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Education Information

Doctorate, Kocaeli University, Fen Bilimleri Enstitüsü, Makine Eğitimi (Dr), Turkey 2007 - 2013

Postgraduate, Dokuz Eylül University, Sağlık Bilimleri Enstitüsü, Biyomekanik (YI) (Tezli), Turkey 2004 - 2007

Undergraduate, Kocaeli University, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, Turkey 1999 - 2007

Dissertations

Doctorate, Gelişimsel kalça displazisi tedavileri için pelvis osteotomi yöntemlerinin karşılaştırılması -biyomekanik çalışma-, Kocaeli Üniversitesi, Fen Bilimleri Enstitüsü, Makine Eğitimi (Dr), 2013

Postgraduate, Osteoblast hücrelerinin çeşitli mekanik uyarılara yanıtının araştırılması, Dokuz Eylül Üniversitesi, Sağlık Bilimleri Enstitüsü, Biyomekanik (YI) (Tezli), 2007

Research Areas

Biomechanics

Academic Titles / Tasks

Assistant Professor, Kocaeli University, Teknoloji Fakültesi, Biyomedikal Mühendisliği, 2018 - Continues

Assistant Professor, Kocaeli University, Teknoloji Fakültesi, Biyomedikal Mühendisliği, 2014 - 2018

Academic and Administrative Experience

Kocaeli Üniversitesi, Teknoloji Fakültesi, Biyomedikal Mühendisliği Bölümü, 2013 - Continues

Courses

Biomechanics, Undergraduate

İmplant Tasarımı ve Teknolojileri, Undergraduate
TEKNİK RESİM, Undergraduate
UYGULAMALI BİYOMEKANİK, Postgraduate
Biyomedikal Tasarım ve Uygulamaları, Undergraduate

Advising Theses

Mutlu İ., Ağız İçi Tarama Cihazlarının Tam Dışsız Hastalarda Kullanımının Değerlendirilmesi, Postgraduate, H.TURAN(Student), 2022
Mutlu İ., Titanyum esaslı distal femur plakların hasar analizi, Postgraduate, S.DEMİR(Student), 2019
Mutlu İ., Gigli testeresi için yeni bir tasarım geliştirilmesi ve prototip imalatı, Postgraduate, H.İPEK(Student), 2019
Mutlu İ., Pnömatik yürüme destek düzeneğinin alt ekstremitte kaslarına etkisinin ölçülmesi, Postgraduate, F.TEZEL(Student), 2017

Jury Memberships

Post Graduate, Post Graduate, Kocaeli Üniversitesi, January, 2021
PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Kocaeli Üniversitesi, December, 2020

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

- I. **Is the magnesium screw as stable as the titanium screw in the fixation of first metatarsal distal chevron osteotomy? A comparative biomechanical study on sawbones models**
Sahin A., Gulabi D., Buyukdogan H., Agar A., Kilic B., MUTLU İ., Erturk C.
JOURNAL OF ORTHOPAEDIC SURGERY, vol.29, no.3, 2021 (Journal Indexed in SCI)
- II. **Suture anchor fixation may be an alternative to tension band wiring in olecranon fractures: Finite element analysis**
KURU T., MUTLU İ.
JOINT DISEASES AND RELATED SURGERY, vol.31, no.2, pp.238-245, 2020 (Journal Indexed in SCI)
- III. **Finite Element Analysis of Short- Versus Long-Segment Posterior Fixation for Thoracolumbar Burst Fracture**
Basaran R., Efendioglu M., Kaksi M., Çelik T., Mutlu İ., Uçar M.
WORLD NEUROSURGERY, vol.128, 2019 (Journal Indexed in SCI)
- IV. **Biomechanical comparison of a new handy tension band with malleolar screw, bicortical screw and conventional tension band for the fixation of transverse medial malleolar fractures**
KURU T., AKPINAR F., Isik C., Ozkilib R., Ipek S., MUTLU İ., Kizilay H.
EKLEM HASTALIKLARI VE CERRAHISI-JOINT DISEASES AND RELATED SURGERY, vol.30, no.3, pp.301-308, 2019 (Journal Indexed in SCI)
- V. **Medial malleolus fractures: A biomechanical comparison of tension band wiring fixation methods**
Uygur E., Poyanli O., MUTLU İ., ÇELİK T., Akpinar F.
ORTHOPAEDICS & TRAUMATOLOGY-SURGERY & RESEARCH, vol.104, no.8, pp.1259-1263, 2018 (Journal Indexed in SCI)
- VI. **The effect of cement on hip stem fixation: a biomechanical study**
Çelik T., Mutlu İ., Ozkan A., Kişioğlu Y.
AUSTRALASIAN PHYSICAL & ENGINEERING SCIENCES IN MEDICINE, vol.40, pp.349-357, 2017 (Journal Indexed in SCI)
- VII. **Evaluation of prebent miniplates in fixation of Le Fort I advancement osteotomy with the finite**

