## Asst. Prof. Muzaffer BÖREKÇİ

#### **Personal Information**

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#### **International Researcher IDs**

ScholarID: kq7CWQUAAAAJ ORCID: 0000-0002-8684-6159

Publons / Web Of Science ResearcherID: AAZ-8429-2020

ScopusID: 50060932500 Yoksis Researcher ID: 174654

#### **Education Information**

Doctorate, Yildiz Technical University, Fen Bilimleri, Turkey 2008 - 2016

Postgraduate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Turkey 2005 - 2008

Undergraduate, Yildiz Technical University, Faculty Of Civil Engineering, Civil Engineering Department, Turkey 2001 - 2005

#### **Dissertations**

Doctorate, Dayanım ve rijitlik azalmalı yapılarda sismik yerdeğiştirme istemi, Yildiz Technical University, Graduate School of Natural and Applied Sciences, 2016

Postgraduate, Betonarme yapılarda yük-yer değiştirme ilişkisinin hasar olasılığı üzerine etkisi, 2008

#### Research Areas

Civil Engineering, Structure, Structural Engineering, Performance of Constructed Facilities, Earthquake Engineering, Concrete Structures, Repair and Strengthening in Buildings, Engineering and Technology

#### **Academic Titles / Tasks**

Assistant Professor, Yildiz Technical University, Faculty Of Civil Engineering, Civil Engineering Department, 2018 - Continues

Research Assistant, Yildiz Technical University, Faculty Of Civil Engineering, Civil Engineering Department, 2005 - 2018

#### **Courses**

RC Structural Design, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019 Graduatio Thesis, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020 Structural Analysis II, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020

Structural Analysis I, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019

Dynamics of Structures, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019

Advanced Dynamics of Structures, Doctorate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019

Computer Applications in Structural Engineering, Undergraduate, 2019 - 2020, 2018 - 2019

Technical Drawing and Descriptive Geometry, Undergraduate, 2017 - 2018

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

- I. Effect of shear wall on seismic performance of RC frame buildings
  - Ozkul T. A., Kurtbeyoğlu A., Börekçi M., Zengin B., Koçak A.
  - ENGINEERING FAILURE ANALYSIS, vol.100, pp.60-75, 2019 (SCI-Expanded)
- II. Performance Evaluation of In-Plan Irregular RC Frame Buildings Based on Turkish Seismic Code ARSLAN G., BÖREKÇİ M., Şahin B., Denizer M. I., Duman K. S.
  - INTERNATIONAL JOURNAL OF CIVIL ENGINEERING, vol.16, no.3, pp.323-333, 2018 (SCI-Expanded)
- III. Inelastic Displacement Ratios for Evaluation of Degrading Peak Oriented SDOF Systems
  Börekçi M., Kırçıl M. S., Ekiz I.
  - PERIODICA POLYTECHNICA-CIVIL ENGINEERING, vol.62, pp.33-47, 2018 (SCI-Expanded)
- IV. Period formula for RC frame buildings considering infill wall thickness and elasticity modulus Koçak A., Börekçi M., Zengın B.
  - SCIENTIA IRANICA, vol.25, pp.118-128, 2018 (SCI-Expanded)
- V. An Investigation of the Concrete Contribution to Shear Strength of RC Columns Failing in Flexure ARSLAN G., BÖREKÇİ M., BALCI M., HACISALIHOGLU M.
  - INTERNATIONAL JOURNAL OF CIVIL ENGINEERING, vol.14, pp.151-160, 2016 (SCI-Expanded)
- VI. Collapse period of degrading SDOF systems
  - Börekçi M., Kırçıl M. S., Ekiz I.
  - EARTHQUAKE ENGINEERING AND ENGINEERING VIBRATION, vol.13, pp.681-694, 2014 (SCI-Expanded)
- VII. An investigation on seismic design indicators of RC columns using finite element analyses ARSLAN G., Hacisalihoglu M., Balci M., BÖREKÇİ M.
  - INTERNATIONAL JOURNAL OF CIVIL ENGINEERING, vol.12, pp.237-243, 2014 (SCI-Expanded)
- VIII. Fragility analysis of R/C frame buildings based on different types of hysteretic model Börekçi M., Kırçıl M. S.
  - STRUCTURAL ENGINEERING AND MECHANICS, vol.39, pp.795-812, 2011 (SCI-Expanded)

