

Prof. Emin Sünbüloğlu

Personal Information

Fax Phone: [+90 212 251 3997](tel:+902122513997)

Email: sunbuloglu@itu.edu.tr

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

Address: İnönü Cad. No 65

International Researcher IDs

ScholarID: D6mHaOMAAAAJ

ORCID: 0000-0001-9930-4618

Publons / Web Of Science ResearcherID: ABB-3177-2020

ScopusID: 8255630900

Yoksis Researcher ID: 24855

Education Information

Doctorate, İstanbul Technical University, Fen Bilimleri Enstitüsü, Makine Mühendisliği Anabilim Dalı, Turkey 2001 - 2008

Postgraduate, Bogazici University, Institute Of Social Sciences, İşletme (YI) (Tezsiz), Turkey 1999 - 2001

Undergraduate, İstanbul Technical University, Makine Fakültesi, Makine Mühendisliği Bölümü, Turkey 1995 - 1999

Foreign Languages

English

Dissertations

Doctorate, Viscoelastoplastic modeling of arterial tissue, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Makine Mühendisliği Anabilim Dalı, 2008

Research Areas

Technical Sciences, Mechanical Engineering, Machine Theory and Dynamics, Modeling and Simulation of Dynamic Systems, Mechanical, Solid Mechanics, Finite Element Methods, Biomechanics, Mechanical Testing

Academic Titles / Tasks

Professor, İstanbul Technical University, Makina, Makina Mühendisliği, 2022 - Continues

Associate Professor, İstanbul Technical University, Makina, Makina Mühendisliği, 2015 - 2022

Lecturer PhD, İstanbul Technical University, Makina, Makina Mühendisliği, 2013 - 2015

Lecturer PhD, İstanbul Technical University, Makina, Makina Mühendisliği, 2009 - 2013

Research Assistant, İstanbul Technical University, Makina, Makina Mühendisliği, 1999 - 2009

Academic and Administrative Experience

Program Koordinatörü, İstanbul Technical University, Lisansüstü Eğitim Enstitüsü, 2020 - Continues
Erasmus Coordinator, İstanbul Technical University, Makina, Makina Mühendisliği, 2020 - Continues
Fakülte Kurulu Üyesi, İstanbul Technical University, Makina, Makina Mühendisliği, 2018 - 2021

