

## Res. Asst. FEZAYİL SUNCA

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: AAH-7542-2020

ScopusID: 57193331797

Yoksis Researcher ID: 60725

### Education Information

Doctorate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, İnşaat Mühendisliği (Dr), Turkey 2016 - Continues

Postgraduate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, İnşaat Mühendisliği, Turkey 2013 - 2016

Undergraduate, Gumushane University, Faculty Of Engineering And Natural Sciences, Department Of Civil Engineering, Turkey 2009 - 2013

### Dissertations

Postgraduate, Investigating Seismic Performance of The Semi-Rigid Connected Prefabricated Structures, Karadeniz Technical University, Mühendislik Fakültesi, İnşaat Mühendisliği, 2016

### Research Areas

Prefabrication, Buildings (industrial, commercial and public), Structural Engineering, Steel Structures, Performance of Constructed Facilities, Earthquake Engineering, Concrete Structures, Repair and Strengthening in Buildings

### Academic Titles / Tasks

Research Assistant, Sivas Cumhuriyet University, Mühendislik Fakültesi, İnşaat Mühendisliği, 2014 - Continues

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

- I. **Nondestructive Experimental Measurement, Model Updating, and Fatigue Life Assessment of carsamba Suspension Bridge**  
GÜNAYDIN M., SUNCA F., ALTUNIŞIK A. C. , Ergun M., OKUR F. Y.  
JOURNAL OF BRIDGE ENGINEERING, vol.27, no.2, 2022 (Peer-Reviewed Journal)
- II. **Post-Earthquake Damage Assessments of Historic Mosques and Effects of Near-Fault and Far-Fault Ground Motions on Seismic Responses**  
ALTUNIŞIK A. C. , SUNCA F., GENÇ A. F. , TAVŞAN C.

INTERNATIONAL JOURNAL OF ARCHITECTURAL HERITAGE, 2021 (Peer-Reviewed Journal)

- III. **Effects of Concrete Strength and Openings in Infill Walls on Blasting Responses of RC Buildings Subjected to TNT Explosive**  
ALTUNIŞIK A. C. , Onalan F., SUNCA F.  
IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY-TRANSACTIONS OF CIVIL ENGINEERING, vol.45, pp.2525-2554, 2021 (Peer-Reviewed Journal)
- IV. **Modal identification and fatigue behavior of Eynel steel arch highway bridge with calibrated models**  
SUNCA F., Ergun M., ALTUNIŞIK A. C. , GÜNAYDIN M., OKUR F. Y.  
JOURNAL OF CIVIL STRUCTURAL HEALTH MONITORING, 2021 (Peer-Reviewed Journal)
- V. **Optimal sensor placements for system identification of concrete arch dams**  
ALTUNIŞIK A. C. , SEVİM B., Sunca F., OKUR F. Y.  
ADVANCES IN CONCRETE CONSTRUCTION, vol.11, no.5, pp.397-407, 2021 (Peer-Reviewed Journal)
- VI. **Optimal Sensor Placement for Laminated Composite and Steel Cantilever Beams by the Effective Independence Method**  
SUNCA F., OKUR F. Y. , ALTUNIŞIK A. C. , KAHYA V.  
STRUCTURAL ENGINEERING INTERNATIONAL, vol.31, no.1, pp.85-92, 2021 (Peer-Reviewed Journal)
- VII. **Pushover analysis of prefabricated structures with various partial fixity rates**  
Akkose M., SUNCA F., TÜRKAY A.  
EARTHQUAKES AND STRUCTURES, vol.14, no.1, pp.21-32, 2018 (Peer-Reviewed Journal)

### Articles Published in Other Journals

- I. **Experimental, numerical and analytical investigation on blast response of brick walls subjected to TNT explosive**  
ALTUNIŞIK A. C. , ÖNALAN F., SUNCA F.  
Journal of Structural Engineering & Applied Mechanics, vol.4, no.1, pp.28-45, 2021 (Peer-Reviewed Journal)
- II. **BETONARME BİNALARIN DEPREM PERFORMANSLARINA DOLGU DUVARLARIN ETKİSİNİN İNCELENMESİ**  
ÇAVDAR Ö., KÖSE SUNCA G. Ç. , SUNCA F.  
Uludağ University Journal of The Faculty of Engineering, vol.25, no.1, pp.465-484, 2020 (Peer-Reviewed Journal)
- III. **1. Derece Deprem Bölgesinde, Aynı Yüksekliklere ve Farklı Dinamik Özelliklere Sahip Betonarme Binalar Arasındaki Çarpışma Davranışı**  
DERTLİ H. H. , SUNCA F., AKKÖSE M.  
Nevşehir Bilim ve Teknoloji Dergisi, vol.6, pp.362-370, 2017 (Peer-Reviewed Journal)
- IV. **1 Mayıs 2003 Bingöl Depreminde Yıkılmış Betonarme Üç Katlı Bir Okul Binasının Statik ve Dinamik Analizi**  
ÇAVDAR Ö., SUNCA F.  
Gümüşhane Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.4, no.1, pp.36, 2014 (Peer-Reviewed Journal)

