

Prof. Cenk ALHAN

Personal Information

Office Phone: [+90 212 473 7000](tel:+902124737000) Extension: 17944

Email: cenkalhan@istanbul.edu.tr

Web: <http://aves.istanbul.edu.tr/cenkalhan/>

Biography

Dr. Cenk ALHAN has completed his BS, MS, and PhD degrees in civil engineering at Middle East Technical University (Turkey), Boğaziçi University (Turkey), and Duke University (USA) in 1996, 1999, and 2003, respectively. He worked as a research assistant at Boğaziçi and Duke Universities in 1997-2000 and 2000-2003, respectively. During his stay at Duke, he worked as a research assistant in an NSF funded project. He became a Faculty Member at Istanbul University in 2006 where he currently works as an Associate Professor in Civil Engineering Department. He works in structural and earthquake engineering areas and his research interests include high-rise structures, seismic isolation, semi-active control, irregular structures, strengthening, and engineering education. He teaches Courses in structural and earthquake engineering including Statics, Strength, Structural Mechanics, Structural Analysis, Earthquake Engineering, Seismic Isolation, and Structural Dynamics. He has given oral presentations at conferences and seminars worldwide such as those in Boston, Alaska, Edmonton, Michigan, Cambridge, Lagos, Sydney, Vienna, İstanbul, and Singapore. Dr. Alhan has published in important technical journals including Journal of Structural Engineering, Journal of Engineering Mechanics, Smart Materials and Structures, Engineering Structures, Engineering Optimization, Earthquake Engineering and Engineering Vibration, Smart Structures and Systems, and Bulletin of Earthquake Engineering for which he has received more than a hundred citations. He also acts as a Reviewer for many SCI journals. He is a member of Earthquake Engineering Research Institute and American Society of Civil Engineers. He worked as a working team member in the European Civil Engineering Education and Training Thematic Network in Romania and Spain. Dr. Alhan has also gained extensive industrial experience by working as a Senior Structural Design Engineer at Laurene & Rickher, P.C. in Raleigh, NC, USA in 2003-2006 where he has been involved in earthquake resistant design of steel, concrete, and wooden structures. He has been serving as a Structural Consultant for high-rise projects in İstanbul and İzmir.

Education Information

Doctorate, Duke University, Graduate School, Civil And Environmental Engineering, United States Of America 2000 - 2003

Postgraduate, Bogazici University, Institute Of Science, İnşaat Mühendisliği Bölümü, Turkey 1996 - 1999

Undergraduate, Middle East Technical University, Faculty Of Engineering, Department Of Civil Engineering, Turkey 1992 - 1996

Foreign Languages

English, C1 Advanced

German, B1 Intermediate

Certificates, Courses and Trainings

Education Management and Planning, İstanbul Süreci - Eğitimde Etkileşim ve Katılımın Güçlendirilmesi, İstanbul

Üniversitesi, 2014

Education Management and Planning, İş Sağlığı ve Güvenliği Eğitimi, İstanbul Üniversitesi Sürekli Eğitim Uygulama ve Araştırma Merkezi, 2014

Occupational Health and Safety, İşyeri Hekimliği ve İş Güvenliği Uzmanlığı Eğitici Belgesi, T.C. Çalışma ve Sosyal Güvenlik Bakanlığı - İş Sağlığı Ve Güvenliği Genel Müdürlüğü, 2013

Education Management and Planning, Build Your Knowledge - Design Solutions with Engineered Wood, APA - The Engineered Wood Association, USA, 2006

Other, Engineering Intern, North Carolina Board Examiners for Engineers and Surveyors, USA, 2003

Education Management and Planning, Fundamentals of Post-Tensioning - Design, Analysis, and Construction, Post-Tensioning Institute, USA, 2003

Education Management and Planning, Expansion Joint Covers, Construction Specialties, Inc., USA, 2003

Education Management and Planning, Impact Modelling of Metal Structures, Technical University of Denmark, Danish Center for Applied Mathematics and Mechanics, 1999

Dissertations

Doctorate, Performance and Reliability of Passive and Controllable Seismic Isolation Systems, Duke University, Graduate School, Civil And Environmental Engineering, 2003

Postgraduate, Behavior of Irregular Structures Under Earthquake Loading, Bogazici University, Mühendislik Fakültesi, İnşaat Mühendisliği, 1999

Research Areas

Civil Engineering, Mechanical, Structural Mechanics, Structure, Structural Engineering, Performance of Constructed Facilities, Earthquake Engineering, Engineering and Technology

Academic Titles / Tasks

Professor, Istanbul University, Mühendislik Fakültesi, İnşaat Mühendisliği Bölümü, 2017 - Continues

Associate Professor, Istanbul University, Mühendislik Fakültesi, İnşaat Mühendisliği Bölümü, 2013 - 2017

Assistant Professor, Istanbul University, Mühendislik Fakültesi, İnşaat Mühendisliği Bölümü, 2006 - 2013

Research Assistant, Duke University, Mühendislik Fakültesi, İnşaat Mühendisliği Bölümü, 2000 - 2003

Research Assistant, Bogazici University, Faculty Of Engineering, Department Of Civil Engineering, 1997 - 2000

Courses

Bitirme Projesi II, Undergraduate, 2017 - 2018, 2016 - 2017, 2014 - 2015

İleri Yapı Dinamiği, Postgraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2013 - 2014

İleri Deprem Mühendisliği, Doctorate, 2017 - 2018, 2016 - 2017, 2014 - 2015, 2013 - 2014

Bitirme Projesi I, Undergraduate, 2018 - 2019, 2016 - 2017, 2015 - 2016, 2014 - 2015