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **The effect of onlay cortical fibula strut grafts on biomechanical features of Vancouver type B1 periprosthetic femoral fractures**
Aliyev O., Erden T., SARIYILMAZ K., Bozdağ S. E., Sünbüloğlu E., TUNCAY İ., YILDIZ F.
ACTA ORTHOPAEDICA ET TRAUMATOLOGICA TURCICA, vol.56, no.3, pp.166-172, 2022 (SCI-Expanded)
- II. **An in-silico approach to modeling orthodontic tooth movement using stimulus-induced external bone adaptation**
Usmanova Z., Sünbüloğlu E.
JOURNAL OF THE MECHANICAL BEHAVIOR OF BIOMEDICAL MATERIALS, vol.124, 2021 (SCI-Expanded)
- III. **Finite element method estimation of temperature distribution of automotive tire using one-way-coupled method**
Usmanova Z., Sünbüloğlu E.
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART D-JOURNAL OF AUTOMOBILE ENGINEERING, vol.235, no.14, pp.3619-3630, 2021 (SCI-Expanded)
- IV. **Evaluation of strain distribution on an edentulous mandible generated by cobalt-chromium metal alloy fixed complete dentures fabricated with different techniques: An in vitro study**
Tasin S., TURP I., Bozdağ S. E., Sünbüloğlu E., Usumez A.
JOURNAL OF PROSTHETIC DENTISTRY, vol.122, no.1, pp.47-53, 2019 (SCI-Expanded)
- V. **Comparison of two different superior capsule reconstruction methods in the treatment of chronic irreparable rotator cuff tears: a biomechanical and histologic study in rabbit models**
Yildiz F., Bilsel K., Pulatkan A., Kapicioglu M., Uzer G., Cetindamar T., Sonmez C., Bozdag E., Sünbüloğlu E.
JOURNAL OF SHOULDER AND ELBOW SURGERY, vol.28, no.3, pp.530-538, 2019 (SCI-Expanded)
- VI. **High strain rate response of nanofiber interlayered structural composites**
Ozden-Yenigun E., Bilge K., Sünbüloğlu E., BOZDAG E., Papila M.
COMPOSITE STRUCTURES, vol.168, pp.47-55, 2017 (SCI-Expanded)
- VII. **Biomechanical comparison of oblique and step-cut osteotomies used in total hip arthroplasty with femoral shortening**
Yildiz F., KILICOGLU O. I., DIKMEN G., Bozdag E., SUNBULOGLU E., TUNA M.
JOURNAL OF ORTHOPAEDIC SCIENCE, vol.21, no.5, pp.640-646, 2016 (SCI-Expanded)
- VIII. **A New Mini-External Fixator for Treating Hallux Valgus: A Preclinical, Biomechanical Study**
Erdil M., CEYLAN H. H., POLAT G., KARA D., BOZDAG E., Sünbüloğlu E.
JOURNAL OF FOOT & ANKLE SURGERY, vol.55, no.1, pp.35-38, 2016 (SCI-Expanded)
- IX. **Stress analysis of a complete maxillary denture under various drop impact conditions: a 3D finite element study**
Sunbuloglu E.
COMPUTER METHODS IN BIOMECHANICS AND BIOMEDICAL ENGINEERING, vol.18, no.14, pp.1543-1554, 2015 (SCI-Expanded)
- X. **The use of dermal automesh for incidental hernia repair in abdominoplasty: Clinical, biochemical, and radiological results**
Mutlu O. O., EGEMEN O., AKAN A., Akan M., KARAHANGIL M., FILINTE G., BOZDAG E., Sünbüloğlu E., KURTUL H.
JOURNAL OF PLASTIC SURGERY AND HAND SURGERY, vol.49, no.3, pp.172-176, 2015 (SCI-Expanded)
- XI. **Retention and surface changes of zirconia primary crowns with secondary crowns of different materials**
Turp I., Bozdag E., SUNBULOGLU E., KAHRUMAN C., YUSUFOGLU I., BAYRAKTAR G.

