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Research Areas

Civil Engineering, Geotechnical, Engineering and Technology

Academic Titles / Tasks

Research Assistant, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2013 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **The role of site effects on elevated seismic demands and corollary structural damage during the October 30, 2020, M7.0 Samos Island (Aegean Sea) Earthquake**
Çetin K. Ö., Papadimitriou A. G., Altun S., Pelekis P., Unutmaz B., Rovithis E., Akgün M., Klimis N., Askan Gündoğan A., Ziotopoulou K., et al.
BULLETIN OF EARTHQUAKE ENGINEERING, vol.20, no.14, pp.7763-7792, 2022 (SCI-Expanded)
- II. **Geotechnical reconnaissance findings of the October 30 2020, Mw7.0 Samos Island (Aegean Sea) earthquake**
Ziotopoulou K., ÇETİN K. Ö., Pelekis P., Altun S., Klimis N., SEZER A., Rovithis E., YILMAZ M. T., Papadimitriou A. G., GÜLERCE Z., et al.
Bulletin of Earthquake Engineering, vol.20, no.14, pp.7819-7852, 2022 (SCI-Expanded)
- III. **Predictive performance of current ground motion models for recorded strong motions in 2020 Samos Earthquake**
GÜLERCE Z., Akbaş B., ÖZACAR A. A., Sopacı E., Önder F. M., UZEL B., CAN G., ÇAKIR E., ILGAÇ M., SÖYLEMEZ B., et al.
SOIL DYNAMICS AND EARTHQUAKE ENGINEERING, vol.152, 2022 (SCI-Expanded)
- IV. **The site effects in Izmir Bay of October 30 2020, M7.0 Samos Earthquake**
ÇETİN K. Ö., ALTUN S., ASKAN GÜNDOĞAN A., AKGÜN M., SEZER A., KINCAL C., ÖZDAĞ Ö. C., İpek Y., UNUTMAZ B., GÜLERCE Z., et al.
SOIL DYNAMICS AND EARTHQUAKE ENGINEERING, vol.152, 2022 (SCI-Expanded)
- V. **Geotechnical aspects of reconnaissance findings after 2020 January 24th, M6.8 Sivrice–Elazig–Turkey earthquake**
ÇETİN K. Ö., ÇAKIR E., ILGAÇ M., CAN G., SÖYLEMEZ B., Elsaid A., Cuceoglu F., GÜLERCE Z., ASKAN GÜNDOĞAN A.,

Aydin S., et al.

Bulletin of Earthquake Engineering, vol.19, no.9, pp.3415-3459, 2021 (SCI-Expanded)

- VI. **Probabilistic assessments of void ratio limits and their range for cohesionless soils**
ÇETİN K. Ö., ILGAÇ M.
SOIL DYNAMICS AND EARTHQUAKE ENGINEERING, vol.142, 2021 (SCI-Expanded)
- VII. **Next-generation liquefaction database**
Brandenberg S. J., Zimmaro P., Stewart J. P., Kwak D. Y., Franke K. W., Moss R. E. S., ÇETİN K. Ö., CAN G., ILGAÇ M., Stamatakos J., et al.
EARTHQUAKE SPECTRA, vol.36, no.2, pp.939-959, 2020 (SCI-Expanded)
- VIII. **SPT-based probabilistic and deterministic assessment of seismic soil liquefaction triggering hazard**
ÇETİN K. Ö., Seed R. B., Kayen R. E., Moss R. E. S., Bilge H. T., ILGAÇ M., Chowdhury K.
SOIL DYNAMICS AND EARTHQUAKE ENGINEERING, vol.115, pp.698-709, 2018 (SCI-Expanded)
- IX. **Examination of differences between three SPT-based seismic soil liquefaction triggering relationships**
ÇETİN K. Ö., Seed R. B., Kayen R. E., Moss R. E. S., Bilge H. T., ILGAÇ M., Chowdhury K.
SOIL DYNAMICS AND EARTHQUAKE ENGINEERING, vol.113, pp.75-86, 2018 (SCI-Expanded)

Articles Published in Other Journals

- I. **A dataset on void ratio limits and their range for cohesionless soils**
ILGAÇ M., CAN G., ÇETİN K. Ö.
DATA IN BRIEF, vol.27, 2019 (ESCI)
- II. **Dataset on SPT-based seismic soil liquefaction**
ÇETİN K. Ö., Seed R. B., Kayen R. E., Moss R. E. S., Bilge H. T., ILGAÇ M., Chowdhury K.
DATA IN BRIEF, vol.20, pp.544-548, 2018 (ESCI)
- III. **The use of the SPT-based seismic soil liquefaction triggering evaluation methodology in engineering hazard assessments**
ÇETİN K. Ö., Seed R. B., Kayen R. E., Moss R. E. S., Bilge H. T., ILGAÇ M., Chowdhury K.
METHODSX, vol.5, pp.1556-1575, 2018 (ESCI)

