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International Researcher IDs

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Education Information

Doctorate, Rensselaer Polytechnic Institute, Faculty Of Engineering, Mechanical Engineering Department, United States Of America 1996 - 2000

Postgraduate, Miami University, Faculty Of Engineering, Mechanical Engineering Department, United States Of America 1991 - 1995

Undergraduate, Middle East Technical University, Faculty Of Engineering, Department Of Mechanical Engineering, Turkey 1987 - 1991

Foreign Languages

Arabic, C1 Advanced

English, C2 Mastery

Dissertations

Doctorate, Quantification and Assessment of Objective Function Performance in Manual Materials Handling, Rensselaer Polytechnic Institute, Faculty Of Engineering, Mechanical Engineering Department, 2000

Postgraduate, DYNAMICS AND BIFURCATIONS OF A T- SHAPED INVERTED PENDULUM MECHANISM , Miami University, Faculty Of Engineering, Mechanical Engineering Department, 1995

Research Areas

Mechanical Engineering, Machine Theory and Dynamics, Vehicle Systems Dynamics, Mechatronics, Acoustics and Noise Control, Modeling and Simulation of Dynamic Systems, Mechanical Vibrations, Engineering and Technology

Academic Titles / Tasks

Professor, Ataturk University, Mühendislik Fakültesi, Makine Mühendisliği, 2014 - Continues

Associate Professor, Ataturk University, Mühendislik Fakültesi, Makine Mühendisliği, 2013 - 2014

Associate Professor, King Abdulaziz University, Faculty Of Engineering, Mechanical Engineering Department, 2011 - 2013
Associate Professor, King Abdulaziz University, Faculty Of Engineering, Industrial Engineering Dept., , 2010 - 2011
Associate Professor, Ataturk University, Mühendislik Fakültesi, Makine Mühendisliği, 2008 - 2010
Assistant Professor, Ataturk University, Mühendislik Fakültesi, Makine Mühendisliği, 2001 - 2007
Research Assistant, Ataturk University, Mühendislik Fakültesi, Makine Mühendisliği, 1992 - 2001

Academic and Administrative Experience

Dean, Iğdir University, Faculty Of Engineering, 2017 - 2021
ÜAK Member, Iğdir University, Faculty Of Engineering, 2017 - 2020
Dekan Vekili, Iğdir University, Faculty Of Arts And Sciences, 2018 - 2019
Head of Department, Ataturk University, Mühendislik Fakültesi, Makine Mühendisliği, 2015 - 2016
Assistant Director of the Institute, Ataturk University, Fen Bilimleri Enstitüsü, 2008 - 2010
Head of Department, Ataturk University, Mühendislik Fakültesi, Makine Mühendisliği, 2002 - 2010

Courses

Sayısal Yöntemler, Undergraduate, 2022 - 2023
İleri Mekanik Titreşimler, Postgraduate, 2022 - 2023
Makine Teorisi - 1, Undergraduate, 2021 - 2022

Advising Theses

Gündoğdu Ö., Usanmaz B., Bir Elektrikli Scooter ve Sürücüsünün Ters Titreşim Yöntemiyle Parametrelerinin Tayini,
Doctorate, S.ALTIN(Student), 2021

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Determining sex-related behavioral differences in manual material lifting and lowering movements during daily life**
Yanıkören M., Yılmaz S., Gündoğdu Ö.
SCIENTIA IRANICA INTERNATIONAL JOURNAL OF SCIENCE & TECHNOLOGY, vol.32, pp.1-18, 2024 (SCI-Expanded)
- II. **Influences of various thermoplastic veil interleaves upon carbon fiber-reinforced composites subjected to low-velocity impact**
Coskun T., Tarih Y. S., YAR A., GÜNDOĞDU Ö., Sahin O. S.
JOURNAL OF THERMOPLASTIC COMPOSITE MATERIALS, 2024 (SCI-Expanded)
- III. **3D biomechanical model that can perform dynamic analysis of the upper extremity and L5/S1 joints without the use of force sensor**
Yanıkören M., Yılmaz S., Gündoğdu Ö.
SADHANA - ACADEMY PROCEEDINGS IN ENGINEERING SCIENCES, vol.49, no.241, pp.1-16, 2024 (SCI-Expanded)
- IV. **Driving Stability of Superconducting Magnetic Bearing System**
CANSIZ A., ORAL E. A., GÜNDOĞDU Ö.
AIP Conf. Proceedings, vol.1434, no.1, pp.1389-1395, 2012 (SCI-Expanded)
- V. **Buckling behaviors of laminated composite stepped flat columns**
AKBULUT H., GÜNDOĞDU Ö., ŞENGÜL M.
FINITE ELEMENTS IN ANALYSIS AND DESIGN, vol.46, no.12, pp.1061-1067, 2010 (SCI-Expanded)
- VI. **Parametric dynamic analysis of a superconducting bearing system**
CANSIZ A., HASAR U. C., GÜNDOĞDU Ö., ÇAM B.

