

Prof. NAKİ TÜTÜNCÜ

Personal Information

Fax Phone: [+90 322 388 6126](tel:+903223886126)

Email: ntutuncu@cu.edu.tr

Web: <https://avesis.cu.edu.tr//ntutuncu>

Address: Çukurova Üniversitesi Makine Mühendisliği Bölümü 01330 Sarıçam Adana

International Researcher IDs

ORCID: 0000-0002-7808-1619

Publons / Web Of Science ResearcherID: H-2940-2018

Yoksis Researcher ID: 2498

Education Information

Doctorate, Rensselaer Polytechnic Institute, İnşaat Mühendisliği, Mekanik, United States Of America 1986 - 1991

Postgraduate, University of Massachusetts Amherst, Yabancı Diller Yüksekokulu, İnşaat Mühendisliği, United States Of America 1983 - 1985

Undergraduate, University of Massachusetts Amherst, Yabancı Diller Yüksekokulu, Makine Mühendisliği, United States Of America 1979 - 1983

Research Areas

Mechanical Engineering, Mechanical, Solid Mechanics, Engineering and Technology

Academic Titles / Tasks

Professor, Cukurova University, Mühendislik Fakültesi, Makina Müh., 1992 - Continues

Supervised Theses

TÜTÜNCÜ N., Mechanics of Composite Structures Using Matlab GUI, Postgraduate, S.Yıldırım(Student), 2013

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Predicting the indentation load of FRP facesheet / foam core sandwiches**
Çetin A., Uzay Ç., Tütüncü N., Geren N.
STRUCTURES, vol.62, 2024 (SCI-Expanded)
- II. **Inertio-elastic instability of functionally graded nanotube-reinforced composite disks**
Yıldırım S., TÜTÜNCÜ N.
Journal of Strain Analysis for Engineering Design, 2024 (SCI-Expanded)
- III. **Effect of Magneto-Thermal Loads on the Rotational Instability of Heterogeneous Rotors**
Yıldırım S., TÜTÜNCÜ N.
AIAA JOURNAL, vol.57, no.5, pp.2069-2074, 2019 (SCI-Expanded)

- IV. **On the inertio-elastic instability of variable-thickness functionally-graded disks**
YILDIRIM S., TÛTÛNCÛ N.
MECHANICS RESEARCH COMMUNICATIONS, vol.91, pp.1-6, 2018 (SCI-Expanded)
- V. **Radial vibration analysis of heterogeneous and non-uniform disks via complementary functions method**
YILDIRIM S., TÛTÛNCÛ N.
JOURNAL OF STRAIN ANALYSIS FOR ENGINEERING DESIGN, vol.53, no.5, pp.332-337, 2018 (SCI-Expanded)
- VI. **Axisymmetric plane vibration analysis of polar-anisotropic disks**
YILDIRIM S., TÛTÛNCÛ N.
COMPOSITE STRUCTURES, vol.194, pp.509-515, 2018 (SCI-Expanded)
- VII. **Free vibration analysis of functionally graded beams using complementary functions method**
Celebi K., Yarimpabuc D., TÛTÛNCÛ N.
ARCHIVE OF APPLIED MECHANICS, vol.88, no.5, pp.729-739, 2018 (SCI-Expanded)
- VIII. **Elastic and viscoelastic response of heterogeneous annular structures under arbitrary transient pressure**
TEMEL B., YILDIRIM S., TÛTÛNCÛ N.
INTERNATIONAL JOURNAL OF MECHANICAL SCIENCES, vol.89, pp.78-83, 2014 (SCI-Expanded)
- IX. **Free vibration analysis of functionally graded beams using an exact plane elasticity approach**
Celebi K., TÛTÛNCÛ N.
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART C-JOURNAL OF MECHANICAL ENGINEERING SCIENCE, vol.228, no.14, pp.2488-2494, 2014 (SCI-Expanded)
- X. **An Efficient Unified Method for Thermoelastic Analysis of Functionally Graded Rotating Disks of Variable Thickness**
TÛTÛNCÛ N., TEMEL B.
MECHANICS OF ADVANCED MATERIALS AND STRUCTURES, vol.20, no.1, pp.38-46, 2013 (SCI-Expanded)
- XI. **CLOSED-FORM SOLUTIONS FOR FORCED VIBRATION ANALYSIS OF INHOMOGENOUS ROD**
Celebi K., Keles I., TÛTÛNCÛ N.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.27, no.4, pp.753-763, 2012 (SCI-Expanded)
- XII. **Exact Analysis of Axisymmetric Dynamic Response of Functionally Graded Cylinders (or Disks) and Spheres**
Keles I., Tutuncu N.
JOURNAL OF APPLIED MECHANICS-TRANSACTIONS OF THE ASME, vol.78, no.6, 2011 (SCI-Expanded)
- XIII. **A novel approach to stress analysis of pressurized FGM cylinders, disks and spheres**
TÛTÛNCÛ N., TEMEL B.
COMPOSITE STRUCTURES, vol.91, no.3, pp.385-390, 2009 (SCI-Expanded)
- XIV. **Effect of anisotropy on axisymmetric dynamic response of thick-walled cylinders**
Keles I., TÛTÛNCÛ N.
INTERNATIONAL JOURNAL OF PRESSURE VESSELS AND PIPING, vol.86, no.7, pp.435-442, 2009 (SCI-Expanded)
- XV. **A Parametric Investigation into Free and Forced Vibration Behavior of Anisotropic Thick-Walled Spheres**
Keles I., TÛTÛNCÛ N.
JOURNAL OF REINFORCED PLASTICS AND COMPOSITES, vol.28, no.6, pp.701-714, 2009 (SCI-Expanded)
- XVI. **Stresses in thick-walled FGM cylinders with exponentially-varying properties**
Tutuncu N.
ENGINEERING STRUCTURES, vol.29, no.9, pp.2032-2035, 2007 (SCI-Expanded)
- XVII. **Forced vibration of composite cylindrical helical rods**
Temel B., CALIM F., Tutuncu N.
INTERNATIONAL JOURNAL OF MECHANICAL SCIENCES, vol.47, no.7, pp.998-1022, 2005 (SCI-Expanded)
- XVIII. **Structure and mechanical properties of Cresco-Ti laser-welded joints and stress analyses using finite element models of fixed distal extension and fixed partial prosthetic designs**