Introduction to Earthquake Engineering, Undergraduate, 2017 - 2018

Sismik İzolasyon, Doctorate, 2018 - 2019, 2017 - 2018, 2016 - 2017

Structural Dynamics, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016

Deprem Mühendisliği I, Postgraduate, 2017 - 2018, 2013 - 2014

Statics, Undergraduate, 2016 - 2017, 2014 - 2015, 2013 - 2014

Seismic Isolation, Doctorate, 2015 - 2016, 2013 - 2014

İleri Yapı Dinamiği, Postgraduate, 2014 - 2015

Yapı Dinamiği, Undergraduate, 2014 - 2015, 2013 - 2014

Seismic Isolation, Doctorate, 2014 - 2015
Deprem Mühendisliği I, Postgraduate, 2012 - 2013, 2011 - 2012
İleri Deprem Mühendisliği, Doctorate, 2012 - 2013, 2011 - 2012
Yapı Mekaniği, Undergraduate, 2012 - 2013, 2011 - 2012
Bitirme Projesi II, Undergraduate, 2012 - 2013, 2011 - 2012
Statics, Undergraduate, 2012 - 2013
Bitirme Projesi I, Undergraduate, 2012 - 2013, 2011 - 2012
Sismik İzolasyon, Doctorate, 2012 - 2013
İleri Yapı Dinamiği, Postgraduate, 2012 - 2013, 2011 - 2012
Yapı Dinamiği, Undergraduate, 2012 - 2013, 2011 - 2012
Yapı Statiği I, Undergraduate, 2011 - 2012
Yapı Sistemlerinin Hesabı İçin Matris Metotları, Postgraduate, 2011 - 2012

Advising Theses

ALHAN C., Endüstriyel Tesislerin Olasılıksal Sismik Risk Değerlendirmesi, Doctorate, K.Akgül(Student), Continues
ALHAN C., Köprülerin Deprem Etkileri Altındaki Davranışları, Doctorate, E.Zeynep(Student), Continues
ALHAN C., Üçlü Sürtünmeli Sarkaç İzolasyon Sistemlerine Sahip Binaların Deprem Davranışları, Doctorate, M.Sönmez(Student), Continues
ALHAN C., Kurşun Çekirdekdeki Isınmanın Sismik İzolasyonlu Binaların Davranışına Etkisi, Doctorate, Z.Kanbir(Student), Continues
ALHAN C., Deprem Etkisi Altında Yapı-Kazık-Zemin Etkileşimi Analizleri için Farklı Yöntemlerin Karşılaştırılması, Doctorate, V.Okumuş(Student), Continues
ALHAN C., Taban Yalıtımlı Binalarda Taban Yalıtım Sisteminin ve Üstyapının Ayrık Deprem Analizi, Postgraduate, B.Yılmaz(Student), Continues
ALHAN C., Taban İzolasyonlu Sıvı Depolama Tanklarının Deprem Davranışına İlave Sönümleyicilerin Etkisi, Doctorate, E.Güler(Student), Continues
ALHAN C., Yarı-aktif sismik izolasyon sistemlerine sahip binaların deprem yükleri altındaki olasılsal davranışı, Doctorate, S.Öncü(Student), 2018
ALHAN C., Zemin Büyütme Katsayılarının Betonarme Taşıyıcı Sistemlerin Deprem Performansına ve Maliyetine Etkileri, Postgraduate, P.Azimi(Student), 2016
ALHAN C., Sismik İzolasyonlu Binalar İçin Yakın Fay Katsayılarının Gerekliliği ve Yeterliliği, Postgraduate, M.Khalid(Student), 2015
ALHAN C., Sismik İzolasyonlu Binaların Deprem Yükleri Altındaki Olasılıksal Davranışı, Doctorate, H.Gazi(Student), 2015
ALHAN C., Yakın Fay Katsayılarının Betonarme Taşıyıcı Sistemlerin Deprem Performansına ve Maliyetine Etkileri, Postgraduate, N.Benmokhtar(Student), 2014
ALHAN C., Sismik İzolasyonlu Binalardaki Doğrusal Olmayan Sıvı Viskoz Sönümleyicilerin Yakın Depremlere Karşı Etkinliği, Postgraduate, E.Güler(Student), 2013
ALHAN C., Ortak Bir İzolasyon Tabanına Sahip Olan Binaların Sismik Davranışı, Postgraduate, M.Selek(Student), 2013
ALHAN C., Yüksek Sönümlü Kauçuk İzolatörlerin Rijitleşme Özelliğinin Sismik İzolasyonlu Binaların Deprem Davranışına Etkisi, Postgraduate, H.Kurtuluş(Student), 2012
ALHAN C., Puls periyotlarının Sismik İzolasyonlu Binaların Performansına Etkisi, Postgraduate, S.Öncü(Student), 2011
ALHAN C., Sismik İzolasyon Platformlarının Performanslarının Sismik İzolatörlerin Mekanik Özelliklerindeki Küçük Sapmalara Olan Duyarlılığı, Postgraduate, K.Hışman(Student), 2011
ALHAN C., Doğrusal ve Doğrusal Olmayan İzolasyon Sistemlerinin Sismik Performanslarının Karşılaştırılması, Postgraduate, M.Özgür(Student), 2010
ALHAN C., Depremin Geliş Açısının Sismik İzolasyonlu Binalara Etkisi," Fen Bilimleri Enstitüsü, Postgraduate, G.Erişgen(Student), 2010
ALHAN C., Sönümün Sismik Taban İzolasyonu ve Sönümleyicilerin Kullanıldığı Binaların Deprem Performansına Etkisi, Postgraduate, F.Şahin(Student), 2008

