

## Prof. MURAT YAYLACI

### Personal Information

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**Web:** <https://avesis.erdogan.edu.tr/murat.yaylaci>

**Address:** RTEÜ MÜH. FAK. ZİHNİ DERİN YERLEŞKESİ

### International Researcher IDs

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Publons / Web Of Science ResearcherID: ABB-5279-2021

ScopusID: 55906015300

Yoksis Researcher ID: 152748

### Education Information

Post Doctorate, University of Santiago de Compostela, Faculty of Mathematics, Department of Applied Mathematics, Spain  
2021 - 2022

Post Doctorate, Germany 2017 - 2017

Post Doctorate, Universitaet Stuttgart, Institute of Engineering and Computational Mechanics, Institute of Engineering and Computational Mechanics, Germany 2016 - 2016

Doctorate, Karadeniz Technical University, Mühendislik Fakültesi, İnşaat Mühendisliği, Turkey 2007 - 2013

Postgraduate, Karadeniz Technical University, Mühendislik Fakültesi, İnşaat Mühendisliği, Turkey 2004 - 2007

Undergraduate, Dumlupınar Üniversitesi, Mühendislik Fakültesi, İnşaat Mühendisliği, Turkey 1999 - 2003

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, İKİ ELASTİK ÇEYREK DÜZLEME OTURAN İKİ ELASTİK TABAKANIN TEMAS PROBLEMİ, Karadeniz Technical University, Mühendislik Fakültesi, İnşaat Mühendisliği/ Mekanik Anabilimdalı, 2013

Postgraduate, AÇIK DENİZ YAPILARI VE BUNLARIN TASARIM PARAMETRELERİNİN İRDELENMESİ, Karadeniz Technical University, Mühendislik Fakültesi, İnşaat Mühendisliği/ Yapı Anabilimdalı, 2007

### Research Areas

Mechanics of Solid Bodies, Civil Engineering, Mechanical, Structural Mechanics, Finite Element Methods, Biomechanics, Engineering and Technology

## Academic Titles / Tasks

Professor, Recep Tayyip Erdogan University, MÜHENDİSLİK VE MİMARLIK FAKÜLTESİ, İNŞAAT MÜHENDİSLİĞİ, 2023 - Continues  
Associate Professor, Recep Tayyip Erdogan University, Mühendislik Fakültesi, İnşaat Mühendisliği Bölümü, 2018 - 2023  
Assistant Professor, Recep Tayyip Erdogan University, Mühendislik Fakültesi, İnşaat Mühendisliği Bölümü, 2014 - 2018  
Research Assistant, Karadeniz Technical University, Deniz Bilimleri Fakültesi, Gemi İnşaatı Ve Gemi Makineleri Mühendisliği, 2006 - 2014

## Academic and Administrative Experience

Member of the Senate, Recep Tayyip Erdogan University, MÜHENDİSLİK VE MİMARLIK FAKÜLTESİ, İNŞAAT MÜHENDİSLİĞİ, 2024 - Continues  
Fakülte Kurulu Üyesi, Recep Tayyip Erdogan University, Turgut Kıran Denizcilik Fakültesi, 2024 - Continues  
Fakülte Yönetim Kurulu Üyesi, Recep Tayyip Erdogan University, Turgut Kıran Denizcilik Fakültesi, 2024 - Continues  
Dean, Recep Tayyip Erdogan University, Turgut Kıran Denizcilik Fakültesi, 2024 - Continues  
University Executive Board Member, Recep Tayyip Erdogan University, MÜHENDİSLİK VE MİMARLIK FAKÜLTESİ, İNŞAAT MÜHENDİSLİĞİ, 2024 - Continues  
Fakülte Yönetim Kurulu Üyesi, Recep Tayyip Erdogan University, MÜHENDİSLİK VE MİMARLIK FAKÜLTESİ, İNŞAAT MÜHENDİSLİĞİ, 2023 - Continues  
Fakülte Kurulu Üyesi, Recep Tayyip Erdogan University, MÜHENDİSLİK VE MİMARLIK FAKÜLTESİ, İNŞAAT MÜHENDİSLİĞİ, 2023 - Continues  
Head of Department, Recep Tayyip Erdogan University, MÜHENDİSLİK VE MİMARLIK FAKÜLTESİ, İNŞAAT MÜHENDİSLİĞİ, 2014 - Continues  
Vice Dean, Recep Tayyip Erdogan University, MÜHENDİSLİK VE MİMARLIK FAKÜLTESİ, İNŞAAT MÜHENDİSLİĞİ, 2023 - 2024  
Recep Tayyip Erdogan University, Mühendislik Fakültesi, İnşaat Mühendisliği, 2017 - 2018  
Assistant Director of the Institute, Recep Tayyip Erdogan University, Fen Bilimleri Enstitüsü, 2016 - 2017  
Head of Department, Recep Tayyip Erdogan University, Mühendislik Fakültesi, İnşaat Mühendisliği Bölümü, 2015 - 2016  
Deputy Head of Department, Recep Tayyip Erdogan University, Mühendislik Fakültesi, İnşaat Mühendisliği Bölümü, 2014 - 2015

