

# Prof. HASAN NEVZAT ÖZGÜVEN

## Personal Information

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## International Researcher IDs

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## Education Information

Doctorate, The University of Manchester, Umist, United Kingdom 1975 - 1978

Postgraduate, Middle East Technical University, Graduate School of Natural and Applied Sciences, Makine Mühendisliği (Dr), Turkey 1972 - 1975

Undergraduate, Middle East Technical University, Faculty of Engineering, Makine Mühendisliği Bölümü, Turkey 1968 - 1973

## Dissertations

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

## Research Areas

Mechanical Engineering, Engineering and Technology

## Academic Titles / Tasks

Professor, Middle East Technical University, Faculty of Engineering, Makine Mühendisliği Bölümü, 1989 - Continues

Associate Professor, Middle East Technical University, Faculty of Engineering, Makine Mühendisliği Bölümü, 1983 - 1989

Associate Professor, The Ohio State University, Faculty Of Engineering, Mechanical Engineering Department, 1985 - 1987

Assistant Professor, Middle East Technical University, Faculty of Engineering, Makine Mühendisliği Bölümü, 1980 - 1983

Lecturer, Middle East Technical University, Faculty of Engineering, Makine Mühendisliği Bölümü, 1979 - 1980

Research Assistant, Middle East Technical University, Faculty of Engineering, 1973 - 1979

## Academic and Administrative Experience

Middle East Technical University, Presidency Office, 2008 - 2016

Middle East Technical University, Presidency Office, 1995 - 1998

## Advising Theses

- ÖZGÜVEN H. N., Dynamic modelling and analysis of split-torque face-gear systems, Doctorate, M.ÖZGÜR(Student), 2022
- Özgüven H. N., Şahin M., Design, modelling and analysis of a novel implantable bone conduction hearing aid with a piezoelectric actuator, Doctorate, A.KOYUNCU(Student), 2022
- ÖZGÜVEN H. N., INVESTIGATION OF DECOUPLING TECHNIQUES FOR LINEAR AND NONLINEAR SYSTEMS, Doctorate, T.KALAYCIOĞLU(Student), 2018
- CİĞEROĞLU E., ÖZGÜVEN H. N., A new modal superposition method for nonlinear vibration analysis of structures using hybrid mode shapes, Postgraduate, E.FERHATOĞLU(Student), 2018
- CİĞEROĞLU E., ÖZGÜVEN H. N., A parametric study on planetary gear dynamics, Doctorate, V.YALIN(Student), 2018
- ÖZGÜVEN H. N., Development of a model updating technique for nonlinear systems, Doctorate, G.CANBALOĞLU(Student), 2015
- ÖZGÜVEN H. N., Dynamic modelling in micromachining, Postgraduate, E.ERSOY(Student), 2015
- ÖZGÜVEN H. N., Analysis and modelling of machine tool dynamics and cutting stability during operation, Doctorate, O.ÖZŞAHİN(Student), 2014
- ÖZGÜVEN H. N., Active vibration control of beams and cylindrical structures using piezoelectric patches, Postgraduate, C.GENÇOĞLU(Student), 2014
- ÖZGÜVEN H. N., Active vibration control of beam and plates by using piezoelectric patch actuators, Postgraduate, İ.FURKAN(Student), 2013
- ÖZGÜVEN H. N., Identification of nonlinearities in structural dynamics by using artificial neural networks and optimization, Postgraduate, A.KOYUNCU(Student), 2013
- KÜLAH H., ÖZGÜVEN H. N., MEMS piezoelectric energy harvester for cochlear implant applications, Postgraduate, L.BEKER(Student), 2013
- ÖZGÜVEN H. N., Identification of localized nonlinearity for dynamic analysis of structures, Doctorate, M.AYKAN(Student), 2013
- ÖZGÜVEN H. N., Dynamic modeling of structural joints, Postgraduate, Ş.TOL(Student), 2012
- CİĞEROĞLU E., ÖZGÜVEN H. N., Possibilistic interpretation of mistuning in bladed disks by fuzzy algebra, Postgraduate, H.ÇAĞLAR(Student), 2012
- ÖZGÜVEN H. N., Harmonic response of large engineering structures with nonlinear modifications, Postgraduate, T.KALAYCIOĞLU(Student), 2011
- ÖZGÜVEN H. N., Determination of dynamically equivalent fe models of aircraft structures by using modal test data, Postgraduate, T.KARAAĞAÇLI(Student), 2010
- ÖZGÜVEN H. N., The effects of structural modifications on acoustic characteristics of enclosed bodies, Postgraduate, Ö.DEMİRKAN(Student), 2010
- CİĞEROĞLU E., ÖZGÜVEN H. N., On the non-linear vibration and mistuning identification of bladed disks, Postgraduate, M.ERSİN(Student), 2010
- ÖZGÜVEN H. N., Structural modification with additional degrees of freedom in large systems, Postgraduate, G.Canbaloglu(Student), 2009
- ÖZGÜVEN H. N., Development of a fast analytical method for prediction of part dynamics in machining stability analysis, Postgraduate, S.Alan(Student), 2009
- ÖZGÜVEN H. N., Nonlinear dynamic modeling and analysis of spindle-tool assemblies in machining centers, Postgraduate, Z.Murat(Student), 2009
- ÖZGÜVEN H. N., Harmonic vibration analysis of large structures with local nonlinearity, Postgraduate, D.ABAT(Student), 2009
- ÖZGÜVEN H. N., Nonlinear dynamic modeling and analysis of spindle-tool assemblies in machining centers ve doğrusal olmayan dinamik modellemesi, Postgraduate, Z.MURAT(Student), 2009
- ÖZGÜVEN H. N., Human tibial bone strength prediction by vibration analysis for diagnosing progressing osteoporosis, Postgraduate, B.BEDİZ(Student), 2009
- ÖZGÜVEN H. N., Finite element structural model updating by using experimental frequency response functions, Postgraduate, M.ÖZTÜRK(Student), 2009
- ÖZGÜVEN H. N., Nonlinear vibration of mistuned bladed disk assemblies, Postgraduate, G.Orbay(Student), 2008

