

# Prof. MURAT ALTUĞ ERBERİK

## Personal Information

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## International Researcher IDs

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## Education Information

Doctorate, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, Turkey 1995 - 2001

## Foreign Languages

English, C1 Advanced

## Dissertations

Doctorate, Energy based seismic evaluation of degrading systems, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2001

## Research Areas

Civil Engineering, Mechanical, Structure, Engineering and Technology

## Academic Titles / Tasks

Professor, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2004 - Continues

## Academic and Administrative Experience

Afet Yönetimi Uygulama ve Araştırma Merkezi Yönetim Kurulu Üyeliği, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2020 - 2023

## Advising Theses

- Erberik M. A., Askan Gündoğan A., Effect of vertical ground motion on the performance of high-rise buildings, Postgraduate, E.KESKİN(Student), 2020
- Erberik M. A., Predefined damage patterns for limit analysis on nonengineered masonry buildings, Postgraduate, C.İÇEL(Student), 2019
- ERBERİK M. A., SUCUOĞLU H., ENERGY BASED SEISMIC ASSESSMENT AND DESIGN, Doctorate, F.SONER(Student), 2019
- Erberik M. A., Energy based evaluation of RC frame structures, Postgraduate, M.AZIZI(Student), 2019
- Erberik M. A., Askan Gündoğan A., Seismic performance of masonry buildings subjected to synthetic ground motions, Postgraduate, A.BAHADIR(Student), 2019
- Erberik M. A., Yılmaz M. T., A lower-bound limit analysis solution for lateral load capacity of masonry walls, Postgraduate, D.KARADENİZ(Student), 2019
- YILMAZ M. T., ERBERİK M. A., An Implementation of probabilistic seismic hazard analysis in selection of seismic coefficient for pseudostatic analysis of slope stability, Postgraduate, K.Gedikaslan(Student), 2017
- YILMAZ M. T., ERBERİK M. A., An implementation of probabilistic seismic hazard analysis in selection of seismic coefficient for pseudo-static analysis of slope stability, Postgraduate, K.GEDİKASLAN(Student), 2017
- ERBERİK M. A., SEISMIC PERFORMANCE ASSESSMENT OF CONFINED MASONRY BUILDINGS, Postgraduate, C.ÇİTİLOĞLU(Student), 2016
- ERBERİK M. A., Seismic performance assessment of wide beam infill joist block frame structures in turkey, Postgraduate, E.KARAASLAN(Student), 2016
- ERBERİK M. A., ASKAN GÜNDOĞAN A., Derivation of site-specific uhs based on simulated ground motions and its parametric effects on building fragility, Doctorate, A.AZARI(Student), 2016
- ERBERİK M. A., Seismic performance assessment of wide beam infill joist block frame structures in Turkey, Postgraduate, E.Karaaslan(Student), 2015
- ERBERİK M. A., Performance evaluation of confined masonry walls, Postgraduate, G.ERKÖSEOĞLU(Student), 2014
- ERBERİK M. A., Seismic performance of confined masonry construction, Postgraduate, G.Erköseoğlu(Student), 2014
- ERBERİK M. A., ASKAN GÜNDOĞAN A., An approach for seismic damage assessment of residential buildings /, Postgraduate, C.DEMİRCİ(Student), 2014
- ERBERİK M. A., ASKAN GÜNDOĞAN A., An integrated seismic loss estimation methodology: A case study in Northwestern Turkey, Postgraduate, E.MÜGE(Student), 2011
- ERBERİK M. A., Seismic vulnerability of masonry structures in Turkey, Postgraduate, H.CERAN(Student), 2010
- ERBERİK M. A., SUCUOĞLU H., Energy based seismic performance assessment of reinforced concrete columns, Doctorate, B.ACUN(Student), 2010
- ERBERİK M. A., A simple seismic performance assessment technique for unreinforced brick masonry structures, Postgraduate, A.ALDEMİR(Student), 2010
- ERBERİK M. A., Fragility based assessment of lowrise and midrise reinforced concrete frame buildings in turkey using Düzce damage database, Postgraduate, A.Özün(Student), 2007
- ERBERİK M. A., A detailed analysis for evaluation of the degradation characteristics of simple structural systems, Postgraduate, B.Kurtman(Student), 2007
- ERBERİK M. A., Fragility based assessment of low-rise and mid-rise reinforced concrete frame buildings in Turkey using Düzce damage database, Postgraduate, A.ÖZÜN(Student), 2007
- ERBERİK M. A., Fragility based assessment of lowrise and midrise reinforced concrete frame buildings in Turkey, Postgraduate, B.ÖZER(Student), 2006

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

- I. **Seismic Assessment of Electrical Equipment in Power Substations: A Case Study for Circuit Breakers**  
Kaatsiz K., Alici F. S., ERBERİK M. A.  
Turkish Journal of Civil Engineering, vol.35, no.4, pp.49-68, 2024 (SCI-Expanded)
- II. **Development of a GIS-Based Predicted-VS30 Map of Türkiye Using Geological and Topographical Parameters: Case Study for the Region Affected by the 6 February 2023 Kahramanmaraş**

## **Earthquakes**

ŞAHİN G., Okalp K., KOÇKAR M. K., YILMAZ M. T., JALEHFOROUZAN A., Temiz F. A., ASKAN GÜNDOĞAN A., AKGÜN H., ERBERİK M. A.

