

Asst. Prof. Rafet ŞİŞMAN

Personal Information

Office Phone: [+90 212 383 5349](tel:+902123835349) Extension: 5349

Email: rafet@yildiz.edu.tr

Web: <https://avesis.yildiz.edu.tr/rafet>

International Researcher IDs

ScholarID: dze-vFgAAAAJ

ORCID: 0000-0002-2699-0255

Publons / Web Of Science ResearcherID: AAG-2967-2020

ScopusID: 57190228526

Yoksis Researcher ID: 216173

Education Information

Doctorate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Turkey 2015 - 2021

Postgraduate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, İnşaat Mühendisliği Anabilimdalı, Turkey 2014 - 2015

Undergraduate, Yildiz Technical University, Faculty Of Civil Engineering, Civil Engineering Department, Turkey 2011 - 2014

Foreign Languages

English, C2 Mastery

Dissertations

Doctorate, Comparative Study of the Interaction of Buried Structures with Ground and Superstructure using Different Approaches, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, 2020

Postgraduate, A system development for large scale soil model generation and earthquake hazard simulation, Yıldız Teknik Üniversitesi, Graduate School of Natural and Applied Sciences, İnşaat Mühendisliği Anabilimdalı, 2015

Research Areas

Civil Engineering, Structure, Earthquake Engineering, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Yildiz Technical University, Faculty Of Civil Engineering, Civil Engineering Department, 2023 - Continues

Researcher, University of California, Los Angeles, Henry Samueli School of Engineering and Applied Science, Department of Civil and Environmental Engineering, 2022 - 2023

Lecturer, Yildiz Technical University, Faculty Of Civil Engineering, Civil Engineering Department, 2018 - 2023

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Characteristics of torsional ground motions obtained for Turkey and their appraisal against Eurocode 8**
ŞİŞMAN R., Taciroglu E.
Bulletin of Earthquake Engineering, vol.22, no.5, pp.2353-2373, 2024 (SCI-Expanded)
- II. **Determination and Evaluation of Local Site Factors in Zeytinburnu, Istanbul, Turkey: A Scenario-Based Study**
Şişman R.
Arabian Journal for Science and Engineering, vol.47, no.10, pp.13009-13020, 2022 (SCI-Expanded)
- III. **Dynamic interaction effects of buried structures on seismic response of surface structures**
Şişman R., Ayvaz Y.
Earthquakes and Structures, vol.19, no.1, pp.1-16, 2020 (SCI-Expanded)
- IV. **Automatic 3D soil model generation for southern part of the European side of Istanbul based on GIS database**
ŞİŞMAN R., ŞAHİN A., HORI M.
GEOMECHANICS AND ENGINEERING, vol.13, no.6, pp.893-906, 2017 (SCI-Expanded)
- V. **Development of integrated earthquake simulation system for Istanbul**
Sahin A., Sisman R., Askan A., Hori M.
EARTH PLANETS AND SPACE, vol.68, 2016 (SCI-Expanded)

Articles Published in Other Journals

- I. **An Educational Tool for Observing Seismic Behavior of 3D Frame Structures**
ŞİŞMAN R., ŞAHİN A.
Sigma Mühendislik ve Fen Bilimleri Dergisi, pp.119-128, 2015 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **Comparative Modelling of Soil – Underground Structure – Surface Structure Interactions**
ŞİŞMAN R., AYVAZ Y.
International Civil Engineering and Architecture Conference 2019, Trabzon, Turkey, 17 April 2019, vol.1, pp.1756-1762
- II. **Spectral Amplifications of Ground Surface Responses in the Vicinity of Underground Structures**
UZUN S., ŞİŞMAN R., AYVAZ Y.
International Civil Engineering and Architecture Conference 2019, Trabzon, Turkey, 17 April 2019, vol.1, pp.1631-1640
- III. **Variation of Rocking Response of Buried Box Culverts under Seismic Loading**
UZUN S., ŞİŞMAN R., AYVAZ Y.
International Civil Engineering and Architecture Conference 2019, Trabzon, Turkey, 17 April 2019, vol.1, pp.1641-1649
- IV. **Effect of Mass Ratio on Racking Ratios of Underground Structures under Seismic Loading**
ŞİŞMAN R., AYVAZ Y.
International Civil Engineering and Architecture Conference 2019, Trabzon, Turkey, 17 April 2019, vol.1, pp.1748-1755
- V. **A Parametric Study on the Amplification Effect of Buried Box Culverts on Seismic Site Response**

under Linear Elastic Soil Conditions

ŞİŞMAN R.

13th INTERNATIONAL CONGRESS ON ADVANCES IN CIVIL ENGINEERING, İzmir, Turkey, 12 September 2018, pp.159

VI. LINEAR AND NONLINEAR SITE RESPONSE ANALYSIS BY USING DISCRETE TIME FILTERS

ŞİŞMAN R., ŞAFAK E., ŞAHİN A.

THE FOURTH INTERNATIONAL CONFERENCE ON EARTHQUAKE ENGINEERING AND SEISMOLOGY, Eskişehir, Turkey, 11 October 2017, pp.128

VII. New Educational Matlab Tool to Explain Two Dimensional Finite Element Method to Graduate Students

Sisman R.

VII European Congress on Computational Methods in Applied Sciences and Engineering, 01 June 2016

VIII. An Investigation on Effect of Subgrade Reaction Modulus of Soil on Natural Period of Low Rise Buildings

Sisman R.

VII European Congress on Computational Methods in Applied Sciences and Engineering, 01 June 2016

Supported Projects

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

Metrics

Publication: 14

Citation (WoS): 9

Citation (Scopus): 6

H-Index (WoS): 1

H-Index (Scopus): 1