- CLINICAL ORAL INVESTIGATIONS, vol.18, no.8, pp.2023-2035, 2014 (SCI-Expanded)
- XII. **Finite element simulation of the behavior of the periodontal ligament: A validated nonlinear contact model**
Tuna M., Sünbüloğlu E., BOZDAG E.
JOURNAL OF BIOMECHANICS, vol.47, no.12, pp.2883-2890, 2014 (SCI-Expanded)
- XIII. **The Effect of Strut Allograft and Its Position on Vancouver Type B1 Periprosthetic Femoral Fractures: A Biomechanical Study**
Sariyilmaz K., DIKICI F., DIKMEN G., Bozdag E., SUNBULOGLU E., BEKLER B., YAZICIOGLU O.
JOURNAL OF ARTHROPLASTY, vol.29, no.7, pp.1485-1490, 2014 (SCI-Expanded)
- XIV. **Experimental Parameter Estimation Method for Nonlinear Viscoelastic Composite Material Models: An Application on Arterial Tissue**
Sünbüloğlu E., BOZDAG E., TOPRAK T., ISLAK C.
COMPUTER METHODS IN BIOMECHANICS AND BIOMEDICAL ENGINEERING, vol.16, no.12, pp.1249-1261, 2013 (SCI-Expanded)
- XV. **The influence of suture material on the strength of horizontal mattress suture configuration for meniscus repair**
HAPA O., Aksahin E., ERDURAN M., Davul S., HAVITÇİOĞLU H., LaPrade R. F., Bozdag E., Sünbüloğlu E.
KNEE, vol.20, no.6, pp.577-580, 2013 (SCI-Expanded)
- XVI. **In vitro comparison of two different materials for the repair of urethan dimethacrylate denture bases**
Cilingir A., BILHAN H., GECKILI O., SULUN T., BOZDAG E., Sünbüloğlu E.
JOURNAL OF ADVANCED PROSTHODONTICS, vol.5, no.4, pp.396-401, 2013 (SCI-Expanded)
- XVII. **The impact of frenulum height on strains in maxillary denture bases**
Cilingir A., BILHAN H., BAYSAL G., Sünbüloğlu E., BOZDAG E.
JOURNAL OF ADVANCED PROSTHODONTICS, vol.5, no.4, pp.409-415, 2013 (SCI-Expanded)
- XVIII. **Rollover crashworthiness analysis of a railroad passenger car**
Baykasoglu C., Muğan A., Sünbüloğlu E., Bozdağ S. E., ARUK F., TOPRAK T.
INTERNATIONAL JOURNAL OF CRASHWORTHINESS, vol.18, no.5, pp.492-501, 2013 (SCI-Expanded)
- XIX. **Horizontal suture placement influences meniscal repair fixation strength**
Kocabey Y., TASER O., Nyland J., INCE H., SAHIN F., Sünbüloğlu E., BAYSAL G.
KNEE SURGERY SPORTS TRAUMATOLOGY ARTHROSCOPY, vol.21, no.3, pp.615-619, 2013 (SCI-Expanded)
- XX. **The Influence of the Attachment Type and Implant Number Supporting Mandibular Overdentures on Stress Distribution: An In Vitro Study, Part I**
Bilhan S. A., BILHAN H., BOZDAG E., Sünbüloğlu E., BAYKASOGLU C., KUTAY O.
IMPLANT DENTISTRY, vol.22, no.1, pp.39-48, 2013 (SCI-Expanded)
- XXI. **Biomechanical Comparison of Tibial Eminence Fracture Fixation With High-Strength Suture, EndoButton, and Suture Anchor**
Hapa O., BARBER F. A., Suner G., Ozden R., Davul S., BOZDAG E., Sünbüloğlu E.
ARTHROSCOPY-THE JOURNAL OF ARTHROSCOPIC AND RELATED SURGERY, vol.28, no.5, pp.681-687, 2012 (SCI-Expanded)
- XXII. **Aperture fixation instead of transverse tunnels at the patella for medial patellofemoral ligament reconstruction**
Hapa O., AKSAHIN E., Ozden R., PEPE M., Yanat A. N., Dogramaci Y., BOZDAG E., Sünbüloğlu E.
KNEE SURGERY SPORTS TRAUMATOLOGY ARTHROSCOPY, vol.20, no.2, pp.322-326, 2012 (SCI-Expanded)
- XXIII. **Crash and structural analyses of an aluminium railroad passenger car**
Baykasoglu C., Sünbüloğlu E., Bozdağ S. E., ARUK F., TOPRAK T., Muğan A.
INTERNATIONAL JOURNAL OF CRASHWORTHINESS, vol.17, no.5, pp.519-528, 2012 (SCI-Expanded)
- XXIV. **Tendon-grasping strength of various suture configurations for rotator cuff repair**
Hapa O., BARBER F. A., Sünbüloğlu E., KOCABEY Y., SARKALKAN N., BAYSAL G.
KNEE SURGERY SPORTS TRAUMATOLOGY ARTHROSCOPY, vol.19, no.10, pp.1749-1754, 2011 (SCI-Expanded)
- XXV. **Biomechanical Comparison of Fixation Techniques in Midshaft Clavicular Fractures**