Seismological Research Letters, vol.95, no.4, pp.2044-2057, 2024 (SCI-Expanded)

- III. **Fundamental period estimation of RC buildings by considering structural and non-structural damage distributions through neural network**  
Cinar O. F., ALDEMİR A., Zervent A., Yucel O. B., ERBERİK M. A., ANIL Ö., ŞAHMARAN M., KOÇKAR M. K., ASKAN GÜNDOĞAN A.  
Neural Computing and Applications, vol.36, no.3, pp.1329-1350, 2024 (SCI-Expanded)
- IV. **The Sensitivity of Global Structural Parameters for Unreinforced Masonry Buildings Subjected to Simulated Ground Motions**  
Koc A. B., ERBERİK M. A., ASKAN GÜNDOĞAN A., Karimzadeh S.  
Buildings, vol.13, no.8, 2023 (SCI-Expanded)
- V. **Simplified Approach for In-Plane Strength Capacity of URM Walls by Using Lower-Bound Limit Analysis and Predefined Damage Patterns**  
Karadeniz D., YILMAZ M. T., Icel C., ERBERİK M. A.  
BUILDINGS, vol.12, no.6, 2022 (SCI-Expanded)
- VI. **An evaluation of seismic hazard and potential damage in Gaziantep, Turkey using site specific models for sources, velocity structure and building stock**  
ARSLAN KELAM A., Karimzadeh S., Yousefibavil K., AKGÜN H., ASKAN GÜNDOĞAN A., ERBERİK M. A., KOÇKAR M. K., PEKCAN O., Ciftci H.  
Soil Dynamics and Earthquake Engineering, vol.154, 2022 (SCI-Expanded)
- VII. **Seismic demands of bare and base-isolated steel frames for real against simulated records of a past earthquake**  
Ozsarac V., Karimzadeh S., Askan Gündoğan A., Erberik M. A.  
STRUCTURE AND INFRASTRUCTURE ENGINEERING, vol.18, pp.1266-1281, 2022 (SCI-Expanded)
- VIII. **Fragility analysis of wide-beam infill-joist block RC frames**  
Donmez C., Karaarslan E., ERBERİK M. A.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.37, no.1, pp.159-173, 2022 (SCI-Expanded)
- IX. **A case study for probabilistic seismic risk assessment of earthquake-prone old urban centers**  
Altindal A., KARIM ZADEH NAGHSHINEH S., ERBERİK M. A., ASKAN GÜNDOĞAN A., ANIL Ö., KOÇKAR M. K., ŞAHMARAN M.  
International Journal of Disaster Risk Reduction, vol.61, 2021 (SCI-Expanded)
- X. **Benchmarking the seismic assessment of unreinforced masonry buildings from a blind prediction test**  
Parisse F., Cattari S., Marques R., Lourenco P. B., Magenes G., Beyer K., Calderoni B., Camata G., Cordasco E. A., Erberik M. A., et al.  
STRUCTURES, vol.31, pp.982-1005, 2021 (SCI-Expanded)
- XI. **Derivation of analytical fragility curves using SDOF models of masonry structures in Erzincan (Turkey)**  
Karimzadeh S., Kadas K., Askan A., Erberik M. A., Yakut A.  
EARTHQUAKES AND STRUCTURES, vol.18, pp.249-261, 2020 (SCI-Expanded)
- XII. **Use of simulated ground motions for the evaluation of energy response of simple structural systems**  
Karimzadeh S., Ozsarac V., Askan A., ERBERİK M. A.  
SOIL DYNAMICS AND EARTHQUAKE ENGINEERING, vol.123, pp.525-542, 2019 (SCI-Expanded)
- XIII. **Seismic performance assessment of confined masonry construction at component and structure levels**  
ERBERİK M. A., Citiloglu C., Erkoseoglu G.  
BULLETIN OF EARTHQUAKE ENGINEERING, vol.17, no.2, pp.867-889, 2019 (SCI-Expanded)
- XIV. **Seismic damage assessment based on regional synthetic ground motion dataset: a case study for**

**Erzincan, Turkey**

Karimzadeh S., Askan A., Erberik M. A., Yakut A.

