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Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: ABA-3633-2020

ScopusID: 21739500700

Yoksis Researcher ID: 163570

Education Information

Doctorate, University of Cincinnati, Makina Mühendisliği, United States Of America 2001 - 2006

Postgraduate, Middle East Technical University, Graduate School Of Natural And Applied Sciences, Makine Mühendisliği (YI) (Tezli), Turkey 1998 - 2001

Undergraduate, Middle East Technical University, Odtu Kuzey Kıbrıs Kampusu (Kktc-Güzelyurt), Makine Mühendisliği Bölümü, Turkey 1994 - 1998

Research Areas

Mechanical Engineering, Construction and Manufacturing, Machine Design, Machine Theory and Dynamics, Machine Dynamics, Modeling and Simulation of Dynamic Systems, Mechanical Vibrations, Mechanical, Finite Element Methods, Mechanical Testing, Metallurgical and Materials Engineering, Material science and engineering, Polymeric Materials, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Middle East Technical University, Faculty Of Engineering, Makine Mühendisliği Bölümü, 2018 - Continues

Assistant Professor, Middle East Technical University, Faculty Of Engineering, Makine Mühendisliği Bölümü, 2009 - 2018

Lecturer, Middle East Technical University, Faculty Of Engineering, Makine Mühendisliği Bölümü, 2008 - 2009

Research Assistant, University of Cincinnati, College Of Engineering, Department Of Mechanical, Industrial And Nuclear Engineering, 2001 - 2006

Research Assistant, Middle East Technical University, Faculty Of Engineering, Makine Mühendisliği Bölümü, 1998 - 2001

Academic and Administrative Experience

Uygulama ve Araştırma Merkezi Yönetim Kurulu Üyesi, Middle East Technical University, 2017 - Continues

Courses

Introduction to Smart Structures and Materials, Undergraduate, 2021 - 2022

Theory of Machines I, Undergraduate, 2021 - 2022

Advising Theses

Ciğeroğlu E., Özgen G. O., Design and production stages of a vibration test fixture, Postgraduate, C.TÜRKER(Student), 2020

Özgen G. O., Development of a constrained layer surface damping treatment with optimized spacer geometry for plates, Postgraduate, B.ULUBALCI(Student), 2019

Özgen G. O., Design of a magnetically tuned vibration absorber, Postgraduate, H.ERDEM(Student), 2019

Özgen G. O., Structural vibration control in wind turbines, Postgraduate, Ç.KOÇAN(Student), 2019

Özgen G. O., DESIGN OF A COMPLEX MODULUS TEST SYSTEM FOR VISCOELASTIC MATERIALS, Postgraduate, B.ERDOĞAN(Student), 2019

Özgen G. O., Estimation of effective parameters and operational response of tuned vibration absorbers, Postgraduate, H.CAN(Student), 2019

Ciğeroğlu E., Özgen G. O., Nonlinear vibration isolation of inertial measurement unit, Postgraduate, A.DÖNMEZ(Student), 2018

ÖZGEN G. O., VIBRATION ISOLATION SYSTEM FOR SPACE LAUNCH VEHICLES, Postgraduate, B.KARAMAN(Student), 2018

CİĞEROĞLU E., ÖZGEN G. O., Finite element model updating of aerospace structures, Postgraduate, D.ÜNLÜ(Student), 2017

YAMAN Y., ÖZGEN G. O., Design and analysis of radar antenna structures for optimum dynamic behavior, Postgraduate, E.SUN(Student), 2016

ÖZGEN G. O., Design and development of a modular dynamic test system for resilient mechanical components and viscoelastic materials, Postgraduate, E.BARIŞ(Student), 2016

ÖZGEN G. O., Development of a novel surface damping treatment, Postgraduate, K.OKAN(Student), 2016

ÖZGEN G. O., YAMAN Y., Design and analysis of radar antenna structure with optimum dynamic behavior, Postgraduate, E.Sun(Student), 2016

