of toggling effect on pullout performance of pedicle screws**
AYCAN M. F. , YAMAN M. E. , USTA Y., DEMİR T., Tolunay T.
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART H-JOURNAL OF ENGINEERING IN MEDICINE, vol.232, is.4, pp.395-402, 2018 (Journal Indexed in SCI)
- V. **Pullout performance comparison of novel expandable pedicle screw with expandable poly-ether-ether-ketone shells and cement-augmented pedicle screws**
AYCAN M. F. , Tolunay T., DEMİR T., YAMAN M. E. , USTA Y.
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART H-JOURNAL OF ENGINEERING IN MEDICINE, vol.231, is.2, pp.169-175, 2017 (Journal Indexed in SCI)
- VI. **Effect of heat treatment on the formation of adiabatic shear bands in high strength steels impacted by AP projectiles**
Ubeyli M., Demir T., YILDIRIM R. O. , AYCAN M. F.
KOVOLVE MATERIALY-METALLIC MATERIALS, vol.47, is.6, pp.409-413, 2009 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **Toggling effect on pullout performance of pedicle screws: Review**
AYCAN M. F. , DEMİR T.
International Advanced Researches and Engineering Journal, vol.4, is.3, pp.161-172, 2020 (Refereed Journals of Other Institutions)
- II. **Investigation on Fracture Toughness Values for Various Martensite Volume Fractions**
AYCAN M. F.
JOURNAL OF POLYTECHNIC-POLITEKNIK DERGISI, vol.23, is.2, pp.277-282, 2020 (Journal Indexed in ESCI)

Refereed Congress / Symposium Publications in Proceedings

- I. **Pedikül Vida Türlerinin Suni Füzyon Sonrası ÇekipÇıkarma Dayanımlarının Karşılaştırmalı İncelenmesi**
Aycan M. F. , Usta Y., Tolunay T., Yaman M. E. , Demir T.
Türk Nöroşirürji Derneği 31. Bilimsel Kongresi, Antalya, Turkey, 29 March - 01 April 2017, pp.107
- II. **PRODUCTION OF REPLICATED TRABECULAR BONE STRUCTURE BY SELECTIVE LASER MELTING METHOD USING Ti6Al4V POWDER AND INVESTIGATION OF GEOMETRIC ACCURACY**
Küçükaltun F., Balci A., Aycan M. F. , Usta Y., Demir T.
The Internatinonal Conference on Materials Science, Mechanical and Automotive Engineerings and Technology, Skopje, Macedonia, 21 - 23 June 2019, pp.375
- III. **INVESTIGATION OF BIOMECHANICAL PERFORMANCE OF SUTURE ANCHOR TENODESIS TECHNIQUE**
Aycan M. F.

- III. ULUSLARARASIBİLİMSEL VE MESLEKİÇALIŞMALAR KONGRESİ – MÜHENDİSLİK(BILMES EN 2019), 27 - 30 June 2019, pp.13
- IV. **AISI H13 ÇELİĞİNİN FARKLI ISIL İŞLEMLER SONUNDAKİ SERTLİK VE SERTLEŞEBİLİRLİK DAVRANIŞLARININ KARŞILAŞTIRILMASI**
Aycan M. F.
I. Ulusal Mühendislikte Bilimsel ve Mesleki Çalışmaları Kongresi, 29 - 30 June 2019, pp.5
- V. **Kemik İçindeki Gözenekli Yapının Üç Boyutlu Lazer Yazıcılar Kullanarak Ti6Al4V Malzemedен Üretilebilirliği**
Balcı A., Küçükaltun F., Aycan M. F. , Usta Y.
5. ULUSLARARASI SOSYAL BİLİMLER KONGRESİ, Nevşehir, Turkey, 27 - 30 June 2019, pp.523-528
- VI. **Investigation on Mechanical Properties of AISI 4140 and AISI 4340 Steels on Various Martensite Volume Fractions**
Aycan M. F.
II. International Scientific and Vocational Studies Congress, 5 - 08 July 2018, pp.520
- VII. **DOĞAL VE YAPAY YAŞLANDIRMANIN ALÜMİNA TAKVİYELİ ALÜMİNYUM ALAŞIMI ESASLI KOMPOZİT MALZEMELERİN SERTLİĞİNE ETKİSİ**
Aycan M. F. , Übeyli M.
6th INTERNATIONAL POWDER METALLURGY CONFERENCE EXHIBITION, Ankara, Turkey, 5 - 09 October 2011, pp.616-621
- VIII. **INVESTIGATION ON THE ARTIFICIAL AGING BEHAVIOUR OF CERAMIC PARTICLE REINFORCED ALUMINIUM MATRIX COMPOSITES**
Aycan M. F. , Übeyli M.
Novel Aspects of Surfacesand Materials (NASM3), Manchester, England, 11 - 15 April 2010, pp.1

Citations

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