### Articles Published in Other Journals

- I. Determination of the Effect of Modern-Day Designing Methods on Seismic Performance of RC Buildings by using Park-Ang Damage Index
  - Börekçi M.
  - Uludağ Üniversitesi Mühendislik Fakültesi Dergisi, vol.25, no.1, pp.325-340, 2020 (Peer-Reviewed Journal)
- II. Dolgu Duvarlı Betonarme Binaların Hakim Periyodunun Doğrudan Formüller ile Elde Edilmesi Börekçi M.
  - Haliç Üniversitesi Fen Bilimleri Dergisi, vol.2, no.2, pp.161-178, 2019 (Peer-Reviewed Journal)
- III. Assessment of Collapse Potential of DegradingSDOF Systems
  - Börekçi M., Kırçıl M. S.
  - International Journal of Civil and Environmental Engineering, vol.9, pp.468-472, 2015 (Peer-Reviewed Journal)
- IV. Evaluation of Inelastic Displacement Ratios of Bilinear SDOF Systems
  - Börekçi M., Kırçıl M. S., Ekiz İ.
  - Sigma Journal of Engineering and Natural Sciences, vol.32, no.2, pp.189-199, 2014 (ESCI)

## Refereed Congress / Symposium Publications in Proceedings

I. THE EFFECT OF THE INCLUSION OF BASEMENT FLOORS IN THE ANALYTICAL MODEL ON THE SEISMIC PERFORMANCE ESTIMATION OF LOW-RISE REINFORCED CONCRETE BUILDINGS DAĞ B., BÖREKÇİ M.

4 th International Conference on Applied Engineering and Natural Sciences, Konya, Turkey, 10 November 2022, pp.29

II. Effects of Using Different Ground Motion Scaling Methods on the Estimation of Seismic Behavior of Tunnel-Form Buildings

Tozlu İ., Börekçi M.

2nd International Conference on Engineering and Applied Natural Sciences (ICEANS 2022), Konya, Turkey, 15 - 18 October 2022, pp.177

III. Investigation of the Seismic Performance of the Vertical Pile-Supported RC Wharf Structures
Kırmızıdağ F., Börekçi M., Ayat Aydoğan B., Aydoğan B., Selçuk M. E.

2nd International Conference on Engineering and Applied Natural Sciences (ICEANS 2022), Konya, Turkey, 15 - 18 October 2022, pp.269

IV. Depremde betonarme bina performansının DBYBHY 2007 ve TBDY 2018'e göre değerlendirilmesi SOYCAN C., BÖREKÇİ M., ARSLAN G.

International Eurasian Conference on Science, Engineering and Technology (Eurasian SciEn Tech 2018), Ankara, Turkey, 22 November 2018, pp.1643-1650

V. Planda düzensizliği bulunan betonarme binaların Türkiye Bina Deprem Yönetmeliği (TBDY) 2018'e göre performanslarının değerlendirilmesi

KEFELİ E., BÖREKÇİ M., ARSLAN G.

International Eurasian Conference on Science, Engineering and Technology (EurasianSciEnTech 2018), Ankara, Turkey, 22 November 2018, pp.1659-1667

VI. Analytical Damage Estimation of an Existing RC Building Suffered a Shear Wall Damage Using Linear and Nonlinear Methods

ERSOY H. V., BÖREKÇİ M., KOÇAK A.

4th International Conference on Engineering and Natural Sciences (ICENS 2018), Kiev, Ukraine, 02 May 2018, pp.1-8

VII. Effect of Dimension and Analytical Modelling Technics of U -Shaped Shear Wall on Behavior of RC Buildings

BÖREKÇİ M., ERSOY H. V., KOÇAK A.

