Assoc. Prof. MUSTAFA ABDULLAH SANDIKKAYA

Personal Information

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International Researcher IDs
ScholarID: HUu9uPgAAAAJ&hl=tr
Publons / Web Of Science ResearcherID: N-7898-2018
Yoksis Researcher ID: 164027

Education Information

Doctorate, Université Joseph-Fourier: Grenoble I, Ecole Doctorale Terre Univers Environnement, Institut Des Sciences De La Terre, France 2010 - 2014
Doctorate, Middle East Technical University, Fen Bilimleri, İnşaat Mühendisliği Bölümü, Turkey 2008 - 2014
Postgraduate, Middle East Technical University, Fen Bilimleri, İnşaat Mühendisliği Bölümü, Turkey 2005 - 2008
Undergraduate, Middle East Technical University, Faculty Of Engineering, Department Of Civil Engineering, Turkey 2001 - 2005

Foreign Languages

English, C1 Advanced
French, A1 Beginner

Dissertations

Postgraduate, Site classification of Turkish national strong-motion recording sites, Orta Doğu Teknik Üniversitesi, Risk Analizi A.B.D., İnşaat Mühendisliği (Yl) (Tezli), 2008

Research Areas

Civil Engineering, Geotechnical, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Hacettepe University, Mühendislik Fakültesi, İnşaat Mühendisliği Bölümü, 2018 - Continues
Assistant Professor, Hacettepe University, Mühendislik Fakültesi, İnşaat Mühendisliği Bölümü, 2015 - 2018
Research Assistant, Middle East Technical University, Faculty Of Engineering, Department Of Civil Engineering, 2006 - 2012

Courses

SOIL MECHANICS LABORATORY, Undergraduate, 2016 - 2017
MATERIALS SCIENCE, Undergraduate, 2016 - 2017

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., Indır 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. **A simulation-based regional ground-motion model for Western Turkiye**
SANDIKKAYA M. A., Akkar S., Kale Ö., Yenier E.
Bulletin of Earthquake Engineering, vol.21, no.7, pp.3221-3249, 2023 (SCI-Expanded)

III. **Region Specific Ground-Motion Predictive Models for Shallow Active Regions**
İçen A., SANDIKKAYA M. A.
Journal of Earthquake Engineering, vol.27, no.15, pp.4449-4468, 2023 (SCI-Expanded)

IV. **A procedure to develop a backbone ground-motion model: A case study for its implementation**
Akkar S., Kale O., SANDIKKAYA M. A., Yenier E.
EARTHQUAKE SPECTRA, vol.37, no.4, pp.2523-2544, 2021 (SCI-Expanded)

V. **Impact of rupture-plane uncertainty on earthquake hazard: observations from the 30 october 2020 Samos earthquake**
Akkar S., Caglar N. M., Kale O., Yazgan U., SANDIKKAYA M. A.
BULLETIN OF EARTHQUAKE ENGINEERING, vol.19, no.7, pp.2739-2761, 2021 (SCI-Expanded)

VI. **A probabilistic procedure to describe site amplification factors for seismic design codes**
SANDIKKAYA M. A., Akkar S., Bard P.
SOIL DYNAMICS AND EARTHQUAKE ENGINEERING, vol.126, 2019 (SCI-Expanded)

VII. **On linear site amplification behavior of crustal and subduction interface earthquakes in Japan: (1) regional effects, (2) best proxy selection**
SANDIKKAYA M. A.
BULLETIN OF EARTHQUAKE ENGINEERING, vol.17, no.1, pp.119-139, 2019 (SCI-Expanded)

VIII. **A model for predicting vertical component peak ground acceleration (PGA), peak ground velocity (PGV), and 5% damped pseudospectral acceleration (PSA) for Europe and the Middle East**
Cagnan Z., Akkar S., Kale O., Sandikkaya A.
BULLETIN OF EARTHQUAKE ENGINEERING, vol.15, no.7, pp.2617-2643, 2017 (SCI-Expanded)

IX. **Cumulative absolute velocity, Arias intensity and significant duration predictive models from a pan-European strong-motion dataset**
SANDIKKAYA M. A., Akkar S.
BULLETIN OF EARTHQUAKE ENGINEERING, vol.15, no.5, pp.1881-1898, 2017 (SCI-Expanded)

X. **BSHAP project strong ground motion database and selection of suitable ground motion models for the Western Balkan Region**
SALIC R., SANDIKKAYA M. A., MILUTINOVIC Z., GÜLERCE Z., DUNI L., KOVACEVIC V., MARKUSIC S., MIHALJEVIC J., KUKA N., KALUDJEROVIC N., et al.
BULLETIN OF EARTHQUAKE ENGINEERING, vol.15, no.4, pp.1319-1343, 2017 (SCI-Expanded)

XI. **Reply to "Comment to BSHAP project strong ground motion database and selection of suitable ground motion models for the Western Balkan Region" by Carlo Cauzzi and Ezio Faccioli**
Salic R., SANDIKKAYA M. A., Milutinovic Z., GÜLERCE Z., Duni L., Kovacevic V., Markusic S., Mihaljevic J., Kuka N., Kaludjerovic N., et al.
BULLETIN OF EARTHQUAKE ENGINEERING, vol.15, no.4, pp.1349-1353, 2017 (SCI-Expanded)