ÖZGEN G. O., Tuned vibration absorber design for a supported hollow cylindrical structure, Postgraduate, T.AKSOY(Student), 2015

ÖZGEN G. O., Prediction of sound transmission through elastomeric bulb seals, Postgraduate, S.ATAMER(Student), 2014

ÖZGEN G. O., Development of a test system for viscoelastic material characterization, Postgraduate, F.EROL(Student), 2014

ÖZGEN G. O., Development of a modal analysis software platform, Postgraduate, O.ÖZGELEN(Student), 2014

Yazıcıoğlu Y., Özgen G. O., Simulation based ground vibration test planning for a fighter aircraft, Doctorate, S.KÖKSAL(Student), 2014

ÇALIŞKAN M., ÖZGEN G. O., Vibration isolation module for a towed array, Postgraduate, Ö.Batmaz(Student), 2014

ÖZGEN G. O., Design of a compliant mechanism to amplify the stroke of a piezoelectric stack actuator, Postgraduate, T.KESKİN(Student), 2013

ÖZGEN G. O., Design and modeling elastomeric vibration isolators using finite element method, Postgraduate, H.HARDIÇ(Student), 2013

CİĞEROĞLU E., ÖZGEN G. O., Finite element modelling and analysis of recoil springs in automatic weapons, Postgraduate, H.ZALOĞLU(Student), 2013

CİĞEROĞLU E., ÖZGEN G. O., DESIGN OF A TEST SETUP FOR THE CHARACTERIZATION OF VIBRATION ISOLATORS, Postgraduate, C.UZ(Student), 2013

ÖZGEN G. O., Service life assessment of solid rocket propellants considering random thermal and vibratory loads, Postgraduate, O.YILMAZ(Student), 2012

ÖZGEN G. O., Investigation of Stockbridge dampers for vibration control of overhead transmission lines, Postgraduate, H.Kasap(Student), 2012

ÖZGEN G. O., Investigation of the use of sandwich materials in automotive body structures, Postgraduate, D.Hara(Student), 2012
ÖZGEN G. O., Analysis and control of gun barrel vibrations, Postgraduate, F.BÜYÜKCİVELEK(Student), 2011
CİĞEROĞLU E., ÖZGEN G. O., Optimization of vibration characteristics of a radar antenna structure, Postgraduate, İ.BARAN(Student), 2011

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Investigation of the effect of structural damping on wind turbine wind-induced fatigue loads**
Kocan C., ÖZGEN G. O.
MECHANICS BASED DESIGN OF STRUCTURES AND MACHINES, 2022 (SCI-Expanded)
- II. **Design of a tuned vibration absorber for a slender hollow cylindrical structure**
Aksoy T., Özgen G. O., Acar B.
Mechanics Based Design of Structures and Machines, vol.48, no.5, pp.615-648, 2020 (SCI-Expanded)
- III. **An improved quasi-zero stiffness vibration isolation system utilizing dry friction damping**
Donmez A., CİĞEROĞLU E., ÖZGEN G. O.
NONLINEAR DYNAMICS, vol.101, no.1, pp.107-121, 2020 (SCI-Expanded)
- IV. **Minimization of Ground Vibration Test Configurations for F-16 Aircraft by Subtractive Modification**
Koksal S., Yildiz E. N., Yazıcıoğlu Y., Özgen G. O.
Shock and Vibration, vol.2019, 2019 (SCI-Expanded)
- V. **Reliability Assessment of Solid-Propellant Rocket Motors Under Storage and Transportation Loads**
Yilmaz O., Kuran B., Özgen G. O.
JOURNAL OF SPACECRAFT AND ROCKETS, vol.54, pp.1356-1366, 2017 (SCI-Expanded)
- VI. **Error analysis and feasibility study of dynamic stiffness matrix-based damping matrix identification**
Ozgen G. O., Kim J. H.
Journal of Sound and Vibration, vol.320, pp.60-83, 2009 (SCI-Expanded)
- VII. **Direct identification and expansion of damping matrix for experimental-analytical hybrid modeling**
Ozgen G. O., Kim J. H.
Journal of Sound and Vibration, vol.308, pp.348-372, 2007 (SCI-Expanded)