## Courses

KIRILMA MEKANİĞİ, Doctorate, 2023 - 2024, 2022 - 2023, 2020 - 2021  
UYGULAMALI SONLU ELEMANLAR ANALİZİ, Postgraduate, 2023 - 2024, 2022 - 2023, 2020 - 2021, 2018 - 2019, 2017 - 2018  
UZMANLIK ALAN DERSLERİ II, Postgraduate, 2023 - 2024, 2022 - 2023, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015  
UZMANLIK ALAN DERSİ II, Doctorate, 2023 - 2024, 2022 - 2023, 2020 - 2021, 2019 - 2020  
YÜKSEK LİSANS TEZİ, Postgraduate, 2023 - 2024, 2022 - 2023, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017  
MUKAVEMET II, Undergraduate, 2023 - 2024, 2022 - 2023, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015  
UZMANLIK ALAN DERSİ-I, Postgraduate, 2023 - 2024, 2022 - 2023, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015  
Bitirme Tezi, Undergraduate, 2023 - 2024, 2022 - 2023, 2020 - 2021, 2019 - 2020  
STATİK, Undergraduate, 2023 - 2024, 2022 - 2023, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014  
UZMANLIK ALAN DERSİ I, Doctorate, 2023 - 2024, 2022 - 2023, 2020 - 2021, 2019 - 2020  
ELASTİSİTE TEORİSİ, Postgraduate, 2023 - 2024, 2022 - 2023, 2020 - 2021, 2019 - 2020, 2017 - 2018, 2016 - 2017,

2015 - 2016, 2014 - 2015

Doktora Tezi, Doctorate, 2023 - 2024, 2022 - 2023

İNŞAAT MÜHENDİSLİĞİNDE ANSYS UYGULAMALARI, Doctorate, 2023 - 2024, 2022 - 2023, 2020 - 2021

DİNAMİK, Undergraduate, 2023 - 2024, 2022 - 2023, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2016 - 2017, 2015 - 2016, 2014 - 2015

SONLU ELEMANLAR YÖNTEMİNE GİRİŞ, Doctorate, 2023 - 2024, 2022 - 2023, 2020 - 2021

MUKAVEMET I, Undergraduate, 2023 - 2024, 2022 - 2023, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015

SUNUM VE SUNUŞ TEKNİKLERİ, Undergraduate, 2023 - 2024, 2022 - 2023, 2020 - 2021, 2019 - 2020

İNTEGRAL DÖNÜŞÜM TEKNİKLERİ, Postgraduate, 2023 - 2024, 2022 - 2023, 2019 - 2020, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015

TEMAS PROBLEMLERİNDE ANSYS UYGULAMALARI, Postgraduate, 2023 - 2024, 2022 - 2023, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017