Jury Memberships

Post Graduate, Yüksek Lisans Tez Savunma Jürisi, İstanbul Üniversitesi, June, 2013
Post Graduate, Yüksek Lisans Tez Savunma Jürisi, İstanbul Üniversitesi, June, 2013
Post Graduate, Yüksek Lisans Tez Savunma Jürisi, İstanbul Üniversitesi, June, 2013
Doctoral Examination, Doktora Yeterlik Jürisi, İstanbul Üniversitesi, March, 2013
Post Graduate, Yüksek Lisans Tez Savunma Jürisi, İstanbul Üniversitesi, October, 2012
Post Graduate, Yüksek Lisans Tez Savunma Jürisi, İstanbul Teknik Üniversitesi, February, 2012
Post Graduate, Yüksek Lisans Tez Savunma Jürisi, İstanbul Üniversitesi, December, 2011
Post Graduate, Yüksek Lisans Tez Savunma Jürisi, İstanbul Üniversitesi, July, 2011
Post Graduate, Yüksek Lisans Tez Savunma Jürisi, İstanbul Üniversitesi, May, 2011
Post Graduate, Yüksek Lisans Tez Savunma Jürisi, İstanbul Üniversitesi, February, 2011
Post Graduate, Yüksek Lisans Tez Savunma Jürisi, İstanbul Üniversitesi, September, 2010
Post Graduate, Yüksek Lisans Tez Savunma Jürisi, İstanbul Üniversitesi, September, 2010
Post Graduate, Yüksek Lisans Tez Jürisi, Tarih: 12/07/2010, İstanbul Üniversitesi, July, 2010
Post Graduate, Yüksek Lisans Tez Savunma Jürisi, İstanbul Üniversitesi, March, 2010
Post Graduate, Yüksek Lisans Tez Savunma Jürisi, İstanbul Üniversitesi, February, 2010
Post Graduate, Yüksek Lisans Tez Savunma Jürisi, İstanbul Üniversitesi, June, 2009
Post Graduate, Yüksek Lisans Tez Savunma Jürisi, İstanbul Üniversitesi, July, 2008
Doctorate, Doktora Tez Savunma Jürisi, Balıkesir Üniversitesi, February, 2008
Post Graduate, Yüksek Lisans Tez Savunma Jürisi, İstanbul Üniversitesi, January, 2008

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Probabilistic behavior of semi-active isolated buildings under pulse-like earthquakes**
Oncu-Davas S., Alhan C.
SMART STRUCTURES AND SYSTEMS, vol.23, no.3, pp.227-242, 2019 (SCI-Expanded)
- II. **Reliability of semi-active seismic isolation under near-fault earthquakes**
Oncu-Davas S., Alhan C.
MECHANICAL SYSTEMS AND SIGNAL PROCESSING, vol.114, pp.146-164, 2019 (SCI-Expanded)
- III. **Probabilistic sensitivity of base-isolated buildings to uncertainties**
Gazi H., Alhan C.
SMART STRUCTURES AND SYSTEMS, vol.22, no.4, pp.441-457, 2018 (SCI-Expanded)
- IV. **Influence of isolation system characteristic strength on the earthquake behavior of base-isolated liquid storage tanks**
ALHAN C., GAZİ H., GÜLER E.
INDIAN JOURNAL OF ENGINEERING AND MATERIALS SCIENCES, vol.25, no.4, pp.346-352, 2018 (SCI-Expanded)
- V. **Necessity and adequacy of near-source factors for seismically isolated buildings**
Saifullah M. K., Alhan C.
EARTHQUAKES AND STRUCTURES, vol.12, no.1, pp.91-108, 2017 (SCI-Expanded)
- VI. **Significance of stiffening of high damping rubber bearings on the response of base-isolated buildings under near-fault earthquakes**
Alhan C., Gazi H., Kurtulus H.
MECHANICAL SYSTEMS AND SIGNAL PROCESSING, vol.79, pp.297-313, 2016 (SCI-Expanded)
- VII. **Seismic isolation performance sensitivity to potential deviations from design values**
Alhan C., Hisman K.
SMART STRUCTURES AND SYSTEMS, vol.18, no.2, pp.293-315, 2016 (SCI-Expanded)
- VIII. **Performance limits of seismically isolated buildings under near-field earthquakes**
Alhan C., Oncu-Davas S.
ENGINEERING STRUCTURES, vol.116, pp.83-94, 2016 (SCI-Expanded)