ÖZGÜVEN H. N., Dynamic modeling and analysis of vibration effects on performance in optical systems, Postgraduate, A.LEVENT(Student), 2008

ÖZGÜVEN H. N., Modal identification of nonlinear substructures and implementation in structural coupling analysis, Postgraduate, Ö.ARSLAN(Student), 2008

ÖZGÜVEN H. N., Nonlinear vibrations of mistuned bladed disk assemblies, Postgraduate, G.ORBAY(Student), 2008

ÖZGÜVEN H. N., Vibration analysis of PCBs and electronic components, Postgraduate, B.AYTEKİN(Student), 2008

ÖZGÜVEN H. N., An investigation on dynamic contact parameters in machining center spindle tool assemblies, Postgraduate, O.ÖZŞAHİN(Student), 2008

ÖZGÜVEN H. N., Modeling part dynamics in machining processes considering material removal, Postgraduate, S.ATLAR(Student), 2007

ÖZGÜVEN H. N., Modelling part dynamics in machining processes considering material removal, Postgraduate, S.Atlar(Student), 2007

ÖZGÜVEN H. N., An investigation on the application of operational modal analysis, Postgraduate, F.Büke(Student), 2006

ÖZGÜVEN H. N., Steady-state modeling of detonation phenomenon in premixed gaseous mixtures and energetic solid explosives, Postgraduate, A.Ertürk(Student), 2006

ÖZGÜVEN H. N., Investigation of model updating techniques and their applications to aircraft structures, Postgraduate, M.Tuğrul(Student), 2006

ÖZGÜVEN H. N., Development and comparative evaluation of a new structural modification method in application to aircraft structures, Postgraduate, S.Köksal(Student), 2006

ÖZGÜVEN H. N., Non-linear mathematical modeling of gear rotor bearing systems including bearing clearance, Postgraduate, N.Ersan(Student), 2005

ÖZGÜVEN H. N., Damage detection in structures using vibration measurements, Postgraduate, M.Özgür(Student), 2003

ÖZGÜVEN H. N., Non-linear vibration analysis of bladed disks with dry damper, Postgraduate, E.CİĞEROĞLU(Student), 2002

ÖZGÜVEN H. N., Dynamic analysis of spur gears, Postgraduate, C.ULAŞ(Student), 1999

ÖZGÜVEN H. N., A New method on identification of symmetrical non-linearities in structures, Postgraduate, M.BÜLENT(Student), 1999

ÖZGÜVEN H. N., Computer based teaching using hypermedia for the mechanical vibration course., Postgraduate, M.ÖZBEK(Student), 1996

ÖZGÜVEN H. N., Harmonic forced vibration analysis of assembled structures with nonlinear coupling, Postgraduate, M.DEVRİM(Student), 1994

ÖZGÜVEN H. N., Non-linear dynamic analysis of geared rotors to internal excitation by using describing functions and finite element methods, Doctorate, R.MALİHA(Student), 1994

ÖZGÜVEN H. N., Dynamic analysis of multi-stage helical geared rotors with transfer matrix method, Postgraduate, S.TARKAN(Student), 1994

ÖZGÜVEN H. N., Vibration analysis of damped structures and structural reanalysis using a new structural modification method, Postgraduate, M.TAHTALI(Student), 1992

