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International Researcher IDs

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Publons / Web Of Science ResearcherID: I-5252-2019

ScopusID: 56460194800

Yoksis Researcher ID: 37198

Education Information

Doctorate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Makina Mühendisliği (Dr), Turkey 2014 - 2019

Postgraduate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Katı Cisimlerin Mekaniği (YI), Turkey 2012 - 2014

Undergraduate, Istanbul University, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, Turkey 2008 - 2012

Foreign Languages

English, C1 Advanced

Dissertations

Postgraduate, Eğri eksenli çubukların analizi için kesin çözüm yöntemi ile sonlu eleman formülasyonu, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Katı Cisimlerin Mekaniği (YI), 2014

Research Areas

Mechanical Engineering, Mechanical, Solid Mechanics, Fracture Mechanics, Continuous Mechanics, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Istanbul Technical University, Makina, Makina Mühendisliği, 2023 - Continues

Assistant Professor, Mef University, Faculty Of Engineering, Department Of Mechanical Engineering, 2022 - 2023

Assistant Professor, Università Degli Studi di Roma La Sapienza, Facoltà di Ingegneria, Dipartimento di Ingegneria Strutturale e Geotecnica, 2021 - 2022

Assistant Professor, Izmir University Of Economics, Faculty Of Engineering, Department Of Mechanical Engineering, 2020 - 2022

Researcher, Università Degli Studi di Roma La Sapienza, Facoltà di Ingegneria, Dipartimento di Ingegneria Strutturale e Geotecnica, 2018 - 2019

Researcher, Università Degli Studi di Roma La Sapienza, Facoltà di Ingegneria, Dipartimento di Ingegneria Strutturale e Geotecnica, 2018 - 2018

Researcher, Università Degli Studi di Roma La Sapienza, Facoltà di Ingegneria, Dipartimento di Ingegneria Strutturale e Geotecnica, 2017 - 2018

Research Assistant, Istanbul Technical University, Makina, Makina Mühendisliği, 2013 - 2018

Courses

Strength of Materials, Undergraduate, 2022 - 2023

Strength of Materials I, Undergraduate, 2022 - 2023

Energy Methods in Mechanics, Doctorate, 2022 - 2023

Advising Theses

Tüfekci E., Eroğlu U., Analytical and numerical analysis of coupled linear vibrations of fgm beams and frames, Postgraduate, N.AYTEMÜR(Student), 2022

Jury Memberships

Doctorate, Doctorate, Università Degli Studi di Firenze, May, 2021

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Approximate closed-form solutions for vibration of nano-beams of local/non-local mixture**
Eroğlu U., Ruta G.
Meccanica, vol.57, no.12, pp.3033-3049, 2022 (SCI-Expanded)
- II. **Vibration of locally cracked pre-loaded parabolic arches**
Eroglu U., Ruta G., Tufekci E.
JOURNAL OF SOUND AND VIBRATION, vol.536, 2022 (SCI-Expanded)
- III. **Perturbation approach to Eringen's local/non-local constitutive equation with applications to 1-D structures**
Eroglu U.
Meccanica, vol.55, no.5, pp.1119-1134, 2020 (SCI-Expanded)
- IV. **Closed-form solutions for elastic tapered parabolic arches under uniform thermal gradients**
Eroglu U., Ruta G.
Meccanica, vol.55, no.5, pp.1135-1152, 2020 (SCI-Expanded)
- V. **Exact closed-form static solutions for parabolic arches with concentrated damage**
Eroğlu U., Paolone A., Ruta G., Tüfekci E.
ARCHIVE OF APPLIED MECHANICS, vol.90, no.4, pp.673-689, 2020 (SCI-Expanded)
- VI. **Natural frequencies of parabolic arches with a single crack on opposite cross-section sides**
Eroglu U., Ruta G., Tufekci E.
JOURNAL OF VIBRATION AND CONTROL, vol.25, no.7, pp.1313-1325, 2019 (SCI-Expanded)
- VII. **Fundamental frequencies and buckling in pre-stressed parabolic arches**
Eroglu U., Ruta G.
JOURNAL OF SOUND AND VIBRATION, vol.435, pp.104-118, 2018 (SCI-Expanded)
- VIII. **A new finite element formulation for free vibrations of planar curved beams**
Eroğlu U., Tüfekci E.
MECHANICS BASED DESIGN OF STRUCTURES AND MACHINES, vol.46, no.6, pp.730-750, 2018 (SCI-Expanded)