element method

Coşkunes F. M. , Kan B., Mutlu İ., Cilasun U., Çelik T.

JOURNAL OF CRANIO-MAXILLOFACIAL SURGERY, vol.43, pp.1505-1510, 2015 (Journal Indexed in SCI)

- VIII. **Effects of inter-implant distance and implant length on the response to frontal traumatic force of two anterior implants in an atrophic mandible: three-dimensional finite element analysis**
Kan B., COŞKUNSES F. M. , MUTLU İ., Ugur L., Meral D. G.
INTERNATIONAL JOURNAL OF ORAL AND MAXILLOFACIAL SURGERY, vol.44, no.7, pp.908-913, 2015 (Journal Indexed in SCI)
- IX. **The effect of proximal tibial corrective osteotomy on menisci, tibia and tarsal bones: a finite element model study of tibia vara.**
ATMACA H., Özkan A., MUTLU I., CELİK T., UĞUR L., KISIOĞLU Y.
The international journal of medical robotics + computer assisted surgery : MRCAS, vol.10, pp.93-7, 2014 (Journal Indexed in SCI Expanded)
- X. **Evaluation of contact characteristics of a patient-specific artificial dysplastic hip joint**
MUTLU İ., Ugur L., ÇELİK T., BULUÇ L., Muezzinoglu U. S. , KİŞİOĞLU Y.
ACTA OF BIOENGINEERING AND BIOMECHANICS, vol.16, no.2, pp.111-120, 2014 (Journal Indexed in SCI)
- XI. **Evaluation of calibration data for contact pressure using Fuji pressure-sensitive film**
MUTLU İ., KİŞİOĞLU Y.
Injury, vol.44, no.11, pp.1660, 2013 (Journal Indexed in SCI)
- XII. **Higher order regression functions result better fit for the calibration curve**
Mutlu İ., Kisioglu Y.
Journal of Orthopaedic Research, vol.31, no.7, pp.1164, 2013 (Journal Indexed in SCI)
- XIII. **Stress distribution comparisons of foot bones in patient with tibia vara: a finite element study**
Ozkan A., Atmaca H., MUTLU İ., ÇELİK T., Ugur L., KİŞİOĞLU Y.
ACTA OF BIOENGINEERING AND BIOMECHANICS, vol.15, no.4, pp.67-72, 2013 (Journal Indexed in SCI)
- XIV. **Comparison of 3D and 2D models editing process in pre osteotomy planning**
Mutlu İ., Özkan A., Atmaca H., Çelik T., M Yavuz Ç., Kişioğlu Y.
Journal Of Biomechanics, vol.44, pp.18, 2011 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **ANALYSIS OF PERCUTANEOUS CORONARY INTERVENTION DATA IN A PRIVATE HOSPITAL**
Mutlu Ü., Mutlu İ., Macit A.
Journal of Healthcare Management and Leadership, no.1, pp.48-58, 2022 (Refereed Journals of Other Institutions)
- II. **3 BOYUTLU YAZICI PARÇALARINDA BAĞLANTI TİPLERİNİN MEKANİK AÇIDAN DEĞERLENDİRİLMESİ**
Çelik T., Mutlu İ., Özkan A.
International Journal of 3D Printing Technologies and Digital Industry, vol.6, pp.137-142, 2022 (National Refreed University Journal)
- III. **Pedikül Vidaları İçin PLA Malzeme Kullanımının Mukavemet Açısından Değerlendirilmesi**
ÇELİK T., TAŞDEMİRCİ Ç., MUTLU İ., ÖZKAN A.
Afyon Kocatepe University Journal of Sciences and Engineering, vol.21, no.4, pp.996-1004, 2021 (Other Refereed National Journals)
- IV. **The evaluation of the relation between dynamic hip screw positions and its failure in unstable femur fractures**
ÇELİK T., MUTLU İ., ÖZKAN A., KİŞİOĞLU Y.
Australian Journal of Mechanical Engineering, vol.19, 2021 (Journal Indexed in ESCI)
- V. **A Statistical Approach To Measure Uniformity Of Fuji Prescale Pressure Sensitive Film Samples**
MUTLU İ., ÇELİK T., ÖZKAN A., KİŞİOĞLU Y.
Bitlis Eren Üniversitesi Fen Bilimleri Dergisi, vol.10, no.3, pp.920-929, 2021 (Other Refereed National Journals)
- VI. **Geleneksel Total Kalça Protezine Alternatif Epifiz Protezinin Mekanik Değerlendirmesi**