- IX. **Seismic responses of base-isolated buildings: efficacy of equivalent linear modeling under near-fault earthquakes**
Alhan C., Ozgur M.
SMART STRUCTURES AND SYSTEMS, vol.15, no.6, pp.1439-1461, 2015 (SCI-Expanded)
- X. **Necessity and adequacy of near-source factors for not-so-tall fixed-base buildings**
Alhan C., Surmeli M.
EARTHQUAKE ENGINEERING AND ENGINEERING VIBRATION, vol.14, no.1, pp.13-26, 2015 (SCI-Expanded)
- XI. **Optimization of seismic isolation systems via harmony search**
Nigdeli S. M., Bekdas G., Alhan C.
ENGINEERING OPTIMIZATION, vol.46, no.11, pp.1553-1569, 2014 (SCI-Expanded)
- XII. **Bringing Probabilistic Analysis Perspective into Structural Engineering Education: Use of Monte Carlo Simulations**
Alhan C., Gazi H.
INTERNATIONAL JOURNAL OF ENGINEERING EDUCATION, vol.30, no.5, pp.1280-1294, 2014 (SCI-Expanded)
- XIII. **Shear building representations of seismically isolated buildings**
Alhan C., Surmeli M.
BULLETIN OF EARTHQUAKE ENGINEERING, vol.9, no.5, pp.1643-1671, 2011 (SCI-Expanded)
- XIV. **Protecting vibration-sensitive contents: an investigation of floor accelerations in seismically isolated buildings**
Alhan C., Şahin F.
BULLETIN OF EARTHQUAKE ENGINEERING, vol.9, no.4, pp.1203-1226, 2011 (SCI-Expanded)
- XV. **Optimal control: Basis for performance comparison of passive and semiactive isolation systems**
Alhan C., Gavin H. P., Aldemir U.
JOURNAL OF ENGINEERING MECHANICS, vol.132, no.7, pp.705-713, 2006 (SCI-Expanded)
- XVI. **Reliability of base isolation for the protection of critical equipment from earthquake hazards**
Alhan C., GAVIN H. P.
ENGINEERING STRUCTURES, vol.27, no.9, pp.1435-1449, 2005 (SCI-Expanded)
- XVII. **Guidelines for low-transmissibility semi-active vibration isolation**
GAVIN H., Alhan C.
SMART MATERIALS & STRUCTURES, vol.14, no.2, pp.297-306, 2005 (SCI-Expanded)
- XVIII. **A parametric study of linear and non-linear passively damped seismic isolation systems for buildings**
Alhan C., GAVIN H.
ENGINEERING STRUCTURES, vol.26, no.4, pp.485-497, 2004 (SCI-Expanded)
- XIX. **Fault tolerance of semiactive seismic isolation**
GAVIN H., Alhan C., OKA N.
JOURNAL OF STRUCTURAL ENGINEERING-ASCE, vol.129, no.7, pp.922-932, 2003 (SCI-Expanded)
- XX. **Parametric analysis of irregular structures under seismic loading according to the new Turkish Earthquake Code**
TEZCAN S., Alhan C.
ENGINEERING STRUCTURES, vol.23, no.6, pp.600-609, 2001 (SCI-Expanded)

Articles Published in Other Journals

- I. **Modeling of Lead Rubber Bearings via 3D-BASIS, SAP2000, and OpenSees Considering Lead Core Heating Modeling Capabilities**
KANBİR Z., ÖZDEMİR G., ALHAN C.
International Journal of Structural and Civil Engineering Research, vol.7, pp.294-301, 2018 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **Comparison of Ground Motion Pulse Models for the Seismic Response of Seismically Isolated Liquid Storage Tanks**
ÖNCÜ DAVAS S., GAZİ H., Güler E., ALHAN C.
in: Earthquake Engineering and Structural Dynamics in Memory of Ragnar Sigbjörnsson, Rajesh Rupakhety, Simon Olafsson, Editor, Springer International Publishing Ag, -, pp.143-157, 2018
- II. **Comparison of Ground Motion Pulse Models for the Seismic Response of Seismically Isolated Liquid Storage Tanks**
ÖNCÜ DAVAS S., GAZİ H., Güler E., ALHAN C.
in: Earthquake Engineering and Structural Dynamics in Memory of Ragnar Sigbjörnsson. Geotechnical, Geological and Earthquake Engineering, Rajesh Rupakhety, Simon Olafsson, Editor, Springer International Publishing Ag, -, pp.143-157, 2018
- III. **Comparison of Ground Motion Pulse Models for the Drift Response of Seismically Isolated Buildings**
GAZİ H., ÖNCÜ DAVAS S., ALHAN C.
in: Urban Planning and Civil Engineering, Sisiopiku V.P., Ramadan O. E., Editor, Athens Institute For Education And Research, Atina, pp.321-332, 2015
- IV. **Comparison of Ground Motion Pulse Models for the Acceleration Response of Seismically Isolated Buildings**
ÖNCÜ DAVAS S., GAZİ H., ALHAN C.
in: Architecture Anthology II: Architectural Construction, Materials and Building Technologies, Jamal M. Khatib, Editor, Athens Institute For Education And Research, Atina, pp.229-240, 2015

Refereed Congress / Symposium Publications in Proceedings

- I. **Doğrusal Olmayan İzolasyon Sistemlerinin Uzak-Fay Depremleri Altındaki Öğretme-Öğrenme Tabanlı Optimizasyonu**
ÖNCÜ DAVAS S., TEMÜR R., ALHAN C.
21. Ulusal Mekanik Kongresi, Niğde, Turkey, 2 - 06 September 2019, pp.1-8
- II. **A Probabilistic Sensitivity Assessment for Isolation System Response of Deterministic Base-isolated Buildings to the Uncertainties in the Synthetic Earthquake Parameters**
GAZİ H., ALHAN C.
2nd International Symposium on Innovative Approaches in Scientific Studies, Samsun, Turkey, 30 November - 02 December 2018, pp.91
- III. **The effect of probability distribution forms of random synthetic earthquake parameters on the superstructure response of base-isolated buildings**
GAZİ H., ALHAN C.
2nd International Symposium on Innovative Approaches in Scientific Studies, Samsun, Turkey, 30 November - 02 December 2018, pp.92
- IV. **Effects of probability distribution forms of uncertain ground motion parameters on the isolation system response of base-isolated buildings**
GAZİ H., ALHAN C.
International Eurasian Conference on Science, Engineering and Technology (EurasianSciEnTech 2018), Ankara, Turkey, 22 - 23 November 2018, pp.127
- V. **Sensitivity of superstructure response of deterministic base-isolated buildings to the uncertainties in the synthetic ground motion parameters**
GAZİ H., ALHAN C.
International Eurasian Conference on Science, Engineering and Technology (EurasianSciEnTech 2018), Ankara, Turkey, 22 - 23 November 2018, pp.125
- VI. **Use of synthetic pulse models for assessing near-fault earthquake behavior of base-isolated**

buildings considering lead core heating

KANBİR Z., GAZİ H., ÖNCÜ DAVAS S., ALHAN C.