Journal of Physics: Conference Series, vol.153, no.1, pp.1-7, 2009 (SCI-Expanded)

- VII. **Optimal seat and suspension design for a quarter car with driver model using genetic algorithms**
Gundogdu O.
INTERNATIONAL JOURNAL OF INDUSTRIAL ERGONOMICS, vol.37, no.4, pp.327-332, 2007 (SCI-Expanded)
- VIII. **A traffic noise prediction method based on vehicle composition using genetic algorithms**
GÜNDOĞDU Ö., GÖKDAĞ M., YÜKSEL F.
Applied Acoustics, vol.66, no.7, pp.799-809, 2005 (SCI-Expanded)
- IX. **Fuzzy control of a dc motor driven four-bar mechanism**
GÜNDOĞDU Ö., ERENTÜRK K.
Mechatronics, vol.15, no.4, pp.423-438, 2005 (SCI-Expanded)
- X. **Development of a genetic algorithm based biomechanical simulation of sagittal lifting tasks**
GÜNDOĞDU Ö., Anderson K. S., Parnianpour M.
Biomedical Engineering - Applications, Basis and Communications, vol.17, no.1, pp.12-18, 2005 (SCI-Expanded)
- XI. **Simulation of manual materials handling: biomechanical assessment under different lifting conditions.**
Gündogdu O., ANDERSON K., PARNIANPOUR M.
Technology and health care : official journal of the European Society for Engineering and Medicine, vol.13, pp.57-66, 2005 (SCI-Expanded)
- XII. **On the Curvature of an Euler-Bernoulli Beam**
GÜNDOĞDU Ö.
INTERNATIONAL JOURNAL OF ELECTRICAL ENGINEERING EDUCATION, vol.31, no.2, pp.132-142, 2003 (SCI-Expanded)
- XIII. **On the Curvature of an Euler-Bernoulli Beam**
GÜNDOĞDU Ö.
INTERNATIONAL JOURNAL OF ELECTRICAL ENGINEERING EDUCATION, vol.31, no.2, pp.132-142, 2003 (SCI-Expanded)

Articles Published in Other Journals

- I. **Teaching Engineering Statics with Linear Algebra and MATLAB**
GÜNDOĞDU Ö., AYDIN M. R.
FEIIC International Journal of Engineering and Technology, vol.1, pp.88-93, 2016 (Peer-Reviewed Journal)
- II. **Modeling and Analysis of a Jeffcott Rotor as a Continuous Cantilever Beam and an Unbalanced Disk System**
GÜNDOĞDU Ö.
Gazi University Journal of Science Part A: Engineering and Innovation, vol.2, no.1, pp.77-85, 2014 (Peer-Reviewed Journal)
- III. **Neuro-Fuzzy Modelling of Manual Materials Handling**
GÜNDOĞDU Ö.
Ordu University Journal of Science and Technology, vol.4, no.1, pp.36-45, 2014 (Peer-Reviewed Journal)
- IV. **NEURO-FUZZY MODELING OF MANUAL MATERIALS HANDLING**
USANMAZ B., GÜNDOĞDU Ö.
Ordu Üniversitesi Bilim ve Teknoloji Dergisi, vol.4, no.1, pp.36-45, 2014 (Peer-Reviewed Journal)
- V. **Determination of Physical Properties of Laminated Composite Beam via the Method of Inverse Vibration Problem**
GÜNDOĞDU Ö.
Journal of Mechanical Engineering and Sciences, vol.1, pp.615-626, 2013 (ESCI)
- VI. **Optimization of the Force Modeling between High Temperature Superconductor and Permanent Magnet**
CANSIZ A., ORAL E. A., GÜNDOĞDU Ö.
Physics Procedia, vol.36, no.12, pp.1025-1030, 2012 (Peer-Reviewed Journal)

