Prof. HASAN NEVZAT ÖZGÜVEN

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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, IFURKAN (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.Canbaloğlu(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.BEDIZ(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, 0.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 dynamicsin 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-linearites 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 reanalaysis using a new structural modification method, Postgraduate, M.TAHTALI(Student), 1992

ÖZGÜVEN H. N., Dynamic modeling and analysis of multi-geared 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., Karaagacli 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 Karaagacli 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 Karaagacli T., ÖZGÜVEN H. N.

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VI. A frequency domain nonparametric identification method for nonlinear structures: Describing surface method Karaagacli T., ÖZGÜVEN H. N.

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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., Ciğeroğlu E., Özgüven H. N. MECHANICAL SYSTEMS AND SIGNAL PROCESSING, vol.107, pp.317-342, 2018 (SCI-Expanded)

- IX. FRF decoupling of nonlinear systems
 Kalayclogiu 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., Ciğeroğlu 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) Mistuning Identification of Integrally Bladed Disks With Cascaded Optimization and Neural Networks XVIII. 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 ÖZSAHİN 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) Selection of design and operational parameters in spindle-holder-tool assemblies for maximum XXVIII. 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.
	IOURNAL OF SOUND AND VIRRATION vol 295 nn 1028-1043 2006 (SCI-Expanded)
XXXII.	A modeling approach for analysis and improvement of spindle-holder-tool assembly dynamics
	Pudek E Enturk A Organica H N
	CURD ANNALS MANUEACTURING TECHNOLOGY vol 55 mg 1 mg 260 272 2006 (CCI Even and d)
XXXIII.	CIRP ANNALS-MANUFACTURING TECHNOLOGY, Vol.55, no.1, pp.369-372, 2006 (Sci-Expanded)
	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 IQURNAL, vol 31, no 7, nn 1313-1320, 1993 (SCI-Expanded)
XXXVII	ITERATIVE RECEPTANCE METHOD FOR DETERMINING HARMONIC RESPONSE OF STRUCTURES WITH
ллл v II.	SYMMETRICAL NONLINEADITIES
	DUDAK E., UZUUVEN H. N. MECHANICAL SVETEMS AND SIGNAL DEOCESSING vol 7 no 1 nn 75 97 1002 (SCI Europdod)
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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.
	IOURNAL OF SOUND AND VIBRATION vol 121 no 3 nn 383-411 1988 (SCI-Expanded)
VI 111	AN EXDEDIMENTAL AND ANALYTICAL STUDY OF IMPACT FORCES DUDING HUMAN HUMDING
XLIII.	AN EALENMENTAL AND ANALITICAL STODT OF IMPACT FORCES DURING NUMAN JUMPING
	OLDOVEN IN N. DERME N.
	JUURINAL OF DIOMEGRAVICS, VOL21, 10.12, PP.1001-1000, 1900 (SUI-EXPANDED)
XLIV.	A NEW MEINUD FOR NARMONIC RESPONSE OF NUNPROPORTIONALLY DAMPED STRUCTURES USING
	UNDAMPED MUDAL 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.
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### **Articles Published in Other Journals**

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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. A Novel Approach for Local Structural Modification of Nonlinear Structures Ceren Ekinci E., Bülent 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.155-160
 II. Extension and Experimental Verification of an Efficient Re-analysis Method for Modified Nonlinear

**Structures** Ekinci E. C., Karaağaçlı T., Çelik F. K., ÖZER M. B., ÖZGÜVEN H. N. 42nd IMAC, A Conference and Exposition on Structural Dynamics, IMAC 2024, Florida, United States Of America, 29

III. Nonlinear Vibration Analysis of a Two-Blade System with Shroud-to-Shroud Contact by Using

#### Response-Dependent Nonlinear Normal Modes

Ahi T., CİĞEROĞLU E., ÖZGÜVEN H. N.

42nd IMAC, A Conference and Exposition on Structural Dynamics, IMAC 2024, Florida, United States Of America, 29 January - 01 February 2024, pp.107-113

### IV. The TRChallenge: Experimental Quantification of Nonlinear Modal Parameters and Confrontation with the Predictions

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### V. Experimental Modal Analysis of Structures with High Nonlinear Damping by Using Response-Controlled Stepped-Sine Testing

Karaağaçlı T., ÖZGÜVEN H. N.

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### VI. Bypassing the Repeatability Issue in Nonlinear Experimental Modal Analysis of Jointed Structures by Using the RCT-HFS Framework

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### VII. Determination of Nonlinear Joint Forces and Nonlinear Identification of Jointed Connections Using FRFs

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### VIII. Experimental Modal Analysis of Geometrically Nonlinear Structures by Using Response-Controlled Stepped-Sine Testing

Karaağaçlı T., ÖZGÜVEN H. N.

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### IX. 3D linear identification of mechanical joint using FRF decoupling and inverse structural modification methods

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### X. Integration of parameter sensitivity to structural optimization of helicopter rotors for minimum vibration

BİLEN M. E., CİĞEROĞLU E., ÖZGÜVEN H. N.

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### XI. 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

### XII. 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.

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### XIII. 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, United States Of America, 31 July - 02 August 2019, pp.1-4

XIV. Dynamic characterization of double-relief profile modifications in planetary gear systems Öztürk V. Y., Ciğeroğlu E., Özgüven H. N.

INTERNATIONAL GEAR CONFERENCE 2018, Lyon, France, 27 - 29 August 2018, pp.1-14

XV. Extended Abstract: Dynamic Behavior of a Compliant Mechanism Driven by Stacked Piezoelectric Actuators

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### Metrics

Publication: 98 Citation (WoS): 2497 Citation (Scopus): 2281 H-Index (WoS): 29 H-Index (Scopus): 29

#### **Non Academic Experience**

EUREKA TÜBİTAK TÜRKİYE ÇİMENTO VE TOPRAK SANAYİİ ÇİMENTO MÜSTAHSİLLERİ BİRLİĞİ