

## Assoc. Prof. ECREN UZUN YAYLACI

### Personal Information

**Email:** [ecren.uzunyaylaci@erdogan.edu.tr](mailto:ecren.uzunyaylaci@erdogan.edu.tr)

**Web:** <https://avesis.erdogan.edu.tr/ecren.uzunyaylaci>

**Address:** [ecren.uzunyaylaci@erdogan.edu.tr](mailto:ecren.uzunyaylaci@erdogan.edu.tr)

### International Researcher IDs

ScholarID: 4uSaTaQAAAAJ

ORCID: 0000-0002-2558-2487

Publons / Web Of Science ResearcherID: ABB-5275-2021

ScopusID: 57413304000

Yoksis Researcher ID: 180628

### Education Information

Post Doctorate, University of Santiago de Compostela, Institute of Aquaculture, Microbiology & Parasitology , Spain 2021 - 2022

Doctorate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, BALIKÇILIK TEKNOLOJİSİ MÜHENDİSLİĞİ, Turkey 2013 - 2019

Doctorate, Die Universitaet Stuttgart, Germany 2016 - 2016

Postgraduate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, BALIKÇILIK TEKNOLOJİSİ MÜHENDİSLİĞİ, Turkey 2009 - 2013

Undergraduate, Karadeniz Technical University, Fen Fakültesi, Biyoloji, Turkey 2004 - 2009

### Certificates, Courses and Trainings

Other, Akademik Araştırmalarda Yapay Zeka Kursu, Recep Tayyip Erdoğan Üniversitesi, 2024

Other, Deney Hayvanları Kullanımı, Recep Tayyip Erdoğan Üniversitesi, 2018

Other, Fen Bilimlerinde Araştırma Projesi Hazırlama, Karadeniz Teknik Üniversitesi, 2014

### Dissertations

Doctorate, Yapay sinir ağları kullanarak deniz levreklerinde (*Dicentrarchus labrax*) hastalığa neden olan patojen bakterilerin tanımlanmadan ayrıştırılması tekniğinin geliştirilmesi, Karadeniz Technical University, Fen Bilimleri Enstitüsü, 2019

Postgraduate, Doğu Karadeniz'de deniz levreği'nde (*Dicentrarchus labrax*) ölümlere sebep olan bakteriyel hastalıklar ve mevsimselliklerinin belirlenmesi, Karadeniz Technical University, Fen Bilimleri Enstitüsü, 2013

### Research Areas

Agricultural Sciences, Life Sciences, Engineering and Technology

## Academic Titles / Tasks

Associate Professor, Recep Tayyip Erdogan University, Rektörlük, -, 2023 - Continues

Research Assistant, Karadeniz Technical University, Fen Bilimleri Enstitüsü, BALIKÇILIK TEKNOLOJİSİ MÜHENDİSLİĞİ, 2010 - 2019

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

- I. **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)
- II. **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)
- III. **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)
- IV. **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.1, no.1, pp.1-11, 2024 (SCI-Expanded)
- V. **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)
- VI. **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.1-12, 2024 (SCI-Expanded)
- VII. **Evaluation of the effect on the permanent tooth germ and adjacent teeth by finite element impact analysis in the traumatized primary tooth**  
Finite element impact analysis in the 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)
- VIII. **Finite element analysis of the behavior of elliptical cracks emanating from the orthopedic cement interface in total hip prostheses**  
Benouis A., El Sallah Zagane M., Moulgada A., Yaylacı M., Ait Kaci D., Terzi M., Özdemir M. E., Uzun Yaylacı E.  
STRUCTURAL ENGINEERING AND MECHANICS, vol.89, no.5, pp.706-711, 2024 (SCI-Expanded)
- IX. **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)
- X. **Research of the crack problem of a functionally graded layer**  
YAYLACI M., UZUN YAYLACI E., Turan M., Özdemir M. E., ÖZTÜRK Ş., Ay S.  
Steel and Composite Structures, vol.50, no.1, pp.77-87, 2024 (SCI-Expanded)
- XI. **Analyzing of continuous and discontinuous contact problems of a functionally graded layer: theory of elasticity and finite element method**  
YAYLACI M., Öner E., ADIYAMAN G., ÖZTÜRK Ş., UZUN YAYLACI E., BİRİNCİ A.  
Mechanics Based Design of Structures and Machines, vol.52, no.8, pp.5720-5738, 2024 (SCI-Expanded)
- XII. **Analysis of the mechano-bactericidal effects of nanopatterned surfaces on implant-derived bacteria**

**using the FEM**

Uzun Yaylacı E., Özdemir M. E., Güvercin Y., Öztürk Ş., Yaylacı M.

