

Prof. VOLKAN KAHYA

Personal Information

Office Phone: [+90 462 377 2631](tel:+904623772631)

Fax Phone: [+90 462 377 4413](tel:+904623774413)

Email: volkan@ktu.edu.tr

Web: <https://avesis.ktu.edu.tr//volkan>

Address: Karadeniz Teknik Üniversitesi Mühendislik Fakültesi İnşaat Mühendisliği Bölümü 61080 Trabzon

International Researcher IDs

ScholarID: BIMyPBwAAAAJ

ORCID: 0000-0003-1392-4483

Publons / Web Of Science ResearcherID: G-8595-2012

ScopusID: 55317290500

Yoksis Researcher ID: 42400

Education Information

Post Doctorate, University of Illinois at Urbana-Champaign, Grainger College of Engineering, Department of Mechanical Science and Engineering, United States Of America 2015 - 2015

Post Doctorate, University of California, Irvine, Henry Samueli School of Engineering, Department of Civil and Environmental Engineering, United States Of America 2008 - 2009

Doctorate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, İnşaat Mühendisliği Bölümü, Turkey 1997 - 2003

Postgraduate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, İnşaat Mühendisliği Bölümü, Turkey 1994 - 1997

Undergraduate, Karadeniz Technical University, Mühendislik-Mimarlık Fakültesi, İnşaat Mühendisliği Bölümü, Turkey 1990 - 1994

Foreign Languages

English, B2 Upper Intermediate

Certificates, Courses and Trainings

Education Management and Planning, TÜBİTAK-2237 Fen Bilimlerinde Proje Yazma Eğitimi, Karadeniz Teknik Üniversitesi, 2014

Occupational Health and Safety, İSG Eğitici Sertifikası, Çalışma ve Sosyal Güvenlik Bakanlığı, 2013

Dissertations

Doctorate, İki tabakalı ortotrop elastik ortamda sürekli ve süreksiz deęme problemlerinin incelenmesi, Karadeniz Technical University, Fen Bilimleri Enstitüsü, İnşaat Mühendisliği Bölümü, 2003

Postgraduate, Üst tarafından rijit olarak mesnetlenmiş elastik bir tabaka ile rijit bir blok arasındaki sürtünmesiz deęme problemi, Karadeniz Technical University, Fen Bilimleri Enstitüsü, İnşaat Mühendisliği Bölümü, 1997

Research Areas

Mechanics of Solid Bodies, Civil Engineering, Mechanical, Structural Mechanics, Building Dynamics, Building Stability, Composite materials, Fracture Mechanics, Finite Element Methods, Engineering and Technology

Academic Titles / Tasks

Professor, Karadeniz Technical University, Mühendislik Fakültesi, İnşaat Mühendisliği, 2019 - Continues
Associate Professor, Karadeniz Technical University, Mühendislik Fakültesi, İnşaat Mühendisliği, 2013 - 2019
Assistant Professor, Karadeniz Technical University, Mühendislik Fakültesi, İnşaat Mühendisliği, 2006 - 2013
Research Assistant, Karadeniz Technical University, Mühendislik Fakültesi, İnşaat Mühendisliği, 1995 - 2006

Academic and Administrative Experience

Karadeniz Technical University, Mühendislik Fakültesi, İnşaat Mühendisliği Bölümü, 2015 - Continues
Karadeniz Technical University, Mühendislik Fakültesi, İnşaat Mühendisliği Bölümü, 2010 - 2014
Karadeniz Technical University, Mühendislik Fakültesi, İnşaat Mühendisliği Bölümü, 2007 - 2009

Courses

Dynamics, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019

Advising Theses

Kahya V., Değişken kesitli hasarlı kirişlerin serbest titreşimleri için bir sonlu eleman modeli, Postgraduate, S.DİLARA(Student), 2019
Kahya V., Kutu kesitli karayolu köprülerinde en kesit şeklinin dinamik davranışa etkisi, Postgraduate, S.BOSTAN(Student), 2019
Kahya V., Tabakalı Kirişlerin Statik, Serbest Titreşim ve Burkulma Analizleri için Bir Sonlu Eleman Modeli, Doctorate, M.Turan(Student), 2018
Kahya V., Yüksek Hızlı Tren Geçişleri Altındaki Köprülerde Rezonans Titreşimlerinin Ayarlı Kütle Sönümleyicilerle Azaltılması, Doctorate, O.Araz(Student), 2017
Kahya V., Çatlaklı Elastik Kirişlerin Dinamik Davranışlarının Analitik, Sayısal ve Deneysel Olarak İncelenmesi, Postgraduate, S.Karaca(Student), 2016
Kahya V., Elastik Zemine Oturan Sonsuz Uzun Elastik Kirişin Hareketli Yük Altında Dinamik Davranışı, Postgraduate, M.Turan(Student), 2012

Jury Memberships

Appointment to Academic Staff-Assistant Professorship, Dr. Öğretim Üyesi Atama Jürisi, Esenyurt Üniversitesi, September, 2019
Appointment to Academic Staff-Assistant Professorship, Doçent Dr. Atama Jürisi, Fırat Üniversitesi, June, 2019
Appointment to Academic Staff-Assistant Professorship, Dr. Öğretim Üyesi Atama Jürisi, Bayburt Üniversitesi, March, 2018
Appointment to Academic Staff-Assistant Professorship, Dr. Öğretim Üyesi Atama Jürisi, Gümüşhane Üniversitesi, December, 2017