NATURAL HAZARDS, vol.92, pp.1371-1397, 2018 (SCI-Expanded)

- XV. **The effect of structural variability and local site conditions on building fragility functions**  
Sisi A. A., Erberik M. A., Askan A.  
EARTHQUAKES AND STRUCTURES, vol.14, pp.285-295, 2018 (SCI-Expanded)
- XVI. **Site-specific uniform hazard spectrum in Eastern Turkey based on simulated ground motions including near-field directivity and detailed site effects**  
Sisi A. A., Askan A., Erberik M. A.  
ACTA GEOPHYSICA, vol.65, pp.309-330, 2017 (SCI-Expanded)
- XVII. **Performance Assessment of Turkish Residential Buildings for Seismic Damage and Loss Estimation**  
Un E. M., Erberik M. A., Askan A.  
JOURNAL OF PERFORMANCE OF CONSTRUCTED FACILITIES, vol.29, no.2, 2015 (SCI-Expanded)
- XVIII. **Blockage assessment of buildings during emergency using multiple types of sensors**  
Ergen Pehlevan E., Guven G., KURÇ Ö., ERBERİK M. A., Ergin T., BİRGÖNÜL M. T., Akinci B.  
AUTOMATION IN CONSTRUCTION, vol.49, pp.71-82, 2015 (SCI-Expanded)
- XIX. **Effect of out-of-plane behavior on seismic fragility of masonry buildings in Turkey**  
Ceran H. B., ERBERİK M. A.  
BULLETIN OF EARTHQUAKE ENGINEERING, vol.11, no.5, pp.1775-1795, 2013 (SCI-Expanded)
- XX. **Seismic Performance Assessment of Unreinforced Masonry Buildings with a Hybrid Modeling Approach**  
Aldemir A., ERBERİK M. A., Demirel I. O., SUCUOĞLU H.  
EARTHQUAKE SPECTRA, vol.29, no.1, pp.33-57, 2013 (SCI-Expanded)
- XXI. **Inelastic Displacement Response of RC Systems with Cyclic Deterioration-An Energy Approach**  
ERBERİK M. A., SUCUOĞLU H., Acun B.  
JOURNAL OF EARTHQUAKE ENGINEERING, vol.16, no.7, pp.937-962, 2012 (SCI-Expanded)
- XXII. **A Methodology for Seismic Loss Estimation in Urban Regions Based on Ground-Motion Simulations**  
Ugurhan B., Askan A., Erberik M. A.  
BULLETIN OF THE SEISMOLOGICAL SOCIETY OF AMERICA, vol.101, pp.710-725, 2011 (SCI-Expanded)
- XXIII. **8 March 2010 Elazig-Kovancilar (Turkey) Earthquake: Observations on Ground Motions and Building Damage**  
Akkar S., Aldemir A., Askan A., Bakir S., Canbay E., Demirel I. O., Erberik M. A., Gülerce Z., Gulkan P., Kalkan E., et al.  
SEISMOLOGICAL RESEARCH LETTERS, vol.82, no.1, pp.42-58, 2011 (SCI-Expanded)
- XXIV. **Importance of Degrading Behavior for Seismic Performance Evaluation of Simple Structural Systems**  
ERBERİK M. A.  
JOURNAL OF EARTHQUAKE ENGINEERING, vol.15, no.1, pp.32-49, 2011 (SCI-Expanded)
- XXV. **Seismic Risk Assessment of Masonry Buildings in Istanbul for Effective Risk Mitigation**  
Erberik M. A.  
EARTHQUAKE SPECTRA, vol.26, no.4, pp.967-982, 2010 (SCI-Expanded)
- XXVI. **Fragility-based assessment of typical mid-rise and low-rise RC buildings in Turkey**  
Erberik M. A.  
ENGINEERING STRUCTURES, vol.30, no.5, pp.1360-1374, 2008 (SCI-Expanded)
- XXVII. **Generation of fragility curves for Turkish masonry buildings considering in-plane failure modes**  
Erberik M. A.  
EARTHQUAKE ENGINEERING & STRUCTURAL DYNAMICS, vol.37, no.3, pp.387-405, 2008 (SCI-Expanded)
- XXVIII. **Vulnerability of Turkish low-rise and mid-rise reinforced concrete frame structures**  
AY B. Ö., ERBERİK M. A.  
JOURNAL OF EARTHQUAKE ENGINEERING, vol.12, pp.2-11, 2008 (SCI-Expanded)
- XXIX. **Fragility analysis of flat-slab structures**  
Erberik M. A., Elnashai A.  
ENGINEERING STRUCTURES, vol.26, no.7, pp.937-948, 2004 (SCI-Expanded)

- XXX. **Energy-based hysteresis and damage models for deteriorating systems**  
Sucuoglu H., Erberik A.  
EARTHQUAKE ENGINEERING & STRUCTURAL DYNAMICS, vol.33, no.1, pp.69-88, 2004 (SCI-Expanded)
- XXXI. **Seismic energy dissipation in deteriorating systems through low-cycle fatigue**  
Erberik A., Sucuoglu H.  
EARTHQUAKE ENGINEERING & STRUCTURAL DYNAMICS, vol.33, no.1, pp.49-67, 2004 (SCI-Expanded)
- XXXII. **Statistical evaluation of the damage potential of earthquake ground motions**  
Sucuoglu H., Yucemen S., Gezer A., Erberik A.  
STRUCTURAL SAFETY, vol.20, no.4, pp.357-378, 1998 (SCI-Expanded)
- XXXIII. **Performance evaluation of a three-storey unreinforced masonry building during the 1992 Erzincan earthquake**  
Sucuoglu H., Erberik A.  
EARTHQUAKE ENGINEERING & STRUCTURAL DYNAMICS, vol.26, no.3, pp.319-336, 1997 (SCI-Expanded)