MUTLU İ., dizdar a.

Journal of Polytechnic, vol.24, no.4, pp.1-2, 2021 (Other Refereed National Journals)

- VII. **How does the material variation of dynamic hip screw affect the cut-out risk in the treatment of intertrochanteric femoral fractures?**
Çelik T., Mutlu İ., Özkan A., Kişioğlu Y.
International Journal of Experimental and Computational Biomechanics, vol.4, no.1, pp.49, 2016 (Refereed Journals of Other Institutions)
- VIII. **Comparison of the Lag Screw Placements for the Treatment of Stable and Unstable Intertrochanteric Femoral Fractures regarding Trabecular Bone Failure.**
Celik T., Mutlu I., Ozkan A., Kısıoğlu Y.
Journal of medical engineering, vol.2016, pp.5470798, 2016 (Refereed Journals of Other Institutions)
- IX. **Use of cone beam computed tomography and three dimensional modeling for assessment of anomalous pulp canal configuration a case report**
YİĞİT D., SİNANOĞLU E. A., MUTLU İ.
Restorative Dentistry & Endodontics, vol.40, pp.161, 2015 (Refereed Journals of Other Institutions)
- X. **EFFECTS OF SALTER PELVIC OSTEOTOMY ANGLE ON CONTACT AREA AND PRESSURE DISTRIBUTION IN THE HIP JOINT: AN EXPERIMENTAL STUDY**
MUTLU İ., UĞUR L., ÇELİK T., ÖZKAN A., MEMİŞOĞLU K., KİŞİOĞLU Y.
Süleyman Demirel Üniversitesi Mühendislik Bilimleri ve Tasarım Dergisi, vol.2, no.2, pp.243-245, 2014 (Other Refereed National Journals)
- XI. **SALTER PELVİK OSTEOTOMİ AÇISININ KALÇA EKLEMİNDE TEMAS ALANINA VE BASINÇ DAĞILIMINA ETKİLERİ DENEYSEL ÇALIŞMA**
MUTLU İ., UĞUR L., ÇELİK T., ÖZKAN A., MEMİŞOĞLU K., KİŞİOĞLU Y.
Süleyman Demirel Üniversitesi Mühendislik Bilimleri ve Tasarım Dergisi, vol.2, pp.243-247, 2014 (Other Refereed National Journals)
- XII. **Lag Vidasının Farklı Sabitleme Pozisyonunda Dinamik Kalça Çivisi ile Tedavi Edilen İntertrokanterik Femoral Kırıklarının Kararlılığı**
Çelik T., Mutlu İ., Özkan A., Kişioğlu Y.
Düzce Üniversitesi Bilim ve Teknoloji Dergisi, vol.1, no.1, pp.120-129, 2013 (National Refereed University Journal)
- XIII. **The Stability of Femoral Intertrochanteric Fractures Treated with Dynamic Hip Screw in Different Fixation Position of Lag Screw**
ÇELİK T., MUTLU İ., ÖZKAN A., KİŞİOĞLU Y.
Duzce University Journal of Science and Technology, vol.1, pp.120-129, 2013 (Other Refereed National Journals)
- XIV. **Cerrahi Öncesi Planlamada Üç Boyutlu Simülasyon ve İki Boyutlu Resim Editörü Programlarının Karşılaştırılması**
ÖZKAN A., MUTLU İ., ÇELİK T., KİŞİOĞLU Y., AYAN S.
İleri Teknoloji Bilimleri Dergisi, vol.1, pp.80-86, 2012 (Other Refereed National Journals)
- XV. **Comparison of three Dimensional Simulation and Dimensional Image Editor Softwares at the pre Surgery Planning**
ÖZKAN A., MUTLU İ., ÇELİK T., KİŞİOĞLU Y., AYAN S.
Journal of Advanced Technology Sciences, vol.1, pp.80-86, 2012 (Other Refereed National Journals)
- XVI. **EFFECTS OF DIFFERENT INSTRUMENTATION TECHNIQUES ON ANTERIOR COLUMN AXIAL LOADING IN BOVINE SPINE MODEL A BIOMECHANICAL STUDY**
AKÇALI Ö., ÇEÇEN B., MUTLU İ.
The journal of turkish spinal surgery, vol.19, pp.89-96, 2008 (Other Refereed National Journals)