International Conference on "Natural Hazards and Risks in a Changing World, Potsdam, Germany, 4 - 05 October 2018, pp.117

- VII. **Şehir İçinde Patlatma İle Yapılan Kazıların Neden Olduğu Titreşimlerin Çevre Yapılara Etkisinin Aletsel Gözlemlene İle Değerlendirilmesi**

ALHAN C., ÖZTOPRAK S., İnanır O. E.

Zemin Mekaniği ve Geoteknik Mühendisliği 17. Ulusal Konferansı, İstanbul, Turkey, 26 - 28 September 2018, vol.2, pp.847-858

- VIII. **Sensitivity of the probabilistic response of semi-active isolated buildings to the probability distribution types of random synthetic earthquake parameters**

ÖNCÜ DAVAS S., ALHAN C.

9th International Congress on Computational Mechanics (GRACM), Chania, Crete, Greece, 4 - 06 June 2018, pp.1

- IX. **Influence of shape parameter/coefficient of variation of random synthetic earthquake parameters on the probabilistic response of semi-active isolated building**

ÖNCÜ DAVAS S., ALHAN C.

9th International Congress on Computational Mechanics (GRACM), Chania, Crete, Greece, 4 - 06 June 2018, pp.1

- X. **A seismic isolation optimization methodology adopted with bat algorithm**

BEKDAŞ G., ÖNCÜ DAVAS S., NİGDELİ S. M., ALHAN C.

8th International Conference on Bioinspired Optimization Methods and their Applications (BIOMA), Paris, France, 16 - 18 May 2018, pp.1-12

- XI. **Yarı-Aktif İzolasyon Sistemi Elemanlarının Mekanik Parametrelerinin Her Bir Elemandaki Bağımsız Değişkenliğinin Taban Deplasmanları Üzerindeki Etkisi**

ÖNCÜ DAVAS S., ALHAN C.

3. Uluslararası Mühendislik Mimarlık ve Tasarım Kongresi, Kocaeli, Turkey, 4 - 05 May 2018, pp.1-2

- XII. **Software for the Analysis of Bridges Including Vertical and Angular Deformations by Utilizing Direct Integration Techniques**

ÖZTORUN E. Z., ÖZTORUN N. K., ALHAN C.

3. International Conference on Civil and Environmental Engineering (ICOCEE), İzmir, Turkey, 24 - 27 April 2018, vol.2, pp.511

- XIII. **Response Sensitivity of Low-Rise Buildings to Coefficients of Variations of Random Semi-Active Isolation System Parameters under Near-Fault Earthquakes**

ÖNCÜ DAVAS S., ALHAN C.

5th International Congress on Civil and Urban Engineering, Barcelona, Spain, 11 - 13 March 2018, pp.1-5

- XIV. **Comparison of Ground Motion Pulse Models for the Seismic Response of Seismically Isolated Liquid Storage Tanks**

Oncu-Davas S., Gazi H., Guler E., Alhan C.

International Conference on Earthquake Engineering and Structural Dynamics (ICESD), Reykjavik, Iceland, 12 - 14 June 2017, vol.44, pp.143-157

- XV. **Effect of Superstructure Flexibility on the Probabilistic Behavior of Semi-Active Isolated Buildings under Near-Fault Historical Earthquakes**

ÖNCÜ DAVAS S., ALHAN C.

International Congress on Engineering and Technology Sciences, Afyon, Turkey, 22 - 25 December 2017, pp.15

- XVI. **Application of Monte-Carlo Simulation to Semi-Active Isolation Systems under Near-Fault Earthquakes**

ÖNCÜ DAVAS S., ALHAN C.

22nd International Conference on APPLIED MATHEMATICS (AMATH17), Roma, Italy, 15 - 17 December 2017, pp.307-311

- XVII. **Köprülerin Deprem Etkileri Altındaki Davranışları**

ÖZTORUN E. Z., ALHAN C., ERDEM S., ÖZTORUN N. K.