Articles Published in Other Journals

- I. **Further developments in the dynamic stiffness matrix (DSM) based direct damping identification method**
Özgen G. O., Kim J.
SAE 2005 Transactions Journal of Passenger Cars - Mechanical Systems, vol.114, no.6, pp.2704-2712, 2006 (Peer-Reviewed Journal)
- II. **Design and development of a complex shear modulus measurement setup for viscoelastic materials**
Özgen G. O.
SAE 2005 Transactions Journal of Passenger Cars - Mechanical Systems, vol.114, no.6, pp.2638-2647, 2006 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **KUVARS SARKAÇLI İVMEÖLÇER VE OKUMA DEVRESİ SİSTEM DİNAMİĞİNİN KARAKTERİZASYONU**
Özmen H. B., Şahin M., Özgen G. O.
10. Savunma Teknolojileri Kongresi (SAVTEK), Ankara, Turkey, 13 - 15 September 2022, pp.845-858
- II. **Development and Verification of Finite Element Model of a Product-Fixture Assembly used for**

Shaker Testing

Türker C., Özgen G. O., Ciğeroğlu E.

39th IMAC, A Conference and Exposition on Structural Dynamics 2021, 8 - 11 February 2021

- III. **Manufacturing Error Detection In Plate And Cylindrical Composite Structures**
Talebi C., Acar B., Özgen G. O.
ASME International Mechanical Engineering Congress and Exposition (IMECE2020), 16 - 19 November 2020
- IV. **A novel method for the vibration reduction of an air vehicle missile launcher**
Aksoy T., Acar B., Özgen G. O.
AIAA Scitech Forum, 2019, California, United States Of America, 7 - 11 January 2019
- V. **Determination of Optimum Vibration Isolator Properties for Payload Vibration Isolation**
Karaman B., Özgen G. O.
15th European Conference on Spacecraft Structures, Materials and Environmental Testing (ECSSMET 2018), ESA-ESTEC, Noordwijk, The Netherlands, 28 May-1 June 2018, Groningen, Netherlands, 28 May - 01 June 2018
- VI. **The Effect of Stiffness and Loading Deviations in a Nonlinear Isolator Having Quasi Zero Stiffness and Geometrically Nonlinear Damping**
DÖNMEZ A., CIĞEROĞLU E., ÖZGEN G. O.
Proceedings of the ASME 2017 International Mechanical Engineering Congress and Exposition, 3 - 09 November 2017
- VII. **Non-linear Dynamic Analysis for the Lateral Vibration of Beams with Breathing Crack under Harmonic Excitation Using Finite Element Method**
Özkan B., Ciğeroğlu E., Özgen G. O., Kadioğlu F. S.
ICAF 2017 (35th Conference and 29th Symposium of the International Committee on Aeronautical Fatigue and Structural Integrity), Nagoya, Japan, 7 - 09 June 2017
- VIII. **Investigation of Sound Transmission Loss of an Automotive Door Sealing System byUsing FEA**
Atamer S., Kandemir M. H., Barutçu B. N., Çalışkan M., Özgen G. O., Altınsoy E.
Fortschritte der Akustik - DAGA 2016. 42. Jahrestagung für Akustik DAGA 2016, 14.-17. März 2016, Aachen, Aachen, Germany, 14 - 17 March 2016
- IX. **Investigation of weight reduction of automotive body structures with the use of sandwich materials**
Hara D., ÖZGEN G. O.
6th Transport Research Arena (TRA), Warszawa, Poland, 18 - 21 April 2016, vol.14, pp.1013-1020
- X. **A Modified Inverse Eigensensitivity Method for Large Finite Element Models**
Unlu D., CIĞEROĞLU E., ÖZGEN G. O.
34th IMAC Conference and Exposition on Structural Dynamics, Florida, United States Of America, 25 - 28 January 2016, pp.293-301
- XI. **Experimental characterization of a tuned vibration absorber**
Aksoy T., ÖZGEN G. O., Acar B., Gençoğlu C.
34th IMAC, A Conference and Exposition on Structural Dynamics, organized by the Society for Experimental Mechanics, 2016, Florida, United States Of America, 25 - 28 January 2016, vol.5, pp.171-179
- XII. **Development of a test system for viscoelastic material characterization**
Erol F., Özgen G. O., Ardiç H., Erdoğan B., Özkan S. S.
The 16th International Conference on Machine Design and Production, İzmir, Turkey, 30 June - 03 July 2014, pp.1-20
- XIII. **Design of a Test Setup for Measuring Dynamic Stiffness of Vibration Isolators**
Uz C., Özgen G. O., Ciğeroğlu E.
31st International Modal Analysis Conference on Structural Dynamics, IMAC 2013, Garden Grove, CA, United States Of America, 11 - 14 February 2013, vol.45, pp.235-247
- XIV. **Prediction of sound transmission through elastomeric bulb seals**
Atamer S., Çalışkan M., Özgen G. O.
43rd International Congress on Noise Control Engineering: Improving the World Through Noise Control, INTERNOISE 2014, Melbourne, Australia, 16 - 19 November 2014
- XV. **GROUND VIBRATION TEST PLANNING OF A FIGHTER AIRCRAFT BY USING A ROUGH FINITE ELEMENT**