- VII. **Determination of Physical Properties of Euler Bernoulli Beam via the Method of Inverse Vibration Problem**
GÜNDOĞDU Ö.
S.L., vol.6, no.3, pp.115-126, 2011 (Peer-Reviewed Journal)
- VIII. **Linear Dynamic Analysis of Superconducting Levitation Systems**
GÜNDOĞDU Ö.
Electrotech, vol.146, pp.92-95, 2006 (Peer-Reviewed Journal)
- IX. **Noise Problem in Construction Machines, its Effect to Environment, and Control**
GÜNDOĞDU Ö.
Construction World, vol.2, pp.94-100, 2006 (Peer-Reviewed Journal)
- X. **Optimal Tuning of PID Controller Gains Using Genetic Algorithms**
GÜNDOĞDU Ö.
Pamukkale University Journal of Engineering Sciences, vol.11, pp.131-135, 2005 (Peer-Reviewed Journal)
- XI. **Optimal Tuning of PID Controller Gains Using Genetic Algorithm**
GÜNDOĞDU Ö.
Pamukkale Üniversitesi Mühendislik Bilimleri Dergisi, vol.11, no.1, pp.131-135, 2005 (Peer-Reviewed Journal)
- XII. **On the Buckling Analysis of Plates Reinforced with Stiff Ribs**
GÜNDOĞDU Ö.
MATHEMATICAL AND COMPUTATIONAL APPLICATIONS, vol.8, pp.103-110, 2003 (Peer-Reviewed Journal)
- XIII. **Importance of Kinetic Measures in Trajectory Prediction with Optimal Control**
GÜNDOĞDU Ö.
Pamukkale University Journal of Engineering Sciences, vol.7, pp.151-155, 2001 (Peer-Reviewed Journal)
- XIV. **Optimal Trajectory Determination for Sagittally Symmetric Manual Lifting Tasks**
GÜNDOĞDU Ö.
MATHEMATICAL AND COMPUTATIONAL APPLICATIONS, vol.4, pp.169-174, 1999 (Peer-Reviewed Journal)
- XV. **A New Algorithm to Obtain λ -Operator Based Transfer Function from Its Continuous Time Counterpart**
GÜNDOĞDU Ö.
MATHEMATICAL AND COMPUTATIONAL APPLICATIONS, vol.1, pp.42-46, 1996 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **ÇOCUKLARDA İŞ SAĞLIĞI VE GÜVENLİĞİ AÇISINDAN GÜVENLİK KÜLTÜRÜNÜN GELİŞTİRİLMESİ**
GÜNDOĞDU Ö., DÖNMEZ B.
in: SOSYAL BİLİMLERDE SOSYAL BİLİMLERDE ÖZGÜN ARAŞTIRMALAR, Prof. Dr. Ramazan Yanık, Doç. Dr. Adnan Küçükali, Editor, Eğitim Yayınevi Tic. Ltd. Şti., İstanbul, pp.115-125, 2023
- II. **Mechanics of fiber composites - Dynamic behavior of composites**
GÜNDOĞDU Ö.
in: Fiber Technology for Fiber-Reinforced Composites, M.Ozgun Seydibeyoglu, Amar K. Mohanty, Manjusri Misra, Editor, Woodhead Publishing Elsevier, Duxford, United Kingdom, pp.40-48, 2017
- III. **Mechanical Vibrations Theory and Practice**
GÜNDOĞDU Ö.
Palme, İstanbul, 2016
- IV. **Vector Mechanics for Engineers: STATICS**
GÜNDOĞDU Ö.
Literatür Yayıncılık, İstanbul, 2015
- V. **5,6,7,8,9,10**
GÜNDOĞDU Ö., KOPMAZ O.
in: Mühendisler için Vektör Mekaniği STATİK, GÜNDOĞDU ÖMER, Editor, Literatür, İstanbul, pp.218-590, 2015
- VI. **Vector Mechanics for Engineers: DYNAMICS**

GÜNDOĞDU Ö.