XX. Ulusal Mekanik Kongresi, Bursa, Turkey, 5 - 09 September 2017, pp.938-947

- XVIII. **Monte Carlo Simulation Of Semi-Active Isolation Systems Under Historical Earthquakes**
ÖNCÜ DAVAS S., ALHAN C.
International Conference on Structural Engineering Dynamics, Ericeira, Portugal, 3 - 05 July 2017, pp.1-8
- XIX. **Sensitivity of the seismic performance of liquid storage tanks with nonlinear isolation systems to deviations in mechanical characteristics of the seismic isolators**
Güler E., GAZİ H., ALHAN C.
6th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering (COMPDYN2017), Rodos Adası, Greece, 15 - 17 June 2017
- XX. **Liquid storage tanks with linear isolation systems: sensitivity of seismic performance to deviations in effective stiffness and damping**
Güler E., ALHAN C., GAZİ H.
2nd International Conference on Civil and Environmental Engineering (ICOCEE2017), Nevşehir, Turkey, 8 - 10 May 2017
- XXI. **Effect of soil amplification on the response of base-isolated buildings under near-fault earthquakes**
SARĞIN S., GAZİ H., ALHAN C., ÖZTOPRAK S.
2nd International Conference on Structural Engineering, New Technology and Methods (ICSENM17), Barselona, Spain, 2 - 04 April 2017
- XXII. **Behavior of base-isolated liquid storage tanks under synthetic near-fault earthquake pulses**
ALHAN C., Güler E., GAZİ H.
Fifth International Symposium on Life-Cycle Civil Engineering (IALCCE2016), Delft, Netherlands, 16 October - 19 November 2016, pp.2415-2419
- XXIII. **Seismic performance comparison of linear and nonlinear viscous dampers in base-isolated buildings**
Güler E., ALHAN C.
Tenth Pacific Conference on Earthquake Engineering Building a Earthquake-Resilient Pacific, Sydney, Australia, 6 - 08 November 2015
- XXIV. **Behavior of seismically isolated liquid storage tanks equipped with nonlinear viscous dampers in seismic environment**
GAZİ H., KAZEZYILMAZ ALHAN C. M., ALHAN C.
Tenth Pacific Conference on Earthquake Engineering Building an Earthquake-Resilient Pacific, Sidney, Australia, 6 - 08 November 2015
- XXV. **Influence of Isolation System Characteristic Strength on the Earthquake Behavior of Base-Isolated Liquid Storage Tanks**
ALHAN C., GAZİ H.
2nd International Conference on Computational and Experimental Science and Engineering, Antalya, Turkey, 14 - 19 October 2015
- XXVI. **Influence of Advanced Modeling of HDRBs on the Dynamic Behavior of Seismically Isolated Buildings**
GAZİ H., ALHAN C., Kurtuluş H.
Earthquake Risk and Engineering towards a Resilient World (SECED 2015), Cambridge, United Kingdom, 9 - 10 July 2015
- XXVII. **Significance of Stiffening of High Damping Rubber Bearings on the Response of Base-Isolated Buildings under Near-Fault Earthquakes**
GAZİ H., ALHAN C., Kurtuluş H.
International Conference On Structural Engineering Dynamics, Lagos, Portugal, 22 - 24 June 2015
- XXVIII. **Behavior of Common-Base Multiple Seismically Isolated Buildings Under Near-Fault Earthquakes**
GAZİ H., ALHAN C., Selek M.
2nd Annual Conference on Architecture and civil Engineering, Singapur, Singapore, 24 - 25 March 2014, pp.72-81
- XXIX. **Effectiveness Of Seismic Isolation In Protecting Sensitive Contents Against Near-Fault Earthquakes Of Various Magnitudes**
ÖNCÜ DAVAS S., ALHAN C.
10th International Congress on Advances in Civil Engineering, Turkey, 1 - 04 October 2013
- XXX. **Sismik İzolasyon Sistemi Parametrelerindeki Rastgele Değişimlerin Etkisinin Monte Carlo Simülasyon**

Metoduyla İncelenmesi

GAZİ H., ALHAN C.

2. Türkiye Deprem Mühendisliği ve Sismoloji Konferansı, Hatay, Turkey, 25 - 27 September 2013

- XXXI. **Sentetik Deprem Puls Sönüm Oranlarının Sismik İzolasyonlu Binaların Davranışına Etkisi**

ÖNCÜ DAVAS S., ALHAN C.

İkinci Türkiye Deprem Mühendisliği Ve Sismoloji Konferansı, Hatay, Turkey, 1 - 04 September 2013

- XXXII. **Evaluation Of Content Damage Ratios Of Seismically Isolated Buildings Under Earthquake Loading**

ALHAN C., ÖNCÜ DAVAS S., GAZİ H.

Vienna Congress on Recent Advances in Earthquake Engineering and Structural Dynamics & 13. D-A-CH Tagung,, Austria, 1 - 04 August 2013

- XXXIII. **Comparison Of Ground Motion Pulse Models For The Acceleration Response Of Seismically Isolated Buildings.**

ÖNCÜ DAVAS S., GAZİ H., ALHAN C.

3rd Annual International Conference on Civil Engineering, Greece, 1 - 04 June 2013, pp.34

- XXXIV. **Comparison Of Ground Motion Pulse Models For The Drift Response Of Seismically Isolated Buildings.**

GAZİ H., ÖNCÜ DAVAS S., ALHAN C.

3rd Annual International Conference on Civil Engineering, Greece, 1 - 04 June 2013, pp.24

- XXXV. **Effectiveness of Seismic Isolation in Protecting Sensitive Contents against Near-Fault Earthquakes of Various Magnitudes**

ÖNCÜ S., ALHAN C.

10th International Congress on Advances in Civil Engineering, Ankara, Turkey, 17 - 19 October 2012

- XXXVI. **Doğrusal Olmayan Sismik İzolasyon Sistemlerinin Performanslarının Yapısal Parametrelere Duyarlılığı**

ALHAN C., Hışman K.

1. Türkiye Deprem Mühendisliği ve Sismoloji Konferansı, Ankara, Turkey, 11 - 14 October 2011

- XXXVII. **Doğrusal Sismik İzolasyon Sistemlerinin Performansının Yapısal Parametrelere Duyarlılığı**

ALHAN C., Hışman K.

Yedinci Ulusal Deprem Mühendisliği Konferansı, İstanbul, Turkey, 30 May - 03 June 2011

- XXXVIII. **A Comparison of Different Methods in Vertical Distribution of Equivalent Lateral Seismic Forces**

ALHAN C., Samat N. Ç.

Sakarya International Symposium of Earthquake Engineering, Sakarya, Turkey, 1 - 02 October 2009, pp.241-251

- XXXIX. **Effects of Near-field Earthquakes on Seismically Isolated Buildings**

ALHAN C., Göktaş Y.