- Demirhan M., BILSEL K., ATALAR A. C., BOZDAG E., Sünbüloğlu E., KALE A.
JOURNAL OF ORTHOPAEDIC TRAUMA, vol.25, no.5, pp.272-278, 2011 (SCI-Expanded)
- XXVI. **Loop security and tensile properties of polyblend and traditional suture materials**
Turker M., KILICOGLU O., SALDUZ A., BOZDAG E., Sünbüloğlu E.
KNEE SURGERY SPORTS TRAUMATOLOGY ARTHROSCOPY, vol.19, no.2, pp.296-302, 2011 (SCI-Expanded)
- XXVII. **Meniscal repair using large diameter horizontal sutures increases fixation strength: an in vitro study**
Kocabey Y., TASER O., HAPA O., Guclu A., BOZDAG E., Sünbüloğlu E., Doral M.
KNEE SURGERY SPORTS TRAUMATOLOGY ARTHROSCOPY, vol.19, no.2, pp.202-206, 2011 (SCI-Expanded)
- XXVIII. **Railroad passenger car collision analysis and modifications for improved crashworthiness**
Baykasoglu C., Sünbüloğlu E., Bozdağ S. E., ARUK F., TOPRAK T., MUGAN A.
INTERNATIONAL JOURNAL OF CRASHWORTHINESS, vol.16, no.3, pp.319-329, 2011 (SCI-Expanded)
- XXIX. **Influence of surgical technique, implant shape and diameter on the primary stability in cancellous bone**
Bilhan H., GECKILI O., MUMCU E., BOZDAG E., Sünbüloğlu E., KUTAY O.
JOURNAL OF ORAL REHABILITATION, vol.37, no.12, pp.900-907, 2010 (SCI-Expanded)
- XXX. **Biomechanical analysis of multilevel discectomy and excision of posterior longitudinal ligament: An in vitro study in sheep**
Yilmaz C., Kabatas S., HEPGUL K., BOZDAG E., Sünbüloğlu E., Cansever T.
NEUROLOGY INDIA, vol.57, no.4, pp.395-401, 2009 (SCI-Expanded)
- XXXI. **Vibration characteristics of grafts for the tympanic membrane**
Oktem F., TOPRAK M., YENER M., BOZDAG E., Sunbuloglu E., TOPRAK T.
ADVANCES IN THERAPY, vol.24, no.1, pp.81-90, 2007 (SCI-Expanded)
- XXXII. **The effect of occlusal contact localization on the stress distribution in complete maxillary denture**
Ates M., CILINGIR A., SULUN T., Sunbuloglu E., BOZDAG E.
JOURNAL OF ORAL REHABILITATION, vol.33, no.7, pp.509-513, 2006 (SCI-Expanded)
- XXXIII. **In vitro investigation of heat transfer in calf spinal cord during polymethylmethacrylate application for vertebral body reconstruction**
Aydin S., BOZDAG E., Sunbuloglu E., UNALAN H., HANCI M., AYDINGOZ O., KUDAY C.
EUROPEAN SPINE JOURNAL, vol.15, no.3, pp.341-346, 2006 (SCI-Expanded)
- XXXIV. **Vibration analysis of new Galata Bridge - experimental and numerical results**
Bozdag E., Sunbuloglu E., ERSOY H.
COMPUTERS & STRUCTURES, vol.84, pp.283-292, 2006 (SCI-Expanded)
- XXXV. **Time-dependent changes in failure loads of 3 biceps tenodesis techniques - In vivo study in a sheep model**
Kilicoglu O., KOYUNCU O., DEMIRHAN M., ESENYEL C., ATALAR A., OZSOY S., BOZDAG E., Sunbuloglu E., BILGIC B.
AMERICAN JOURNAL OF SPORTS MEDICINE, vol.33, no.10, pp.1536-1544, 2005 (SCI-Expanded)
- XXXVI. **Tensile strength of ligaments after thermal shrinkage depending on time and immobilization: In vivo study in the rabbit**
Demirhan M., UYSAL M., KILICOGLU O., ATALAR A., SIVACIOGLU S., SOLAKOGLU S., BOZDAG E., Sunbuloglu E.
JOURNAL OF SHOULDER AND ELBOW SURGERY, vol.14, no.2, pp.193-200, 2005 (SCI-Expanded)
- XXXVII. **Effect of decortication on laminar strength during sublaminar wiring - An experimental study**
Aydingoz O., BILSEL N., BOTANLIOGLU H., BOZDAG E., Sunbuloglu E., KESMEZACAR H.
JOURNAL OF SPINAL DISORDERS & TECHNIQUES, vol.17, no.6, pp.498-504, 2004 (SCI-Expanded)
- XXXVIII. **Biomechanical analysis of cervical multilevel oblique corpectomy: an in vitro study in sheep**
Karalar T. C., UNAL F., GUZEY F., KIRIS T., BOZDAG E., Sunbuloglu E.
ACTA NEUROCHIRURGICA, vol.146, no.8, pp.813-818, 2004 (SCI-Expanded)
- XXXIX. **Triply coupled vibrations of thin-walled open cross-section beams including rotary inertia effects**
Arpacı A., BOZDAG S. E., Sunbuloglu E.
JOURNAL OF SOUND AND VIBRATION, vol.260, no.5, pp.889-900, 2003 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