## **Books & Book Chapters**

- I. **Spatial Distribution of Hysteretic Energy in Reinforced Concrete Moment Resisting Frames**  
Erberik M. A., Azizi M.  
in: Energy Based Seismic Engineering, Amadeo Benavent-Climent, Fabrizio Mollaioli, Editor, Springer, London/Berlin, Zug, pp.47-62, 2021
- II. **Rapid Seismic Assessment Procedures for the Turkish Building Stock**  
YAKUT A., ERBERİK M. A., İLKİ A., SUCUOĞLU H., AKKAR D. S.  
in: Seismic Evaluation and Rehabilitation of Structures, Alper İlki, Michael N. Fardis, Editor, Springer, pp.15-35, 2014

## **Refereed Congress / Symposium Publications in Proceedings**

- I. **Seismic Performance Evaluation of a School Building Using Linear Elastic Assessment Procedure**  
Eren E., Kaatsız K., Alıcı F., ERBERİK M. A.  
7th International Conference on Earthquake Engineering and Seismology, 7ICEES 2023, Antalya, Turkey, 6 - 10 November 2023, vol.488 LNCE, pp.307-325
- II. **Field Survey-Based Macroseismic Intensity Map of the 6th of February 2023 Kahramanmaraş Earthquakes**  
Albayrak K., ASKAN GÜNDOĞAN A., ERBERİK M. A., KOÇKAR M. K., Aydın M. F.  
7th International Conference on Earthquake Engineering and Seismology, ICEES 2023, Antalya, Turkey, 6 - 10 November 2023, vol.401 LNCE, pp.107-114
- III. **A Comparative Study for the Seismic Demands on a Sample Masonry Building Regarding the Evolution of Turkish Earthquake Codes**  
SEMERDÖKEN Y., ERBERİK M. A.  
7th International Conference on Earthquake Engineering and Seismology, 7ICEES 2023, Antalya, Turkey, 6 - 10 November 2023, vol.488 LNCE, pp.397-409
- IV. **Production of GIS-Based Predicted Vs30 Maps for Türkiye by Combining Geological and High-Resolution Topographical Digital Maps**  
ŞAHİN G., Okalp K., KOÇKAR M. K., YILMAZ M. T., JALEHFOROUZAN A., Temiz F. A., ASKAN GÜNDOĞAN A., AKGÜN H., ERBERİK M. A.  
7th International Conference on Earthquake Engineering and Seismology, 7ICEES 2023, Antalya, Turkey, 6 - 10 November 2023, vol.488 LNCE, pp.167-174
- V. **Seismic Assessment of High Voltage Circuit Breakers in Power Substations**  
Alıcı F. S., Kaatsız K., ERBERİK M. A.

7th International Conference on Earthquake Engineering and Seismology, 7ICEES 2023, Antalya, Turkey, 6 - 10 November 2023, vol.488 LNCE, pp.257-271