WCCE-ECCE-TCCE Joint Conference: Earthquake & Tsunami, İstanbul, Turkey, 22 - 24 June 2009

- XL. **Performance of Non-linear Base Isolation Systems Designed According to Uniform Building Code**

ALHAN C., Altun M.

5th International Advanced Technologies Symposium, Karabük, Turkey, 13 - 15 May 2009, pp.2079-2084

- XLI. **Parametric Analysis of Passive Damping in Base Isolation**

ALHAN C., Gavin H.

16th ASCE Engineering Mechanics Conference, Seattle, United States Of America, 16 - 18 July 2003

- XLII. **Inter-story Drift Amplification and Damping in Passive Isolation Systems**

Gavin H., ALHAN C.

7th U.S. National Conference on Earthquake Engineering, Boston, United States Of America, 21 - 25 July 2002

- XLIII. **Control of Torsionally Asymmetric Structures**

Gavin H., ALHAN C.

American Control Conference, Anchorage, United States Of America, 8 - 10 May 2002, pp.2475-2480

- XLIV. **Yaşanabilir Şehirler Toplu Taşıma ile Yaratılır - Antalya Örneği**

Tezcan S. S., Gökmen E., Barbaros B., ALHAN C., Özden Ö.

Akdeniz Üniversitesi, Mühendislik Fakültesi, Açılış Etkinlikleri Konferansı, Antalya, Turkey, 12 October 1998, pp.1-

Supported Projects

GAZİ H., GÜLER E., ALHAN C., Project Supported by Higher Education Institutions, Sensitivity of the seismic performance of liquid storage tanks with nonlinear isolation systems to deviations in mechanical characteristics of the seismic isolators, 2017 - 2017

ALHAN C., GAZİ H., SARĞIN S., ÖZTOPRAK S., Project Supported by Higher Education Institutions, Effect of soil amplification on the response of base-isolated buildings under near-fault earthquakes, 2016 - 2017

BEKDAŞ G., NİGDELİ S. M., ALHAN C., Project Supported by Higher Education Institutions, Betonarme Tekil Temellerin Metasezgisel algoritmalar ile optimizasyonu, 2016 - 2017

ALHAN C., TUBITAK Project, Taban İzolasyonlu Sıvı Depolama Tanklarının Yakın-Fay Ve Uzak-Fay Depremleri Altındaki Davranışı, 2015 - 2016

ALHAN C., Project Supported by Higher Education Institutions, Titreşime Hassas Cihazların Korunması: Sismik İzolasyonlu Binalarda Kat İvmelerinin Araştırılması, 2012 - 2015

ALHAN C., Project Supported by Higher Education Institutions, "Sismik İzolasyonlu Binaların Deprem Yükleri Altındaki Olasılıksal Davranışı", 2012 - 2015

ALHAN C., Project Supported by Higher Education Institutions, Behavior of Common-Base Multiple Seismically Isolated Buildings Under Near-Fault Earthquakes, 2014 - 2014

ALHAN C., Project Supported by Higher Education Institutions, Sismik İzolasyonlu Binalardaki Doğrusal Olmayan Sıvı Viskoz Sönümleyicilerin Yakın Depremlere Karşı Etkinliği, 2011 - 2014

ALHAN C., Project Supported by Higher Education Institutions, Evaluation of Content Damage Ratios of Seismically Isolated Buildings under Earthquake Loading, 2013 - 2013

ALHAN C., Project Supported by Higher Education Institutions, SİSMİK İZOLASYON PLATFORMLARININ PERFORMANSLARININ SİSMİK İZOLATÖRLERİN MEKANİK ÖZELLİKLERİNDEKİ KÜÇÜK SAPMALARA OLAN DUYARLILIĞI, 2010 - 2011

ALHAN C., Project Supported by Higher Education Institutions, Deprem Geliş Açısının Sismik İzolasyonlu Binalara Etkisi, 2009 - 2010

Memberships / Tasks in Scientific Organizations

International Association for Life-Cycle Civil Engineering, Member, 2016 - Continues