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Experimental assessment of FRP repairing in concrete cylinders exposed high temperatures**
AKBULUT Y. E., NAYIR S., ALTUNIŞIK A. C., KAHYA V., SÜNNETÇİ M. O., ERSOY H.
CASE STUDIES IN CONSTRUCTION MATERIALS, vol.21, 2024 (SCI-Expanded)
- II. **Applications of optical flow methods and computer vision in structural health monitoring for enhanced modal identification**
HACIEFENDİOĞLU K., KAHYA V., Limongelli M. G., OKUR F. Y., ALTUNIŞIK A. C., Aslan T., Pembeoğlu S., Duman C., Bostan A., Aleit H.
Structures, vol.69, 2024 (SCI-Expanded)
- III. **A New Higher-Order Finite Element Model for Free Vibration and Buckling of Functionally Graded Sandwich Beams with Porous Core Resting on a Two-Parameter Elastic Foundation Using Quasi-3D Theory**
Mohamed I., Kahya V., Şimşek S.
IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY - TRANSACTIONS OF CIVIL ENGINEERING, vol.48, no.3, pp.1-26, 2024 (SCI-Expanded)
- IV. **Automatic Detection of Collapsed Buildings after the 6 February 2023 Türkiye Earthquakes Using Post-Disaster Satellite Images with Deep Learning-Based Semantic Segmentation Models**
HACIEFENDİOĞLU K., BAŞAĞA H. B., KAHYA V., ÖZGAN K., ALTUNIŞIK A. C.
BUILDINGS, vol.14, no.3, 2024 (SCI-Expanded)
- V. **Evaluation of earthquake-related damages on masonry structures due to the 6 February 2023 Kahramanmaraş-Türkiye earthquakes: A case study for Hatay Governorship Building**
KAHYA V., GENÇ A. F., SUNCA F., Roudane B., ALTUNIŞIK A. C., YILMAZ S., GÜNAYDIN M., DOK G., KIRTEL O., DEMİR A., et al.
Engineering Failure Analysis, vol.156, 2024 (SCI-Expanded)
- VI. **Finite element static analysis of functionally graded sandwich beams with porous core resting on a two-parameter elastic foundation based on quasi-3D theory**
Mohamed I., KAHYA V., ŞİMŞEK S.
Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2024 (SCI-Expanded)
- VII. **Ritz-Type Quasi-3D Solution for Free Vibration and Buckling of Functionally Graded Sandwich Beams with Porous Core Resting on a Two-Parameter Elastic Foundation**
Mohamed I., KAHYA V., ŞİMŞEK S.
Arabian Journal for Science and Engineering, 2024 (SCI-Expanded)
- VIII. **Field Observations and Numerical Investigations on Seismic Damage Assessment of RC and Masonry Minarets During the February 6th, 2023, Kahramanmaraş (Mw 7.7 Pazarcık and Mw 7.6 Elbistan) Earthquakes in Türkiye**
ATMACA B., ERTÜRK ATMACA E., Roudane B., Güleş O., Demirkaya E., Aykanat B., ALTUNIŞIK A. C., GÜNAYDIN M., Arslan M. E., KAHYA V., et al.
International Journal of Architectural Heritage, 2024 (SCI-Expanded)
- IX. **Field Observations and Damage Evaluation in Reinforced Concrete Buildings After the February 6th, 2023, Kahramanmaraş-Türkiye Earthquakes**
Altunişik A. C., Arslan M. E., Kahya V., Aslan B., Sezdirmez T., Dok G., Kirtel O., Öztürk H., Sunca F., Baltacı A., et al.
JOURNAL OF EARTHQUAKE AND TSUNAMI, vol.17, no.6, 2023 (SCI-Expanded)
- X. **Damage detection in anisotropic-laminated composite beams based on incomplete modal data and teaching-learning-based optimization**
ŞİMŞEK S., KAHYA V., ADIYAMAN G., TOĞAN V.
STRUCTURAL AND MULTIDISCIPLINARY OPTIMIZATION, vol.65, no.11, 2022 (SCI-Expanded)
- XI. **Vibration-based damage detection in anisotropic laminated composite beams by a shear-deformable finite element and harmony search optimization**
KAHYA V., ŞİMŞEK S., TOĞAN V.

STRUCTURAL AND MULTIDISCIPLINARY OPTIMIZATION, vol.65, no.6, 2022 (SCI-Expanded)

- XII. **Optimization of multiple tuned mass dampers for a two-span continuous railway bridge via differential evolution algorithm**
Araz O., KAHYA V.
STRUCTURES, vol.39, pp.29-38, 2022 (SCI-Expanded)
- XIII. **Multiple damage detection in laminated composite beams using automated model update**
Kahya V., Okur F. Y., Şimşek S., Altunışık A. C., Aslan M.
STRUCTURES, vol.34, pp.1665-1683, 2021 (SCI-Expanded)
- XIV. **Design of series tuned mass dampers for seismic control of structures using simulated annealing algorithm**
Araz O., KAHYA V.
ARCHIVE OF APPLIED MECHANICS, vol.91, pp.4343-4359, 2021 (SCI-Expanded)
- XV. **Assessment of modal characteristics of cross-laminated timber beams subject to successive damages**
GENÇ A. F., KAHYA V., ALTUNIŞIK A. C., GÜNAYDIN M., DEMİRKİR C.
ARCHIVES OF CIVIL AND MECHANICAL ENGINEERING, vol.21, no.3, 2021 (SCI-Expanded)
- XVI. **Damage Localization in Laminated Composite Beams with Multiple Edge Cracks Based on Vibration Measurements**
KAHYA V., Karaca S., OKUR F. Y., ALTUNIŞIK A. C., ASLAN M.
IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY-TRANSACTIONS OF CIVIL ENGINEERING, vol.45, no.1, pp.75-87, 2021 (SCI-Expanded)
- XVII. **Optimal Sensor Placement for Laminated Composite and Steel Cantilever Beams by the Effective Independence Method**
SUNCA F., Okur F. Y., Altunisik A. C., Kahya V.
STRUCTURAL ENGINEERING INTERNATIONAL, vol.31, no.1, pp.85-92, 2021 (SCI-Expanded)
- XVIII. **Free vibration and buckling analysis of functionally graded sandwich beams by Navier's method**
Turan M., KAHYA V.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.36, no.2, pp.743-757, 2021 (SCI-Expanded)
- XIX. **Free vibration analysis and damage localization in tapered beams with cracks using finite element method**
KAHYA V., ŞİMŞEK S., Gunes S. D.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.36, no.2, pp.841-854, 2021 (SCI-Expanded)
- XX. **Series tuned mass dampers in vibration control of continuous railway bridges**
Araz O., KAHYA V.
STRUCTURAL ENGINEERING AND MECHANICS, vol.73, no.2, pp.133-141, 2020 (SCI-Expanded)
- XXI. **A simple design method for multiple tuned mass dampers in reduction of excessive vibrations of high-speed railway bridges**
KAHYA V., Araz O.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.35, no.2, pp.607-618, 2020 (SCI-Expanded)
- XXII. **Shear-deformable finite element for free vibrations of laminated composite beams with arbitrary lay-up**
KAHYA V., Karaca S., VO T. P.
STEEL AND COMPOSITE STRUCTURES, vol.33, no.4, pp.473-487, 2019 (SCI-Expanded)
- XXIII. **Annular Cylindrical Liquid Column Dampers for Control of Structural Vibrations**
ALTUNIŞIK A. C., Yetişken A., KAHYA V.
IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY-TRANSACTIONS OF CIVIL ENGINEERING, vol.43, no.3, pp.479-490, 2019 (SCI-Expanded)
- XXIV. **Free vibrations of laminated composite beams with multiple edge cracks: Numerical model and experimental validation**