Literatür Yayıncılık, İstanbul, 2014

VII. **MATLAB with Engineering and Science Applications**

GÜNDOĞDU Ö.

Nobel Yayın Dağıtım, Ankara, 2004

Refereed Congress / Symposium Publications in Proceedings

- I. **KİMYA SANAYİSİNE AİT KAZALARIN MİNİ BİR ANATOMİSİ**
DÖNMEZ B., GÜNDOĞDU Ö.
2nd Bilsel International Ahlat Scientific Research and Innovation Congress, TURKEY, Bitlis, Turkey, 9 - 10 December 2023, pp.400-417
- II. **DEVELOPMENT OF BED WITH MULTIFUNCTIONAL INTELLIGENT HONEYCOMB SYSTEM TO BE USED TO PREVENT PRESSURE SOULS IN BED-CONNECTED PATIENTS**
İpek Çoban G., Çoban M. K., Başçı A., Dal D., Gündoğdu Ö., Erge A.
1st INTERNATIONAL CONGRESS ON HEALTH SCIENCES AND MULTIDISCIPLINARY APPROACHES, Erzurum, Turkey, 25 - 27 November 2021, pp.673-680
- III. **Üst Ekstremitte Biyodinamik Modelin Benzetimi ve Reaksiyon Kuvvetlerinin Belirlenmesi**
YANIKÖREN M., TEZGEL S., USANMAZ B., GÜNDOĞDU Ö.
UMTEB 6. Uluslararası Mesleki ve Teknik Bilimler Kongresi, 11 - 12 April 2019
- IV. **İnsan Vücudu Bölümlerinin Kütle Atalet Momentlerinin Teorik Olarak Hesaplanması ve Karşılaştırılması**
YANIKÖREN M., TEZGEL S., USANMAZ B., GÜNDOĞDU Ö.
UMTEB 6. Uluslararası Mesleki ve Teknik Bilimler Kongresi, 11 - 12 April 2019
- V. **Mühendislik Sistemlerinin Matekmatiksel Modelleri, Gösterimleri ve Çözümleri Üzerine bir Seçki**
GÜNDOĞDU Ö.
Palandöken Uygulamalı Matematik ve Mühendislik Günleri, Erzurum, Turkey, 25 - 27 January 2019
- VI. **ÇOCUKLARIN OYUNCAK GÜRÜLTÜSÜNE MARUZ KALMASI: BİR DEĞERLENDİRME**
GÜNDOĞDU Ö., AYDIN M. R.
I. INTERNATIONAL İĞDIR CONGRESSON MULTIDISCIPLINARY STUDIES, 6 - 08 November 2018
- VII. **Influence of Stacking Sequence in Lamineted Composite Structures on theMechanical and Dynamics Properties**
GÜNDOĞDU Ö., AYDIN M. R., ACAR V., YAPICI F., YILDIZ K., TOPÇU M. V.
II. International İğdır Symposium, 9 - 11 November 2017
- VIII. **Tabakalı Hibrit Kompozit Yapılarda Yönlenme Açısının Sönüm Özelliklerine Etkisi**
AYDIN M. R., GÜNDOĞDU Ö., Kaya B., Bayraktar G., Aksuoğlu O. K., Hotunlu O.
II. International Conference on Advanced Engineering Technologies, 21 - 23 September 2017
- IX. **Teaching Engineering Statics with Linear Algebra and MATLAB**
GÜNDOĞDU Ö., AYDIN M. R.
FEIIC-International Conference on Engineering Education and Research 2015, Medine, Saudi Arabia, 19 - 21 December 2015
- X. **Plazma ile nitrülenmiş AISI 4140 malzemenin dinamik özelliklerinin incelenmesi**
AYDIN M. R., KOVACI H., ÇELİK A., GÜNDOĞDU Ö.
Uluslararası Katılımlı 17. Makine Teorisi Sempozyumu, İzmir, Turkey, 14 - 17 June 2015, pp.25
- XI. **Using Simulink as an Active Learning Aid in Dynamics/Vibration Courses**
GÜNDOĞDU Ö., AYDIN M. R.
FEIIC-International Conference on Engineering Education and Research, Medine, Saudi Arabia, 23 - 25 December 2013, vol.1, pp.25-32
- XII. **Using Simulink as an Active Learning Aid in Dynamics/Vibration Courses**
GÜNDOĞDU Ö., AYDIN M. R.

