

# **Prof.Dr. HASAN NEVZAT ÖZGÜVEN**

## **Kişisel Bilgiler**

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## **Uluslararası Araştırmacı ID'leri**

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## **Eğitim Bilgileri**

Doktora, The University of Manchester, Umist, Birleşik Krallık 1975 - 1978

Yüksek Lisans, Orta Doğu Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Makine Mühendisliği (Dr), Türkiye 1972 - 1975

Lisans, Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, Türkiye 1968 - 1973

## **Yaptığı Tezler**

Doktora, An Investigation Into the Mathematical Modelling of Damped Mechanical Structures, The University Of Manchester, Umist, 1978

## **Araştırma Alanları**

Makina Mühendisliği, Mühendislik ve Teknoloji

## **Akademik Unvanlar / Görevler**

Prof.Dr., Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, 1989 - Devam Ediyor

Doç.Dr., Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, 1983 - 1989

Doç.Dr., The Ohio State University, Faculty Of Engineering, Mechanical Engineering Department, 1985 - 1987

Yrd.Doç.Dr., Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, 1980 - 1983

Öğretim Görevlisi, Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, 1979 - 1980

Araştırma Görevlisi, Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, 1973 - 1979

## **Akademik İdari Deneyim**

Orta Doğu Teknik Üniversitesi, Rektörlük, 2008 - 2016

Orta Doğu Teknik Üniversitesi, Rektörlük, 1995 - 1998

## **Yönetilen Tezler**

- ÖZGÜVEN H. N., Dynamic modelling and analysis of split-torque face-gear systems, Doktora, M.ÖZGÜR(Öğrenci), 2022
- Özgüven H. N., Şahin M., Design, modelling and analysis of a novel implantable bone conduction hearing aid with a piezoelectric actuator, Doktora, A.KOYUNCU(Öğrenci), 2022
- ÖZGÜVEN H. N., INVESTIGATION OF DECOUPLING TECHNIQUES FOR LINEAR AND NONLINEAR SYSTEMS, Doktora, T.KALAYCIOĞLU(Öğrenci), 2018
- CİĞEROĞLU E., ÖZGÜVEN H. N., A new modal superposition method for nonlinear vibration analysis of structures using hybrid mode shapes, Yüksek Lisans, E.FERHATOĞLU(Öğrenci), 2018
- CİĞEROĞLU E., ÖZGÜVEN H. N., A parametric study on planetary gear dynamics, Doktora, V.YALIN(Öğrenci), 2018
- ÖZGÜVEN H. N., Development of a model updating technique for nonlinear systems, Doktora, G.CANBALOĞLU(Öğrenci), 2015
- ÖZGÜVEN H. N., Dynamic modelling in micromachining, Yüksek Lisans, E.ERSOY(Öğrenci), 2015
- ÖZGÜVEN H. N., Analysis and modelling of machine tool dynamics and cutting stability during operation, Doktora, O.ÖZŞAHİN(Öğrenci), 2014
- ÖZGÜVEN H. N., Active vibration control of beams and cylindrical structures using piezoelectric patches, Yüksek Lisans, C.GENÇOĞLU(Öğrenci), 2014
- ÖZGÜVEN H. N., Active vibration control of beam and plates by using piezoelectric patch actuators, Yüksek Lisans, İ.FURKAN(Öğrenci), 2013
- ÖZGÜVEN H. N., Identification of nonlinearities in structural dynamics by using artificial neural networks and optimization, Yüksek Lisans, A.KOYUNCU(Öğrenci), 2013
- KÜLAH H., ÖZGÜVEN H. N., MEMS piezoelectric energy harvester for cochlear implant applications, Yüksek Lisans, L.BEKER(Öğrenci), 2013
- ÖZGÜVEN H. N., Identification of localized nonlinearity for dynamic analysis of structures, Doktora, M.AYKAN(Öğrenci), 2013
- ÖZGÜVEN H. N., Dynamic modeling of structural joints, Yüksek Lisans, Ş.TOL(Öğrenci), 2012
- CİĞEROĞLU E., ÖZGÜVEN H. N., Possibilistic interpretation of mistuning in bladed disks by fuzzy algebra, Yüksek Lisans, H.ÇAĞLAR(Öğrenci), 2012
- ÖZGÜVEN H. N., Harmonic response of large engineering structures with nonlinear modifications, Yüksek Lisans, T.KALAYCIOĞLU(Öğrenci), 2011
- ÖZGÜVEN H. N., Determination of dynamically equivalent fe models of aircraft structures by using modal test data, Yüksek Lisans, T.KARAAGAÇLI(Öğrenci), 2010
- ÖZGÜVEN H. N., The effects of structural modifications on acoustic characteristics of enclosed bodies, Yüksek Lisans, Ö.DEMİRKAN(Öğrenci), 2010
- CİĞEROĞLU E., ÖZGÜVEN H. N., On the non-linear vibration and mistuning identification of bladed disks, Yüksek Lisans, M.ERSİN(Öğrenci), 2010
- ÖZGÜVEN H. N., Büyük sistemlerde ek serbestlik dereceli yapısal değişiklik, Yüksek Lisans, G.Canbaloglu(Öğrenci), 2009
- ÖZGÜVEN H. N., Metal işlemenin kararlılık analizinde parça dinamiğinin tahmini için hızlı analitik bir yöntemin geliştirilmesi, Yüksek Lisans, S.Alan(Öğrenci), 2009
- ÖZGÜVEN H. N., İşleme merkezlerinde mil-takım sistemlerinin incelenmesi ve doğrusal olmayan dinamik modellemesi, Yüksek Lisans, Z.Murat(Öğrenci), 2009
- ÖZGÜVEN H. N., Harmonic vibration analysis of large structures with local nonlinearity, Yüksek Lisans, D.ABAT(Öğrenci), 2009
- ÖZGÜVEN H. N., Nonlinear dynamic modeling and analysis of spindle-tool assemblies in machining centers ve doğrusal olmayan dinamik modellemesi, Yüksek Lisans, Z.MURAT(Öğrenci), 2009
- ÖZGÜVEN H. N., Human tibial bone strength prediction by vibration analysis for diagnosing progressing osteoporosis, Yüksek Lisans, B.BEDİZ(Öğrenci), 2009
- ÖZGÜVEN H. N., Finite element structural model updating by using experimental frequency response functions, Yüksek Lisans, M.ÖZTÜRK(Öğrenci), 2009
- ÖZGÜVEN H. N., Düzensiz kanatçıklara sahip disklerde doğrusal olmayan titreşimler., Yüksek Lisans, G.Orbay(Öğrenci), 2008
- ÖZGÜVEN H. N., Dynamic modeling and analysis of vibration effects on performance in optical systems, Yüksek Lisans, A.LEVENT(Öğrenci), 2008