- KAHYA V., Karaca S., OKUR F. Y., ALTUNIŞIK A. C., ASLAN M.
INTERNATIONAL JOURNAL OF MECHANICAL SCIENCES, vol.159, pp.30-42, 2019 (SCI-Expanded)
- XXV. **Vibrations of a Box-Sectional Cantilever Timoshenko Beam with Multiple Cracks**
ALTUNIŞIK A. C., OKUR F. Y., KAHYA V.
INTERNATIONAL JOURNAL OF STEEL STRUCTURES, vol.19, no.2, pp.635-649, 2019 (SCI-Expanded)
- XXVI. **Vibration-based damage detection in beam structures with multiple cracks: modal curvature vs. modal flexibility methods**
ALTUNIŞIK A. C., OKUR F. Y., Karaca S., KAHYA V.
NONDESTRUCTIVE TESTING AND EVALUATION, vol.34, no.1, pp.33-53, 2019 (SCI-Expanded)
- XXVII. **Vibration and buckling of laminated beams by a multi-layer finite element model**
KAHYA V., Turan M.
STEEL AND COMPOSITE STRUCTURES, vol.28, no.4, pp.415-426, 2018 (SCI-Expanded)
- XXVIII. **Vibration and stability analysis of functionally graded sandwich beams by a multi-layer finite element**
KAHYA V., Turan M.
COMPOSITES PART B-ENGINEERING, vol.146, pp.198-212, 2018 (SCI-Expanded)
- XXIX. **Experimental study on control performance of tuned liquid column dampers considering different excitation directions**
ALTUNIŞIK A. C., YETISKEN A., KAHYA V.
MECHANICAL SYSTEMS AND SIGNAL PROCESSING, vol.102, pp.59-71, 2018 (SCI-Expanded)
- XXX. **Stress intensity factors for cracked elastic beams subjected to moving loads**
KAHYA V., Karaca S.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.33, no.4, pp.1309-1319, 2018 (SCI-Expanded)
- XXXI. **Plane receding contact problem for a functionally graded layer supported by two quarter-planes**
ÇÖMEZ İ., KAHYA V., Erdol R.
ARCHIVES OF MECHANICS, vol.70, no.6, pp.485-504, 2018 (SCI-Expanded)
- XXXII. **Automated model updating of multiple cracked cantilever beams for damage detection**
ALTUNIŞIK A. C., OKUR F. Y., KAHYA V.
Journal of Constructional Steel Research, vol.138, pp.499-512, 2017 (SCI-Expanded)
- XXXIII. **Modal parameter identification and vibration based damage detection of a multiple cracked cantilever beam**
ALTUNIŞIK A. C., OKUR F. Y., KAHYA V.
ENGINEERING FAILURE ANALYSIS, vol.79, pp.154-170, 2017 (SCI-Expanded)
- XXXIV. **Structural identification of a cantilever beam with multiple cracks: Modeling and validation**
Altumsik A. C., OKUR F. Y., KAHYA V.
INTERNATIONAL JOURNAL OF MECHANICAL SCIENCES, vol.130, pp.74-89, 2017 (SCI-Expanded)
- XXXV. **Bending of Laminated Composite Beams by a Multi-Layer Finite Element Based on a Higher-Order Theory**
KAHYA V., TURAN M.
ACTA PHYSICA POLONICA A, vol.132, no.3, pp.473-475, 2017 (SCI-Expanded)
- XXXVI. **Series tuned mass dampers in train-induced vibration control of railway bridges**
KAHYA V., Araz O.
STRUCTURAL ENGINEERING AND MECHANICS, vol.61, no.4, pp.453-461, 2017 (SCI-Expanded)
- XXXVII. **Finite element model for vibration and buckling of functionally graded beams based on the first-order shear deformation theory**
KAHYA V., TURAN M.
COMPOSITES PART B-ENGINEERING, vol.109, pp.108-115, 2017 (SCI-Expanded)
- XXXVIII. **Receding contact problem for two-layer functionally graded media indented by a rigid punch**
ÇÖMEZ İ., El-Borgi S., KAHYA V., Erdol R.
ACTA MECHANICA, vol.227, no.9, pp.2493-2504, 2016 (SCI-Expanded)

