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

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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

Advising 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. Effect of Magneto-Thermal Loads on the Rotational Instability of Heterogeneous Rotors
Yildirim S., TÜTÜNCÜ N.
AIAA JOURNAL, vol.57, no.5, pp.2069-2074, 2019 (SCI-Expanded)
- III. On the inertio-elastic instability of variable-thickness functionally-graded disks
YILDIRIM S., TÜTÜNCÜ N.
MECHANICS RESEARCH COMMUNICATIONS, vol.91, pp.1-6, 2018 (SCI-Expanded)

- IV. **Radial vibration analysis of heterogeneous and non-uniform disks via complementary functions method**
YILDIRIM S., TÜTÜNCÜ N.
JOURNAL OF STRAIN ANALYSIS FOR ENGINEERING DESIGN, vol.53, no.5, pp.332-337, 2018 (SCI-Expanded)
- V. **Axisymmetric plane vibration analysis of polar-anisotropic disks**
YILDIRIM S., TÜTÜNCÜ N.
COMPOSITE STRUCTURES, vol.194, pp.509-515, 2018 (SCI-Expanded)
- VI. **Free vibration analysis of functionally graded beams using complementary functions method**
Celebi K., Yarimpabuc D., TÜTÜNCÜ N.
ARCHIVE OF APPLIED MECHANICS, vol.88, no.5, pp.729-739, 2018 (SCI-Expanded)
- VII. **Elastic and viscoelastic response of heterogeneous annular structures under arbitrary transient pressure**
TEMEL B., YILDIRIM S., TÜTÜNCÜ N.
INTERNATIONAL JOURNAL OF MECHANICAL SCIENCES, vol.89, pp.78-83, 2014 (SCI-Expanded)
- VIII. **Free vibration analysis of functionally graded beams using an exact plane elasticity approach**
Celebi K., TÜTÜNCÜ 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)
- IX. **An Efficient Unified Method for Thermoelastic Analysis of Functionally Graded Rotating Disks of Variable Thickness**
TÜTÜNCÜ N., TEMEL B.
MECHANICS OF ADVANCED MATERIALS AND STRUCTURES, vol.20, no.1, pp.38-46, 2013 (SCI-Expanded)
- X. **CLOSED-FORM SOLUTIONS FOR FORCED VIBRATION ANALYSIS OF INHOMOGENEOUS ROD**
Celebi K., Keles I., TÜTÜNCÜ N.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.27, no.4, pp.753-763, 2012 (SCI-Expanded)
- XI. **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)
- XII. **A novel approach to stress analysis of pressurized FGM cylinders, disks and spheres**
TÜTÜNCÜ N., TEMEL B.
COMPOSITE STRUCTURES, vol.91, no.3, pp.385-390, 2009 (SCI-Expanded)
- XIII. **Effect of anisotropy on axisymmetric dynamic response of thick-walled cylinders**
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- XIV. **A Parametric Investigation into Free and Forced Vibration Behavior of Anisotropic Thick-Walled Spheres**
Keles I., TÜTÜNCÜ N.
JOURNAL OF REINFORCED PLASTICS AND COMPOSITES, vol.28, no.6, pp.701-714, 2009 (SCI-Expanded)
- XV. **Stresses in thick-walled FGM cylinders with exponentially-varying properties**
Tutuncu N.
ENGINEERING STRUCTURES, vol.29, no.9, pp.2032-2035, 2007 (SCI-Expanded)
- XVI. **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)
- XVII. **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**
UYDAL H., Kurtoglu C., GURBUZ R., TUTUNCU N.
JOURNAL OF PROSTHETIC DENTISTRY, vol.93, no.3, pp.235-244, 2005 (SCI-Expanded)
- XVIII. **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)
- XIX. **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)
- XX. **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)
- XXI. **Effect of anisotropy on inertia-elastic instability of rotating disks**
 Tutuncu N.
 INTERNATIONAL JOURNAL OF SOLIDS AND STRUCTURES, vol.37, no.51, pp.7609-7616, 2000 (SCI-Expanded)
- XXII. **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)
- XXIII. **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)
- XXIV. **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)
- XXV. **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)
- XXVI. **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)
- XXVII. **Thermoelastic analysis of polar-anisotropic circular plates**
 Tutuncu N.
 JOURNAL OF ENGINEERING MECHANICS-ASCE, vol.123, no.10, pp.1104-1106, 1997 (SCI-Expanded)
- XXVIII. **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)
- XXIX. **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)
- XXX. **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)
- XXXI. **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)
- XXXII. **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)

Refereed Congress / Symposium Publications in Proceedings

- 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 Diciplines, 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 İ., 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 İ., TÜTÜNCÜ N.
XVI. ULUSAL MEKANİK KONGRESİ, Kayseri, Turkey, 1 - 03 June 2009, pp.417-426

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