- ÖZGÜVEN H. N., Modal identification of nonlinear substructures and implementation in structural coupling analysis, Yüksek Lisans, Ö.ARSLAN(Öğrenci), 2008
- ÖZGÜVEN H. N., Nonlinear vibrations of mistuned bladed disk assemblies, Yüksek Lisans, G.ORBAY(Öğrenci), 2008
- ÖZGÜVEN H. N., Vibration analysis of PCBS and electronic components, Yüksek Lisans, B.AYTEKİN(Öğrenci), 2008
- ÖZGÜVEN H. N., An investigation on dynamic contact parameters in machining center spindle?tool assemblies, Yüksek Lisans, O.ÖZŞAHİN(Öğrenci), 2008
- ÖZGÜVEN H. N., Modeling part dynamics in machining processes considering material removal, Yüksek Lisans, S.ATLAR(Öğrenci), 2007
- ÖZGÜVEN H. N., Talaşlı imalatta talaş kaldırmayı dikkate alan parça dinamiği modellemenmesi, Yüksek Lisans, S.Atlar(Öğrenci), 2007
- ÖZGÜVEN H. N., Çalışma koşullarında modal analiz uygulamaları üzerine bir inceleme., Yüksek Lisans, F.Büke(Öğrenci), 2006
- ÖZGÜVEN H. N., İşleme merkezlerinde iş milli-takımı sisteminin dinamik modellemenmesi, Yüksek Lisans, A.Ertürk(Öğrenci), 2006
- ÖZGÜVEN H. N., Model güncelleme teknikleri ve bu tekniklerin havacılık yapılarına uygulamaları., Yüksek Lisans, M.Tuğrul(Öğrenci), 2006
- ÖZGÜVEN H. N., Yeni bir yapısal değişiklik yönteminin geliştirilmesi ve havacılık yapılarına uygulamasının karşılaştırmalı değerlendirme, Yüksek Lisans, S.Köksal(Öğrenci), 2006
- ÖZGÜVEN H. N., Yatak boşlukları içeren dişli-şaft-yatak sistemlerinin doğrusal olmayan elemanlarla matematik modellemenmesi, Yüksek Lisans, N.Ersan(Öğrenci), 2005
- ÖZGÜVEN H. N., Titreşim ölçümelerini kullanarak yapılarda hasar tesbiti, Yüksek Lisans, M.Özgür(Öğrenci), 2003
- ÖZGÜVEN H. N., Non-linear vibration analysis of bladed disks with dry damper, Yüksek Lisans, E.CİĞEROĞLU(Öğrenci), 2002
- ÖZGÜVEN H. N., Dynamic analysis of spur gears, Yüksek Lisans, C.ULAŞ(Öğrenci), 1999
- ÖZGÜVEN H. N., A New method on identification of symmetrical non-linearites in structures, Yüksek Lisans, M.BÜLENT(Öğrenci), 1999
- ÖZGÜVEN H. N., Computer based teaching using hypermedia for the mechanical vibration course, Yüksek Lisans, M.ÖZBEK(Öğrenci), 1996
- ÖZGÜVEN H. N., Harmonic forced vibration analysis of assembled structures with nonlinear coupling, Yüksek Lisans, M.DEVRİM(Öğrenci), 1994
- ÖZGÜVEN H. N., Non-linear dynamic analysis of geared rotors to internal excitation by using describing functions and finite element methods, Doktora, R.MALİHA(Öğrenci), 1994
- ÖZGÜVEN H. N., Dynamic analysis of multi stage helical geared rotors with transfer matrix method, Yüksek Lisans, S.TARKAN(Öğrenci), 1994
- ÖZGÜVEN H. N., Vibration analysis of damped structures and structural reanalysis using a new structural modification method, Yüksek Lisans, M.TAHTALI(Öğrenci), 1992
- ÖZGÜVEN H. N., Dynamic modeling and analysis of multi-geared rotors including lateral and torsional vibration coupling, Yüksek Lisans, D.YILMAZ(Öğrenci), 1991
- ÖZGÜVEN H. N., Fault diagnosis of gears by computer simulation, Yüksek Lisans, M.YALÇINTAŞ(Öğrenci), 1990
- ÖZGÜVEN H. N., Vibration analysis of structures using substructure synthesis, Yüksek Lisans, N.ÇETİNKAYA(Öğrenci), 1989
- ÖZGÜVEN H. N., Dynamic analysis of nonlinear structures for harmonic excitation, Yüksek Lisans, E.BUDAK(Öğrenci), 1989
- ÖZGÜVEN H. N., Dynamic analysis of geared shaft systems by using continuous system models, Yüksek Lisans, Ö.SAADET(Öğrenci), 1989

## **SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler**

- I. **Non-Linear Dynamic Modeling and Analysis of Split-Torque Face-Gear Drive Systems**  
Aydogan M. O., Saribay Z. B., ÖZGÜVEN H. N.