- XXXIX. **Axisymmetric analysis of a functionally graded layer resting on elastic substrate**
TURAN M., ADIYAMAN G., KAHYA V., BİRİNCİ A.
STRUCTURAL ENGINEERING AND MECHANICS, vol.58, no.3, pp.423-442, 2016 (SCI-Expanded)
- XL. **Buckling analysis of laminated composite and sandwich beams by the finite element method**
KAHYA V.
COMPOSITES PART B-ENGINEERING, vol.91, pp.126-134, 2016 (SCI-Expanded)
- XLI. **Damages on reinforced concrete buildings due to consecutive earthquakes in Van**
ATEŞ Ş., KAHYA V., Yurdakul M., ADANUR S.
SOIL DYNAMICS AND EARTHQUAKE ENGINEERING, vol.53, pp.109-118, 2013 (SCI-Expanded)
- XLII. **Finite element dynamic analysis of laminated composite beams under moving loads**
Kahya V.
STRUCTURAL ENGINEERING AND MECHANICS, vol.42, no.5, pp.729-745, 2012 (SCI-Expanded)
- XLIII. **Dynamic analysis of laminated composite beams under moving loads using finite element method**
Kahya V.
NUCLEAR ENGINEERING AND DESIGN, vol.243, pp.41-48, 2012 (SCI-Expanded)
- XLIV. **A receding contact problem for an anisotropic elastic medium consisting of a layer and a half plane**
Kahya V., Ozsahin T. S., Birinci A., Erdol R.
INTERNATIONAL JOURNAL OF SOLIDS AND STRUCTURES, vol.44, no.17, pp.5695-5710, 2007 (SCI-Expanded)
- XLV. **Partial closure of a crack located in an anisotropic infinite elastic layer**
Kahya V., Birinci A., Ozsahin T. S., Erdol R.
EUROPEAN JOURNAL OF MECHANICS A-SOLIDS, vol.25, no.5, pp.819-833, 2006 (SCI-Expanded)

Articles Published in Other Journals

- I. **On the earthquake-related damages of civil engineering structures within the areas impacted by Kahramanmaraş earthquakes**
ATMACA B., Arslan M. E., EMİROĞLU M., ALTUNIŞIK A. C., ADANUR S., DEMİR A., GÜNAYDIN M., TOPLU E., TATAR T., KAHYA V., et al.
Journal of Structural Engineering & Applied Mechanics (Online), vol.6, no.2, pp.98-116, 2023 (Peer-Reviewed Journal)
- II. **OPTIMIZATION OF NON-TRADITIONAL TUNED MASS DAMPER FOR DAMPED STRUCTURES UNDER HARMONIC EXCITATION**
ARAZ O., KAHYA V.
Uludağ University Journal of The Faculty of Engineering, vol.26, no.3, pp.1021-1034, 2021 (Peer-Reviewed Journal)
- III. **Experimental study on annular cylindrical tuned liquid dampers for vibration control under different excitation angles**
ALTUNIŞIK A. C., KAHYA V., Yetişken A.
Journal of Structural Engineering & Applied Mechanics, vol.4, no.3, pp.163-183, 2021 (Peer-Reviewed Journal)
- IV. **Use of trigonometric series functions in free vibration analysis of laminated composite beams**
Turan M., Kahya V.
Challenge Journal of Structural Mechanics, vol.6, no.2, pp.61-67, 2020 (Peer-Reviewed Journal)
- V. **A SEQUENTIAL APPROACH BASED DESIGN OF MULTIPLE TUNED MASS DAMPERS UNDER HARMONIC EXCITATION**
KAHYA V., Araz O.
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES-SIGMA MUHENDISLIK VE FEN BİLİMLERİ DERGİSİ, vol.37, no.1, pp.225-239, 2019 (ESCI)
- VI. **Effects of manufacturing type on control performance of multiple tuned mass dampers under harmonic excitation**

- KAHYA V., ARAZ O.
Journal of Structural Engineering & Applied Mechanics, vol.1, no.3, pp.117-127, 2018 (Peer-Reviewed Journal)
- VII. **Free Vibration of Cracked Cantilever Beams: Analytical and Experimental Modelling**
KAHYA V., ŞİMŞEK S.
Fırat University Turkish Journal of Science & Technology, vol.13, no.1, pp.1-7, 2018 (Peer-Reviewed Journal)
- VIII. **Fonksiyonel Derecelendirilmiş Kirişlerin Navier Methodu ile Serbest Titreşim Analizi**
TURAN M., KAHYA V.
KARADENİZ FEN BİLİMLERİ DERGİSİ, 2018 (Peer-Reviewed Journal)
- IX. **Dynamic analysis of pre-stressed elastic beams under moving mass using different beam models**
KAHYA V.
CHALLENGE JOURNAL OF STRUCTURAL MECHANICS, vol.1, no.3, pp.106-116, 2015 (Peer-Reviewed Journal)
- X. **RESONANT VIBRATIONS OF TWO-SPAN RAILWAY BRIDGES UNDER HIGH-SPEED TRAINS**
KAHYA V., ARAZ O., TURAN M.
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES-SIGMA MUHENDİSLİK VE FEN BİLİMLERİ DERGİSİ, vol.33, no.2, pp.188-199, 2015 (ESCI)
- XI. **Dynamic analysis of composite sandwich beams under moving mass**
KAHYA V., MOSALLAM A.
Kahramanmaraş Sütçü İmam Üniversitesi Mühendislik Bilimleri Dergisi, vol.14, no.1, pp.18-25, 2011 (Peer-Reviewed Journal)
- XII. **Contact Problem for an Elastic Layered Composite Resting on Rigid Flat Supports**
ÖZŞAHİN T. Ş., KAHYA V., BİRİNCİ A., ÇAKIROĞLU A. O.
International Journal of Civil and Environmental Engineering, vol.1, no.1, pp.21-26, 2007 (Peer-Reviewed Journal)
- XIII. **Frictionless Contact Problem between two Orthotropic Elastic Layers**
KAHYA V., BİRİNCİ A., ERDOL R.
International Journal of Civil and Environmental Engineering, vol.1, no.1, pp.21-26, 2007 (Peer-Reviewed Journal)
- XIV. **Frictionless Contact Problem between an Elastic Layer Bonded to a Rigid Support and a Rigid Stamp**
KAHYA V., BİRİNCİ A., ERDOL R.
MATHEMATICAL AND COMPUTATIONAL APPLICATIONS, vol.6, no.1, pp.13-22, 2001 (Scopus)

Books & Book Chapters

- I. **Solutions to plane elasto-static contact problems of anisotropic media**
KAHYA V.
Scholars' Press, Köln, 2015
- II. **Burulma**
KAHYA V.
in: MUKAVEMET, Ekmekyapar T., Özakça M., Editor, Nobel Akademik Yayıncılık Eğitim Danışmanlık Tic. Ltd. Şti., Ankara, pp.169-231, 2014

