

Asst. Prof. OKAN İLHAN

Personal Information

Office Phone: [+90 312 906 2279](tel:+903129062279)

Web: <https://avesis.aybu.edu.tr/100315>

International Researcher IDs

ScholarID: oTLxtYkAAAAJ

ORCID: 0000-0003-1276-7930

Publons / Web Of Science ResearcherID: ABH-3780-2020

Yoksis Researcher ID: 222118

Education Information

Doctorate, University of Illinois at Urbana-Champaign, The Grainger College of Engineering, Civil and Environmental Engineering, United States Of America 2016 - 2020

Postgraduate, Bogazici University, Kandilli Observatory And Earthquake Research Institute, Department Of Earthquake Engineering, Turkey 2010 - 2015

Undergraduate, Dokuz Eylul University, Mühendislik Fakültesi, İnşaat Mühendisliği Bölümü, Turkey 2005 - 2010

Dissertations

Doctorate, Conventional and deep learning-based site amplification models for Central and Eastern North America, University of Illinois at Urbana-Champaign, Engineering Faculty, Civil and Environmental Engineering, 2020

Postgraduate, MICROZONATION WITH RESPECT TO RAINFALL – INDUCED LANDSLIDES, Bogazici University, Kandilli Observatory And Earthquake Research Institute, Department Of Earthquake Engineering, 2015

Research Areas

Geotechnical, Soil Dynamics

Academic Titles / Tasks

Assistant Professor, Ankara Yildirim Beyazit University, Mühendislik ve Doğa Bilimleri Fakültesi, İnşaat Mühendisliği, 2021 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

- I. Local site effects at the selected stations affected by the February 6 2023 Türkiye Earthquake Sequences**
İLHAN O., İndir O., MURATOĞLU G., İçen A., Albayrak K., SANDIKKAYA M. A., ASKAN GÜNDOĞAN A., Arduino P., Taciroğlu E.
Soil Dynamics and Earthquake Engineering, vol.178, 2024 (SCI-Expanded)
- II. Simulated site amplification for Central and Eastern North America: Data set development and**

amplification models

İLHAN O., Hashash Y. M., Stewart J. P., Rathje E. M., Nikolaou S., Campbell K. W.
Earthquake Spectra, vol.40, no.1, pp.200-229, 2024 (SCI-Expanded)

- III. **Sediment thickness map of United States Atlantic and Gulf Coastal Plain Strata, and their influence on earthquake ground motions**
Boyd O. S., Churchwell D., Moschetti M. P., Thompson E. M., Chapman M. C., İLHAN O., Pratt T. L., Ahdi S. K., Rezaeian S.
Earthquake Spectra, vol.40, no.1, pp.89-112, 2024 (SCI-Expanded)
- IV. **Field reconnaissance and observations from the February 6, 2023, Turkey earthquake sequence**
Ozkula G., Dowell R. K., Baser T., Lin J., Numanoglu O. A., İLHAN O., Olgun C. G., Huang C., Uludag T. D.
Natural Hazards, vol.119, no.1, pp.663-700, 2023 (SCI-Expanded)
- V. **Simulation-based site amplification model for shallow bedrock sites in Korea**
Aaqib M., Park D., Adeel M. B., Hashash Y. M. A., İlhan O.
Earthquake Spectra, vol.37, no.3, pp.1900-1930, 2021 (SCI-Expanded)
- VI. **Application of empirical and simulation-based site amplification models for Central and Eastern North America to selected sites**
Hashash Y. M., İlhan O., Uysal H., Stewart J. P., Nikolaou S., Rathje E. M., Campbell K. W., Silva W. J.
Earthquake Spectra, vol.37, no.1_suppl, pp.1516-1533, 2021 (SCI-Expanded)
- VII. **Nonlinear site amplification model for ergodic seismic hazard analysis in Central and Eastern North America**
Hashash Y. M. A., İlhan O., Harmon J. A., Parker G. A., Stewart J. P., Rathje E. M., Campbell K. W., Silva W. J.
Earthquake Spectra, vol.36, no.1, pp.69-86, 2020 (SCI-Expanded)
- VIII. **Significance of site natural period effects for linear site amplification in central and eastern North America: Empirical and simulation-based models**
Hashash Y. M. A., İlhan O., Hassani B., Atkinson G. M., Harmon J., Shao H.
Earthquake Spectra, vol.36, no.1, pp.87-110, 2020 (SCI-Expanded)
- IX. **Site amplification functions for central and eastern North America – Part I: Simulation data set development**
Harmon J., Hashash Y. M., Stewart J. P., Rathje E. M., Campbell K. W., Silva W. J., Xu B., Musgrove M., İlhan O.
Earthquake Spectra, vol.35, no.2, pp.787-814, 2019 (SCI-Expanded)
- X. **Site amplification functions for central and eastern North America – Part II: Modular simulation-based models**
Harmon J., Hashash Y. M., Stewart J. P., Rathje E. M., Campbell K. W., Silva W. J., İlhan O.
Earthquake Spectra, vol.35, no.2, pp.815-847, 2019 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