- VI. **SEISMIC ASSESSMENT OF ELECTRIC TRANSMISSION SYSTEMS**  
Sucuoğlu H., Erberik M. A., Kaatsız K., Alıcı F. S.  
6th International Conference on Earthquake Engineering and Seismology (6ICEES), Kocaeli, Turkey, 13 - 15 October 2021, pp.1-10
- VII. **TÜRKİYE BİNA DEPREM YÖNETMELİĞİNE UYGUNLUK ENDEKSİNİN HESAPLANMASI**  
Ünal B., Erberik M. A., Askan Gündoğan A.  
6th International Conference on Earthquake Engineering and Seismology (6ICEES) , Kocaeli, Turkey, 13 - 15 October 2021, pp.1-6
- VIII. **INTRODUCTION TO SEISMIC RISK ASSESSMENT FRAMEWORK FOR HISTORICAL STRUCTURES IN TURKEY**  
Temiz C., Erberik M. A., Askan Gündoğan A.  
6th International Conference on Earthquake Engineering and Seismology (6ICEES) , Kocaeli, Turkey, 13 - 15 October 2021, pp.1-6
- IX. **COMPARISON OF REAL AND SIMULATED RECORDS IN TERMS OF SEISMIC INPUT ENERGY FOR A BASE ISOLATED STRUCTURE**  
Özsarac V., Karimzadeh S., Askan Gündoğan A., Erberik M. A.  
17th World Conference on Earthquake Engineering, Sendai, Japan, 27 September - 02 October 2021, pp.1-9
- X. **Türkiye'deki Yığma Binaların Genel Özelliklerine Dair Bir Çalışma**  
Eroğlu Azak T., Erberik M. A.  
5th International Conference on Earthquake Engineering and Seismology, Ankara, Turkey, 8 - 11 October 2019, pp.1-10
- XI. **Seismic Performance of Masonry Buildings Subjected to Synthetic Ground Motions**  
Koç A. B., Erberik M. A., Askan Gündoğan A., Karım Zadeh Naghshineh S.  
5th International Conference on Earthquake Engineering and Seismology, Ankara, Turkey, 8 - 11 October 2019, pp.1-11
- XII. **Energy-Based Evaluation of RC Frame Structures**  
Azizi M., Erberik M. A.  
5th International Conference on Earthquake Engineering and Seismology, Ankara, Turkey, 8 - 11 October 2019, pp.1-14
- XIII. **Comparison of energy-based responses of structural systems to real and simulated ground motion records**  
Ozsarac V., Karimzadeh S., Askan A., ERBERİK M. A.  
7th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN 2019, Crete, Greece, 24 - 26 June 2019, vol.2, pp.2234-2243
- XIV. **Comparison energy-based seismic structural responses based on simulated ground motions with existing empirical relationships**  
Karimzadeh S., Askan A., Erberik M. A.  
13th International Congress on Advances in Civil Engineering, İzmir, Turkey, 12 - 14 September 2018
- XV. **Comparison of energy-based seismic structural responses based on simulated ground motions with existing empirical relationships**  
KARIM ZADEH NAGHSHINEH S., ASKAN GÜNDOĞAN A., Erberik M. A.  
13th Advances in Civil Engineering Congress (ACE), Cesme, Turkey, 12 - 14 September 2018
- XVI. **EVALUATION OF SEISMIC ENERGY IN SIMPLE STRUCTURAL SYSTEMS USING SIMULATED GROUND MOTIONS**  
Karım Zadeh Naghshineh S., Ozsarac V., Askan Gündoğan A., Erberik M. A.  
Eleventh U.S. National Conference on Earthquake Engineering , California, United States Of America, 25 - 29 June 2018, pp.295
- XVII. **FRAGILITY CURVES FOR RC BUILDINGS OF DUZCE (TURKEY) USING SIMULATED RECORDS**  
Kadas K., Karımzadeh S., Askan A., Erberik M. A., Yakut A.

- 11th U.S. National Conference on Earthquake Engineering, California, United States Of America, 25 - 29 June 2018
- XVIII. **Predefined damage patterns for limit analysis on non-engineered masonry buildings**  
İÇEL C., ERBERİK M. A., YILMAZ M. T.  
16th European Conference on Earthquake Engineering, 18 - 21 June 2018
- XIX. **A comparative study on the seismic performances of unreinforced and confined masonry buildings**  
ERBERİK M. A., ÇİTİLOĞLU C., ERKÖSEOĞLU G.  
16th European Conference on Earthquake Engineering, 18 - 21 June 2018
- XX. **THE COMPARISON OF DIFFERENT FRAGILITY CURVE GENERATION TECHNIQUES TO ESTIMATE OBSERVED DAMAGE DISTRIBUTIONS**  
Karım Zadeh Naghshineh S., Kadas K., Askan A., Erberik M. A., Yakut A.  
16th European conference on earthquake engineering, Thessaloniki, Greece, 18 - 21 June 2018
- XXI. **From Seismic Sources to Engineering Demand Parameters: An Interdisciplinary Framework for Estimation of Seismic Losses in Urban Region**  
ASKAN GÜNDOĞAN A., Asten M., Erberik M. A., Erkmen C., KARIM ZADEH NAGHSHINEH S., Kilic N., Sisman F. N., YAKUT A.  
2nd Workshop on Best Practices in Physics-based Fault Rupture Models for Seismic Hazard Assessment of Nuclear Installations: Issues and Challenges towards Full Seismic Risk Analysis (Best PSHANI), Cadarache, France, 14 - 16 May 2018
- XXII. **FROM SEISMIC SOURCES TO ENGINEERING DEMANDPARAMETERS: AN INTERDISCIPLINARY FRAMEWORK FORESTIMATION OF SEISMIC LOSSES IN URBAN REGIONS**  
Askan A., Asten M., Erberik M. A., Erkmen C., Karimzadeh S., Kılıç N., Şişman N., Yakut A.  
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- XXIII. **From Seismic Sources to Engineering Demand Parameters: An Interdisciplinary Framework for Estimation of Seismic Losses in Urban Regions**  
Askan Gündoğan A., Asten,Asten,Asten,Asten M., Erberik M. A., Erkmen C., Karimzadeh S., Kilic N., Sisman F. N., Yakut A.  
Best Practices in Physics-based Fault Rupture Models for Seismic Hazard Assessment of Nuclear Installations: issues and challenges towards full Seismic Risk Analysis , Aix-En-Provence, France, 14 - 16 May 2018, pp.1-2
- XXIV. **An energy-based seismic response evaluation of simple structural systems with simulated ground motions**  
Karimzadeh S., Ozsarac V., Askan A., ERBERİK M. A.  
11th National Conference on Earthquake Engineering 2018: Integrating Science, Engineering, and Policy, NCEE 2018, California, United States Of America, 25 - 29 June 2018, vol.8, pp.4819-4829
- XXV. **Comparison of energy-based seismic structural responses based on simulated ground motions with existing empirical relationships**  
ASKAN GÜNDOĞAN A., KARIM ZADEH NAGHSHINEH S., Erberik M. A.  
American Geophysical Union (AGU), New Orleans, United States Of America, 11 - 15 December 2017
- XXVI. **A guideline for earthquake risk management of historical structures in Turkey**  
AHUNBAY Z., ALTAY G., ARUN E. G., AYDEMİR O., ATASAGUN F. D., CELEP Z., ERBERİK M. A., İLKİ A., KURAN F., ÜNAL Z. G., et al.  
4th International Conference on Earthquake Engineering and Engineering Seismology, 11 - 13 October 2017
- XXVII. **Kırılgnalık eğrileri kullanılarak elde edilen tahmini hasar dağılımının hasar tespit verileriyle karşılaştırılması**  
ÇETİN C., ERBERİK M. A.  
4th International Conference on Earthquake Engineering and Engineering Seismology, 11 - 13 October 2017
- XXVIII. **Donatısız ve kuşatılmış yığma yapıların deprem performanslarının karşılaştırılması**  
ÇİTİLOĞLU C., ERBERİK M. A.  
4th International Conference on Earthquake Engineering and Engineering Seismology, 11 - 13 October 2017
- XXIX. **An energy-based seismic response evaluation of simple structural systems with simulated ground motions**