ÖZGÜVEN H. N., Dynamic modeling and analysis of multi-gear rotors including lateral and torsional vibration coupling, Postgraduate, D.YILMAZ(Student), 1991

ÖZGÜVEN H. N., Fault diagnosis of gears by computer simulation, Postgraduate, M.YALÇINTAŞ(Student), 1990

ÖZGÜVEN H. N., Vibration analysis of structures using substructure synthesis, Postgraduate, N.ÇETİNKAYA(Student), 1989

ÖZGÜVEN H. N., Dynamic analysis of nonlinear structures for harmonic excitation, Postgraduate, E.BUDAK(Student), 1989

ÖZGÜVEN H. N., Dynamic analysis of geared shaft systems by using continuous system models, Postgraduate, Ö.SAADET(Student), 1989

## **Published journal articles indexed by SCI, SSCI, and AHCI**

### **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, vol.145, no.3, 2023 (SCI-Expanded)

- II. **Experimental Modal Analysis of Nonlinear Amplified Piezoelectric Actuators by Using Response-Controlled Stepped-Sine Testing**  
Koyuncu A., Karaagacılı T., ŞAHİN M., ÖZGÜVEN H. N.  
EXPERIMENTAL MECHANICS, vol.62, no.9, pp.1579-1594, 2022 (SCI-Expanded)
- III. **Experimental Quantification and Validation of Modal Properties of Geometrically Nonlinear Structures by Using Response-Controlled Stepped-Sine Testing**  
Karaagacılı T., ÖZGÜVEN H. N.  
EXPERIMENTAL MECHANICS, vol.62, no.2, pp.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, vol.500, 2021 (SCI-Expanded)
- V. **Experimental modal analysis of nonlinear systems by using response-controlled stepped-sine testing**  
Karaagacılı T., ÖZGÜVEN H. N.  
MECHANICAL SYSTEMS AND SIGNAL PROCESSING, vol.146, 2021 (SCI-Expanded)
- VI. **A frequency domain nonparametric identification method for nonlinear structures: Describing surface method**  
Karaagacılı T., ÖZGÜVEN H. N.  
MECHANICAL SYSTEMS AND SIGNAL PROCESSING, vol.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, vol.135, 2020 (SCI-Expanded)
- VIII. **A new modal superposition method for nonlinear vibration analysis of structures using hybrid mode shapes**  
Ferhatoglu E., Cığeroğlu E., Özgüven H. N.  
MECHANICAL SYSTEMS AND SIGNAL PROCESSING, vol.107, pp.317-342, 2018 (SCI-Expanded)
- IX. **FRF decoupling of nonlinear systems**  
Kalaycıoğlu T., ÖZGÜVEN H. N.  
MECHANICAL SYSTEMS AND SIGNAL PROCESSING, vol.102, pp.230-244, 2018 (SCI-Expanded)
- X. **Localization and identification of structural nonlinearities using cascaded optimization and neural networks**  
Koyuncu A., Cığeroğlu E., Özgüven H. N.  
MECHANICAL SYSTEMS AND SIGNAL PROCESSING, vol.95, pp.219-238, 2017 (SCI-Expanded)
- XI. **Model updating of nonlinear structures from measured FRFs**  
Canbaloglu G., ÖZGÜVEN H. N.  
MECHANICAL SYSTEMS AND SIGNAL PROCESSING, vol.80, pp.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, vol.42, pp.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, pp.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, vol.89, pp.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, vol.144, pp.119-126, 2014 (SCI-Expanded)
- XVI. **Nonlinear structural modification and nonlinear coupling**  
Kalaycioglu T., ÖZGÜVEN H. N.  
MECHANICAL SYSTEMS AND SIGNAL PROCESSING, vol.46, no.2, pp.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, vol.40, no.1, pp.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, vol.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, vol.135, no.2, 2013 (SCI-Expanded)
- XX. **A new method to determine dynamically equivalent finite element models of aircraft structures from modal test data**  
Karaağaçlı T., Yildiz E. N., ÖZGÜVEN H. N.  
MECHANICAL SYSTEMS AND SIGNAL PROCESSING, vol.31, pp.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, vol.61, no.1, pp.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, vol.25, no.4, pp.1112-1125, 2011 (SCI-Expanded)
- XXIII. **Analysis and compensation of mass loading effect of accelerometers on tool point FRF measurements for chatter stability predictions**  
ÖZŞAHİN O., ÖZGÜVEN H. N., Budak E.  
INTERNATIONAL JOURNAL OF MACHINE TOOLS & MANUFACTURE, vol.50, no.6, pp.585-589, 2010 (SCI-Expanded)
- XXIV. **Vibration measurements predict the mechanical properties of human tibia**  
Bediz B., ÖZGÜVEN H. N., Korkusuz F.  
CLINICAL BIOMECHANICS, vol.25, no.4, pp.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, vol.23, no.6, pp.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, vol.23, no.1, pp.30-44, 2009 (SCI-Expanded)
- XXVII. **A closed-form approach for identification of dynamical contact parameters in spindle-holder-tool assemblies**  
ÖZŞAHİN O., ERTURK A., ÖZGÜVEN H. N., Budak E.  
INTERNATIONAL JOURNAL OF MACHINE TOOLS & MANUFACTURE, vol.49, no.1, pp.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, vol.47, no.9, pp.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, vol.47, no.1, pp.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, vol.46, no.15, pp.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, vol.295, pp.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, vol.55, no.1, pp.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, vol.126, no.3, pp.534-541, 2004 (SCI-Expanded)
- XXXIV. **A modal superposition method for non-linear structures**  
Kuran B., Ozguven H. N.  
JOURNAL OF SOUND AND VIBRATION, vol.189, no.3, pp.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, vol.166, no.3, pp.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, vol.31, no.7, pp.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, vol.7, no.1, pp.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, vol.114, no.3, pp.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, vol.145, no.2, pp.239-260, 1991 (SCI-Expanded)
- XL. **STRUCTURAL MODIFICATIONS USING FREQUENCY-RESPONSE FUNCTIONS**  
OZGUVEN H. N.  
MECHANICAL SYSTEMS AND SIGNAL PROCESSING, vol.4, no.1, pp.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, vol.125, no.1, pp.71-83, 1988 (SCI-Expanded)
- XLII. **MATHEMATICAL-MODELS USED IN GEAR DYNAMICS - A REVIEW**  
OZGUVEN H. N., HOUSER D.  
JOURNAL OF SOUND AND VIBRATION, vol.121, no.3, pp.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, vol.21, no.12, pp.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, vol.117, no.2, pp.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, vol.111, no.3, pp.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, vol.106, no.1, pp.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, vol.106, no.1, pp.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, vol.85, pp.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, vol.76, pp.23-41, 1981 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Analytical Prediction of Part Dynamics for Machining Stability Analysis**  
Alan S., Budak E., ÖZGÜVEN H. N.  
International Journal of Automation Technology, vol.4, no.3, pp.259-267, 2010 (Scopus)