SEMİNER, Postgraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016

SEMİNER, Doctorate, 2019 - 2020

YAPI STATİĞİ, Undergraduate, 2019 - 2020, 2016 - 2017, 2014 - 2015

DÖNEM PROJESİ, Postgraduate, 2019 - 2020

Mühendislik Bitirme Tezi-II, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017

YAPI İŞLERİNDE İSG, Postgraduate, 2018 - 2019

MUHENDİSLİK MEKANİĞİ, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2015 - 2016, 2014 - 2015

Mühendislik Bitirme Tezi-I, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017

YAPI MALZEMELERİ, Associate Degree, 2016 - 2017

Malzeme Bilimi ve Yapı Malzemeleri, Associate Degree, 2016 - 2017

YAPI DENETİM UYGULAMALARI, Associate Degree, 2014 - 2015

ELASTİSİTE TEORİSİ, Postgraduate, 2015 - 2016

PROJE, Associate Degree, 2014 - 2015

TEKNİK RESİM, Associate Degree, 2014 - 2015

ÇELİK YAPILAR, Associate Degree, 2014 - 2015

## Advising Theses

Yaylacı M., Dolgu barajlarda şev stabilitesi analizi, Postgraduate, Ş.ONAT(Student), 2023

Yaylacı M., Farklı tasarımdaki dental implantların sayısal analizi, Postgraduate, C.AYDIN(Student), 2023

Yaylacı M., TBDY 2018'e göre betonarme yapıların farklı tip sismik izolatör birimleri kullanılarak modellenmesi ve analizi, Postgraduate, Ş.ÖZTÜRK(Student), 2023

Yaylacı M., Pas payı yüksekliğinin kirişli betonarme döşeme hesaplarına etkisi, Postgraduate, M.ZEYTİN(Student), 2023

Yaylacı M., Sonlu elemanlar yöntemi ile balık kafeslerinin katı sıvı etkileşim analizi, Postgraduate, M.EMİN(Student), 2021

YAYLACI M., Kemik Dokuda ve İmplant Çevresindeki Gerilme Dağılımına Farklı Protez Tasarımlarının Etkisinin İncelenmesi, Postgraduate, G.NUR(Student), 2020

YAYLACI M., 2007 ve 2018 Türkiye Deprem Yönetmeliklerine Göre Farklı Döşeme Sistemlerine Sahip Betonarme Bir Yapının Deprem Davranışlarının Karşılaştırılması, Postgraduate, G.EDA(Student), 2020

YAYLACI M., Kemik Dokuda ve İmplant Çevresindeki Gerilme Dağılımına Farklı Protez Malzemelerin Etkisinin İncelenmesi, Postgraduate, M.TERZİ(Student), 2020

YAYLACI M., Yarım Düzlem Üzerine Oturan Fonksiyonel Derecelendirilmiş Tabakanın Temas Problemi, Postgraduate, M.YAYLI(Student), 2019

YAYLACI M., Rijit Bir Panç Aracılığıyla Yüklenmiş Ve Rijit Temele Bağlanmış Fonksiyonel Derecelendirilmiş Tabakanın Temas Problemi, Postgraduate, M.ABANOZ(Student), 2018