- JOURNAL OF VIBRATION AND ACOUSTICS-TRANSACTIONS OF THE ASME, cilt.145, sa.3, 2023 (SCI-Expanded)
- II. **Experimental Modal Analysis of Nonlinear Amplified Piezoelectric Actuators by Using Response-Controlled Stepped-Sine Testing**  
Koyuncu A., Karaagacli T., ŞAHİN M., ÖZGÜVEN H. N.  
EXPERIMENTAL MECHANICS, cilt.62, sa.9, ss.1579-1594, 2022 (SCI-Expanded)
- III. **Experimental Quantification and Validation of Modal Properties of Geometrically Nonlinear Structures by Using Response-Controlled Stepped-Sine Testing**  
Karaagacli T., ÖZGÜVEN H. N.  
EXPERIMENTAL MECHANICS, cilt.62, sa.2, ss.199-211, 2022 (SCI-Expanded)
- IV. **Ideal tooth profile modifications for improving nonlinear dynamic response of planetary gear trains**  
Ozturk V. Y., CİĞEROĞLU E., ÖZGÜVEN H. N.  
JOURNAL OF SOUND AND VIBRATION, cilt.500, 2021 (SCI-Expanded)
- V. **Experimental modal analysis of nonlinear systems by using response-controlled stepped-sine testing**  
Karaagacli T., ÖZGÜVEN H. N.  
MECHANICAL SYSTEMS AND SIGNAL PROCESSING, cilt.146, 2021 (SCI-Expanded)
- VI. **A frequency domain nonparametric identification method for nonlinear structures: Describing surface method**  
Karaagacli T., ÖZGÜVEN H. N.  
MECHANICAL SYSTEMS AND SIGNAL PROCESSING, cilt.144, 2020 (SCI-Expanded)
- VII. **A novel modal superposition method with response dependent nonlinear modes for periodic vibration analysis of large MDOF nonlinear systems**  
Ferhatoglu E., CİĞEROĞLU E., ÖZGÜVEN H. N.  
Mechanical Systems and Signal Processing, cilt.135, 2020 (SCI-Expanded)
- VIII. **A new modal superposition method for nonlinear vibration analysis of structures using hybrid mode shapes**  
Ferhatoglu E., Ciğeroğlu E., Özgüven H. N.  
MECHANICAL SYSTEMS AND SIGNAL PROCESSING, cilt.107, ss.317-342, 2018 (SCI-Expanded)
- IX. **FRF decoupling of nonlinear systems**  
Kalaycoglu T., ÖZGÜVEN H. N.  
MECHANICAL SYSTEMS AND SIGNAL PROCESSING, cilt.102, ss.230-244, 2018 (SCI-Expanded)
- X. **Localization and identification of structural nonlinearities using cascaded optimization and neural networks**  
Koyuncu A., Ciğeroğlu E., Özgüven H. N.  
MECHANICAL SYSTEMS AND SIGNAL PROCESSING, cilt.95, ss.219-238, 2017 (SCI-Expanded)
- XI. **Model updating of nonlinear structures from measured FRFs**  
Canbaloglu G., ÖZGÜVEN H. N.  
MECHANICAL SYSTEMS AND SIGNAL PROCESSING, cilt.80, ss.282-301, 2016 (SCI-Expanded)
- XII. **Identification of bearing dynamics under operational conditions for chatter stability prediction in high speed machining operations**  
ÖZŞAHİN O., Budak E., ÖZGÜVEN H. N.  
PRECISION ENGINEERING-JOURNAL OF THE INTERNATIONAL SOCIETIES FOR PRECISION ENGINEERING AND NANOTECHNOLOGY, cilt.42, ss.53-65, 2015 (SCI-Expanded)
- XIII. **Dynamic characterization of bolted joints using FRF decoupling and optimization**  
Tol S., ÖZGÜVEN H. N.  
MECHANICAL SYSTEMS AND SIGNAL PROCESSING, ss.124-138, 2015 (SCI-Expanded)
- XIV. **In-process tool point FRF identification under operational conditions using inverse stability solution**  
ÖZŞAHİN O., Budak E., ÖZGÜVEN H. N.  
INTERNATIONAL JOURNAL OF MACHINE TOOLS & MANUFACTURE, cilt.89, ss.64-73, 2015 (SCI-Expanded)
- XV. **Analytical modeling of asymmetric multi-segment rotor - bearing systems with Timoshenko beam model including gyroscopic moments**  
Ozsahin O., ÖZGÜVEN H. N., Budak E.