## Books & Book Chapters

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

## Refereed Congress / Symposium Publications in Proceedings

- 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, United States Of America, 13 - 16 February 2023, pp.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, United States Of America, 13 - 16 February 2023, pp.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, United States Of America, 13 - 16 February 2023, pp.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, United States Of America, 13 - 16 February 2023, pp.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, United States Of America, 7 - 10 February 2022, pp.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 February 2021, pp.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 August 2021, vol.10
- VIII. **Integration of parameter sensitivity to structural optimization of helicopter rotors for minimum vibration**  
BİLEN M. E., CİĞEROĞLU E., ÖZGÜVEN H. N.  
VIBRATIONS IN ROTATING MACHINERY- VIRM 12, 14 - 15 October 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, United States Of America, 10 - 13 February 2020, pp.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 May 2021, vol.101, pp.294-297
- XI. **Identifying the joint dynamics of a bolted beam system by using FRF decoupling and the SEMM expansion technique**  
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- XVIII. **Model Updating of a Nonlinear System: Gun Barrel of a Battle Tank**  
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- XX. **New FRF Based Methods for Substructure Decoupling**  
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- XXVII. **Localization and Identification of structural nonlinearities using neural networks**  
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- XXXVIII. **Ba1-xSrxTiO3 films prepared by chemical solution deposition**  
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- XXXIX. **Twenty years of computational methods for harmonic response analysis of non-proportionally damped systems**

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**XL. Modal Identification of Damped Structures From Response Measurements**

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**XLI. Sönümlü Yapıların Dinamik Özelliklerinin Titreşim Ölçümlerinden Bulunması Üzerine Bir Yöntem**

YAMAN Y., ÖZGÜVEN H. N.

1. Ulusal Makina Teorisi Sempozyumu, Ankara, Turkey, 3 - 06 September 1984

## Supported Projects

ÖZGÜVEN H. N., H2020 Project, models, EXperiments and high PERformance computing for Turbine mechanical Integrity and Structural dynamics in Europe, 2017 - 2021

## Metrics

Publication: 96

Citation (WoS): 2424

Citation (Scopus): 2245

H-Index (WoS): 28

H-Index (Scopus): 29

## Non Academic Experience

EUREKA

TÜBİTAK

TÜRKİYE ÇİMENTO VE TOPRAK SANAYİİ

ÇİMENTO MÜSTAHSİLLERİ BİRLİĞİ