## Advising Graduates (Non-Thesis)

Yaylacı M., YAPI İŞLERİNDE İSG, Masters (Non-Thesis), M.ŞENOL(Student), 2020  
Yaylacı M., YAPI İŞLERİNDE İSG, Masters (Non-Thesis), B.KOÇAK(Student), 2020  
Yaylacı M., YAPI İŞLERİNDE İSG, Masters (Non-Thesis), A.DÖNE(Student), 2020  
Yaylacı M., YAPI İŞLERİNDE İSG, Masters (Non-Thesis), G.AYDIN(Student), 2020  
Yaylacı M., YAPI İŞLERİNDE İSG, Masters (Non-Thesis), S.TOPALOĞLU(Student), 2020  
Yaylacı M., YAPI İŞLERİNDE İSG, Masters (Non-Thesis), A.KÖSEOĞLU(Student), 2019  
Yaylacı M., YAPI İŞLERİNDE İSG, Masters (Non-Thesis), F.DERECİ(Student), 2019  
Yaylacı M., YAPI İŞLERİNDE İSG, Masters (Non-Thesis), F.BAYKUŞAK(Student), 2019  
Yaylacı M., YAPI İŞLERİNDE İSG, Masters (Non-Thesis), T.DORUM(Student), 2019  
Yaylacı M., YAPI İŞLERİNDE İSG, Masters (Non-Thesis), Ö.ÖZGÜR(Student), 2019  
Yaylacı M., YAPI İŞLERİNDE İSG, Masters (Non-Thesis), K.DEDEMEN(Student), 2019  
Yaylacı M., YAPI İŞLERİNDE İSG, Masters (Non-Thesis), Y.KESKİN(Student), 2019

## Jury Memberships

Associate Professor Exam, Associate Professor Exam, Recep Tayyip Erdoğan Üniversitesi, December, 2023  
PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Recep Tayyip Erdoğan Üniversitesi, December, 2023  
Post Graduate, Post Graduate, Çankırı Karatekin Üniversitesi, December, 2023  
Post Graduate, Post Graduate, Çankırı Karatekin Üniversitesi, December, 2023  
PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Recep Tayyip Erdoğan Üniversitesi, November, 2023  
Appointment to Academic Staff-Assistant Professorship, Appointment to Academic Staff-Assistant Professorship, Recep Tayyip Erdoğan Üniversitesi, October, 2023  
Appointment to Academic Staff-Assistant Professorship, Appointment to Academic Staff-Assistant Professorship, Karadeniz Teknik Üniversitesi, October, 2023  
Appointment to Academic Staff-Assistant Professorship, Appointment to Academic Staff-Assistant Professorship, Yalova Üniversitesi, October, 2023  
Appointment to Academic Staff-Assistant Professorship, Appointment to Academic Staff-Assistant Professorship, Aydın Adnan Menderes Üniversitesi, October, 2023  
Post Graduate, Post Graduate, Çankırı Karatekin Üniversitesi, August, 2023  
Post Graduate, Post Graduate, Recep Tayyip Erdoğan Üniversitesi, August, 2023  
Post Graduate, Post Graduate, Recep Tayyip Erdoğan Üniversitesi, August, 2023  
Post Graduate, Post Graduate, Bayburt Üniversitesi, July, 2023  
Post Graduate, Post Graduate, Çankırı Karatekin Üniversitesi, February, 2023  
PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Recep Tayyip Erdoğan Üniversitesi, February, 2023  
Post Graduate, Post Graduate, Çankırı Karatekin Üniversitesi, February, 2023  
Doctoral Examination, Doctoral Examination, Karadeniz Teknik Üniversitesi, February, 2023  
Doctoral Examination, Doctoral Examination, Recep Tayyip Erdoğan Üniversitesi, January, 2023  
Post Graduate, Post Graduate, Aydın Adnan Menderes Üniversitesi, August, 2022  
Post Graduate, Post Graduate, Çankırı Karatekin Üniversitesi, August, 2022  
Post Graduate, Post Graduate, Çankırı Karatekin Üniversitesi, August, 2022  
Post Graduate, Post Graduate, Çankırı Karatekin Üniversitesi, July, 2022  
Post Graduate, Post Graduate, Çankırı Karatekin Üniversitesi, June, 2022  
Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Çankırı Karatekin Üniversitesi, October, 2020  
Post Graduate, Post Graduate, Karadeniz Teknik Üniversitesi, June, 2020