- KARIMZADEH S., ÖZSARAÇ V., ASKAN GÜNDOĞAN A., ERBERİK M. A.  
4th International Conference on Earthquake Engineering and Engineering Seismology, 11 - 13 October 2017
- XXX. **Yığma Yapıların Deprem Etkisi Altında Gözleme ve Hesaba Bağlı DEĞERlendirilmesi için Yöntem**  
GENEŞ M. C., Abrahamczyk L., KAÇIN S., ERBERİK M. A.  
4. Uluslararası Deprem Mühendisliği ve Sismoloji Konferansı, Eskişehir, Turkey, 11 - 13 October 2017
- XXXI. **An Energy-Based Seismic Response Evaluation of Simple Structural Systems with Simulated Ground Motions**  
KARIM ZADEH NAGHSHINEH S., Ozsarac V., ASKAN GÜNDOĞAN A., Erberik M. A.  
4. International Conference on Earthquake Engineering and Seismology (4ICEES), Eskişehir, Turkey, 11 - 13 October 2017
- XXXII. **AN INVESTIGATION ON THE USE OF SIMULATED RECORDS IN DERIVATION OF FRAGILITY CURVES FOR RC BUILDINGS IN**  
kadas k., karimzadeh s., ASKAN GÜNDOĞAN A., ERBERİK M. A., YAKUT A.  
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- XXXIII. **An Investigation on the Use of Simulated Records in Derivation of Fragility Curves for RC Buildings in Duzce**  
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- XXXVI. **Preparation of a Guideline for Earthquake Risk Management of Historical Structures in Turkey**  
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- XXXVII. **An Energy-based seismic response evaluation of Simple Structural Systems with Simulated Ground Motions**  
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- XXXVIII. **Seismic Fragility of Wide-Beam Infill-Joist Block Reinforced Concrete Frame Buildings**  
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16th World Conference on Earthquake Engineering, 9 - 13 January 2017
- XXXIX. **An Interdisciplinary Approach for Regional Seismic Damage Estimation**  
ASKAN GÜNDOĞAN A., Erberik M. A., KARIM ZADEH NAGHSHINEH S., YAKUT A., Sisman F. N., Kilic N., Asten M.  
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- XL. **Seismic Damage Assessment in Erzincan (Turkey) utilizing Synthetic Ground Motion Records**  
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- XLII. **Seismic Damage Estimation on Regional Basis A Case Study**