- I. **Comprasion of Various Critical Plane Approaches Under Proportional and Non-Proportional Multiaxial Stress States**
LEBLEBİCİ T., SÜNBÜLOĞLU E., BOZDAĞ S. E.
III. International Iron and Steel Symposium (UDCS'17), Karabük, Turkey, 3 - 05 April 2017, pp.196-200
- II. **A DESIGN STRATEGY ON THE TALBOT TYPEARTICULATION OF A FREIGHT WAGON**
SÜNBÜLOĞLU E., BOZDAĞ S. E.
16th International Conference on Railway Engineering Design Operation, 2 - 04 July 2018
- III. **FATIGUE ANALYSIS OF RAILWAY ROLLING STOCK SOME ASPECTS OF APPLICATIONS AND USE OF FINITE ELEMENT ANALYSES**
SÜNBÜLOĞLU E., BOZDAĞ S. E.
IMSMATEC, The Internatinonal Conference on Materials Science Mechanical and Automotive Engineerings and Technology, 10 - 12 April 2018
- IV. **Süperior kapsül rekonstrüksiyonunda hücresiz insan dermal grefti ve tensor fasya lata otogreftinin karşılaştırılması: Tavşan modelinde histolojik ve biyomekanik çalışma**
YILDIZ F., BİLSEL İ. K., PULATKAN M. A., KAPICIOĞLU M., UZER G., ÇETİNDAMAR T., SÖNMEZ C., BOZDAĞ S. E., SÜNBÜLOĞLU E.
10. Omuz ve Dirsek Cerrahisi Kongresi, Ankara, Turkey, 21 - 24 March 2018
- V. **Süperior Kapsül Rekonstrüksiyonunda Hücresiz İnsan Dermal Grefti ve Tensör Fasya Lata Otogreftinin Karşılaştırılması: Tavşan Modelinde Histolojik ve Biyomekanik Çalışma**
YILDIZ F., BİLSEL İ. K., PULATKAN A., KAPICIOĞLU M., UZER G., Çetindamar T., Erden C., BOZDAĞ S. E., SÜNBÜLOĞLU E.
10. Omuz ve Dirsek Cerrahisi Kongresi, Ankara, Turkey, 21 - 24 March 2018
- VI. **pediatrik suprakondiler humerus kırıkları için diverjan lateral üç pin ile tespitin biyomekanik analizi: çapraz pinlemeden daha stabil midir**
BİLGİLİ F., BALCI H. İ., BİRİŞİK F., ATALAR A. C., BOZDAĞ S. E., SÜNBÜLOĞLU E.
27. ulusal türk ortopedi ve travmatoloji kongresi, Turkey, 24 - 29 October 2017, vol.51, pp.90
- VII. **Biomechanical comparison of hexapod spatial frames with different strut models. A biomechanical study**
Baş A., ERALP L., KOCAOĞLU M., EREN İ., BOZDAĞ S. E., SÜNBÜLOĞLU E.
3rd World Ortho Recon ILLRS ASAMI Congress, Lizbon, Portugal, 30 August - 02 September 2017, vol.3, pp.42
- VIII. **Corrective accuracy and biomechanical performans of hexapodal external fixators**
EREN İ., Baş A., ERALP L., KOCAOĞLU M., BOZDAĞ S. E., SÜNBÜLOĞLU E.
3rd World Ortho Recon ILLRS ASAMI Congress, Lizbon, Portugal, 30 August - 02 September 2017, vol.3, pp.27
- IX. **Uniaxial and biaxial mechanical behavior of hybrid carbon/aramid woven fabrics**
Sünbüloğlu E., Özden Yenigün E., Tuna M., Bozdağ E.
7th European Conference on Protective Clothing, İzmir, Turkey, 23 - 25 May 2016, pp.1
- X. **The Numerical Investigation Of Running Safety And Fatigue Analysis Of A Freight Wagon**
ŞENTÜRK B. G., SÜNBÜLOĞLU E., ÖZDEŞ A., BOZDAĞ S. E.
ADVANCED RAILWAY ENGINEERING, IC-ARE215, 2 - 04 March 2015, pp.84-88
- XI. **Numerical Fatigue Evaluation of a Full Scale Passenger Rolling Stock s Welded Joints According to Fkm Forschungskuratorium Maschinenbau Guideline**
ÖZDEŞ A., SÜNBÜLOĞLU E., BOZDAĞ S. E., FRIEDL N.
AVTECH'15/ III International Automotive and Vehicle Technologies Conference, 23 - 25 January 2016
- XII. **The Effect Of Sewing Speed On Needle Penetration Force**
ÇAKICI G., Eryürük S. H., Bozdağ S. E., Sünbüloğlu E., KÖKSAL F., Kalaoğlu F.
The International Istanbul Textile Congress 2013, İstanbul, Turkey, 30 May - 01 June 2013, pp.210
- XIII. **Investigation of Needle Penetration Forces**
ÇAKICI G., Eryürük S. H., Bozdağ S. E., Sünbüloğlu E., Kalaoğlu F.
International Conference of Applied Research in Textile, Monastir, Tunisia, 17 - 27 January 2013, pp.1-3