ADVANCES IN NANO RESEARCH, vol.15, no.6, pp.567-577, 2023 (SCI-Expanded)

- XIII. **Finite element analysis of the femur fracture for a different total hip prosthesis (Charnley, Osteal, and Thompson)**  
Zagane, M.S. M. E. S., Moulgada A., Yaylacı M., Abderahmen S., Uzun Yaylacı E.  
STRUCTURAL ENGINEERING AND MECHANICS, vol.88, no.6, pp.583-588, 2023 (SCI-Expanded)
- XIV. **Comparative study by the finite element method of three activities of a wearer of total hip prosthesis during the postoperative period**  
Moulgada A., El Sallah Zagane M., YAYLACI M., Djafar A. K., Abderahmane S., ÖZTÜRK Ş., UZUN YAYLACI E.  
Structural Engineering and Mechanics, vol.87, no.6, pp.575-583, 2023 (SCI-Expanded)
- XV. **Numerical simulation of the total hip prosthesis under static and dynamic loading (for three activities)**  
El Sallah Zagane M., Moulgada A., YAYLACI M., Abderahmen S., Özdemir M. E., Yaylacı E. U.  
Structural Engineering and Mechanics, vol.86, no.5, pp.635-645, 2023 (SCI-Expanded)
- XVI. **Free vibration and buckling of functionally graded porous beams using analytical, finite element, and artificial neural network methods**  
Turan M., Uzun Yaylacı E., Yaylacı M.  
ARCHIVE OF APPLIED MECHANICS, vol.93, no.4, pp.1351-1372, 2023 (SCI-Expanded)
- XVII. **Vibration and buckling analyses of FGM beam with edge crack: Finite element and multilayer perceptron methods**  
YAYLACI M., Yaylacı E. U., Özdemir M. E., ÖZTÜRK Ş., Sesli H.  
Steel and Composite Structures, vol.46, no.4, pp.565-575, 2023 (SCI-Expanded)
- XVIII. **Analyzing the mechano mechano-bactericidal effect of nano nano-patterned surfaces by finite element method and verification with artificial neural networks**  
Yaylacı E. U., YAYLACI M., Özdemir M. E., Terzi M., ÖZTÜRK Ş.  
Advances in Nano Research, vol.15, no.2, pp.165-174, 2023 (SCI-Expanded)
- XIX. **Biomechanical analysis of odontoid and transverse atlantal ligament in humans with ponticulus posticus variation under different loading conditions: Finite element study.**  
Güvercin Y., Yaylacı M., Dizdar A., Kanat A., Uzun Yaylacı E., Ay S., Abdioğlu A. A., Şen A.  
Injury, vol.53, pp.3879-3886, 2022 (SCI-Expanded)
- XX. **Implementation of finite element and artificial neural network methods to analyze the contact problem of a functionally graded layer containing crack**  
YAYLACI M., Yaylacı E. U., Özdemir M. E., Ay S., ÖZTÜRK Ş.  
Steel and Composite Structures, vol.45, no.4, pp.501-511, 2022 (SCI-Expanded)
- XXI. **Characterization of Pseudoalteromonas sp. from Aquaculture Environment and Optimization of Fermentation Culture Parameters by RSM-Based Modeling**  
Yaylacı E.  
TURKISH JOURNAL OF FISHERIES AND AQUATIC SCIENCES, vol.22, no.11, 2022 (SCI-Expanded)
- XXII. **Application of artificial neural networks in the analysis of the continuous contact problem**  
Yaylacı E., Oner E., YAYLACI M., Ozdemir M. E., Abushattal A., BİRİNCİ A.  
STRUCTURAL ENGINEERING AND MECHANICS, vol.84, no.1, pp.35-48, 2022 (SCI-Expanded)
- XXIII. **Suture button fixation method used in the treatment of syndesmosis injury: A biomechanical analysis of the effect of the placement of the button on the distal tibiofibular joint in the mid-stance phase with finite elements method**  
Guvercin Y., Abdioğlu A. A., Dizdar A., Yaylacı E., YAYLACI M.  
INJURY-INTERNATIONAL JOURNAL OF THE CARE OF THE INJURED, vol.53, no.7, pp.2437-2445, 2022 (SCI-Expanded)
- XXIV. **Evaluation of the contact problem of functionally graded layer resting on rigid foundation pressed via rigid punch by analytical and numerical (FEM and MLP) methods**  
YAYLACI M., Abanoz M., Yaylacı E., ÖLMEZ H., SEKBAN D. M., BİRİNCİ A.