Refereed Congress / Symposium Publications in Proceedings

- I. **The Mechanical Evaluation of the Connection types in 3D printer part**
Çelik T., Özdemir O., Mutlu İ.

Imascon, Kocaeli, Turkey, 10 - 12 December 2021, pp.20

- II. **AĞIZ İÇİ TARAMA CİHAZININ TAM DİŞSİZ HASTALARDA KULLANIMININ DEĞERLENDİRİLMESİ**
Turan H., MUTLU İ.
2. İstanbul Uluslararası Modern Bilimsel Araştırmalar Kongresi, İstanbul, Turkey, 23 December 2021, vol.1, pp.964-971
- III. **SAĞLIK BAKANLIĞINA BAĞLI HASTANELERDE ANJİYOGRAFİ CİHAZININ HURDAYA AYRILMASI VE GERİ KAZANIMININ İNCELENMESİ**
MUTLU İ., KOYUNCU Z. S.
7. Uluslararası Marmara Fen bilimleri Kongresi, Kocaeli, Turkey, 10 December 2021, pp.180-183
- IV. **ORTOPEDİK CERRAHİ TEDAVİ AMELİYATI OLAN HASTALARIN VERİLERİNİN RETROSPEKTİF OLARAK İNCELENMESİ**
Kuş B., MUTLU İ.
1. ULUSLARARASI SAĞLIKTA VERİ BİLİMİ KONGRESİ, İstanbul, Turkey, 5 - 06 December 2019
- V. **AMELİYATHANELERDE KULLANILAN TIBBİ CİHAZLARDA PERİYODİK,ÖNLEYİCİ VE KESTİRİMCİ BAKIM**
MUTLU İ., Karaağaç C.
ULUSLARARASI MARMARA FEN VE SOSYAL BİLİMLER KONGRESİ, Kocaeli, Turkey, 1 - 03 November 2019
- VI. **Finite element analysis of long versus short segment posterior screw fixation for thoracolumbar burst fracture**
balak N., başaran R., ÇELİK T., efendioğlu m., kakşi m., MUTLU İ., UÇAR M.
European Congress of Neurosurgery (EANS2019), Dublin, Ireland, 24 - 28 September 2019
- VII. **Titanyum Alaşımı Distal Femur Plak Hasar Analizi**
DEMİR S., MUTLU İ.
6. Uluslararası Fen, Mühendislik ve Mimarlık Bilimlerinde Akademik çalışmalar sempozyumu, Ankara, Turkey, 13 - 15 June 2019
- VIII. **Hayvansal Tendonun İn Vitro Sürünme Davranışı**
MUTLU İ., ÇELİK T., ÖZKAN A.
Internatinal Marmara Science and Social Congress (IMASCON), Kocaeli, Turkey, 23 - 25 November 2018
- IX. **Hayvansal Tendonun In Vitro Sürünme Davranışı**
MUTLU İ., ÇELİK T., ÖZKAN A.
Uluslararası Marmara Fen ve Sosyal Bilimler Kongresi 2018, 23 - 25 November 2018
- X. **MODIFICATION OF GIGLISAW FOR SURGICAL OPERATIONS**
ipek h., MUTLU İ., AKPINAR F.
Uluslararası 9. Biyomekanik Kongresi, 19 - 22 September 2018
- XI. **Evaluation of Technical Training Given to Medical Diagnostic Ultrasound Appliance Users: A Preliminary Study**
MUTLU İ., Menekşe A. E.
3rd International Conference on Engineering Technology and Applied Sciences Congress, 17 - 21 July 2018
- XII. **Effects of Different Zygomatic Implant Locations on Response to Traumatic Force in Zygoma: A Finite Element Analysis Study**
DAĞAŞAN V. Ç. , GÜLER N., MUTLU İ.
25th Turkish Association of Oral and Maxillofacial Surgery International Congress, 13 - 17 May 2018
- XIII. **MEDİAL MALLEOL KIRIĞINA YÖNELİK FARKLI TESPİT YÖNTEMLERİNİN GERGİ BANDI İLE KARŞILAŞTIRILMASI: BİYOMEKANİK ÇALIŞMA**
UYGUR M. E. , POYANLI O. Ş. , MUTLU İ., ÇELİK T., AKPINAR F.
27. Ulusal Türk Ortopedi ve Travmatoloji Kongresi, Antalya, Turkey, 24 - 29 October 2017
- XIV. **Three dimensional finite element analysis of the stress distribution under the force of mastication over the bone segments and the titanium fixation systems formed by the multiple piece Le Forte 1 osteotomy**
SÜRMEİOĞLU D., KAN B., MUTLU İ., ÇELİK TOPÇU P.
TAOMS 2017, Muğla-Bodrum, Turkey, 23 - 27 May 2017