Refereed Congress / Symposium Publications in Proceedings

- I. **Design phases and effectiveness of tuned liquid damper and tuned liquid column damper in seismic induced vibration**
İdriss B. A., SUNCA F., GÜNAYDIN M., ALTUNIŞIK A. C., KAHYA V.
Proceedings of 3rd International Civil Engineering and Architecture Congress, Turkey, 12 October 2023
- II. **Eksenî Doğrultusunda Fonksiyonel Derecelendirilmiş Kirişlerin Sonlu Elemanlar Metoduyla Burkulma Analizi**
TURAN M., KAHYA V.
22. ULUSAL MEKANİK KONGRESİ 06 - 10 Eylül 2021, Çukurova Üniversitesi, Adana, Turkey, 6 - 10 September 2021

- III. **Armoni Arama Algoritması Kullanılarak Tabakalı Kompozit Kirişte Frekans Değişimlerine Dayalı Hasar Tespiti**
KAHYA V., ŞİMŞEK S.
22. ULUSAL MEKANİK KONGRESİ 06 - 10 Eylül 2021, Çukurova Üniversitesi, Adana, Turkey, 6 - 10 September 2021
- IV. **Deprem Etkisindeki Yüksek Katlı Yapılardaki Titreşimlerin Ayarlı Kütle Sönümleyici Kullanılarak Azaltılması**
ARAZ O., KAHYA V.
22. ULUSAL MEKANİK KONGRESİ 06 - 10 Eylül 2021, Çukurova Üniversitesi, Adana, Turkey, 6 - 10 September 2021
- V. **Experimental investigation of optimal sensor placement of a laminated composite cantilever beam**
SUNCA F., OKUR F. Y., ALTUNIŞIK A. C., KAHYA V.
International Congress on the Phenomenological Aspects of Civil Engineering, Erzurum, Turkey, 20 - 23 June 2021
- VI. **Free Vibration Analysis of Layered Composite Beams with Delamination Damage**
KAHYA V., ŞİMŞEK S.
II. International Conference on Innovative Engineering Applications (CIEA' 2021), 20-22 May 2021, Muş, Turkey, Muş, Turkey, 20 - 22 May 2021
- VII. **Delaminasyon Hasarı Bulunan Tabakalı Kompozit Kirişlerin Serbest Titreşim Analizi**
KAHYA V., ŞİMŞEK S.
II. International Conference on Innovative Engineering Applications (CIEA' 2021), 20-22 May 2021, Muş, Turkey, Muş, Turkey, 20 - 22 May 2021
- VIII. **Damage localization in laminated composite beams using modal data**
KAHYA V., ŞİMŞEK S., ALTUNIŞIK A. C., OKUR F. Y., ASLAN M.
IES'20 International Engineering Symposium, Engineering Applications in Industry (Virtual), İzmir, Turkey, 05 December 2020, pp.9-19
- IX. **Buckling Analysis of Laminated Composite Beams by Navier Method**
TURAN M., KAHYA V.
3rd International Conference on Advanced Engineering Technologies, Bayburt, Turkey, 19 - 21 September 2019, pp.959-966
- X. **Use of Trigonometric Series Functions in Free Vibration Analysis of Laminated Composite Beams**
TURAN M., KAHYA V.
3rd International Conference on Advanced Engineering Technologies, Bayburt, Turkey, 19 - 21 September 2019, pp.951-958
- XI. **HASARLI KONİK KIRIŞLARIN SERBEST TİTREŞİM ANALİZİ İÇİN BİR SONLU ELEMAN MODELİ**
KAHYA V., Güneş S. D., ŞİMŞEK S.
TUMTMK 21. Ulusal Mekanik Kongresi, Turkey, 2 - 06 September 2019
- XII. **Optimum Non-Traditional Tuned Mass Dampers for Harmonically Excited Undamped System**
ARAZ O., KAHYA V.
3rd International Conference on Advanced Engineering Technologies, 19 - 21 September 2019
- XIII. **Non-Traditional Tuned Mass Dampers for Harmonically Excited Damped System**
ARAZ O., KAHYA V.
3rd International Conference on Advanced Engineering Technologies, 19 - 21 September 2019
- XIV. **HASARLI KONİK KİRİŞLERİN SERBEST TİTREŞİM ANALİZLERİ İÇİN BİR SONLU ELEMAN MODELİ**
KAHYA V., Güneş S. D., ŞİMŞEK S.
TUMTMK 21. ULUSAL MEKANİK KONGRESİ, Niğde, Turkey, 2 - 06 September 2019, pp.887-897
- XV. **Multilayered Finite Element for Free Vibration Analysis of Functionally Graded Sandwich Beams**
KAHYA V., TURAN M.
International Civil Engineering and Architecture Conference, Trabzon, Turkey, 17 - 20 May 2019, vol.1, pp.908-918
- XVI. **FREE VIBRATIONS OF LAMINATED COMPOSITE BEAMS WITH ARBITRARY LAY-UP USING FINITE ELEMENT METHOD**
KAHYA V., ŞİMŞEK S., VO T. P.
International Civil Engineering and Architecture Conference (ICEARC 2019), Trabzon, Turkey, 17 - 20 April 2019, vol.1, pp.976-989