Post Graduate, Post Graduate, Recep Tayyip Erdoğan Üniversitesi, June, 2020  
Doctoral Examination, Doctoral Examination, Recep Tayyip Erdoğan Üniversitesi, March, 2020  
Doctoral Examination, Doctoral Examination, Karadeniz Teknik Üniversitesi, February, 2020  
Post Graduate, Post Graduate, Recep Tayyip Erdoğan Üniversitesi, January, 2020  
Post Graduate, Post Graduate, Recep Tayyip Erdoğan Üniversitesi, January, 2020  
Post Graduate, Post Graduate, Karadeniz Teknik Üniversitesi, January, 2020  
Post Graduate, Post Graduate, Recep Tayyip Erdoğan Üniversitesi, January, 2020  
Post Graduate, Post Graduate, Recep Tayyip Erdoğan Üniversitesi, January, 2020  
Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Recep Tayyip Erdoğan Üniversitesi, December, 2019  
Doctoral Examination, Doctoral Examination, Karadeniz Teknik Üniversitesi, June, 2019  
Post Graduate, Post Graduate, Karadeniz Teknik Üniversitesi, May, 2019  
Doctoral Examination, Doctoral Examination, Karadeniz Teknik Üniversitesi, February, 2019

### **Published journal articles indexed by SCI, SSCI, and AHCI**

- I. **Analysis of temperature changes in living tissue using the modified fractional thermal conduction model under laser heat flux on the skin surface**  
Abouelregal A. E., Alharb R. A., Yaylaci M., Mohamed B. O., Megahid S. F.  
CONTINUUM MECHANICS AND THERMODYNAMICS, vol.37, no.1, pp.1-25, 2024 (SCI-Expanded)
- II. **Biomechanical Analysis and Solution Suggestions of Screw Replacement Scenarios in Femoral Neck Fracture Surgeries: Finite Element Method**  
Güvercin Y., Yaylaci M., Dizdar A., Özdemir M. E., Ay S., Uzun Yaylaci E., Karahasanoğlu U., Uygun H., Peker G.  
ORTHOPAEDIC SURGERY, vol.1, no.1, pp.1-11, 2024 (SCI-Expanded)
- III. **RFOR-DQHFEM: Hybrid relaxed first-Order reliability and differential quadrature hierarchical finite element method for multi-physics reliability analysis of conical shells**  
Furjan M., Kolahchi R., YAYLACI M.  
Thin-Walled Structures, vol.205, 2024 (SCI-Expanded)
- IV. **Stenotrophomonas strain DP30; a marine bacteria capable of precipitating calcium carbonate**  
Uzun Yaylaci E., Kara A., Aksu İ., Yaylaci M.  
GEOMICROBIOLOGY JOURNAL AN INTERNATIONAL JOURNAL OF GEOMICROBIOLOGY AND MICROBIAL BIOGEOCHEMISTRY, vol.3, no.23, pp.78-90, 2024 (SCI-Expanded)
- V. **Optimization flutter response of laminated smart nanocomposite truncated conical shell under supersonic aerodynamic pressure using hybrid IGWO-DQHFEM**  
Shan L., Furjan M., Kolahchi R., Yaylaci M.  
AEROSPACE SCIENCE AND TECHNOLOGY, vol.109766, no.1, pp.1-55, 2024 (SCI-Expanded)
- VI. **Stability analysis of porous FG sandwich plates under thermomechanical loads via integral HySDT**  
Laoufi I., Attia A., Bourada F., Tounsi A., Tounsi A., Khedher K. M., Salem M. A., YAYLACI M.  
Archive of Applied Mechanics, vol.94, no.11, pp.3175-3194, 2024 (SCI-Expanded)
- VII. **Determination of Formability Behavior of Steel Used in Ships by Various Methods**  
Sekban D. M., Uzun Yaylaci E., Özdemir M. E., Yaylaci M.  
STRUCTURAL ENGINEERING AND MECHANICS, vol.92, no.2, pp.189-196, 2024 (SCI-Expanded)
- VIII. **Nonlinear vibration and parametric excitation of magneto-thermo elastic embedded nanobeam using Homotopy Perturbation Technique**  
Selvamani R., Thangamuni P., Yaylaci M., Özdemir M. E., Uzun Yaylaci E.  
ZAMM ZEITSCHRIFT FÜR ANGEWANDTE MATHEMATIK UND MECHANIK, vol.1, no.1, pp.1-15, 2024 (SCI-Expanded)
- IX. **Superharmonic resonance analysis of the sandwich FGM beams with viscoelastic core layer**  
Tounsi A., Youzera H., Meftah S. A., Khedher K. M., Salem M. A., Yaylaci M.  
COMPUTERS AND CONCRETE, vol.35, no.1, pp.1-15, 2024 (SCI-Expanded)