MODEL

Koksal S., Yıldız E. N., YAZICIOĞLU Y., ÖZGEN G. O.

ASME International Mechanical Engineering Congress and Exposition (IMECE2013), California, United States Of America, 15 - 21 November 2013

- XVI. **Dynamic stiffness-based test systems for viscoelastic material characterization: Design considerations**
Özgen G. O., Erol F., Batihan A. C.
30th IMAC, A Conference on Structural Dynamics, 2012, Jacksonville, FL, United States Of America, 30 January - 02 February 2012, vol.5, pp.287-297
- XVII. **Design and construction of a tuned vibration absorber with automatically adjustable tuning frequency**
Akkurt B., Bayık B., Çam E., Erdoğan B., Özcan A. B., Güven C., Bayız Y. E., Erol F., Özgen G. O., Konukseven E. I.
15th International Conference on Machine Design And Production (UMTIK 2012), Denizli, Turkey, 19 - 22 June 2012, pp.1-14
- XVIII. **Finite element model updating of aerospace structures**
Ünlü D., Ciğeroğlu E., Özgen G. O.
15th International Conference on Machine Design And Production (UMTIK 2012)), Denizli, Turkey, 19 - 22 June 2012, pp.1-15
- XIX. **Sonlu elemanlar analiziyle icra yayının yay karakteristiğinin bulunması**
Zaloğlu H., Özgen G. O., Ciğeroğlu E.
SAVTEK 2012 6. Savunma Teknolojileri Kongresi, Ankara, Turkey, 20 - 22 June 2012, vol.1, pp.1043-1050
- XX. **Hareketli platforma entegre edilen bir mekanik sistem için optimum pasif titreşim izolatörü sayısının belirlenmesi.**
Baytemir O. Y., Ciğeroğlu E., Özgen G. O.
SAVTEK 2012 6. Savunma Teknolojileri Kongresi, Ankara, Turkey, 20 - 22 June 2012, vol.1, pp.1063-1074
- XXI. **Service life prediction of solid rocket propellants considering random thermal environments**
Yılmaz O., Kuran B., Özgen G. O.
6th Ankara International Aerospace Conference, Ankara, Turkey, 14 - 16 September 2011, pp.1-10
- XXII. **Bir radar anten yapısının titreşim özelliklerinin topolojik optimizasyon tekniği ve destek elemanları kullanılarak iyileştirilmesi**
Baran I., Özgen G. O., Ciğeroğlu E.
15. Ulusal Makina Teorisi Sempozyumu (UMTS2011), Niğde, Turkey, 16 - 18 June 2011, pp.665-673
- XXIII. **Bir radar anten yapısının titreşim özelliklerinin topolojik optimizasyon tekniği ile iyileştirilmesi**
Baran I., Özgen G. O., Ciğeroğlu E.
SAVTEK 2010 5. Savunma Teknolojileri Kongresi, Ankara, Turkey, 23 - 25 June 2010, pp.167-178
- XXIV. **Bir viskoelastik malzeme test düzeneğinin bilgisayar destekli tasarımı**
Eroğlu D., Özgen G. O.
14. Ulusal Makina Teorisi Sempozyumu (UMTS2009), Güzelyurt, Cyprus (Kktc), 2 - 04 July 2009, pp.249-255
- XXV. **Pasif sistemler kullanarak titreşim kontrolü**