- XV. **Effects of the pneumatic gait assist system on the lower extremity muscles during walking using superficial EMG**
MUTLU İ., TEZEL F.
International Conference on Advances and Innovations in Engineering (ICAIE), 10 - 12 May 2017
- XVI. **The Effect of Cement on Hip Stem Fixation A Biomechanical Study**
ÇELİK T., MUTLU İ., ÖZKAN A., KİŞİOĞLU Y.
Uluslararası Katılımlı 8. Ulusal Biyomekanik Kongresi, Ankara, Turkey, 19 - 23 October 2016
- XVII. **Le Fort I Osteotomisinde Tek Hazır Bükülmüş Plakların Sınırları**
KAN B., COŞKUNSES F. M. , KAN H., MUTLU İ., TOKUÇ B.
Taoms 13. Bilimsel Sempozyumu, Trabzon, Turkey, 23 - 26 October 2015
- XVIII. **EFFECTS OF SALTER PELVIC OSTEOTOMY ANGLE ON CONTACT AREA AND PRESSURE DISTRIBUTION IN THE HIP JOINT: AN EXPERIMENTAL STUDY**
MUTLU İ., UĞUR L., ÇELİK T., ÖZKAN A., MEMİŞOĞLU K., KİŞİOĞLU Y.
VII. National Biomechanics Congress with International Participation, Isparta, Turkey, 16 - 18 October 2014
- XIX. **Testing of Callus Formation Strength After Bone Fracture Healing for Rats**
ÖZKAN A., MUTLU İ., CENGİZ A., AYDIN A., BULUÇ L., MÜEZZİNOĞLU Ü. S. , KİŞİOĞLU Y.
9.Int Semp. Computer Methods in Biomechanics and Biomedical Engineering 2010, Valencia, Spain, 24 - 27 February 2010
- XX. **Effects of Fibula and Talus on the Tibial Stress Distribution**
ÖZKAN A., MUTLU İ., YAVUZ Ç., BULUÇ L., MÜEZZİNOĞLU Ü. S. , KİŞİOĞLU Y.
EnginSoft International Conference 2009, Bergamo, Italy, 1 - 02 October 2009
- XXI. **SONLU ELEMANLAR TABANLI ANALİZ İÇİN BİYOMEKANİK MODEL OLUŞTURMA TEKNİKLERİ**
MUTLU İ., ÖZKAN A., KİŞİOĞLU Y.
5. Uluslararası İleri Teknolojiler Sempozyumu (IATS'09), 13 - 15 May 2009

Supported Projects

Mutlu İ., Gökdemir N., Project Supported by Higher Education Institutions, ORTOPEDİK PLAKLARDA TASARIMSAL İYİLEŞTİRME: DENEYSEL ÇALIŞMA, 2021 - 2021