- COMPUTERS & STRUCTURES, cilt.144, ss.119-126, 2014 (SCI-Expanded)
- XVI. **Nonlinear structural modification and nonlinear coupling**  
Kalaycioglu T., ÖZGÜVEN H. N.  
MECHANICAL SYSTEMS AND SIGNAL PROCESSING, cilt.46, sa.2, ss.289-306, 2014 (SCI-Expanded)
- XVII. **Parametric identification of nonlinearity in structural systems using describing function inversion**  
Aykan M., ÖZGÜVEN H. N.  
MECHANICAL SYSTEMS AND SIGNAL PROCESSING, cilt.40, sa.1, ss.356-376, 2013 (SCI-Expanded)
- XVIII. **Mistuning Identification of Integrally Bladed Disks With Cascaded Optimization and Neural Networks**  
Yumer M. E., Ciğeroğlu E., Özgüven H. N.  
JOURNAL OF TURBOMACHINERY-TRANSACTIONS OF THE ASME, cilt.135, 2013 (SCI-Expanded)
- XIX. **A New Design Approach for Rapid Evaluation of Structural Modifications Using Neural Networks**  
Demirkan O., Olceroglu E., BAŞDOĞAN F. İ., ÖZGÜVEN H. N.  
JOURNAL OF MECHANICAL DESIGN, cilt.135, sa.2, 2013 (SCI-Expanded)
- XX. **A new method to determine dynamically equivalent finite element models of aircraft structures from modal test data**  
Karaağach T., Yıldız E. N., ÖZGÜVEN H. N.  
MECHANICAL SYSTEMS AND SIGNAL PROCESSING, cilt.31, ss.94-108, 2012 (SCI-Expanded)
- XXI. **Prediction of workpiece dynamics and its effects on chatter stability in milling**  
Budak E., Tunc L. T., Alan S., ÖZGÜVEN H. N.  
CIRP ANNALS-MANUFACTURING TECHNOLOGY, cilt.61, sa.1, ss.339-342, 2012 (SCI-Expanded)
- XXII. **Parametric identification of structural nonlinearities from measured frequency response data**  
Arslan O., Aykan M., ÖZGÜVEN H. N.  
MECHANICAL SYSTEMS AND SIGNAL PROCESSING, cilt.25, sa.4, ss.1112-1125, 2011 (SCI-Expanded)
- XXIII. **Analysis and compensation of mass loading effect of accelerometers on tool point FRF measurements for chatter stability predictions**  
ÖZSAHİN O., ÖZGÜVEN H. N., Budak E.  
INTERNATIONAL JOURNAL OF MACHINE TOOLS & MANUFACTURE, cilt.50, sa.6, ss.585-589, 2010 (SCI-Expanded)
- XXIV. **Vibration measurements predict the mechanical properties of human tibia**  
Bediz B., ÖZGÜVEN H. N., Korkusuz F.  
CLINICAL BIOMECHANICS, cilt.25, sa.4, ss.365-371, 2010 (SCI-Expanded)
- XXV. **A method in model updating using Miscorrelation Index sensitivity**  
Kozak M. T., Öztürk M., ÖZGÜVEN H. N.  
MECHANICAL SYSTEMS AND SIGNAL PROCESSING, cilt.23, sa.6, ss.1747-1758, 2009 (SCI-Expanded)
- XXVI. **Identification of structural non-linearities using describing functions and the Sherman-Morrison method**  
Ozer M. B., ÖZGÜVEN H. N., Royston T. J.  
MECHANICAL SYSTEMS AND SIGNAL PROCESSING, cilt.23, sa.1, ss.30-44, 2009 (SCI-Expanded)
- XXVII. **A closed-form approach for identification of dynamical contact parameters in spindle-holder-tool assemblies**  
ÖZSAHİN O., ERTURK A., ÖZGÜVEN H. N., Budak E.  
INTERNATIONAL JOURNAL OF MACHINE TOOLS & MANUFACTURE, cilt.49, sa.1, ss.25-35, 2009 (SCI-Expanded)
- XXVIII. **Selection of design and operational parameters in spindle-holder-tool assemblies for maximum chatter stability by using a new analytical model**  
Erturk A., Budak E., Ozguven H. N.  
INTERNATIONAL JOURNAL OF MACHINE TOOLS & MANUFACTURE, cilt.47, sa.9, ss.1401-1409, 2007 (SCI-Expanded)
- XXIX. **Effect analysis of bearing and interface dynamics on tool point FRF for chatter stability in machine tools by using a new analytical model for spindle-tool assemblies**  
Ertuerk A., Oezgueven H. N., Budak E.  
INTERNATIONAL JOURNAL OF MACHINE TOOLS & MANUFACTURE, cilt.47, sa.1, ss.23-32, 2007 (SCI-Expanded)
- XXX. **Analytical modeling of spindle-tool dynamics on machine tools using Timoshenko beam model and**