- ERBERİK M. A., ASKAN GÜNDOĞAN A.  
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- XLIII. **Evaluation of Changing Building Characteristics in Turkey**  
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12th International Congress on Advances in Civil Engineering, İstanbul, Turkey, 21 - 23 September 2016, pp.1-7
- XLIV. **Evaluation of Changing Building Characteristics in Turkey**  
AY B. Ö., EROĞLU AZAK T., ERBERİK M. A.  
12th International Congress on Advances in Civil Engineering, 21 - 23 September 2016
- XLV. **A Study on Fragility Analysis of Masonry Buildings**  
shaghayegh k., ASKAN GÜNDOĞAN A., ERBERİK M. A., YAKUT A.  
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- XLVI. **A Study on Fragility Analyses of Masonry Buildings in Erzincan (Turkey) Utilizing Simulated and Real Ground Motion Records**  
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- XLVII. **Simulation of 13 March 1992 Erzincan Turkey Earthquake Including a Near Field Forward Directivity Pulse Model Implications for Earthquake Engineering**  
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- XLVIII. **Multicomponent seismic loss estimation on the North Anatolian Fault Zone**  
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- LI. **Kentsel Alanlar için Bütünleşik Sismik Kayıp Tahmin Yöntemi: Erzincan Pilot Uygulaması**  
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- LII. **Estimation of seismic losses in urban regions within an interdisciplinary framework a case study**  
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- LIII. **Multisensor data fusion for determining hallway blockages in a building during evacuation**  
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- LIV. **Post disaster sensor based condition assessment of buildings to develop evacuation strategies**  
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- LV. **Providing guidance for evacuation during emergency based on a real time damage and vulnerability assessment of facilities**  
GÜVEN İŞİN G., ERGEN PEHLEVAN E., ERBERİK M. A., KURÇ Ö., BİRGÖNÜL M. T.  
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- LVI. **A detailed evaluation on degrading behavior of structural systems**  
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9th US National and 10th Canadian Conference on Earthquake Engineering 2010, Including Papers from the 4th

- International Tsunami Symposium, Toronto, Canada, 25 - 29 July 2010, vol.3, pp.1845-1854
- LVII. **A Critique on the Turkish Earthquake Code Regulations Regarding Masonry Construction**  
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8th International Seminar on Structural Masonry, İstanbul, Turkey, 5 - 07 November 2008
- LVIII. **Türkiye deki Az ve Orta Katlı Betonarme Yapıların Deprem Güvenliği Açısından İncelenmesi**  
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- LX. **Assessment of seismic fragility curves for low- and mid-rise reinforced concrete frame buildings using Duzce field database**  
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- LXI. **Influence of peak ground velocity on seismic failure probability**  
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## Episodes in the Encyclopedia

- I. **Encyclopedia of Earthquake Engineering**  
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- II. **Encyclopedia of Earthquake Engineering**  
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Springer Berlin Heidelberg, pp., 2015

## Supported Projects

Bilgin Altınöz A. G., Aykaç Leidholm P., Özçakır Ö., Ergenç Cabanas Rodriguez D., Şahin Güçhan N., Yıldırım Esen S., Rifaioğlu M. N., Pamir H., Türer A., Erberik M. A., et al., Other International Funding Programs, CARE-PACE | Post-Earthquake Damage Assessment, Emergency Response, Conservation, Rehabilitation, and Resilience of Cultural Heritage Assets in Multi-layered City: Antakya, Hatay, 2023 - 2024

Kaatsız K., Erberik M. A., Alıcı F. S., Öz İ., Project Supported by Other Official Institutions, Mevcut Binaların TBDY-2018'e Göre Doğrusal Elastik Hesap Yöntemi İle Değerlendirilmesi, 2021 - 2023

Şahmaran M., Erberik M. A., Koçkar M. K., Askan Gündoğan A., Anıl Ö., Aldemir A., Durmaz M., Project Supported by Other Official Institutions, Etkin ve Ekonomik Güçlendirme Uygulaması İçin Orta Hasarlı Binaların Artık Kapasitelerinin Tahmin Metodu, 2020 - 2021

Erberik M. A., Askan Gündoğan A., Project Supported by Other Private Institutions, Yapı Sağlık İzleme Yazılımı Geliştirme Projesi, 2020 - 2021

Askan Gündoğan A., Erberik M. A., Project Supported by Other Official Institutions, Kamu Binaları Deprem Risk Envanteri için Yöntem Geliştirilmesi, 2019 - 2019

Askan Gündoğan A., Pekcan O., Erberik M. A., Akgün H., Municipality, GAZİANTEP İLİ MERKEZ İLÇELERİNDE SİSMİK TEHLİKE TABANLI YAPISAL RİSKLERİN BELİRLENMESİ İÇİN DEPREM MASTER PLANI HAZIRLIK PROJESİ, 2018 - 2019

AY B. Ö., Eroğlu Azak T., ERBERİK M. A., Project Supported by Higher Education Institutions, Deprem Tehlikesine Maruz Bina Envanterinin İstatistikî Yöntemler ile İncelenmesi, 2016 - 2016

ERBERİK M. A., TUBITAK Project, Az ve Orta Katlı Betonarme Yapıların Hasargörebilirliğinin İncelenmesi, 2005 - 2006

## Activities in Scientific Journals

JOURNAL OF EARTHQUAKE ENGINEERING, Editor, 2023 - Continues

## Memberships / Tasks in Scientific Organizations

Türkiye Deprem Mühendisliği Derneği, Chairman, 2021 - Continues, Turkey

## Scientific Refereeing

Structures, Journal Indexed in SCI-E, December 2022

INTERNATIONAL JOURNAL OF ARCHITECTURAL HERITAGE : CONSERVATION, ANALYSIS, AND RESTORATION, Journal Indexed in SCI-E, December 2022