Özgen G. O.
SAVTEK 2008 4. Savunma Teknolojileri Kongresi, Ankara, Turkey, 26 - 27 June 2008, pp.447-455
- XXVI. **Identification of damping from experimental dynamic stiffness matrix: Error analysis**
Ozgen G. O., Kim J. H.
23rd Conference and Exposition on Structural Dynamics 2005, IMAC-XXIII, Orlando, FL, United States Of America, 31 January - 03 February 2005
- XXVII. **Further developments in the dynamic stiffness matrix (DSM) based direct damping identification method**
Ozgen G. O., Kim J.
SAE 2005 Noise and Vibration Conference and Exhibition, Traverse City, MI, United States Of America, 16 - 19 May 2005
- XXVIII. **Applications of the dynamic stiffness matrix (DSM) based direct damping identification method**

Ozgen G. O., Kim J.

SAE 2005 Noise and Vibration Conference and Exhibition, Traverse City, MI, United States Of America, 16 - 19 May 2005

XXIX. Design and development of a complex shear modulus measurement setup for viscoelastic materials

Ozgen G. O.

SAE 2005 Noise and Vibration Conference and Exhibition, Traverse City, MI, United States Of America, 16 - 19 May 2005

XXX. Expansion of the experimentally identified damping matrix to formulate an analytical-experimental hybrid model

Özgen G. O., Kim J.

22nd International Modal Analysis Conference (IMAC XXII): A Conference and Exposition on Structural Dynamics, Michigan, United States Of America, 26 - 29 January 2004, pp.1-12

XXXI. Finite element modeling and analysis of a passenger car body structure

Özgen G. O., Ünlüsoy Y. S.

Proceedings of Automotive Technologies Congress'02 (OTEKON'02), Bursa, Turkey, 24 - 26 June 2002, pp.1-8

Expert Reports

I. 4. Ankara Asliye Ticaret Mahkemesi Bilirkişi Heyet Raporu

Çanak M., Demiral S., Özgen G. O., Şenyurt E. E.

4. Ankara Asliye Ticaret Mahkemesi, pp.22, Ankara, 2022

Patent

Koçan Ç., Özgen G. O., Rüzgâr türbini titreşimlerini sönmüleme ve yapının yorulma ömrünü arttırma amacıyla tasarlanan viskoelastik malzemeden oluşan sönmüleme elemanı, Patent, CHAPTER F Mechanical engineering; Lighting; Heating; Weaponry; Destroyed Materials, The Invention Registration Number: TR 2020 14194 B , Standard Registration, 2022
Ozsacmaci Y., Ertugrul M., Dilberoglu M. U., Caliskan A., Dindar A., Butun H. E., Dikici M. Y., Konukseven E. I., Özgen G. O., Tarcin S., A refrigerator Comprising an Ice Cube Tray, Patent, CHAPTER F Mechanical engineering; Lighting; Heating; Weaponry; Destroyed Materials, The Invention Registration Number: WO/2013/182430 , Registration in Multiple Countries, 2013