- receptance coupling for the prediction of tool point FRF**  
Erturk A., Ozguven H. N., Budak E.  
INTERNATIONAL JOURNAL OF MACHINE TOOLS & MANUFACTURE, cilt.46, sa.15, ss.1901-1912, 2006 (SCI-Expanded)
- XXXI. Nonlinear vibration analysis of bladed disks with dry friction dampers**  
Cigeroglu E., Ozguven H. N.  
JOURNAL OF SOUND AND VIBRATION, cilt.295, ss.1028-1043, 2006 (SCI-Expanded)
- XXXII. A modeling approach for analysis and improvement of spindle-holder-tool assembly dynamics**  
Budak E., Erturk A., Ozguven H. N.  
CIRP ANNALS-MANUFACTURING TECHNOLOGY, cilt.55, sa.1, ss.369-372, 2006 (SCI-Expanded)
- XXXIII. Nonlinear dynamic modeling of gear-shaft-disk-bearing systems using finite elements and describing functions**  
Maliha R., Dogruer C., Ozguven H. N.  
JOURNAL OF MECHANICAL DESIGN, cilt.126, sa.3, ss.534-541, 2004 (SCI-Expanded)
- XXXIV. A modal superposition method for non-linear structures**  
Kuran B., Ozguven H. N.  
JOURNAL OF SOUND AND VIBRATION, cilt.189, sa.3, ss.315-339, 1996 (SCI-Expanded)
- XXXV. DYNAMIC ANALYSIS OF GEARED SHAFT SYSTEMS BY USING A CONTINUOUS SYSTEM MODEL**  
Şener Ö. S., ÖZGÜVEN H. N.  
JOURNAL OF SOUND AND VIBRATION, cilt.166, sa.3, ss.539-556, 1993 (SCI-Expanded)
- XXXVI. FORCED HARMONIC RESPONSE ANALYSIS OF NONLINEAR STRUCTURES USING DESCRIBING FUNCTIONS**  
TANRIKULU O., KURAN B., OZGUVEN H. N., IMREGUN M.  
AIAA JOURNAL, cilt.31, sa.7, ss.1313-1320, 1993 (SCI-Expanded)
- XXXVII. ITERATIVE RECEPTANCE METHOD FOR DETERMINING HARMONIC RESPONSE OF STRUCTURES WITH SYMMETRICAL NONLINEARITIES**  
BUDAK E., OZGUVEN H. N.  
MECHANICAL SYSTEMS AND SIGNAL PROCESSING, cilt.7, sa.1, ss.75-87, 1993 (SCI-Expanded)
- XXXVIII. DYNAMIC ANALYSIS OF GEARED ROTORS BY FINITE-ELEMENTS**  
KAHRAMAN A., OZGUVEN H. N., HOUSER D., ZAKRAJSEK J.  
JOURNAL OF MECHANICAL DESIGN, cilt.114, sa.3, ss.507-514, 1992 (SCI-Expanded)
- XXXIX. A NONLINEAR MATHEMATICAL-MODEL FOR DYNAMIC ANALYSIS OF SPUR GEARS INCLUDING SHAFT AND BEARING DYNAMICS**  
OZGUVEN H. N.  
JOURNAL OF SOUND AND VIBRATION, cilt.145, sa.2, ss.239-260, 1991 (SCI-Expanded)
- XL. STRUCTURAL MODIFICATIONS USING FREQUENCY-RESPONSE FUNCTIONS**  
OZGUVEN H. N.  
MECHANICAL SYSTEMS AND SIGNAL PROCESSING, cilt.4, sa.1, ss.53-63, 1990 (SCI-Expanded)
- XLI. DYNAMIC ANALYSIS OF HIGH-SPEED GEARS BY USING LOADED STATIC TRANSMISSION ERROR**  
OZGUVEN H. N., HOUSER D.  
JOURNAL OF SOUND AND VIBRATION, cilt.125, sa.1, ss.71-83, 1988 (SCI-Expanded)
- XLII. MATHEMATICAL-MODELS USED IN GEAR DYNAMICS - A REVIEW**  
OZGUVEN H. N., HOUSER D.  
JOURNAL OF SOUND AND VIBRATION, cilt.121, sa.3, ss.383-411, 1988 (SCI-Expanded)
- XLIII. AN EXPERIMENTAL AND ANALYTICAL STUDY OF IMPACT FORCES DURING HUMAN JUMPING**  
OZGUVEN H. N., BERME N.  
JOURNAL OF BIOMECHANICS, cilt.21, sa.12, ss.1061-1066, 1988 (SCI-Expanded)
- XLIV. A NEW METHOD FOR HARMONIC RESPONSE OF NONPROPORTIONALLY DAMPED STRUCTURES USING UNDAMPED MODAL DATA**  
OZGUVEN H. N.  
JOURNAL OF SOUND AND VIBRATION, cilt.117, sa.2, ss.313-328, 1987 (SCI-Expanded)

- XLV. **SUPPRESSING THE 1ST AND 2ND RESONANCES OF BEAMS BY DYNAMIC VIBRATION ABSORBERS**  
 OZGUVEN H. N., CANDIR B.  
 JOURNAL OF SOUND AND VIBRATION, cilt.111, sa.3, ss.377-390, 1986 (SCI-Expanded)
- XLVI. **WHIRL SPEEDS AND UNBALANCE RESPONSE OF MULTIBEARING ROTORS USING FINITE-ELEMENTS**  
 OZGUVEN H. N., OZKAN Z.  
 JOURNAL OF VIBRATION ACOUSTICS STRESS AND RELIABILITY IN DESIGN-TRANSACTIONS OF THE ASME, cilt.106, sa.1, ss.72-79, 1984 (SCI-Expanded)
- XLVII. **ON THE CRITICAL SPEED OF CONTINUOUS SHAFT-DISK SYSTEMS**  
 OZGUVEN H. N.  
 JOURNAL OF VIBRATION ACOUSTICS STRESS AND RELIABILITY IN DESIGN-TRANSACTIONS OF THE ASME, cilt.106, sa.1, ss.59-61, 1984 (SCI-Expanded)
- XLVIII. **Receptances of non proportionally and continuously damped plates Reduced dampers method**  
 ÖZGÜVEN H. N.  
 Journal Of Sound And Vibration, cilt.85, ss.383-395, 1982 (SCI-Expanded)
- XLIX. **Receptances of non proportionally and continuously damped plates equivalent dampers method**  
 ÖZGÜVEN H. N., COWLEY A.  
 Journal Of Sound And Vibration, cilt.76, ss.23-41, 1981 (SCI-Expanded)