- ARCHIVE OF APPLIED MECHANICS, vol.92, no.6, pp.1953-1971, 2022 (SCI-Expanded)
- XXV. **The contact problem of the functionally graded layer resting on rigid foundation pressed via rigid punch**  
YAYLACI M., Abanoz M., Yaylaci E., ÖLMEZ H., SEKBAN D. M., BİRİNCİ A.  
STEEL AND COMPOSITE STRUCTURES, vol.43, no.5, pp.661-672, 2022 (SCI-Expanded)
- XXVI. **On the plane receding contact between two functionally graded layers using computational, finite element and artificial neural network methods**  
ÖNER E., Sengul Sabano B., Uzun Yaylaci E., ADIYAMAN G., YAYLACI M., BİRİNCİ A.  
ZAMM-ZEITSCHRIFT FÜR ANGEWANDTE MATHEMATIK UND MECHANIK, vol.102, no.2, 2022 (SCI-Expanded)
- XXVII. **Isolation and characterization of Bacillus spp. from aquaculture cage water and its inhibitory effect against selected Vibrio spp.**  
Yaylaci E.  
ARCHIVES OF MICROBIOLOGY, vol.204, no.1, 2022 (SCI-Expanded)
- XXVIII. **Analyzing the contact problem of a functionally graded layer resting on an elastic half plane with theory of elasticity, finite element method and multilayer perceptron**  
YAYLACI M., Yayli M., Yaylaci E., ÖLMEZ H., BİRİNCİ A.  
STRUCTURAL ENGINEERING AND MECHANICS, vol.78, no.5, pp.585-597, 2021 (SCI-Expanded)
- XXIX. **Assessment of different solution methods for receding contact problems in functionally graded layered mediums**  
YAYLACI M., Eyuboglu A., ADIYAMAN G., Yaylaci E., ÖNER E., BİRİNCİ A.  
MECHANICS OF MATERIALS, vol.154, 2021 (SCI-Expanded)
- XXX. **Highly Transferable pAQU-Related Plasmids Encoding Multidrug Resistance Are Widespread in the Human and Fish Pathogen Photobacterium damsela subsp. damsela in Aquaculture Areas in the Black Sea**  
Vences A., Abushattal S., Matanza X. M., Dubert J., Uzun E., Ogut H., Osorio C. R.  
MICROBIAL ECOLOGY, vol.80, no.3, pp.507-518, 2020 (SCI-Expanded)
- XXXI. **Artificial neural network calculations for a receding contact problem**  
Yaylaci E., Yaylaci M., ÖLMEZ H., BİRİNCİ A.  
COMPUTERS AND CONCRETE, vol.25, no.6, pp.551-563, 2020 (SCI-Expanded)
- XXXII. **The isolation frequency of bacterial pathogens from sea bass (Dicentrarchus labrax) in the Southeastern Black Sea**  
Uzun E., Ogut H.  
AQUACULTURE, vol.437, pp.30-37, 2015 (SCI-Expanded)
- XXXIII. **TRACE ELEMENTS IN WHITING MERLANGIUS MERLANGUS AND ITS PARASITE HYSTEROThYLACIUM ADUNCUM: ROLE OF AGE, SIZE AND PARASITISM ON THE HOST**  
ALKAN N., Alkan A., Uzun E., Ogut H.  
APPLIED ECOLOGY AND ENVIRONMENTAL RESEARCH, vol.13, no.3, pp.741-752, 2015 (SCI-Expanded)
- XXXIV. **Incidence and prevalence of Diplectanum aequans and its influence on the fitness of juvenile sea bass (Dicentrarchus labrax) in the Black Sea**  
Ogut H., Uzun E.  
AQUACULTURE RESEARCH, vol.45, no.4, pp.742-748, 2014 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Response Surface Methodology for Optimization of Antagonist Effect of Bacillus sp.**  
Uzun Yaylaci E.  
Recep Tayyip Erdoğan Üniversitesi Fen ve Mühendislik Bilimleri Dergisi, vol.5, no.1, pp.126-132, 2024 (Peer-Reviewed Journal)
- II. **Antibacterial Activity and In vitro Probiotic Properties of Lactococcus lactis Isolated from Sea Bass (Dicentrarchus labrax)**

UZUN YAYLACI E.