- XVII. DETERMINATION OF IMPACT FACTOR FOR SINGLE-SPAN RAILWAY BRIDGES**
KAHYA V., ARAZ O.
International Civil Engineering and Architecture Conference 2019, 17 - 20 April 2019
- XVIII. PERFORMANCE ASSESSMENT OF MULTIPLE TUNED MASS DAMPERS IN VIBRATION CONTROL OF CONTINUOUS RAILWAY BRIDGES**
KAHYA V., ARAZ O.
International Civil Engineering and Architecture Conference 2019, 17 - 20 April 2019
- XIX. Localization of Open Transverse Cracks in Laminated Composite Beams Based on Modal Data**
KAHYA V., ŞİMŞEK S., ALTUNIŞIK A. C., OKUR F. Y., ASLAN M.
International Congress on Engineering and Architecture, Alanya, Turkey, 14 - 16 November 2018
- XX. Finite Element Model for Free Vibration Analysis of Tapered Elastic Beams with Multiple Cracks**
KAHYA V., Güneş S. D., ŞİMŞEK S.
International Congress on Engineering and Architecture, Antalya, Turkey, 14 - 16 November 2018, pp.59-69
- XXI. Finite Element for Free Vibration Analysis of Tapered Beams**
KAHYA V., Güneş S. D., ŞİMŞEK S.
International Conference on Innovative Engineering Applications, Sivas, Turkey, 20 - 22 September 2018
- XXII. A Finite Element for Free Vibration Analysis of Tapered Beams**
KAHYA V., Güneş S. D., ŞİMŞEK S.
International Conference on Innovative Engineering Applications, Sivas, Turkey, 20 - 22 September 2018, pp.286-292
- XXIII. Natural Frequency Analysis of Laminated Composite Beams with Multiple Open Transverse Cracks**
KAHYA V., ŞİMŞEK S., OKUR F. Y., ALTUNIŞIK A. C., ASLAN M.
International Conference on Innovative Engineering Applications, Sivas, Turkey, 20 - 22 September 2018, pp.327-334
- XXIV. Dynamic response of a Timoshenko beam subjected to a series of moving loads**
KAHYA V.
ASCE 5th International Engineering and Construction Conference (IECC'5), Irvine, United Kingdom, 27 - 29 August 2008, pp.59-68
- XXV. Characterization Of Glass Fiber Reinforced Polyester Composites Produced By Pultrusion Process**
ASLAN M., Ezzatkah A., KAHYA V., ALTUNIŞIK A. C., Kayhan M.
International Technological Sciences and Design Symposium, Giresun, Turkey, 27 - 29 June 2018, pp.460
- XXVI. Optimum Design of Tuned Mass Damper with Consideration of Stroke**
ARAZ O., KAHYA V.
International Conference on Innovative Engineering Applications, Giresun, Turkey, 27 - 29 June 2018, pp.602
- XXVII. Free Vibration Analysis of Functionally Graded Beams by Navier Method**
Turan M., KAHYA V.
International Technological Sciences and Design Symposium, Giresun, Turkey, 27 - 29 June 2018, pp.597
- XXVIII. Optimization of Tuned Mass Dampers Using Pattern Search Algorithm**
ARAZ O., KAHYA V.
International Technological Sciences and Design Symposium, Giresun, Turkey, 27 - 29 June 2018, pp.1609-1619
- XXIX. Finite Element Model for Anisotropic Laminated Composite Beams**
ŞİMŞEK S., KAHYA V.
World Multidisciplinary Civil Engineering-Architecture-Urban Planning Symposium, Prag, Czech Republic, 18 - 22 June 2018
- XXX. Damage Localization in Steel Cantilever Beams with Multiple Cracks Using Modal Characteristics**
KAHYA V., ŞİMŞEK S.
World Multidisciplinary Civil Engineering-Architecture-Urban Planning Symposium, Prag, Czech Republic, 18 - 22 June 2018
- XXXI. Damage detection of a multiple cracked cantilever beam**
ALTUNIŞIK A. C., OKUR F. Y., KAHYA V., KARACA S.
8th International Advanced Technologies Symposium, Elazığ, Turkey, 19 - 22 October 2017, pp.75-82

- XXXII. **Experimental study on control performance of tuned liquid column dampers considering different excitation directions**
ALTUNIŞIK A. C., Yetişken A., KAHYA V.
8th International Advanced Technologies Symposium, Elazığ, Turkey, 19 - 22 October 2017, pp.83-94
- XXXIII. **Demiryolu köprülerinin titreşim kontrolünde ayarlı kütle sönümleyiciler için yeni bir tasarım**
ARAZ O., KAHYA V.
II. International Conference on Advanced Engineering Technologies, Bayburt, Turkey, 21 - 23 September 2017, pp.1595
- XXXIV. **Tabakalı kompozit kirişlerin Navier metoduyla statik analizi**
TURAN M., KAHYA V.
II. International Conference on Advanced Engineering Technologies, Bayburt, Turkey, 21 - 23 September 2017, pp.1454
- XXXV. **Tabakalı kompozit kirişlerin sonlu elemanlar metoduyla statik analizi**
TURAN M., KAHYA V.
II. International Conference on Advanced Engineering Technologies, Bayburt, Turkey, 21 - 23 September 2017, pp.1358
- XXXVI. **Titreşim kontrolünde sıvı sütunlu sönümleyicilerin deneysel değerlendirilmesi**
ALTUNIŞIK A. C., YETİSKEN A., KAHYA V.
II. International Conference on Advanced Engineering Technologies, Bayburt, Turkey, 21 - 23 September 2017, pp.1619
- XXXVII. **Fonksiyonel dereceli kirişlerin sonlu elemanlar metoduyla statik analizi**
TURAN M., KAHYA V.
20. Ulusal Mekanik Kongresi, Bursa, Turkey, 5 - 09 September 2017, pp.562-569
- XXXVIII. **A FINITE ELEMENT MODEL FOR ANISOTROPIC LAMINATED COMPOSITE BEAMS**
ŞİMŞEK S., KAHYA V.
World Multidisciplinary Civil Engineering-Architecture-Urban Planning Symposium, Prag, Czech Republic, 12 - 16 June 2017, pp.368
- XXXIX. **Optimal design of multiple tuned mass dampers based on Den Hartog's method**
KAHYA V., ARAZ O.
International Conference on Advances and Innovations in Engineering, Elazığ, Turkey, 10 - 12 May 2017, pp.690-694
- XL. **Free vibration of cracked cantilever beams: Analytical and experimental modelling**
KAHYA V., KARACA S.
International Conference on Advances and Innovations in Engineering, Elazığ, Turkey, 10 - 12 May 2017, pp.695-700
- XLI. **Free vibration and buckling analysis of functionally graded beams by finite element method**
KAHYA V., Turan M.
International Conference on Advances and Innovations in Engineering, Elazığ, Turkey, 10 - 12 May 2017, pp.701-706
- XLII. **Optimal design of multiple tuned mass dampers based on Den Hartog's method**
KAHYA V., ARAZ O.
International Conference on Advances and Innovations in Engineering, 10 - 12 May 2017
- XLIII. **Analytical, numerical and experimental investigation of a box-sectional cantilever beam with multiple cracks**
ALTUNIŞIK A. C., Okur F. Y., KAHYA V.
ICOCEE - Cappadocia 2017, 8 - 10 May 2017
- XLIV. **Analytical, numerical and experimental investigation of a box-sectional cantilever beam with multiple cracks**
ALTUNIŞIK A. C., OKUR F. Y., KAHYA V.
2nd International Conference on Civil and Environmental Engineering, Nevşehir, Turkey, 8 - 10 May 2017, pp.2131-2140