### **Düger Dergilerde Yayınlanan Makaleler**

- I. **Analytical Prediction of Part Dynamics for Machining Stability Analysis**  
 Alan S., Budak E., ÖZGÜVEN H. N.  
 International Journal of Automation Technology, cilt.4, sa.3, ss.259-267, 2010 (Scopus)

### **Kitap & Kitap Bölümleri**

- I. **New FRF Based Methods for Substructure Decoupling**  
 Kalaycıoğlu T., ÖZGÜVEN H. N.  
 Dynamics of Coupled Structures, Volume 4, Matt Allen, Randall L. Mayes, Daniel Rixen , Editör, Springer, ss.463-472, 2016
- II. **Experimental Validation of Pseudo Receptance Difference (PRD) Method for Nonlinear Model Updating**  
 CANBALOĞLU G., ÖZGÜVEN H. N.  
 Nonlinear Dynamics, Volume 1, Gaëtan Kerschen , Editör, SPRINGER, ss.293-306, 2016

### **Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar**

- I. **Experimental Modal Analysis of Structures with High Nonlinear Damping by Using Response-Controlled Stepped-Sine Testing**  
 Karaağaçlı T., ÖZGÜVEN H. N.  
 41st IMAC, A Conference and Exposition on Structural Dynamics, 2023, Austin, Amerika Birleşik Devletleri, 13 - 16 Şubat 2023, ss.125-132
- II. **A Novel Approach for Local Structural Modification of Nonlinear Structures**  
 Ceren Ekinci E., Bülent Özer M., ÖZGÜVEN H. N.  
 41st IMAC, A Conference and Exposition on Structural Dynamics, 2023, Austin, Amerika Birleşik Devletleri, 13 - 16 Şubat 2023, ss.155-160
- III. **The TRChallenge: Experimental Quantification of Nonlinear Modal Parameters and Confrontation with the Predictions**

- Bhattu A., Jamia N., Hermann S., Müller F., Scheel M., ÖZGÜVEN H. N., Schwingshackl C., Krack M.  
41st IMAC, A Conference and Exposition on Structural Dynamics, 2023, Austin, Amerika Birleşik Devletleri, 13 - 16  
Şubat 2023, ss.133-136
- IV. **Bypassing the Repeatability Issue in Nonlinear Experimental Modal Analysis of Jointed Structures by Using the RCT-HFS Framework**  
Gürbüz M. F., Karaağaçlı T., ÖZER M. B., ÖZGÜVEN H. N.  
41st IMAC, A Conference and Exposition on Structural Dynamics, 2023, Austin, Amerika Birleşik Devletleri, 13 - 16  
Şubat 2023, ss.75-80
- V. **Determination of Nonlinear Joint Forces and Nonlinear Identification of Jointed Connections Using FRFs**  
Soleimani H., Ciğeroğlu E., Özgüven H. N.  
40th IMAC, A Conference and Exposition on Structural Dynamics, 2022, Florida, Amerika Birleşik Devletleri, 7 - 10  
Şubat 2022, ss.57-61
- VI. **Experimental Modal Analysis of Geometrically Nonlinear Structures by Using Response-Controlled Stepped-Sine Testing**  
Karaağaçlı T., ÖZGÜVEN H. N.  
39th IMAC, A Conference and Exposition on Structural Dynamics, 2021, Virtual, Online, 8 - 11 Şubat 2021, ss.123-134
- VII. **3D linear identification of mechanical joint using FRF decoupling and inverse structural modification methods**  
Soleimani H., Ciğeroğlu E., Özgüven H. N.  
33rd Conference on Mechanical Vibration and Sound, VIB 2021, Held as Part of the ASME 2021 International Design Engineering Technical Conferences and Computers and Information in Engineering Conference, IDETC-CIE 2021, Virtual, Online, 17 - 19 Ağustos 2021, cilt.10
- VIII. **Integration of parameter sensitivity to structural optimization of helicopter rotors for minimum vibration**  
BİLEN M. E., CİĞEROĞLU E., ÖZGÜVEN H. N.  
VIBRATIONS INROTATING MACHINERY- VIRM 12, 14 - 15 Ekim 2020
- IX. **Numerical Computation of Nonlinear Normal Modes (NNMs) by using Response Dependent Nonlinear Mode (RDNM) Concept**  
Karaağaçlı T., Ciğeroğlu E., Özgüven H. N.  
International Modal Analysis Conference and Exposition on Structural Dynamics IMAC XXXVIII, Texas, Amerika Birleşik Devletleri, 10 - 13 Şubat 2020, ss.1-4
- X. **Design optimization of tool holder extension for enhanced chatter stability by using component mode tuning method**  
Karataş G., ÖZŞAHİN O., ÖZGÜVEN H. N., Budak E.  
9th CIRP Conference on High Performance Cutting, HPC 2020, Virtual, Online, 24 - 26 Mayıs 2021, cilt.101, ss.294-297
- XI. **Identifying the joint dynamics of a bolted beam system by using FRF decoupling and the SEMM expansion technique**  
Klaassen S. W. B., Ciğeroğlu E., Özgüven H. N.  
TriboMechaDynamics 2019, Texas, Amerika Birleşik Devletleri, 31 Temmuz - 02 Ağustos 2019, ss.1-4
- XII. **Dynamic characterization of double-relief profile modifications in planetary gear systems**  
Öztürk V. Y., Ciğeroğlu E., Özgüven H. N.  
INTERNATIONAL GEAR CONFERENCE 2018, Lyon, Fransa, 27 - 29 Ağustos 2018, ss.1-14
- XIII. **Extended Abstract: Dynamic Behavior of a Compliant Mechanism Driven by Stacked Piezoelectric Actuators**  
Koyuncu A., ŞAHİN M., ÖZGÜVEN H. N.  
36th IMAC Conference and Exposition on Structural Dynamics, Florida, Amerika Birleşik Devletleri, 12 - 15 Şubat 2018, ss.77-79
- XIV. **Reduction of Helicopter Rotor Vibratory Loads Through Robust and Hybrid Optimization**