Fifth International Conference on Advances in Civil, Structural and Environmentsl Engineering - ACSEE 2017, Roma, Italy, 20 May 2017, pp.1

VIII. Effects of Infill Wall Thickness, Elasticity Modulus & Opening Ratio on the Period of Reinforced Concrete Framed Buildings

BÖREKÇİ M., ZENGİN B., KURTBEYOĞLU A.

2nd International Civil Engineering & Architecture Symposium for Academicians 2015 (ICESA 2015), 01 May 2015

IX. Damage probability of RC frame buildings with degrading hysteretic behavior BÖREKÇİ M.

Recent Advances in Earthquake Engineering and Structural Dynamics, Vienna, 01 September 2013

X. Effectiveness of FRP Strengthening on Earthquake Performance of a RC Infilled Frame Structure KIRÇIL M. S., BÖREKÇİ M., KESKİN R. S. O.

Recent Advances in Earthquake Engineering and Structural Dynamics, Vienna, 01 August 2013

XI. The Performance Assessment of a Multi-Span, Box Girder Reinforced Concrete Bridge with and without Seismic Isolation

BÖREKÇİ M., ALTUN M., ARSLAN G.

Proceedings of the Eleventh International Conference on Computational Structures Technology, Dubrovnik, Croatia, 04 September 2012, pp.100

XII. The Performance Assessment of a Multi-Span Box Girder RC Bridge with and without Seismic

#### Isolation

BÖREKÇİ M., ALTUN M., ARSLAN G.

The Eleventh International Conference on Computational Structures Technology 2012 (CST 2012), Croatia, pp.1

XIII. Modeling the RC Frame Buildings with Shear Walls as Fictive Element and Performance Evaluation of This Type of Buildings

AKSU ÖZKUL T., BÖREKÇİ M., ZENGİN B., KOÇAK A.

The IRES 27th International Conference, Thailand, pp.1

## **Supported Projects**

Börekçi M., Aydoğan B., Ayat Aydoğan B., Selçuk M. E., Kırmızıdağ F., Project Supported by Higher Education Institutions, Investigation of Earthquake Performance of Reinforced Concrete Pile Piers according to TKLYDY2020 and Determination of Damage Probability, 2021 - 2022

BÖREKÇİ M., DAĞ B., EROĞLU A., ALTEKİN M., ŞİŞMAN R., Project Supported by Higher Education Institutions, Bitişik Nizam Betonarme Çerçeveli Binaların Deprem Durumundaki Çarpışmalarının Performansa Etkisinin Elde Edilmesi, 2021 - 2022

### Scientific Refereeing

Structures, Journal Indexed in SCI-E, December 2023

JOURNAL OF VIBRATION ENGINEERING & TECHNOLOGIES, Journal Indexed in SCI-E, October 2023

Engineering Structures, Journal Indexed in SCI-E, September 2022

Structures, Journal Indexed in SCI-E, October 2021

Engineering Structures, Journal Indexed in SCI-E, May 2021

# **Mobility Activity**

Research Scholarship Program, Post Doc, University of Nevada, Reno, United States Of America, 2023 - 2024

### Metrics

Publication: 26 Citation (WoS): 46 Citation (Scopus): 70 H-Index (WoS): 5 H-Index (Scopus): 5

### **Congress and Symposium Activities**

4th International Conference on Engineering and Natural Sciences (ICENS 2018), Working Group, Kyyiv, Ukraine, 2018 Fifth International Conference on Advances in Civil, Structural and Environmental Engineering - ACSEE 2017, Attendee, Roma. Italy. 2017

International Conference on Advances in Civil, Structural and Environmental Engineering (ACSEE 2017), Working Group, Rome, Italy, 2017

Vienna Congress on Recent Advances in Earthquake Engineering and Structural Dynamics (VEESD), Working Group, Vienna, Austria, 2013

Eleventh International Conference on Computational Structures Technology (CST 2012), Working Group, Dubrovnik,