FEIIC-International Conference on Engineering Education and Research, Medine, Saudi Arabia, 23 - 25 December 2013, vol.1, pp.25-32

- XIII. **Köpük Dolgulu Bal Peteği Sandviç Yapıların Titreşim Analizi**
AYDIN M. R., YAMAN M., GÜNDOĞDU Ö.
16. Ulusal Makine Teorisi Sempozyumu, UMTS – 2011, Turkey, 12 October 2013
- XIV. **Elle Yük Kaldırmanın Bulanık Diferansiyel Denklemler İle Modellenmesi**
USANMAZ B., GÜNDOĞDU Ö.
16.ULUSAL MAKİNA TEORİSİ SEMPOZYUMU, Erzurum, Turkey, 12 - 13 September 2013, pp.42-47
- XV. **KÖPÜK DOLGULU BAL PETEĞİ SANDVIÇ YAPILARIN TİTREŞİM ANALİZİ**
AYDIN M. R., GÜNDOĞDU Ö.
UMTS 2013, Erzurum, Turkey, 12 - 13 September 2013, vol.1, pp.663-670
- XVI. **KÖPÜK DOLGULU BAL PETEĞİ SANDVIÇ YAPILARIN TİTREŞİM ANALİZİ**
AYDIN M. R., GÜNDOĞDU Ö.
UMTS 2013, Erzurum, Turkey, 12 - 13 September 2013, vol.1, pp.663-670
- XVII. **İnsan Vücudu Biyotitreşim Modelinin Model İndirgenmesi**
GÜNDOĞDU Ö., AYDIN M. R., USANMAZ B.
16.ULUSAL MAKİNA TEORİSİ SEMPOZYUMU, Erzurum, Turkey, 12 - 13 September 2013, pp.48-52
- XVIII. **DRIVING STABILITY OF SUPERCONDUCTING MAGNETIC BEARING SYSTEM**
CANSIZ A., ORAL E. A., GÜNDOĞDU Ö.
Joint Conference on Transactions of the Cryogenic Engineering Conference (CEC)/International Cryogenic Materials Conference (ICMC), Washington, United States Of America, 13 - 17 June 2011, vol.1434, pp.1389-1395
- XIX. **Optimization of the force modeling between high temperature superconductor and permanent magnet**
CANSIZ A., ORAL E. A., GÜNDOĞDU Ö.
Superconductivity Centennial Conference (SCC), Hague, Netherlands, 18 - 23 September 2011, vol.36, pp.1025-1030
- XX. **Parametric dynamic analysis of a superconducting bearing system**
CANSIZ A., HASAR U. C., Gundogdu O., CAM B. A.
International Conference on Superconductivity and Magnetism (ICSM), Side, Turkey, 25 - 29 August 2008, vol.153
- XXI. **Is makinelerinde gürültü problemi, çevreye etkisi ve kontrolü**
DİKİCİ B., BALCI M., GAVGALI M., GÜNDOĞDU Ö.
II.IS MAKİNELERİ SEMPOZYUMU VE SERGİSİ, İstanbul, Turkey, 29 September - 01 October 2005, pp.389-400
- XXII. **Is makinelerinde gürültü problemi, çevreye etkisi ve kontrolü**
DİKİCİ B., BALCI M., GAVGALI M., GÜNDOĞDU Ö.
II.IS MAKİNELERİ SEMPOZYUMU VE SERGİSİ, İstanbul, Turkey, 29 September - 01 October 2005, pp.389-400