- BİLEN M. E., CİĞEROĞLU E., ÖZGÜVEN H. N.  
6th Asian / Australian Rotorcraft Forum (ARF), 7 - 09 Kasım 2017
- XV. **Dynamic Modelling of Split-Torque Face-Gear Drive Systems**  
AYDOĞAN M. Ö., SARIBAY Z. S., ÖZGÜVEN H. N.  
American Society of Mechanical Engineers International Design Engineering Technical Conferences, 6 - 09 Ağustos 2017
- XVI. **Dynamic Decoupling of Nonlinear Systems**  
Kalaycioglu T., ÖZGÜVEN H. N.  
35th IMAC Conference and Exposition on Structural Dynamics, California, Amerika Birleşik Devletleri, 30 Ocak - 02 Şubat 2017, ss.199-203
- XVII. **Modeling and Measurement of Micro End Mill Dynamics Using Inverse Stability Approach**  
YILMAZ E., BUDAK E., ÖZGÜVEN H. N.  
7th CIRP Conference on High Performance Cutting (HPC), Chemnitz, Almanya, 31 Mayıs - 02 Haziran 2016, cilt.46, ss.242-245
- XVIII. **Model Updating of a Nonlinear System: Gun Barrel of a Battle Tank**  
Canbaloglu G., ÖZGÜVEN H. N.  
34th IMAC Conference and Exposition on Structural Dynamics, Florida, Amerika Birleşik Devletleri, 25 - 28 Ocak 2016, ss.365-387
- XIX. **A Modal Superposition Method for the Analysis of Nonlinear Systems**  
Ferhatoglu E., CİĞEROĞLU E., ÖZGÜVEN H. N.  
34th IMAC Conference and Exposition on Structural Dynamics, Florida, Amerika Birleşik Devletleri, 25 - 28 Ocak 2016, ss.269-278
- XX. **New FRF Based Methods for Substructure Decoupling**  
Kalaycioglu T., ÖZGÜVEN H. N.  
34th IMAC Conference and Exposition on Structural Dynamics, Florida, Amerika Birleşik Devletleri, 25 - 28 Ocak 2016, ss.463-472
- XXI. **Optimization of Tooth Bending Fatigue Characteristics of Spur Gear Pairs Using a Gear Dynamics-Based Approach**  
Ozturk Y., CİĞEROĞLU E., ÖZGÜVEN H. N.  
ASME International Design Engineering Technical Conferences and Computers and Information in Engineering Conference, Massachusetts, Amerika Birleşik Devletleri, 2 - 05 Ağustos 2015
- XXII. **Optimization of Tooth Bending Fatigue Characteristics of Spur Gear Pairs using a Gear Dynamics based Approach**  
ÖZTÜRK Y., CİĞEROĞLU E., ÖZGÜVEN H. N.  
ASME 2015 International Design Engineering Technical Conferences, Boston, Amerika Birleşik Devletleri, 2 - 05 Ağustos 2015
- XXIII. **Dişlilerde Dinamik İletim Hatasını Azaltmaya Yönelik İdeal Profil Değişiklikleri**  
Öztürk Y., CİĞEROĞLU E., ÖZGÜVEN H. N.  
Uluslararası katılımlı 17. Makina Teorisi Sempozyumu / TrC-IFTOMM Symposium on Theory of Machines and Mechanisms, 14 - 17 Haziran 2015
- XXIV. **Experimental Validation of Pseudo Receptance Difference (PRD) Method for Nonlinear Model Updating**  
Canbaloglu G., ÖZGÜVEN H. N.  
33rd IMAC Conference and Exposition on Structural Dynamics, Florida, Amerika Birleşik Devletleri, 2 - 05 Şubat 2015, ss.293-306
- XXV. **Optimum Profile Modifications for the Minimization of Dynamic Transmission Error**  
ÖZTÜRK V. Y., CİĞEROĞLU E., ÖZGÜVEN H. N.  
International Gear Conference, 26 - 28 Ağustos 2014
- XXVI. **Nonlinear Structural Coupling: Experimental Application**  
Kalaycioglu T., ÖZGÜVEN H. N.  
32 International Modal Analysis Conference on Structural Dynamics, Florida, Amerika Birleşik Devletleri, 3 - 06