- IX. **Small-Amplitude free vibrations of straight beams subjected to large displacements and rotation**
Eroglu U., Tüfekci E.
APPLIED MATHEMATICAL MODELLING, vol.53, pp.223-241, 2018 (SCI-Expanded)
- X. **Free Vibration of Damaged Frame Structures Considering the Effects of Axial Extension, Shear Deformation and Rotatory Inertia: Exact Solution**
Eroglu U., Tüfekci E.
INTERNATIONAL JOURNAL OF STRUCTURAL STABILITY AND DYNAMICS, vol.17, no.10, 2017 (SCI-Expanded)
- XI. **Crack modeling and identification in curved beams using differential evolution**
Eroglu U., Tüfekci E.
INTERNATIONAL JOURNAL OF MECHANICAL SCIENCES, vol.131, pp.435-450, 2017 (SCI-Expanded)
- XII. **A new two-noded curved beam finite element formulation based on exact solution**
Tüfekci E., Eroglu U., AYA S. A.
ENGINEERING WITH COMPUTERS, vol.33, no.2, pp.261-273, 2017 (SCI-Expanded)
- XIII. **Exact solution based finite element formulation of cracked beams for crack detection**
Eroglu U., Tüfekci E.
INTERNATIONAL JOURNAL OF SOLIDS AND STRUCTURES, vol.96, pp.240-253, 2016 (SCI-Expanded)
- XIV. **Large deflection analysis of planar curved beams made of Functionally Graded Materials using Variational Iterational Method**
Eroglu U.
COMPOSITE STRUCTURES, vol.136, pp.204-216, 2016 (SCI-Expanded)
- XV. **Exact solution for in-plane static problems of circular beams made of functionally graded materials**
Tüfekci E., EROGLU U., AYA S. A.
MECHANICS BASED DESIGN OF STRUCTURES AND MACHINES, vol.44, no.4, pp.476-494, 2016 (SCI-Expanded)
- XVI. **In-plane free vibrations of circular beams made of functionally graded material in thermal environment: Beam theory approach**
Eroglu U.
COMPOSITE STRUCTURES, vol.122, pp.217-228, 2015 (SCI-Expanded)

Articles Published in Other Journals

- I. **İTÜ MAKİNA FAKÜLTESİNİN EĞİTİM ANLAYIŞINA DERS PROGRAMLARI, KÜRSÜLER VE ÇALIŞMA GRUPLARININ EVRİMİ İŞİĞİNDE BİR BAKIŞ**
Eroğlu U., Tüfekci E.
İstanbul Teknik Üniversitesi Dergisi, no.1, pp.44-48, 2023 (Non Peer-Reviewed Journal)
- II. **Some New Approximate Solutions in Closed-Form to Problems of Nanobars**
EROĞLU U.
European Mechanical Science, vol.5, no.4, 2021 (Peer-Reviewed Journal)
- III. **Some closed-form solutions for buckling of straight beams with varying cross-section by Variational Iteration Method with Generalized Lagrange Multipliers**
EROĞLU U., TÜFEKÇİ E.
International Journal Of Engineering Applied Sciences, vol.10, no.3, pp.159-175, 2018 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **The minimum variance distortionless response beamformer for damage identification using modal curvatures**
Pau A., EROĞLU U.
XXV CONVEGNO AIMETA, Palermo, Italy, 04 September 2022
- II. **Perturbations for Non-Local Elastic Vibration of Circular Arches**

EROĞLU U., Ruta G.

Second International Nonlinear Dynamics Conference, NODYCON 2021, Roma, Italy, 16 February 2021, vol.1, pp.291-301

III. Advances in Nonlinear Dynamics

EROĞLU U.

Second International Nonlinear Dynamics Conference, NODYCON 2021, Roma, Italy, 16 February 2021, vol.3, pp.347-355

IV. Vibration of Pre-Loaded Shallow Circular Arches

Eroğlu U., Ruta G.

1st International Nonlinear Dynamics Conference, NODYCON 2019, Rome, Italy, 17 - 20 February 2019, pp.237-245

Supported Projects

Eroğlu U., Project Supported by Higher Education Institutions, Hüzme Oluşturma Yöntemlerinin Yapısal Mekanikte Hasar Tespiti Problemlerinde Kullanılması, 2023 - Continues

Tüfekçi E., TUBITAK Project, Doğru Ve Çember Eksenli Çubuklarda Çatlak Modellemesi Ve Deneysel Verilerle Çatlağın Tespiti, 2014 - 2017

Memberships / Tasks in Scientific Organizations

Associazione Italiana di Meccanica Teorica e Applicata, Member, 2022 - Continues, Italy

Scientific Refereeing

JVC/JOURNAL OF VIBRATION AND CONTROL, Journal Indexed in SCI-E, March 2023

COMPOSITE STRUCTURES, SCI Journal, June 2022

JOURNAL OF SOUND AND VIBRATION, SCI Journal, June 2022

COMPOSITE STRUCTURES, SCI Journal, July 2021

JVC/JOURNAL OF VIBRATION AND CONTROL, Journal Indexed in SCI-E, May 2021

JVC/JOURNAL OF VIBRATION AND CONTROL, Journal Indexed in SCI-E, February 2021

INTERNATIONAL JOURNAL OF MECHANICAL SCIENCES, SCI Journal, February 2021

COMPOSITE STRUCTURES, SCI Journal, December 2020

INTERNATIONAL JOURNAL OF MECHANICAL SCIENCES, SCI Journal, June 2020

Applied Acoustics, SCI Journal, March 2018

Composite Structures, SCI Journal, February 2017

Journal of Engineering Mechanics, SCI Journal, April 2016

Multidiscipline Modeling in Materials and Structures, Other Indexed Journal, March 2015

Metrics

Publication: 25

Citation (WoS): 158

Citation (Scopus): 236

H-Index (WoS): 8

H-Index (Scopus): 10

Congress and Symposium Activities

Türkiye'de Mühendislik ve Mimarlığın 250 Yılı, Attendee, İstanbul, Turkey, 2022