- XIV. **Experimental set up design to investigate the friction behavior of textile fibers**
PARLAR Z., KARAKAŞ H., BOZDAĞ S. E., SÜNBÜLOĞLU E.
Proceedings of 12th International Materials Symposium (IMSP'2008), Denizli, Turkey, 15 - 17 October 2008,
pp.784-790
- XV. **Experimental stress analysis of guide rails**
SÜNBÜLOĞLU E., BOZDAĞ S. E., TOPRAK T., TOPRAK T., İMRAK C. E., Demirsöz R., Targıt S.
ELEVCON 2006, 20 - 22 June 2006
- XVI. **Comparison of boundary element and finite element methods in chain link stress analysis**
SÜNBÜLOĞLU E., İMRAK C. E., FETVACI M. C., Kesikçi K.
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Supported Projects

Sünbüloğlu E., Bozdağ S. E., Project Supported by Higher Education Institutions, KUŞAKÜSTÜ GÜÇLENDİRME BEZİ KONSTRÜKSİYONLARININ LASTİĞİN GENEL ÖZELLİKLERİNE ETKİLERİNİN İNCELENMESİ, 2017 - 2022

Acaroğlu Ergün Ö., Sünbüloğlu E., Erdoğan C., Bozdağ S. E., Project Supported by Higher Education Institutions, Yüksek Deformasyon Hızlarında Kayaçların Mekanik Özelliklerinin Araştırılması, 2018 - 2021

Sünbüloğlu E., Project Supported by Higher Education Institutions, Dental Protez Polimer Malzemelerinin Yüksek Deformasyon Hzlarında Gerilme-Şekil Değiştirme Özelliklerinin Belirlenmesi ve Protez Tasarımlarının Sayısal Değerlendirilmesi, 2012 - 2021

Sünbüloğlu E., Project Supported by Higher Education Institutions, Hafifletilmiş Yük Vagonu Tasarımı için Şekil Optimizasyonu, 2011 - 2021

Sünbüloğlu E., Project Supported by Higher Education Institutions, Periodontal Ligamanın Bir Temas Modeli Olarak Modellenmesi: Doğrulanmış Bir Sonlu Elemanlar Çalışması, 2014 - 2018

Sünbüloğlu E., Project Supported by Higher Education Institutions, An Approach to Estimate Outcomes of Silk Stent Deployment To Cerebral Aneurysms Using Transient CFD Analysis, 2013 - 2018

Sünbüloğlu E., TUBITAK Project, Hafifletilmiş Yeni Yük Vagonu Tasarımı Ve Prototip İmalatı, 2010 - 2015

Metrics

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