

## Res. Asst. PhD HÜRMET KÜÇÜKGÖNCÜ

### Personal Information

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### International Researcher IDs

ORCID: 0000-0001-5148-8753

Publons / Web Of Science ResearcherID: ABJ-4453-2022

Yoksis Researcher ID: 43243

### Education Information

Doctorate, Erciyes University, Fen Bilimleri Enstitüsü, Civil Engineering, Turkey 2013 - 2018

Postgraduate, Erciyes University, Fen Bilimleri Enstitüsü, Civil Engineering, Turkey 2011 - 2013

Undergraduate Double Major, Erciyes University, Mühendislik Fakültesi, İnşaat Mühendisliği , Turkey 2007 - 2011

Undergraduate, Erciyes University, Mühendislik Fakültesi, Makina Mühendisliği, Turkey 2006 - 2010

### Foreign Languages

German, B1 Intermediate

### Dissertations

Doctorate, An experimental study of analyzing the seismic behaviorof strengthened three dimensional frame structure, Erciyes University, Fen Bilimleri Enstitüsü, Civil Engineering, 2018

Postgraduate, Detecting the damaged beams using Hilbert-Huang Transform, Erciyes University, Fen Bilimleri Enstitüsü, Civil Engineering, 2013

### Research Areas

Civil Engineering, Mechanical, Structural Mechanics, Building Dynamics, Structural Engineering, Earthquake Engineering, Concrete Structures, Repair and Strengthening in Buildings, Engineering and Technology

### Academic Titles / Tasks

Research Assistant PhD, Abdullah Gul University, Mühendislik Fakültesi, İnşaat Mühendisliği, 2018 - Continues

### Courses

Numerical Methods for Engineers, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019

AGU Ways II, Undergraduate, 2021 - 2022

Introduction to Seismic Base Isolation, Undergraduate, 2022 - 2023

Mechanics, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020

AGU Ways, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020

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

- I. **Comprehensive analysis of experimental and numerical results of bond strength and mechanical properties of fly ash based GPC and OPC concrete**  
Gül Aslanbay Y., Aslanbay H. H., Özbayrak A., Kucukgoncu H., Atas O.  
Construction and Building Materials, vol.416, 2024 (SCI-Expanded)
- II. **Determination of stress-strain relationship based on alkali activator ratios in geopolymers concretes and development of empirical formulations**  
Özbayrak A., Kucukgoncu H., Atas O., Aslanbay H. H., Aslanbay Y. G., Altun F.  
Structures, vol.48, pp.2048-2061, 2023 (SCI-Expanded)
- III. **Comprehensive experimental analysis of the effects of elevated temperatures in geopolymers concretes with variable alkali activator ratios**  
Özbayrak A., Küçükgöncü H., Aslanbay H. H., Gül Aslanbay Y., Ataş O.  
JOURNAL OF BUILDING ENGINEERING, vol.68, pp.1-24, 2023 (SCI-Expanded)
- IV. **One-Story Three-Dimensional Frame Structures Behavior Strengthened with External Shear Wall under Cyclic Loading: An Experimental Study**  
KÜÇÜKGÖNCÜ H., ALTUN F.  
JOURNAL OF EARTHQUAKE ENGINEERING, vol.26, no.14, pp.7384-7407, 2022 (SCI-Expanded)
- V. **The seismic behaviour of RC exterior shear walls used for strengthening of intact and damaged frames**  
Küçükgöncü H., Altun F.  
BULLETIN OF EARTHQUAKE ENGINEERING, vol.18, no.8, pp.3683-3709, 2020 (SCI-Expanded)
- VI. **Crack identification in beams using Hilbert transform, kurtosis and mode shape rotation deviation curve**  
Kucukgoncu H., AYDIN K.  
Inverse Problems in Science and Engineering, vol.21, no.8, pp.1392-1416, 2013 (SCI-Expanded)

### **Articles Published in Other Journals**

- I. **Analytical and experimental comparison of mechanical properties of unconfined concrete with TBDY 2018 and other models**  
Küçükgöncü H.  
Niğde Ömer Halisdemir Üniversitesi Mühendislik Bilimleri Dergisi, vol.12, no.2, pp.501-513, 2023 (Peer-Reviewed Journal)
- II. **An efficient algorithm for ogee spillway discharge with partially opened radial gates by the method of Design of Small Dams and comparison of current and previous methods**  
Haktanır T., Çitakoğlu H., Küçükgöncü H.  
The International Journal Of Engineering And Science (IJES), vol.5, no.7, pp.13-26, 2016 (Peer-Reviewed Journal)

### **Refereed Congress / Symposium Publications in Proceedings**

- I. **An Experimental Study Analyzing The Seismic Behaviour of Three Dimensional Frame Structure**  
Küçükgöncü H., Altun F.

3. INTERNATIONAL CONFERENCE ON CIVIL AND ENVIRONMENTAL ENGINEERING, İzmir, Turkey, 24 - 27 April 2018, vol.1, pp.423-431
- II. **GÜÇLENDİRİLMİŞ ÜÇ BOYUTLU ÇERÇEVE YAPI DEPREM DAVRANIŞININ DENEYSEL İNCELENMESİ**  
Küçükgöncü H., Altun F.  
6. Ulusal Yapı Mekaniği Laboratuvarları Toplantısı, Trabzon, Turkey, 17 - 18 November 2017, pp.59-60
- III. **Detecting Damages in Beams Using Hilbert-Huang Transform**  
Aydın K., Küçükgöncü H.  
10th International Congress on Advances in Civil Engineering, Ankara, Turkey, 17 - 19 October 2012, pp.1-10

## Supported Projects

Özbayrak A., Küçükgöncü H., Altun F., TUBITAK Project, Behavior and Strength of Structural Columns and Beams Produced of Fly Ash Based Geopolymer Concrete, 2021 - 2024  
Küçükgöncü H., Altun F., Project Supported by Higher Education Institutions, An Experimental Study of Analyzing the Seismic Behavior of Strengthened Three Dimensional Frame Structure, 2017 - 2018

## Metrics

Publication: 11  
Citation (Scopus): 34  
H-Index (Scopus): 3

## Scholarships

2228-B Yüksek Lisans Öğrencileri İçin Doktora Burs Programı, TUBITAK, 2013 - 2017