JOURNAL OF ANATOLIAN ENVIRONMENTAL AND ANIMAL SCIENCES, vol.7, no.3, pp.251-256, 2022 (Peer-Reviewed Journal)

III. **Finite element analysis of the mechanical behavior of the different angle hip femoral stem**

Guvercin Y., YAYLACI M., ÖLMEZ H., Yaylaci E., Ozdemir M. E., Dizdar A.

BIOMATERIALS AND BIOMECHANICS IN BIOENGINEERING, vol.6, no.1, pp.29-46, 2022 (ESCI)

IV. **Application of Artificial Neural Networks to Predict Inhibition in Probiotic Experiments**

UZUN YAYLACI E.

International Journal of Engineering and Applied Sciences, vol.13, no.3, pp.106-125, 2021 (Peer-Reviewed Journal)

V. **Antioxidant Potential of Chestnut Shell, Stinging Nettle, Kiwi Fruit and Citrus Fruit Extracts and Antimicrobial Effects Against Some Fish Pathogens**

KOBYA O., KARA B., YAYLACI E., ÇAĞLAK E.

JOURNAL OF ANATOLIAN ENVIRONMENTAL AND ANIMAL SCIENCES, vol.12, no.4, pp.138-152, 2021 (Peer-Reviewed Journal)

VI. **Antibacterial Effects of Boric Acid Against Aquatic Pathogens**

UZUN YAYLACI E.

JOURNAL OF ANATOLIAN ENVIRONMENTAL AND ANIMAL SCIENCES, vol.6, no.2, pp.240-244, 2021 (Peer-Reviewed Journal)

VII. **Investigation of The Effect of Different Prosthesis Designs and Numbers on Stress, Strain and Deformation Distribution**

Nişancı G. N., GÜVERCİN Y., ATEŞ S. M., ÖLMEZ H., UZUN YAYLACI E., YAYLACI M.

International Journal of Engineering and Applied Sciences, vol.12, no.4, pp.138-152, 2020 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **The behavior of Pseudoalteromonas haloplanktis OS-9 in Conditions that Mimic the Gastrointestinal Environment of Fish**  
UZUN YAYLACI E.  
4th International Conference on Scientific Research, Şanlıurfa, Turkey, 9 - 11 September 2022
- II. **Antibacterial Activity of Marine-Culturable Rhodococcus Species Collected from Aquaculture Cage Surface Waters**  
UZUN YAYLACI E.  
9th International Academic Studies Conference, Turkey, 3 - 05 August 2022
- III. **In vitro analysis: Antibacterial Potential of Marine Psychrobacter sp.,**  
UZUN YAYLACI E.  
8th International Mardin Artuklu Scientific Researchers Conference, Mardin, Turkey, 4 - 06 June 2022
- IV. **FINITE ELEMENT METHOD AND ARTIFICIAL NEURAL NETWORK BASED NUMERICAL SOLUTION OF THE CONTACT PROBLEM**  
YAYLACI M., UZUN YAYLACI E., ÖZDEMİR M. E.  
V-International European Conference on Interdisciplinary Scientific Research, Valencia, Spain, 28 - 29 January 2022
- V. **Antibacterial Activity of Helichrysum arenarium subsp. aucheri Extract Against Vibrio spp. Isolated from Sea Bass (Dicentrarchus labrax) and Aquaculture Cage Water**  
UZUN YAYLACI E., CÜCE M., BEKİRCAN T.  
7th International Mardin Artuklu Scientific Researchers Conference, Mardin, Turkey, 10 - 12 December 2021
- VI. **Levrekten (Dicentrarchus labrax) İzole Edilen Lactococcus lactis'in Antibakteriyel Potansiyelinin İncelenmesi**  
UZUN YAYLACI E.  
10th Ulusal Moleküler Biyoloji ve Biyoteknoloji Kongresi, Turkey, 17 - 19 December 2021
- VII. **Preliminary Selection Study of Potential Probiotic Bacteria from Aquaculture Environment**

UZUN YAYLACI E.