- XLV. Bending of laminated composite beams by a multi-layer finite element based on a higher-order theory**
Turan M., KAHYA V.
3rd International Conference on Computational and Experimental Science and Engineering, Antalya, Turkey, 19 - 24 October 2016, pp.299
- XLVI. Series multiple tuned mass dampers for vibration control of high-speed railway bridges**
KAHYA V., ARAZ O.
6th International Conference on Structural Engineering, Mechanics and Computation, SEMC 2016, Cape-Town, South Africa, 5 - 07 September 2016, pp.143-148
- XLVII. Vibration and buckling of laminated composite and sandwich beams with a shear-deformable layered finite element**
KAHYA V.
6th International Conference on Structural Engineering, Mechanics and Computation, SEMC 2016, Cape-Town, South Africa, 5 - 07 September 2016, pp.897-904
- XLVIII. Tabakalı kompozit kirişlerin sonlu elemanlar metoduyla statik, dinamik ve stabilite analizleri**
KAHYA V.
Mühendislikte Yeni Teknolojiler Sempozyumu, Bayburt, Turkey, 22 - 24 October 2015, pp.101-113
- XLIX. Yarım Düzlem Üzerine Oturan Fonksiyonel Derecelendirilmiş Bir Tabakanın Eksenel Simetrik Temas Problemi**
ADIYAMAN G., BİRİNCİ A., TURAN M., KAHYA V.
19. Ulusal Mekanik Kongresi, Trabzon, Turkey, 24 - 28 August 2015
- L. Tabakalı elastik ortamların dönel simetrik yükleme altında statik analizi**
Turan M., KAHYA V., ADIYAMAN G., BİRİNCİ A.
19. Ulusal Mekanik Kongresi, Trabzon, Turkey, 24 - 28 August 2015, pp.978-989
- LI. Hızlı tren köprülerinin rezonans titreşimlerinin azaltılmasında seri bağlı ayarlı kütle sönümleyiciler**
ARAZ O., KAHYA V.
19. Ulusal Mekanik Kongresi, Trabzon, Turkey, 24 - 28 August 2015, pp.105-112
- LII. Yarım düzlem üzerine oturan (yapıştırılmış) fonksiyonel derecelendirilmiş bir tabakanın eksenel simetrik temas problemi**
ADIYAMAN G., BİRİNCİ A., Turan M., KAHYA V.
19. Ulusal Mekanik Kongresi, Trabzon, Turkey, 24 - 28 August 2015, pp.16-25
- LIII. Effects of construction errors in bridges on performance of TMDs in vibration reduction**
KAHYA V., ARAZ O., TURAN M.
11th International Congress on Advances in Civil Engineering (ACE 2014), İstanbul, Turkey, 21 - 25 October 2014
- LIV. The resonant vibration of two-span bridges under high-speed trains**
KAHYA V., ARAZ O., Turan M.
International Civil Engineering & Architecture Symposium for Academicians, Antalya, Turkey, 17 - 20 May 2014, pp.91-97
- LV. A study on vibration reduction of railway bridges under high-speed trains using tuned mass dampers**
KAHYA V., ARAZ O., Turan M.
International Civil Engineering & Architecture Symposium for Academicians, Antalya, Turkey, 17 - 20 May 2014, pp.1-7
- LVI. Vibration reduction of bridges under high-speed trains using tuned mass dampers**
KAHYA V., ARAZ O., Turan M.
7th International Advanced Technologies Symposium, İstanbul, Turkey, 30 October - 01 November 2013, pp.803-807
- LVII. A parametric study on dynamic response of bridges subjected to high-speed trains**
KAHYA V., ARAZ O., Turan M.
7th International Advanced Technologies Symposium, İstanbul, Turkey, 30 October - 01 November 2013, pp.129-132