Supported Projects

BAŞÇI A., GÜNDOĞDU Ö., Project Supported by Higher Education Institutions, Vankomisin Yüklü PluronicF127 Polimer Tabanlı Termal ve Bakteri Duyarlı Akıllı Nanokapsüllü Sement 2, 2023 - 2024

İPEK ÇOBAN G., DAL D., BAŞÇI A., GÜNDOĞDU Ö., ÇOBAN M. K., Project Supported by Higher Education Institutions, Yatağa bağımlı hastalarda basınç yaralarının önlenmesinde kullanılacak multifonksiyonel akıllı petek sistemine sahip yatak geliştirilmesi-2, 2021 - 2024

İpek Çoban G., Çoban M. K., Gündoğdu Ö., Dal D., Başçı A., TUBITAK Project, YATAĞA BAĞIMLI HASTALARDA BASINÇ YARALARININ ÖNLENMESİNDE KULLANILACAK MULTİFONKSİYONEL AKILLI PETEK SİSTEMİNE SAHİP YATAK GELİŞTİRİLMESİ, 2021 - 2023

GÜNDOĞDU Ö., TARİH Y. S., Project Supported by Higher Education Institutions, Karbon ve Cam Yüzey Tabakalı Termoplastik Keçe Katmanlı Sandviç Kompozitlerde Mekanik ve Dinamik özelliklerinin İncelenmesi, 2021 - 2023

BAŞÇI A., AYDIN M. R., ŞENOL O., GÜNDOĞDU Ö., GÜR B., TUNCER K., Project Supported by Higher Education Institutions, Vankomisin yüklü PluronicF127 polimer tabanlı termal ve bakteri duyarlı akıllı nanokapsüllü sement, 2020 - 2023

İPEK ÇOBAN G., DAL D., GÜNDOĞDU Ö., BAŞÇI A., ÇOBAN M. K., Project Supported by Higher Education Institutions, Yatağa bağımlı hastalarda basınç yaralarının önlenmesinde kullanılacak multifonksiyonel akıllı petek sistemine sahip yatak geliştirilmesi, 2019 - 2021

Akbulut H., Gündoğdu Ö., TÜBİTAK Project, "Interply Ve Intraply Hibrit Kompozitlerin Taguchi Deney Tasarımı İle Üretim Optimizasyonu Ve Dinamik Analiz, 2018 - 2021

GÜNDOĞDU Ö., YANIKÖREN M., ÖZDEMİR A., TUNCER K., USANMAZ B., TEZGEL S., Project Supported by Higher Education Institutions, Elle Yük Kaldırma Hareketinin Üç Boyutlu (3D) Biyomekanik Modellenmesi, 2018 - 2020

Tuncer K., Gündoğdu Ö., Project Supported by Other Official Institutions, Elle Yük Kaldırma Hareketinin Üç Boyutlu (3D) Biyomekanik Modellenmesi, 2018 - 2020

GÜNDOĞDU Ö., AYDIN M. R., Project Supported by Higher Education Institutions, Interply ve Intraply Hibrit Kompozitlerin Karşılaştırmalı Dinamik Analizi, 2017 - 2019

YAMAN M., GÜNDOĞDU Ö., ŞANSVEREN M. F., Project Supported by Higher Education Institutions, KÖPÜK DOLGULU SANDVIÇ KOMPOZİT MALZEMELERİN TİTREŞİM VE SÖNÜM DAVRANIŞLARININ İNCELENMESİ, 2013 - 2017

GÜNDOĞDU Ö., Project Supported by Higher Education Institutions, "HİBRİT KOMPOZİT MALZEMELERİN DİNAMİK DAVRANIŞLARININ İNCELENMESİ", 2012 - 2014

Patent

İpek Çoban G., Dal D., Başçı A., Gündoğdu Ö., Çoban M. K., Smart Bed System, Patent, CHAPTER A Human Needs, The Invention Registration Number: TR 2018 20826 B , Standard Registration, 2022

Tuncer K., Gündoğdu Ö., İLAÇ YÜKLÜ NANOKAPSÜL KATKILI PMMA SEMENTİ, Patent, CHAPTER A Human Needs, The Invention Recourse Number: PCT /TR2021/050871 , Standard Registration, 2021

Metrics

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