- UYSAL H., Kurtoglu C., GURBUZ R., TUTUNCU N.
JOURNAL OF PROSTHETIC DENTISTRY, vol.93, no.3, pp.235-244, 2005 (SCI-Expanded)
- XIX. **Quasi-static and dynamic response of viscoelastic helical rods**
Temel B., CALIM F., Tutuncu N.
JOURNAL OF SOUND AND VIBRATION, vol.271, pp.921-935, 2004 (SCI-Expanded)
- XX. **Stress redistribution and instability in rotating orthotropic cylinders**
Tutuncu N., Ozturk M.
JOURNAL OF REINFORCED PLASTICS AND COMPOSITES, vol.23, no.9, pp.941-950, 2004 (SCI-Expanded)
- XXI. **Exact solutions for stresses in functionally graded pressure vessels**
Tutuncu N., Ozturk M.
COMPOSITES PART B-ENGINEERING, vol.32, no.8, pp.683-686, 2001 (SCI-Expanded)
- XXII. **Effect of anisotropy on inertio-elastic instability of rotating disks**
Tutuncu N.
INTERNATIONAL JOURNAL OF SOLIDS AND STRUCTURES, vol.37, no.51, pp.7609-7616, 2000 (SCI-Expanded)
- XXIII. **A parametric stability analysis of composite plates tapered in planform**
Herdi M., Tutuncu N.
JOURNAL OF STRAIN ANALYSIS FOR ENGINEERING DESIGN, vol.35, no.1, pp.59-64, 2000 (SCI-Expanded)
- XXIV. **Plane stress analysis of end-loaded orthotropic curved beams of constant thickness with applications to full rings**
Tutuncu N.
JOURNAL OF MECHANICAL DESIGN, vol.120, no.2, pp.368-374, 1998 (SCI-Expanded)
- XXV. **Determination of buckling speed for rotating orthotropic disk restrained at outer edge**
Tutuncu N., Durdu A.
AIAA JOURNAL, vol.36, no.1, pp.89-93, 1998 (SCI-Expanded)
- XXVI. **Intralaminar failure stresses due to centrifugal forces in polar-anisotropic circular plates**
Tutuncu N.
JOURNAL OF COMPOSITE MATERIALS, vol.32, no.21, pp.1948-1963, 1998 (SCI-Expanded)
- XXVII. **Interlaminar thermal stresses in polar-anisotropic circular plates**
Tutuncu N.
JOURNAL OF REINFORCED PLASTICS AND COMPOSITES, vol.17, no.11, pp.1024-1035, 1998 (SCI-Expanded)
- XXVIII. **Thermoelastic analysis of polar-anisotropic circular plates**
Tutuncu N.
JOURNAL OF ENGINEERING MECHANICS-ASCE, vol.123, no.10, pp.1104-1106, 1997 (SCI-Expanded)
- XXIX. **Bending stresses in composite spherical shells under axisymmetric edge-loads**
Tutuncu N., Ozturk M.
COMPUTERS & STRUCTURES, vol.62, no.1, pp.157-163, 1997 (SCI-Expanded)
- XXX. **EFFECT OF ANISOTROPY ON STRESSES IN ROTATING DISCS**
TUTUNCU N.
INTERNATIONAL JOURNAL OF MECHANICAL SCIENCES, vol.37, no.8, pp.873-881, 1995 (SCI-Expanded)
- XXXI. **THERMALLY-INDUCED TWIST IN COMPOSITE TUBES AND THEIR APPLICATIONS TO HELICOPTER ROTOR BLADES WITH CONTROLLABLE TWIST**
TUTUNCU N., WINCKLER S.
JOURNAL OF THE AMERICAN HELICOPTER SOCIETY, vol.39, no.1, pp.41-49, 1994 (SCI-Expanded)
- XXXII. **STRESSES AND DEFORMATIONS IN THICK-WALLED CYLINDERS SUBJECTED TO COMBINED LOADING AND A TEMPERATURE-GRADIENT**
TÜTÜNCÜ N., WINCKLER S.
JOURNAL OF REINFORCED PLASTICS AND COMPOSITES, vol.12, no.2, pp.198-209, 1993 (SCI-Expanded)
- XXXIII. **DEFORMATIONS IN COMPOSITE SHELLS OF REVOLUTION UNDER AXISYMMETRICAL AND THERMAL LOADS**
TÜTÜNCÜ N., WINCKLER S.
JOURNAL OF COMPOSITE MATERIALS, vol.26, no.17, pp.2511-2521, 1992 (SCI-Expanded)