4th Agriculture, Environment and Health Congress, Aydın, Turkey, 20 - 22 May 2021

VIII. **In vitro Antimicrobial Activity of Rosa canina Leaf Extract Against Selected Microorganisms**

UZUN YAYLACI E., CÜCE M., BEKİRCAN T.

4th Agriculture, Environment and Health Congress, Aydın, Turkey, 20 - 22 May 2021

IX. **Antibacterial Activity of Orange (Citrus aurantium) and Stinging Nettle (Urtica dioica) Extracts Against Selected Fish Pathogenic Bacteria**

Kobyay O., KARA B., UZUN YAYLACI E., ÇAĞLAK E.

2nd International Symposium on Biodiversity Research, Rize, Turkey, 18 - 20 November 2020

X. **Bacterial Differentiation with Artificial Neural Networks**

UZUN YAYLACI E., ÖĞÜT H.

Euroasian Congress on Molecular Biotechnology, 19 - 21 September 2019

XI. **KARADENİZDE YETİŞTİRİCİLİĞİ YAPILAN LEVREK BALIKLARINA DİCENTRARCHUS LABRAX DİPLECTANUM AEQUANS PARAZİTİNİN İNSİDANS VE PREVELENSİNİN ETKİSİ**

ÖĞÜT H., UZUN YAYLACI E.

18. ULUSAL SU SEMPOZYUMU, Turkey, 1 - 04 September 2015, pp.334

XII. **DOĞU KARADENİZDE DENİZ LEVREĞİ DİCENTRARCHUS LABRAX NDE ÖLÜMLERE SEBEP OLAN BAKTERİYEL PATOJENLER VE İNDİANSLARI**

ÖĞÜT H., UZUN YAYLACI E.

18. ULUSAL SU SEMPOZYUMU, Turkey, 1 - 04 September 2015, pp.179

## Supported Projects

Uzun Yaylacı E., Kara A., Project Supported by Higher Education Institutions, Kendi Kendini Onaran Beton Uygulamalarında Kullanım Potansiyeli Olan Yerli Üreolitik Bakterilerin Üreaz Aktivitesinin ve Bakteriyel Kalsiyum Karbonat Çökeliminin Ölçülmesi, 2023 - 2024

Uzun Yaylacı E., Yaylacı M., Çağlak E., Öztürk Ş., Kara A., TUBİTAK Project, Biyobeton Uygulamalarında Kullanılmak Üzere Deniz Suyundan Bakteri İzolasyonu, Tanımlanması ve Aktif İzolatların Beton Üzerindeki Fiziksel Etkilerinin İncelenmesi, 2023 - 2024

Uzun Yaylacı E., Osorio Rodriguez C., TUBİTAK Project, Hızla Yayılan Bir Balık Patojeni olan Photobacterium damsela subsp. damsela'da, Sıcaklıkla Çalışan AcrAB-ToIC Pompa Sisteminin Antimikrobiyal Direnç, Virülens ve Diğer Genler Üzerindeki Rollerinin Deşifre Edilmesi, 2021 - 2022

Uzun Yaylacı E., Köse S., Project Supported by Higher Education Institutions, Deniz Levreklerinde Dicentrarchus labrax Hastalığa Neden olan Patojen Bakterilerin Tanımlanması için Geliştirilen Yapay Sinir Ağı Yönteminin Doğrulanması, 2017 - 2018

Uzun Yaylacı E., Öğüt H., Parlak R., Altuntaş C., Project Supported by Higher Education Institutions, Doğu Karadeniz Bölgesi'nde Yetiştiriciliği Yapılan Deniz Levreği (Dicentrarchus labrax) Balığında Yüksek Mortaliteye Sebep Olan Bakteriyel Hastalıkların Belirlenmesi ve Kontrolü, 2011 - 2013

## Metrics

Publication: 53

Citation (WoS): 667

Citation (Scopus): 650

H-Index (WoS): 12

H-Index (Scopus): 13