- X. **Impact of visco-elastic medium on the bending and vibration characteristics of porous FG nanoplates via integral HSDT**  
Baghdali I., Attia A., Bourada F., Bousahla A. A., Tounsi A., Heireche H., Tounsi A., Bourada M., Yaylacı M.  
PHYSICAL MESOMECHANICS, vol.28, no.2, pp.1-15, 2024 (SCI-Expanded)
- XI. **Formability behavior of AH-32 shipbuilding steel strengthened by friction stir process**  
SEKBAN D. M., UZUN YAYLACI E., Özdemir M. E., ÖZTÜRK Ş., YAYLACI M., Panda S. K.  
Theoretical and Applied Fracture Mechanics, vol.132, 2024 (SCI-Expanded)
- XII. **Examining the contact problem of a functionally graded layer supported by an elastic half-plane with the analytical and numerical methods**  
YAYLACI M., YAYLI M. Ö., ÖZTÜRK Ş., Ay S., Özdemir M. E., UZUN YAYLACI E., BİRİNCİ A.  
Mathematical Methods in the Applied Sciences, vol.47, no.12, pp.10400-10420, 2024 (SCI-Expanded)
- XIII. **Numerical fatigue damage analysis and mathematical modeling of articular cartilage under cyclic load via hyperelasticity theory**  
Al-Furjan M., Cai J., Shan L., Yaylacı M., Bidgoli M. R., Kolahchi R.  
APPLIED MATHEMATICAL MODELLING, vol.136, no.1, pp.1-26, 2024 (SCI-Expanded)
- XIV. **Vibration Analysis of Magneto-Piezo-Thermoelastic Ceramic-Metal FG Nanobeam using modified nonlocal State Space Strain Gradient Theory**  
Rajendran S., Loganathan R., Thangamuni P., Yaylacı M.  
PHYSICAL MESOMECHANICS, vol.28, no.1, pp.1-22, 2024 (SCI-Expanded)
- XV. **On Nonlinear Dynamic Analysis of Hyperbolic Tangent FG-GPL-Reinforced Shallow Spherical Cap under Supersonic Flow**  
Kolahchi R., Wei Y., Furjan M., Yaylacı M., Farrokhian A., Shen X.  
WAVES IN RANDOM AND COMPLEX MEDIA, vol.1, no.1, pp.1-18, 2024 (SCI-Expanded)
- XVI. **Impact of material distribution on the dynamic response of a bidirectional FG beam under general boundary conditions and supported by nonlinear substrate**  
Laoud B., Benyoucef S., Bachiri A., Bourada F., Tounsi A., Yaylacı M., Salem M. A., Khedher K. M.  
Acta Mechanica, vol.235, no.7, pp.4417-4433, 2024 (SCI-Expanded)
- XVII. **Free vibration and bending analysis of porous bi-directional FGM sandwich shell using a TSDT p-version finite element method**  
Lakhdar Z., Chorfi S. M., Belalia S. A., Khedher K. M., Alluqmani A. E., Tounsi A., Yaylacı M.  
Acta Mechanica, vol.235, no.6, pp.3657-3686, 2024 (SCI-Expanded)
- XVIII. **Vibration of piezo-magneto-thermoelastic FG nanobeam submerged in fluid with variable nonlocal parameter**  
Rajendran S., Loganathan R., Yaylacı M., Uzun Yaylacı E., Özdemir M. E.  
ADVANCES IN NANO RESEARCH, vol.16, no.5, pp.489-500, 2024 (SCI-Expanded)
- XIX. **Nonlinear poro-thermo-forced vibration in curved sandwich magneto-electro-elastic shells under hygrothermal environment**  
Selvamani R., Ebrahimi F., Yaylacı M., Öztürk Ş., Uzun Yaylacı E.  
ACTA MECHANICA, vol.235, pp.5489-5528, 2024 (SCI-Expanded)
- XX. **Multi-method examination of contact mechanics in orthotropic layers under gravity**  
Öner E., Uzun Yaylacı E., Yaylacı M.  
MECHANICS OF MATERIALS, vol.1, no.1, pp.1-34, 2024 (SCI-Expanded)
- XXI. **Dynamic Instability Behaviour Prediction of Curved Shell Composite Structure using Different Higher-Order Theories**  
Gangwa A. R., Sahoo A., Kumar V., Sharma N., Yaylacı M., Panda S. K.  
JOURNAL OF VIBRATION ENGINEERING & TECHNOLOGIES, vol.1, no.1, pp.1-20, 2024 (SCI-Expanded)
- XXII. **Effects of the stiffness of an inclusion on the mechanical behavior of an aluminum alloy plate with a lateral notch**  
Abdelmadjid M., El Sallah Z. M., Yaylacı M., Djafar A. K., Ali B., Abdelghani B., Öztürk Ş., Özdemir M. E., Uzun Yaylacı E.  
STEEL AND COMPOSITE STRUCTURES, vol.51, no.1, pp.63-72, 2024 (SCI-Expanded)
- XXIII. **Energy Harvesting Estimation from Vibration of Chopped Fiber Rods Reinforced Microbeams with**