Articles Published in Other Journals

- I. **EXACT SOLUTIONS FOR FORCED VIBRATION OF NON UNIFORM RODS BY LAPLACE TRANSFORMATION**
ÇELEBİ K., KELEŞ İ., TÜTÜNCÜ N.
Gazi University Journal of Science, vol.24, no.2, pp.347-353, 2011 (Scopus)
- II. **Analysis of Behaviour of an Elastic Bar with Varying Cross Section Under Dynamic Loads with Laplace Transform Method**
ÇELEBİ K., TÜTÜNCÜ N., KELEŞ İ.
Çukurova University Journal of Faculty of Engineering and Architecture, vol.22, no.2, pp.185-196, 2007 (Peer-Reviewed Journal)
- III. **Free Vibration and Dynamic Analysis of Uniform and Non Uniform Rods Using Mode Superposition Method**
ÇELEBİ K., TÜTÜNCÜ N., KELEŞ İ.
Çukurova University Journal of Faculty of Engineering and Architecture, vol.22, no.2, pp.197-211, 2007 (Peer-Reviewed Journal)

Papers Published in Refereed Scientific Meetings

- I. **Rotational Instability of Polar Orthotropic Nonuniform Disks**
YILDIRIM S., TÜTÜNCÜ N.
8th International Conference on Mechanical and Aerospace Engineering (ICMAE), Prague, Czech Republic, 22 - 25 July 2017, pp.586-590
- II. **Keyfi Dinamik İç Basınç Altındaki Heterojen Dairesel Yapıların Elastik ve Viskoelastik Davranışları TRABZON TÜRKİYE 24 28 Ağustos 2015 ss 1 10**
TEMEL B., YILDIRIM S., TÜTÜNCÜ N.
XIX. Ulusal Mekanik Kongresi, Trabzon, Turkey, 24 - 28 August 2015, pp.1-10
- III. **Keyfi Dinamik İç Basınç Altındaki Heterojen Dairesel Yapıların Elastik ve Viskoelastik Davranışları**
Temel B., Yıldırım S., Tütüncü N.
XIX. Ulusal Mekanik Kongresi, Trabzon, Turkey, 24 - 28 August 2015, pp.1-10
- IV. **Analysis of Composite Plates by KomPro**
YILDIRIM S., Tütüncü N.
(IJAS) International Conference for Academic Dicipines, Viyana, Austria, 6 - 10 April 2014, pp.1-2
- V. **Transient Response of FGM Pressure Vessels**
Pekel H., Keleş İ., Temel B., Tütüncü N.
10th Biennial International Conference on Vibration Problems (ICOVP), Usti, Czech Republic, 5 - 08 September 2011, pp.315-320
- VI. **Transient Response of FGM Pressure Vessels**
Pekel H., Keles I., Temel B., Tütüncü N.
10th Biennial International Conference on Vibration Problems (ICOVP), Prague, Czech Republic, 5 - 08 September 2011, vol.139, pp.315-320
- VII. **Homojen olmayan FGM Çubuk Disk ve Silindirlerin Laplace Transformasyonu ile Zorlanmış Titresim Analizi**
ÇELEBİ K., KELES I., TÜTÜNCÜ N.
XVI. ULUSAL MEKANİK KONGRESİ, Kayseri, Turkey, 1 - 03 June 2009, pp.417-426

Metrics

Publication: 45

Citation (WoS): 594

Citation (Scopus): 771

H-Index (WoS): 12

H-Index (Scopus): 14