- Şubat 2014, ss.241-248
- XXVII. **Localization and Identification of structural nonlinearities using neural networks**  
Yumer M. E., Koyuncu A., CİĞEROĞLU E., ÖZGÜVEN H. N.  
IMAC XXXI: Conference Exposition on Structural Dynamics, 11 - 14 Şubat 2013
- XXVIII. **Analytical modeling of the machine tool spindle dynamics under operational conditions**  
ÖZSAHİN O., Budak E., ÖZGÜVEN H. N.  
37th International MATADOR 2012 Conference, Manchester, Birleşik Krallik, 25 - 27 Temmuz 2012, ss.117-120
- XXIX. **Finite Element Modeling of MEMS Piezoelectric Energy Harvester**  
Beker L., Muhtaroglu A., ÖZGÜVEN H. N., KÜLAH H.  
NSTI Nanotechnology Conference and Expo (Nanotech 2012), Santa-Clara, Küba, 18 - 21 Haziran 2012, ss.633-636
- XXX. **Harmonic Response of Large Engineering Structures with Nonlinear Modifications**  
Kalaycioglu T., ÖZGÜVEN H. N.  
8th International Conference on Structural Dynamics (EURODYN), Leuven, Belçika, 4 - 06 Temmuz 2011, ss.3623-3629
- XXXI. **Investigating Dynamics of Machine Tool Spindles under Operational Conditions**  
ÖZSAHİN O., Budak E., ÖZGÜVEN H. N.  
13th CIRP Conference on Modelling of Machining Operations, Sintra, Portekiz, 12 - 13 Mayıs 2011, cilt.223, ss.610-612
- XXXII. **Mistuning identification of bladed disks utilizing neural networks**  
Yümer M. E., CİĞEROĞLU E., ÖZGÜVEN H. N.  
ASME Turbo Expo 2010: Power for Land, Sea, and Air, GT 2010, Glasgow, İngiltere, 14 - 18 Haziran 2010, cilt.6, ss.601-610
- XXXIII. **Non-linear forced response analysis of mistuned bladed disk assemblies**  
Yümer M. E., CİĞEROĞLU E., ÖZGÜVEN H. N.  
ASME Turbo Expo 2010: Power for Land, Sea, and Air, GT 2010, Glasgow, İngiltere, 14 - 18 Haziran 2010, cilt.6, ss.757-766
- XXXIV. **Prediction of Vibro-Acoustic Response of Enclosed Spaces by Using Structural Modification Techniques**  
Demirkhan O., BAŞDOĞAN F. İ., ÖZGÜVEN H. N., ÇALIŞKAN M.  
International Conference on Noise and Vibration Engineering (ISMA)/Conference of USD, Leuven, Belçika, 20 - 22 Eylül 2010, ss.4293-4306
- XXXV. **Robustness Analysis of Intentional Mistuning Patterns in Randomly Mistuned Bladed Disk Assemblies**  
Yümer M. E., CİĞEROĞLU E., ÖZGÜVEN H. N.  
International Conference on Noise and Vibration Engineering (ISMA)/Conference of USD, Leuven, Belçika, 20 - 22 Eylül 2010, ss.4865-4874
- XXXVI. **Dynamic modeling of optical systems in order to study vibration effect on performance**  
Avsar A. L., ÖZGÜVEN H. N.  
Conference on Current Developments in Lens Design and Optical Engineering XI - and Advances in Thin Film Coatings VI, California, Amerika Birleşik Devletleri, 1 - 03 Ağustos 2010, cilt.7786
- XXXVII. **The use of noise measurements in machining stability analysis**  
Özlü E., ÖZSAHİN O., Budak E., ÖZGÜVEN H. N.  
36th International Congress and Exhibition on Noise Control Engineering, INTER-NOISE 2007, İstanbul, Türkiye, 28 - 31 Ağustos 2007, cilt.7, ss.4881-4894
- XXXVIII. **Ba<sub>1-x</sub>Sr<sub>x</sub>TiO<sub>3</sub> films prepared by chemical solution deposition**  
ÖZENBAŞ A. M., ÖZGÜVEN H. N., Emre M., Demirbaş M.  
Proceedings of the 8th Conference and Exhibition of the European Ceramic Society, İstanbul, Türkiye, 29 Haziran - 03 Temmuz 2003, ss.1249-1252
- XXXIX. **Twenty years of computational methods for harmonic response analysis of non-proportionally damped systems**  
Ozguven H.

- 20th IMAC Conference on Structural Dynamics, Los-Angeles, Şili, 4 - 07 Şubat 2002, cilt.4753, ss.390-396
- XL. **Modal Identification of Damped Structures From Response Measurements**  
ÖZGÜVEN H. N., YAMAN Y.  
3rd International Modal Analysis Conference (IMAC), Florida, Amerika Birleşik Devletleri, 2 - 04 Eylül 1985
- XLI. **Sönümlü Yapıların Dinamik Özelliklerinin Titreşim Ölçümlerinden Bulunması Üzerine Bir Yöntem**  
YAMAN Y., ÖZGÜVEN H. N.  
1. Ulusal Makina Teorisi Sempozyumu, Ankara, Türkiye, 3 - 06 Eylül 1984

## Desteklenen Projeler

ÖZGÜVEN H. N., UFUK 2020 Projesi, models, EXperiments and high PERformance computing for Turbine mechanical Integrity and Structural dynamics in Europe, 2017 - 2021

## Metrikler

Yayın: 96  
Atıf (WoS): 2378  
Atıf (Scopus): 2228  
H-İndeks (WoS): 26  
H-İndeks (Scopus): 29

## Akademi Dışı Deneyim

EUREKA  
TÜBİTAK  
TÜRKİYE ÇİMENTO VE TOPRAK SANAYİİ  
ÇİMENTO MÜSTAHSİLLERİ BİRLİĞİ