XII. **Testing probabilistic seismic hazard estimates against accelerometric data in two countries: France and Turkey**

TASAN H., BEAUVAL C., HELMSTETTER A., Sandikkaya A., GUEGUEN P.
GEOPHYSICAL JOURNAL INTERNATIONAL, vol.198, no.3, pp.1554-1571, 2014 (SCI-Expanded)

XIII. **Comparisons among the five ground-motion models developed using RESORCE for the prediction of response spectral accelerations due to earthquakes in Europe and the Middle East**
DOUGLAS J., Akkar S., AMERI G., BARD P., BINDI D., BOMMER J. J., BORA S. S., COTTON F., DERRAS B., HERMKES M., et al.
BULLETIN OF EARTHQUAKE ENGINEERING, vol.12, no.1, pp.341-358, 2014 (SCI-Expanded)

XIV. **Empirical ground-motion models for point- and extended-source crustal earthquake scenarios in Europe and the Middle East**
Akkar S., Sandikkaya M. A., BOMMER J. J.
BULLETIN OF EARTHQUAKE ENGINEERING, vol.12, no.1, pp.359-387, 2014 (SCI-Expanded)

XV. **Compatible ground-motion prediction equations for damping scaling factors and vertical-to-horizontal spectral amplitude ratios for the broader Europe region**
Akkar S., Sandikkaya M. A., AY B. Ö.
BULLETIN OF EARTHQUAKE ENGINEERING, vol.12, no.1, pp.517-547, 2014 (SCI-Expanded)

XVI. **Reference database for seismic ground-motion in Europe (RESORCE)**
Akkar S., Sandikkaya M. A., SENYURT M., Sisi A. A., AY B. Ö., TRAVERSA P., DOUGLAS J., COTTON F., LUZI L., HERNANDEZ B., et al.
BULLETIN OF EARTHQUAKE ENGINEERING, vol.12, no.1, pp.311-339, 2014 (SCI-Expanded)

XVII. **A Nonlinear Site-Amplification Model for the Next Pan-European Ground-Motion Prediction Equations**
Sandikkaya M. A., Akkar S., BARD P.
BULLETIN OF THE SEISMOLOGICAL SOCIETY OF AMERICA, vol.103, no.1, pp.19-32, 2013 (SCI-Expanded)

XVIII. **Toward a ground-motion logic tree for probabilistic seismic hazard assessment in Europe**
DELAVAUD E., COTTON F., Akkar S., SCHERBAUM F., DANCIU L., BEAUVAL C., DROUET S., DOUGLAS J., BASILI R., Sandikkaya M. A., et al.
JOURNAL OF SEISMOLOGY, vol.16, no.3, pp.451-473, 2012 (SCI-Expanded)

XIX. **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., ERBERİK M. A., GÜLERCE Z., Gulkan P., KALKAN E., et al.
SEISMOLOGICAL RESEARCH LETTERS, vol.82, no.1, pp.42-58, 2011 (SCI-Expanded)

XX. **Site classification of Turkish national strong-motion stations**
Sandikkaya M. A., YILMAZ M. T., BAKIR B. S., YILMAZ O.
JOURNAL OF SEISMOLOGY, vol.14, no.3, pp.543-563, 2010 (SCI-Expanded)

XXI. **The recently compiled Turkish strong motion database: preliminary investigation for seismological parameters**
Akkar S., Cagnan Z., Yenier E., Erdogan O., Sandikkaya M. A., Gulkan P.
JOURNAL OF SEISMOLOGY, vol.14, no.3, pp.457-479, 2010 (SCI-Expanded)

Articles Published in Other Journals

I. **A Site Amplification Model for Crustal Earthquakes**
SANDIKKAYA M. A., Dinsever L. D.
GEOSCIENCES, vol.8, no.7, 2018 (ESCI)

Supported Projects

SANDIKKAYA M. A., TUBITAK Project, Doğrusal olmayan zemin büyütme davranışının ve bölgesel farklılıkların yer

hareketi ve değişkenliği üzerindekietkisinin belirlenmesi, 2017 - Continues
SANDIKKAYA M. A., Project Supported by Higher Education Institutions, Swiss PSHA Workshop Katılımı, 2017 - 2018
SANDIKKAYA M. A., Project Supported by Higher Education Institutions, SERA Projesi Avrupa için Zemin Büyütme Modeli Geliştirilmesi Toplantısı, 2017 - 2017
SANDIKKAYA M. A., Project Supported by Higher Education Institutions, EPOS Projesi Yer Hareketi Tahmin Denklemleri Çalıştayı, 2016 - 2016
SANDIKKAYA M. A., Project Supported by Higher Education Institutions, Öğretim Üyeliğine Geçiş Desteği Projesi, 2015 - 2016
SANDIKKAYA M. A., Project Supported by Higher Education Institutions, Pan-Avrupa bölgesi için Arias şidddeti, kümülatif mutlak hız ve ayraçlanmış süre tayinine yönelik yer hareketi tahmin denklemi geliştirme projesi, 2015 - 2016
TUBITAK Project, 105G016 Ulusal Kuvvetli Yer Hareketi Şebekesi Veri Tabanının Uluslararası Ölçütlere Göre Derlenmesi, 2005 - 2009

Metrics

Publication: 22
Citation (WoS): 710
Citation (Scopus): 637
H-Index (WoS): 10
H-Index (Scopus): 10

Non Academic Experience

TUBİTAK - TEYDEB