MUTLU İ., Project Supported by Higher Education Institutions, TİTANYUM ALAŞIMI (TiAl6V4) DİSTAL FEMUR PLAKLARININ HASAR ANALİZİ, 2018 - 2020

MUTLU İ., Project Supported by Higher Education Institutions, ORTOPEDİK CERRAHİDE KULLANILAN GİĞLİ TESTERENİN GELİŞTİRİLMESİ, 2018 - 2019

MUTLU İ., Project Supported by Higher Education Institutions, SABİT YÜK ALTINDA DIŞ KAZIMA KÜREKLERİNİN DIŞ MİNESİ ÜZERİNDEKİ ETKİLERİ, 2018 - 2019

MUTLU İ., Project Supported by Higher Education Institutions, DENTAL İMPLANT STABİLİTESİNİ ARTTIRMAK İÇİN YENİ İMPLANT TASARIMI, 2015 - 2016

Activities in Scientific Journals

Kocaeli Journal of Science and Engineering, Assistant Editor, 2021 - Continues

Scientific Refereeing

DÜZCE ÜNİVERSİTESİ BİLİM VE TEKNOLOJİ DERGİSİ, National Scientific Refreed Journal, April 2022

DÜZCE ÜNİVERSİTESİ BİLİM VE TEKNOLOJİ DERGİSİ, National Scientific Refreed Journal, September 2021

COMPUTER APPLICATIONS IN ENGINEERING EDUCATION, National Scientific Refreed Journal, August 2021

PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART H-JOURNAL OF ENGINEERING IN MEDICINE,

SCI Journal, June 2021

DÜZCE ÜNİVERSİTESİ BİLİM VE TEKNOLOJİ DERGİSİ, National Scientific Refreed Journal, June 2021

TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Kocaeli University, Turkey, May 2021

PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART H-JOURNAL OF ENGINEERING IN MEDICINE, SCI Journal, April 2021

BMC MUSCULOSKELETAL DISORDERS, SCI Journal, April 2021

COMPUTER APPLICATIONS IN ENGINEERING EDUCATION, SCI Journal, April 2021

DÜZCE ÜNİVERSİTESİ BİLİM VE TEKNOLOJİ DERGİSİ, National Scientific Refreed Journal, March 2021

Politeknik Dergisi, National Scientific Refreed Journal, March 2021

Citations

Total Citations (WOS):60

h-index (WOS):5