JOURNAL OF BUILDING ENGINEERING, Journal Indexed in SCI-E, December 2022

JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, Journal Indexed in SCI-E, November 2022

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TUBITAK Project, 1002 - Quick Support Program, Bayburt University, Turkey, November 2022

JOURNAL OF EARTHQUAKE ENGINEERING, Journal Indexed in SCI-E, October 2022

Sustainable and Resilient Infrastructure, Journal Indexed in ESCI, September 2022

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SOIL DYNAMICS AND EARTHQUAKE ENGINEERING, Journal Indexed in SCI-E, June 2022

EARTHQUAKE ENGINEERING AND STRUCTURAL DYNAMICS, Journal Indexed in SCI-E, June 2022

Structures, Journal Indexed in SCI-E, June 2022

TUBITAK Project, 1071-Uluslararası Araştırma Fonlarından Yararlanma Kapasitesinin ve Uluslararası Ar-Ge İşbirliklerine Katılımın Arttırılmasına Yönelik Destek Programı , Sakarya University, Turkey, May 2022

GEOMATICS, NATURAL HAZARDS AND RISK, Journal Indexed in SCI-E, April 2022

STRUCTURAL ENGINEERING INTERNATIONAL: JOURNAL OF THE INTERNATIONAL ASSOCIATION FOR BRIDGE AND STRUCTURAL ENGINEERING (IABSE), Journal Indexed in SCI-E, April 2022

BULLETIN OF EARTHQUAKE ENGINEERING, Journal Indexed in SCI-E, March 2022

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GEOMATICS, NATURAL HAZARDS AND RISK, Journal Indexed in SCI-E, February 2022

JOURNAL OF EARTHQUAKE ENGINEERING, Journal Indexed in SCI-E, February 2022

TUBITAK Project, 3501 - National Young Researcher Career Development Program, Ozyegin University, Turkey, February 2022

SOIL DYNAMICS AND EARTHQUAKE ENGINEERING, Journal Indexed in SCI-E, January 2022

SOIL DYNAMICS AND EARTHQUAKE ENGINEERING, Journal Indexed in SCI-E, December 2021

JOURNAL OF EARTHQUAKE ENGINEERING, Journal Indexed in SCI-E, November 2021

JOURNAL OF EARTHQUAKE ENGINEERING, Journal Indexed in SCI-E, September 2021

EARTHQUAKE SPECTRA, Journal Indexed in SCI-E, July 2021

SOIL DYNAMICS AND EARTHQUAKE ENGINEERING, Journal Indexed in SCI-E, June 2021

BULLETIN OF EARTHQUAKE ENGINEERING, Journal Indexed in SCI-E, March 2021

INTERNATIONAL JOURNAL OF ARCHITECTURAL HERITAGE : CONSERVATION, ANALYSIS, AND RESTORATION, Journal Indexed in SCI-E, March 2021

BULLETIN OF EARTHQUAKE ENGINEERING, Journal Indexed in SCI-E, January 2021

TUBITAK Project, 3501 - National Young Researcher Career Development Program, Middle East Technical University, Turkey, January 2021

## Tasks In Event Organizations

Şenol Balaban M., Ay B. Ö., Özdemir Ö., Rittersberger H. İ., Erberik M. A., Kestel A. S., Özacar A. A., Disaster Risk Management 23rd Round Table Meeting, Scientific Congress, Ankara, Turkey, Şubat 2021

Şenol Balaban M., Erberik M. A., Özdemir Ö., Özacar A. A., Ay B. Ö., Afet Risk Yönetimi 22. Yuvarlak Masa Toplantısı, Scientific Congress, Ankara, Turkey, Şubat 2020

Erberik M. A., Askan Gündoğan A., Koçkar M. K., Beşinci Uluslararası Deprem Mühendisliği ve Sismoloji Konferansı, Scientific Congress, Ankara, Turkey, Ekim 2019

## Metrics

Publication: 102

Citation (WoS): 582

Citation (Scopus): 785

H-Index (WoS): 12

H-Index (Scopus): 15

## Invited Talks

Marmara, Van, Elazığ ve İzmir Depremlerine Yapı Hasarları, Seminar, TMMOB İnşaat Mühendisleri Odası Gaziantep Şubesi, Turkey, December 2020

24 Ocak 2020 Elazığ Depremi Kırsal Yapılar, Seminar, TMMOB İnşaat Mühendisleri Odası Ankara Şubesi, Turkey, May 2020

Deprem, Kent ve İnsan Çalıştayı, Workshop, Ankara Üniversitesi, Turkey, March 2020

5th International Conference on Earthquake Engineering and Seismology - Special Workshop on behalf of Prof. Sucuoglu, Workshop, Orta Doğu Teknik Üniversitesi, Turkey, October 2019

## Non Academic Experience

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