### Refereed Congress / Symposium Publications in Proceedings

- I. **Betonarme Yapıların Sismik Davranışlarına Dolgu Duvarların Etkisinin İncelenmesi**  
ÇAVDAR Ö., Köse Sunca G. Ç. , SUNCA F.  
International Science and Engineering Applications Symposium on Hazards 2019 (ISESH2019), Karabük (TURKEY) in 25-27 September 2019., 25 - 27 October 2019
- II. **Experimental Investigation on Pounding Behavior of Adjacent RC Buildings Using Shaking Table Test**  
Sunca F., Altunışık A. C.  
Ulusal 7. Yapı Mekaniği Laboratuvarları Çalıştayı, Konya, Turkey, 4 - 05 October 2019, pp.79-84
- III. **POUNDING EFFECTS ON TORSION RESPONSE OF ADJACENT BUILDINGS SUBJECTED TO NEAR-FAULT**

## GROUND MOTIONS

SUNCA F., TÜRKAY A., ALTUNIŞIK A. C.

International Civil Engineering and Architecture Conference 2019, 17 - 20 April 2019

- IV. **Seismic Response of a Prefabricated Industrial Structure to Multiple Support Seismic Excitations**  
SUNCA F., AKKÖSE M.  
2nd International Conference on Civil and Environmental Engineering Symposium, Nevşehir, Turkey, 8 - 10 May 2017, pp.982-990
- V. **Seismic Performance of Semi-Rigid Connected Prefabricated Structures**  
AKKÖSE M., SUNCA F., TÜRKAY A.  
4th International Symposium on Innovative Technologies in Engineering and Science, Antalya, Turkey, 3 - 05 November 2016, pp.1592-1601
- VI. **Seismic Performance Evaluation of a Train Station Building Considering Earthquake-Induced Pounding Effects**  
SUNCA F., AKKÖSE M.  
4th International Symposium on Innovative Technologies in Engineering and Science, Antalya, Turkey, 3 - 05 November 2016, pp.1743-1751
- VII. **Evaluation of Seismic Performance of Semi-Rigid Connected Prefabricated Structures**  
SUNCA F., AKKÖSE M.  
The Sixth International Conference on Structural Engineering, Mechanics and Computation, Cape-Town, South Africa, 5 - 07 September 2016, pp.342-347
- VIII. **Effects of Near-Fault Ground Motions on Earthquake-Induced Pounding Response of RC Buildings with Plan Irregularity**  
AKKÖSE M., SUNCA F.  
The Sixth International Conference on Structural Engineering, Mechanics and Computation, Cape-Town, South Africa, 5 - 07 September 2016, pp.320-325
- IX. **Aynı Yüksekliğe Farklı Dinamik Özelliklere Sahip Betonarme Binaların Arasında Bırakılması Gereken Boşluk Miktarının İrdelenmesi**  
AKKÖSE M., SUNCA F.  
Prof. Dr. M. Hasan BODUROĞLU Sempozyumu, İstanbul, Turkey, 9 - 10 May 2016
- X. **Kısmi Bağlantılı Prefabrik Yapıların Statik İtme (Pushover) Analizi**  
SUNCA F., AKKÖSE M.  
2. Ulusal Yapı Kongresi ve Sergisi Yapı Üretimi, Kullanımı ve Koruma Süreçleri, Ankara, Turkey, 3 - 05 June 2015, pp.107-116
- XI. **Evaluation of Seismic Performance of Prefabricated Structures Using Pushover Analysis**  
SUNCA F., AKKÖSE M., TÜRKAY A.  
International Conference on Civil and Environmental Engineering Symposium, Nevşehir, Turkey, 20 - 23 May 2015, pp.1255-1260
- XII. **Investigation of Seismic Response of Semi-Rigid Connected Prefabricated Structures**  
SUNCA F., AKKÖSE M.  
International Burdur Earthquake and Environment Symposium, Burdur, Turkey, 7 - 09 May 2015

## Supported Projects

Altunışık A. C. , Ateş Ş., Kartal M. E. , Kahya V., Sevim B., Günaydın M., Başağa H. B. , Genç A. F. , Okur F. Y. , Sunca F., et al., Project Supported by Higher Education Institutions, Doğu Karadeniz Bölgesindeki Stratejik Öneme Sahip Mühendislik Yapıları İçin Yapı Sağlığı İzleme Ağının Kurulması ve Yenilikçi Yöntemlerin Geliştirilmesi, 2021 - 2023

Altunışık A. C. , Adanur S., Günaydın M., Sunca F., Project Supported by Higher Education Institutions, Experimental Investigation on the FRP Composite Material Strengthening Effect on Pounding Damages of Adjacent RC Buildings Using Shaking Table Test, 2021 - 2023

## **Metrics**

Publication: 23

Citation (WoS): 12

Citation (Scopus): 11

H-Index (WoS): 2

H-Index (Scopus): 2