### **Piezoelectric Patch Based on Five Parameter-Surface-Strain Gradient Beam Model**

Balubaid M., Ramady A., Mamoud S., Kolahchi R., Kestegar B., Ali S. I., Algarni A., Yaylacı M., Farrokhan A.  
INTERNATIONAL JOURNAL OF STRUCTURAL STABILITY AND DYNAMICS, vol.1, no.1, pp.1-12, 2024 (SCI-Expanded)

- XXIV. **Accurate Free and Forced Vibration Behavior Prediction of Functionally Graded Sandwich Beams with Variable Cross-Section: A Finite Element Assessment**  
Belabed Z., Tounsi A., Bousahla A. A., Tounsi A., Yaylacı M.  
MECHANICS BASED DESIGN OF STRUCTURES AND MACHINES, vol.1, no.1, pp.1-15, 2024 (SCI-Expanded)
- XXV. **Evaluation of the effect on the permanent tooth germ and adjacent teeth by finite element impact analysis in the traumatized primary tooth**  
Kurt A., Yaylacı M., Dizdar A., Naralan M. E., Uzun Yaylacı E., Öztürk Ş., Çakır B.  
INTERNATIONAL JOURNAL OF PAEDIATRIC DENTISTRY, vol.1, pp.1-10, 2024 (SCI-Expanded)
- XXVI. **Investigation Formability Behavior of Friction Stir Welded High Strength Shipbuilding Steel Using Experimental, Finite Element and Artificial Neural Network Methods**  
Sekban D. M., Uzun Yaylacı E., Özdemir M. E., Yaylacı M., Tounsi A.  
JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE, vol.6, no.2, pp.402-412, 2024 (SCI-Expanded)
- XXVII. **Finite element analysis of the behavior of elliptical cracks emanating from the orthopedic cement interface in total hip prostheses**  
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### **Tasks In Event Organizations**

Yaylacı M., 4th International Conference on Advanced Engineering Technologies, Scientific Congress, Turkey, Eylül 2022  
Yaylacı M., 1<sup>st</sup> International Karatekin Science and Technology Conference, Scientific Congress, Turkey, Eylül 2022

### **Metrics**

Publication: 105  
Citation (WoS): 2230  
Citation (Scopus): 1734  
H-Index (WoS): 30  
H-Index (Scopus): 27

### **Non Academic Experience**

Company, OT-FA İNŞAAT, OT-FA İNŞAAT