Books & Book Chapters

- I. **Preliminary Report on Engineering and Geological Effects of the January 24, 2020 Magnitude 6.7 Earthquake in Elazığ, Turkey**
ÇETİN K. Ö., ILGAÇ M., CAN G., ÇAKIR E., SÖYLEMEZ B.
GEER, 2020
- II. **Geotechnical Reconnaissance Findings**
ÇETİN K. Ö., Ziotopoulou K., Mylonakis G., Klimis N., YILMAZ M. T., GÜLERCE Z., CAN G., ILGAÇ M., ÇAKIR E., SÖYLEMEZ B., et al.
in: Seismological and Engineering Effects of the M 7.0 Samos Island (Aegean Sea) Earthquake, K. Onder Cetin, George Mylonakis, Anastasios Sextos, Jonathan P. Stewart, Editor, GEER, pp.179-224, 2020
- III. **Site Effects**
ÇETİN K. Ö., Papadimitriou A., Mylonakis G., Ziotopoulou K., ASKAN GÜNDOĞAN A., ILGAÇ M., CAN G., ÇAKIR E., SÖYLEMEZ B., Elsaid A., et al.
in: Seismological and Engineering Effects of the M 7.0 Samos Island (Aegean Sea) Earthquake, K. Onder Cetin, George Mylonakis, Anastasios Sextos, Jonathan P. Stewart, Editor, GEER, pp.160-178, 2020

Refereed Congress / Symposium Publications in Proceedings

- I. **Updated SPT-Based Seismic Soil Liquefaction Triggering Global Database**
ILGAÇ M., ÇETİN K. Ö., Kayen R. E.
GeoCongress on State of the Art and Practice in Geotechnical Engineering, Charlottetown, Canada, 20 - 23 March 2022, vol.334, pp.308-317
- II. **An Updated Shear Wave Velocity-Based Seismic Soil Liquefaction Triggering Database**
ILGAÇ M., Kayen R. E., Wood C., ÇETİN K. Ö.
GeoCongress on State of the Art and Practice in Geotechnical Engineering, Charlottetown, Canada, 20 - 23 March 2022, vol.334, pp.318-328
- III. **A Critical Review of Void Ratio Relationships for Granular Soils**
Ilgaç M., Çetin K. Ö.
3rd Session on Modeling, Geomaterials, and Site Characterization at Geo-Congress on Vision, Insight, Outlook, Minnesota, United States Of America, 25 - 28 February 2020, pp.407-416
- IV. **Quality control for next-generation liquefaction case histories**
Zimmaro P., Brandenburg S., Bozorgnia Y., Stewart J., Kwak D., Çetin K. Ö., Can G., Ilgaç M., Franke K., Moss R., et al.
7th International Conference on Earthquake Geotechnical Engineering, ICEGE 2019, Rome, Italy, 17 - 20 January 2019, pp.5905-5912
- V. **Vaka Analizi: Bir Hafif Rayli Sistemi İlave Araçlara Ait Depolama Tesisinin Geoteknik Değerlendirmesi**
ÇETİN K. Ö., CAN G., ILGAÇ M.
3. Uluslararası Zemin-Yapı Etkileşimi Sempozyumu, 18 - 20 October 2017
- VI. **Vaka Analizi: Bir Metro İstasyonu Viyadük Geçiş Projesinin Sismik Zemin - Kazikli Radye Temel Etkileşimi Değerlendirmesi**
ÇETİN K. Ö., ILGAÇ M., CAN G.
4. Uluslararası Deprem Mühendisliği ve Sismoloji Konferansı, 11 - 13 October 2017
- VII. **SPT Based Seismic Soil Liquefaction Triggering Assessment**
ÇETİN K. Ö., ILGAÇ M.
XIIth International Conference on Advances in Civil Engineering, 21 - 23 September 2016
- VIII. **Comparative Assessment of Seismic Soil Liquefaction Triggering Relationships.**
ILGAÇ M., TOLGA B., ÇETİN K. Ö.
6th Geotechnical Symposium, Cukurova University, Adana, Turkey, 23 - 25 November 2015
- IX. **Case Study: Describing and Avoiding a Deep Landslide with Instrumental Methods**
ÇETİN K. Ö., DAMLA GAYE O., ILGAÇ M., FURKAN G.
15th National Congress on Soil Mechanics and Foundation Engineering, Turkey, 21 - 15 October 2014

Other Publications

- I. **24 January 2020, Sivrice-Elazığ-Turkey Earthquake Reconnaissance Report**
Çetin K. Ö., Ilgaç M., Can G., Çakır E., Söylemez B.
Technical Report, pp.1, 2020

Metrics

Publication: 26

Citation (WoS): 149

Citation (Scopus): 143

H-Index (WoS): 6

H-Index (Scopus): 6

Invited Talks

Wednesday Series, Seminar, University of California, Berkeley, United States Of America, April 2019

Scholarships

TUBITAK 2214, TUBITAK, 2018 - 2019