- I. **İzmir Güney Sahili Zemin Büyütmesi ve Sıvılaşma Direncinin Zemin Tepki Analizleri ile Değerlendirilmesi**
İlhan O.
18. Ulusal Zemin Mekaniği ve Geoteknik Mühendisliği Konferansı, Kayseri, Turkey, 29 - 30 September 2022, pp.741-750
- II. **Simulation-based Site Amplification Factors for Medium Stiff-to-Stiff Sites in Southern Coast of Izmir City**
İlhan O., Zülfikar A. C.
3rd EUROPEAN CONFERENCE ON EARTHQUAKE ENGINEERING & SEISMOLOGY, Bucuresti, Romania, 4 - 09 September 2022, pp.2185-2192
- III. **The Development of VS Profile Database for Large-Scale Site Response Analyses: An Application to Izmir and Kocaeli**
Eroğlu K. N., İndir O., İlhan O.

6th Engineers of Future International Student Symposium, Zonguldak, Turkey, 1 - 02 July 2022, pp.274-281

- IV. **Performance of NGA-East GMMs and Site Amplification Models Relative to CENA Ground Motions**
Ramos-Sepulveda M., Parker G., Li M., İLHAN O., Hashash Y., Rathje E., Stewart J.
12th National Conference on Earthquake Engineering, NCEE 2022, Utah, United States Of America, 27 June - 01 July 2022
- V. **Application of Deep Learning Technique for Site Amplification at Central and Eastern North America**
İlhan O., Hashash Y. M. A., Stewart J. P., Rathje E. M., Nikolaou S.
The 6th IASPEI / IAEE International Symposium: Effects of Surface Geology on Seismic Motion, Kyoto, Japan, 30 August - 01 September 2021
- VI. **Deep learning-based site amplification models for central and eastern north America**
İlhan O., Harmon J. A., Numanoglu Ö. A., Hashash Y. M. A.
International Conference on Earthquake Geotechnical Engineering, Rome, Italy, 17 - 20 June 2019, pp.2980-2987
- VII. **Development of a United States Community Shear Wave Velocity Profile Database**
Ahdi S. K., Sadiq S., İlhan O., Bozorgnia Y., Hashash Y. M. A., Kwak D. Y., Park D., Yong A., Stewart J. P.
5th Geotechnical Earthquake Engineering and Soil Dynamics Conference: Seismic Hazard Analysis, Earthquake Ground Motions, and Regional-Scale Assessment, GEESDV 2018, Texas, United States Of America, 10 - 13 June 2018, vol.2018-June, pp.330-339
- VIII. **Modelling of Site Amplification via Large Scale Nonlinear Simulations with Applications to North America**
Hashash Y. M. A., Harmon J., İlhan O., Stewart J. P., Rathje E. M., Campbell K. W., Silva W. J., Goulet C. A.
5th Geotechnical Earthquake Engineering and Soil Dynamics Conference: Seismic Hazard Analysis, Earthquake Ground Motions, and Regional-Scale Assessment, GEESDV 2018, Texas, United States Of America, 10 - 13 June 2018, vol.2018-June, pp.523-537
- IX. **An Approach for Quantifying the Effect of Rainfall Infiltration on Slope Stability**
İlhan O., Tönük G., Ansal M. A.
Zemin Mekanigi ve Temel Muhendisligi 15. Ulusal Kongresi, Ankara, Turkey, 16 - 17 October 2014, pp.505-514
- X. **Real-Time Earthquake Damage Assessment of Buried Gas Pipelines**
İlhan O., Zülfikar A. C.
Second European Conference on Earthquake Engineering and Seismology, İstanbul, Turkey, 25 - 29 August 2014, pp.4819-4830

Metrics

Publication: 20

Citation (Scopus): 94

H-Index (Scopus): 5