Scientific Refereeing

ARCHIVE OF APPLIED MECHANICS, Journal Indexed in SCI-E, May 2022

MECHANICAL SYSTEMS AND SIGNAL PROCESSING, Journal Indexed in SCI-E, April 2022

MECHANICAL SYSTEMS AND SIGNAL PROCESSING, Journal Indexed in SCI-E, March 2022

MECHANICAL SYSTEMS AND SIGNAL PROCESSING, Journal Indexed in SCI-E, March 2022

MECHANICAL SYSTEMS AND SIGNAL PROCESSING, Journal Indexed in SCI-E, March 2022

PROBABILISTIC ENGINEERING MECHANICS, Journal Indexed in SCI-E, February 2022

NOISE CONTROL ENGINEERING JOURNAL, Journal Indexed in SCI-E, January 2022

MECHANICAL SYSTEMS AND SIGNAL PROCESSING, Journal Indexed in SCI-E, December 2021

ARCHIVE OF APPLIED MECHANICS, Journal Indexed in SCI-E, November 2021

ENGINEERING FAILURE ANALYSIS, Journal Indexed in SCI-E, August 2021

JOURNAL OF SOUND AND VIBRATION, SCI Journal, July 2021

ARCHIVE OF APPLIED MECHANICS, Journal Indexed in SCI-E, May 2021

NOISE CONTROL ENGINEERING JOURNAL, Journal Indexed in SCI-E, February 2021

NOISE CONTROL ENGINEERING JOURNAL, Journal Indexed in SCI-E, January 2021

JOURNAL OF SOUND AND VIBRATION, SCI Journal, November 2020
NOISE CONTROL ENGINEERING JOURNAL, Journal Indexed in SCI-E, July 2020
JOURNAL OF SOUND AND VIBRATION, SCI Journal, July 2020
NOISE CONTROL ENGINEERING JOURNAL, Journal Indexed in SCI-E, June 2020
NOISE CONTROL ENGINEERING JOURNAL, Journal Indexed in SCI-E, June 2020
NOISE CONTROL ENGINEERING JOURNAL, Journal Indexed in SCI-E, April 2020
NOISE CONTROL ENGINEERING JOURNAL, Journal Indexed in SCI-E, February 2020
ROYAL SOCIETY OPEN SCIENCE, Journal Indexed in SCI-E, February 2020
NOISE CONTROL ENGINEERING JOURNAL, Journal Indexed in SCI-E, January 2020
MEASUREMENT, Journal Indexed in SCI-E, October 2019
International Journal of Automotive Science and Technology, Other journals, October 2019
NOISE CONTROL ENGINEERING JOURNAL, Journal Indexed in SCI-E, August 2019
NOISE CONTROL ENGINEERING JOURNAL, Journal Indexed in SCI-E, June 2019
Noise Control Engineering Journal, Journal Indexed in SCI-E, February 2019
NOISE CONTROL ENGINEERING JOURNAL, Journal Indexed in SCI-E, November 2018
INTERNATIONAL JOURNAL OF AUTOMOTIVE ENGINEERING AND TECHNOLOGIES, National Scientific Refreed Journal,
November 2018
NOISE CONTROL ENGINEERING JOURNAL, Journal Indexed in SCI-E, June 2018
NOISE CONTROL ENGINEERING JOURNAL, Journal Indexed in SCI-E, June 2018
JOURNAL OF SOUND AND VIBRATION, SCI Journal, June 2018
NOISE CONTROL ENGINEERING JOURNAL, Journal Indexed in SCI-E, June 2018

Metrics

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H-Index (Scopus): 4