- LVIII. Hareketli yük altında köprü titreşimlerinin ayarlı kütle sönümleyiciler kullanılarak azaltılması**
KAHYA V., ARAZ O., Turan M.
18. Ulusal Mekanik Kongresi, Manisa, Turkey, 26 - 30 August 2013, pp.280-288
- LIX. Çok açıklıklı kirişlerin hareketli yük etkisi altında dinamik davranışı**
KAHYA V., ARAZ O., Turan M.
18. Ulusal Mekanik Kongresi, Manisa, Turkey, 26 - 30 August 2013, pp.289-295
- LX. Elastik zemine oturan sonsuz uzun elastik kirişin hareketli yük altında dinamik davranışı**
KAHYA V., Turan M., ARAZ O.
18. Ulusal Mekanik Kongresi, Manisa, Turkey, 26 - 30 August 2013, pp.296-308
- LXI. Tabakalı kompozit kirişlerin hareketli yük altında dinamik titreşimleri**
KAHYA V.
İnşaat Mühendisliği'nde 100. Yıl Teknik Kongresi, İstanbul, Turkey, 22 - 24 November 2012, pp.1-12
- LXII. Hareketli yük altındaki tabakalı kompozit kirişlerin sonlu elemanlar metoduyla dinamik analizi**
KAHYA V.
2. Köprüler ve Viyadükler Sempozyumu, Eskişehir, Turkey, 28 - 30 September 2011, pp.1-11
- LXIII. Finite element analysis of laminated composite beams under moving loads**
KAHYA V.
International Balkans Conference on Challenges of Civil Engineering, Tiran, Albania, 19 - 21 May 2011, pp.1-8
- LXIV. Dynamic analysis of pre-stressed elastic beams under moving mass using different beam models**
KAHYA V.
9th International Congress on Advances in Civil Engineering, Trabzon, Turkey, 27 - 30 September 2010, pp.1-14
- LXV. Kompozit sandviç kirişlerin hareketli yük etkisi altında dinamik davranışı**
KAHYA V., Mosallam A.
16. Ulusal Mekanik Kongresi, Kayseri, Turkey, 26 - 29 September 2009, pp.739-749
- LXVI. Öngerilmeli köprü kirişlerinin hareketli yük etkisi altında dinamik analizi**
KAHYA V.
16. Ulusal Mekanik Kongresi, Kayseri, Turkey, 26 - 29 September 2009, pp.729-737
- LXVII. Çeşitli sınır şartlarına sahip elastik kirişlerin hareketli yük etkisi altında dinamik analizi**
KAHYA V., AKKÖSE M., ERDÖL R.
TUMTMK 15. Ulusal Mekanik Kongresi, Isparta, Turkey, 3 - 07 September 2007, pp.509-519
- LXVIII. Elastik yarı düzlem üzerine oturan farklı iki düz blok ile yüklenmiş elastik tabakada temas problemi**
ÖZŞAHİN T. Ş., KAHYA V., ÇAKIROĞLU A. O.
TUMTMK 15. Ulusal Mekanik Kongresi, Isparta, Turkey, 3 - 07 September 2007, pp.661-669
- LXIX. Rijit temele oturan ve hareketli yük etkisine maruz elastik tabakada sürekli deęme problemi**
KAHYA V., Erdöl R.
12. Ulusal Mekanik Kongresi, Konya, Turkey, 10 - 14 September 2001, pp.531-540
- LXX. Elastik tabakalara ait ara yüzeyde süreksizlięi bulunan bileşik tabaka problemi**
ÖZŞAHİN T. Ş., KAHYA V., ÇAKIROĞLU A. O.
TUMTMK 11. Ulusal Mekanik Kongresi, Bolu, Turkey, 6 - 10 September 1999, pp.543-554
- LXXI. Rijit mesnetli elastik tabakada deęme problemi**
BİRİNCİ A., KAHYA V., Erdöl R.
11. Ulusal Mekanik Kongresi, Bolu, Turkey, 6 - 10 September 1999, pp.409-418
- LXXII. Elastik mesnete oturan bileşik tabakalarda sürekli deęme problemi**
KAHYA V., BİRİNCİ A., Erdöl R.
10. Ulusal Mekanik Kongresi, İstanbul, Turkey, 15 - 19 September 1997, pp.165-173
- LXXIII. Frictionless contact problem between an elastic layer bonded to a rigid support and a rigid stamp**
KAHYA V., ERDÖL R.
3rd EUROMECH Solid Mechanics Conference, Stockholm, Sweden, 18 - 22 August 1997

Other Publications

- I. "Yaşayan, Yaşadıkça Korunan Beypazarı", Mimarlık Bölümü Seminerleri,KTÜ,Trabzon
CANDAŞ KAHYA N., Kahya V.
Presentation, 2004
- II. "Katpatuka: Güzel atlar Diyarı", Mimarlık Bölümü Seminerleri, KTÜ, Trabzon
CANDAŞ KAHYA N., Kahya V.
Presentation, 2003

Supported Projects

KAHYA V., ŞİMŞEK S., ASLAN M., ALTUNIŞIK A. C., TOĞAN V., Project Supported by Higher Education Institutions, Tabakalı Kompozit Yapılarda Modal Karakteristikler Yardımıyla Hasar Tespiti İçin Optimizasyon Tabanlı Bir Yöntem Geliştirilmesi, 2021 - 2024

ALTUNIŞIK A. C., ATEŞ Ş., ADANUR S., KAHYA V., SEVİM B., GÜNAYDIN M., BAŞAĞA H. B., GENÇ A. F., OKUR F. Y., SUNCA F., et al., Project Supported by Higher Education Institutions, Doğu Karadeniz Bölgesindeki Stratejik Öneme Sahip Mühendislik Yapıları İçin Yapı Sağlığı İzleme Ağının Kurulması ve Yenilikçi Yöntemlerin Geliştirilmesi, 2021 - 2024

ALTUNIŞIK A. C., ADANUR S., ATEŞ Ş., SEVİM B., BEKİROĞLU S., GENÇ A. F., OKUR F. Y., KAHYA V., DEMİRKİR C., GÜNAYDIN M., et al., Project Supported by Higher Education Institutions, Mühendislik Yapılarının Dinamik Yükler Altındaki Performanslarının Yüksek Kapasiteli Sarsma Masası Kullanılarak Belirlenmesi, 2018 - 2021

ALTUNIŞIK A. C., KAHYA V., TOĞAN V., BAŞAĞA H. B., TUTKUN M., Project Supported by Higher Education Institutions, International Civil Engineering and Architecture Conference, 2018 - 2020

KAHYA V., Project Supported by Higher Education Institutions, Ağır Taşıt Yükleme Altında Karayolu Kaplaması ile Temel Zemini Arasında Oluşan Dinamik Etkileşimin İncelenmesi, 2010 - 2012

Activities in Scientific Journals

Journal of Structural Engineering & Applied Mechanics , First Editor, 2018 - Continues

Memberships / Tasks in Scientific Organizations

TMMOB İnşaat Mühendisleri Odası, Member, 1994 - Continues

Metrics

Publication: 138

Citation (WoS): 932

Citation (Scopus): 1050

H-Index (WoS): 19

H-Index (Scopus): 19

Non Academic Experience

Karadeniz Teknik Akademi

Karadeniz Teknik Üniversitesi Uzaktan Eğitim Merkezi