ASCE American Society of Civil Engineers, Member, 2004 - Continues

EERI Earthquake Engineering and Research Institute, Member, 2003 - Continues

Scientific Refereeing

Engineering Structures, SCI Journal, October 2018

Structural Engineering International, SCI Journal, September 2018

Gazi University Journal of Science, Other Indexed Journal, July 2018

Advances in Structural Engineering, SCI Journal, June 2018

Soil Dynamics and Earthquake Engineering, SCI Journal, June 2018

Bulletin of Earthquake Engineering, SCI Journal, April 2018

Engineering Structures, SCI Journal, March 2018

Earthquake Engineering and Engineering Vibration, SCI Journal, February 2018

Journal of Bridge Engineering, SCI Journal, January 2018

Bulletin of Earthquake Engineering, SCI Journal, January 2018

Engineering Structures, SCI Journal, January 2018

Engineering Structures, SCI Journal, December 2017

Engineering Structures, SCI Journal, November 2017

Structure and Infrastructure Engineering, SCI Journal, October 2017

Earthquake Engineering and Engineering Vibration, SCI Journal, July 2017
Engineering Structures, SCI Journal, June 2017
Journal of Earthquake Engineering, SCI Journal, June 2017
Engineering Structures, SCI Journal, June 2017
Engineering Structures, SCI Journal, June 2017
Engineering Structures, SCI Journal, May 2017
Gazi Üniversitesi Mühendislik-Mimarlık Fakültesi Dergisi, SCI Journal, February 2017
Earthquake Engineering and Engineering Vibration, SCI Journal, January 2017
Engineering Structures, SCI Journal, January 2017
Engineering Structures, SCI Journal, January 2017
Earthquake Engineering and Engineering Vibration, SCI Journal, November 2016
Steel and Composite Structures, SCI Journal, October 2016
Bulletin of Earthquake Engineering, SCI Journal, October 2016
Engineering Structures, SCI Journal, July 2016
Earthquakes and Structures, SCI Journal, July 2016
Engineering Structures, SCI Journal, June 2016
Engineering Structures, SCI Journal, June 2016
Turkish Journal of Electrical Engineering & Computer Sciences, SCI Journal, May 2016
Advances in Mechanical Engineering, SCI Journal, May 2016
Earthquakes and Structures, SCI Journal, April 2016
Engineering Structures, SCI Journal, March 2016
Engineering Optimization, SCI Journal, March 2016
Earthquake Engineering and Engineering Vibration, SCI Journal, February 2016
Journal of Bridge Engineering, SCI Journal, February 2016
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Earthquake Engineering and Structural Dynamics, SCI Journal, December 2015
Earthquake Engineering and Engineering Vibration, SCI Journal, December 2015
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Indian Journal of Engineering & Materials Sciences, SCI Journal, December 2015
Indian Journal of Engineering & Materials Sciences, SCI Journal, December 2015
Engineering Optimization, SCI Journal, December 2015
Engineering Structures, SCI Journal, July 2015
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Advances in Mechanical Engineering, SCI Journal, June 2015
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Advances in Mechanical Engineering, SCI Journal, February 2015
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Bulletin of Earthquake Engineering, SCI Journal, November 2014
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Computer Applications in Engineering Education, SCI Journal, October 2014
Earthquake Engineering and Engineering Vibration, SCI Journal, October 2014
Engineering Structures, SCI Journal, September 2014
Engineering Structures, SCI Journal, August 2014
Bulletin of Earthquake Engineering, SCI Journal, June 2014
Soil Dynamics and Earthquake Engineering, SCI Journal, June 2014
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Engineering Structures, SCI Journal, January 2007

Metrics

Publication: 69
Citation (WoS): 326
Citation (Scopus): 344
H-Index (WoS): 10
H-Index (Scopus): 10

Congress and Symposium Activities

Natural Hazards and Risks in a Changing World, Attendee, Potsdam, Germany, 2018
Zemin Mekaniği ve Geoteknik Mühendisliği 17. Ulusal Konferansı, Attendee, İstanbul, Turkey, 2018
International Conference on Earthquake Engineering and Structural Dynamics (ICESD2017), Attendee, Reykjavík, Iceland, 2017
2nd International Conference on Civil and Environmental Engineering (ICOCEE2017), Attendee, Nevşehir, Turkey, 2017
2nd International Conference on Structural Engineering, New Technology and Methods (ICSENM17), Attendee, Barcelona, Spain, 2017
Fifth International Symposium on Life-Cycle Civil Engineering (IALCCE2016), Attendee, Netherlands, 2016
Türkiye Sismik Tehlike Haritası ve Türkiye Bina Deprem Yönetmeliği Çalıştayı, Attendee, Ankara, Turkey, 2016
Tenth Pacific Conference on Earthquake Engineering (PCEE 2015), Attendee, Sydney, Australia, 2015
International Conference on Computational and Experimental Science and Engineering (ICCESEN-2015), Attendee, Antalya, Turkey, 2015
Earthquake Risk and Engineering towards a Resilient World (SECED 2015), Attendee, United Kingdom, 2015
International Conference On Structural Engineering Dynamics, Attendee, LAGOS, Portugal, 2015
Erasmus Öğretim Üyesi Hareketliliği Programı, Attendee, Bologna, Italy, 2015
Deprem Yönetmeliğinin Güncellenmesi Çalıştayı, Attendee, ANKARA, Turkey, 2014
2nd Annual International Conference on Architecture and Civil Engineering, Attendee, SINGAPUR, Singapore, 2014
Vienna Congress on Recent Advances in Earthquake Engineering and Structural Dynamics, Attendee, Viyana, Austria, 2013
Deprem Yönetmeliğinin Güncellenmesi Çalıştayı, Attendee, İstanbul, Turkey, 2013
Deprem Yalıtımı Yöntemleri ve Uygulamaları Sempozyumu, Attendee, Ankara, Turkey, 2013
1. Türkiye Deprem Mühendisliği ve Sismoloji Konferansı, Attendee, Ankara, Turkey, 2011
Intergroups Interaction Programme, Attendee, Timişoara, Romania, 2011
7. Ulusal Deprem Mühendisliği Konferansı, Attendee, Ankara, Turkey, 2011
Euoropean Civil Engineering Education and Training (EUCEET) Thematic Network 3rd General Assembly, Attendee, Paris, France, 2009
WCCE-ECCE-TCCE Joint conference: Earthquake and Tsunami, Attendee, İstanbul, Turkey, 2009
5th International Advanced Technologies Symposium, Attendee, Karabük, Turkey, 2009
Su ve Enerji Konferansı, Attendee, Artvin, Turkey, 2008
Euoropean Civil Engineering Education and Training (EUCEET) Thematic Netwrok Workshop, Attendee, Constantza, Romania, 2008
First International Conference on Education and Training in Geo-Engineering Sciences: Soil Mechanics and Geotechnical Engineering Geology, Rock Mechanics, Attendee, Constantza, Romania, 2008
7th U.S. National Conference on Earthquake Engineering (7NCEE), Attendee, Massachusetts, United States Of America, 2002

Awards

ALHAN C., Outstanding Contribution in Reviewing, Engineering Structures, October 2016