

## Assoc. Prof. Yıldırım Serhat ERDOĞAN

### Personal Information

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### International Researcher IDs

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### Education Information

Doctorate, Istanbul Technical University, İnşaat Mühendisliği, Mekanik, Turkey 2007 - 2013

Postgraduate, Istanbul Technical University, İnşaat Mühendisliği, Mekanik, Turkey 2005 - 2007

### Foreign Languages

English, C1 Advanced

### Research Areas

Civil Engineering, Mechanical, Structural Mechanics, Building Dynamics, Engineering and Technology

### Academic Titles / Tasks

Associate Professor, Yildiz Technical University, Faculty Of Civil Engineering, Civil Engineering Department, 2020 - Continues

Assistant Professor, Yildiz Technical University, Faculty Of Civil Engineering, Civil Engineering Department, 2018 - Continues

Assistant Professor, Yildiz Technical University, Faculty Of Civil Engineering, Civil Engineering Department, 2015 - 2018

Research Assistant, Istanbul Technical University, İnşaat Fakültesi, İnşaat Mühendisliği, 2009 - 2013

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

- I. **A computationally efficient method for optimum tuning of single-sided pounding tuned mass dampers for structural vibration control**  
ERDOĞAN Y. S., ADA M.  
International Journal of Structural Stability and Dynamics, vol.21, 2021 (SCI-Expanded)
- II. **A computer-vision based vibration transducer scheme for structural health monitoring applications**  
ERDOĞAN Y. S., ADA M.  
SMART MATERIALS AND STRUCTURES, vol.29, no.8, 2020 (SCI-Expanded)
- III. **Evaluation of Existing Damage Patterns and Seismic Assessment of Historical Davutpasa Barracks via Operational-Modal Analysis**

Gani E., ERDOĞAN Y. S., KOÇAK A.

Journal of Performance of Constructed Facilities, vol.34, no.4, 2020 (SCI-Expanded)

- IV. **A study on the crack detection in beams using linear and nonlinear normal modes**  
ERDOĞAN Y. S.  
ADVANCES IN STRUCTURAL ENGINEERING, vol.23, no.7, pp.1305-1321, 2020 (SCI-Expanded)
- V. **Seismic response of a highway bridge in case of vehicle-bridge dynamic interaction**  
Erdoğan Y. S., Çatbaş N.  
Earthquakes and Structures, vol.18, no.1, pp.1-14, 2020 (SCI-Expanded)
- VI. **Investigation of the Seismic Behavior of a Historical Masonry Minaret Considering the Interaction with Surrounding Structures**  
Erdoğan Y. S., Kocaturk T., Demir C.  
JOURNAL OF EARTHQUAKE ENGINEERING, vol.23, pp.112-140, 2019 (SCI-Expanded)
- VII. **Investigation of existing damage mechanism and retrofitting of Skeuophylakion under seismic loads**  
KOCATURK T., ERDOĞAN Y. S., DEMİR C., GOKCE A., ULUKAYA S., YÜZER N.  
ENGINEERING STRUCTURES, vol.137, pp.125-144, 2017 (SCI-Expanded)
- VIII. **Seismic analysis and investigation of damage mechanism of 57th infantry regiment memorial using finite-discrete element method**  
ERDOĞAN Y. S., Kocaturk T., DEMİR C.  
BULLETIN OF EARTHQUAKE ENGINEERING, vol.15, no.4, pp.1397-1424, 2017 (SCI-Expanded)
- IX. **Discrete and Continuous Finite Element Models and Their Calibration via Vibration and Material Tests for the Seismic Assessment of Masonry Structures**  
ERDOĞAN Y. S.  
INTERNATIONAL JOURNAL OF ARCHITECTURAL HERITAGE, vol.11, no.7, pp.1026-1045, 2017 (SCI-Expanded)
- X. **Earthquake behavior of M1 minaret of historical Sultan Ahmed Mosque (Blue Mosque)**  
Kocaturk T., Erdosgan Y. S.  
STRUCTURAL ENGINEERING AND MECHANICS, vol.59, no.3, pp.539-558, 2016 (SCI-Expanded)
- XI. **Investigation of Uncertainty Changes in Model Outputs for Finite-Element Model Updating Using Structural Health Monitoring Data**  
Erdogan Y. S., Gul M., Catbas F. N., Bakir P. G.  
JOURNAL OF STRUCTURAL ENGINEERING, vol.140, no.11, 2014 (SCI-Expanded)
- XII. **Structural identification (St-Id) using finite element models for optimum sensor configuration and uncertainty quantification**  
Erdogan Y. S., CATBAS F. N., Bakir P. G.  
FINITE ELEMENTS IN ANALYSIS AND DESIGN, vol.81, pp.1-13, 2014 (SCI-Expanded)
- XIII. **Evaluation of the different genetic algorithm parameters and operators for the finite element model updating problem**  
Erdogan Y. S., Bakir P. G.  
COMPUTERS AND CONCRETE, vol.11, no.6, pp.541-569, 2013 (SCI-Expanded)
- XIV. **DAMAGE IDENTIFICATION IN REINFORCED CONCRETE BEAMS BY FINITE ELEMENT MODEL UPDATING USING PARALLEL AND HYBRID GENETIC ALGORITHMS**  
Bakir P. G., Erdogan Y. S.  
INTERNATIONAL JOURNAL OF COMPUTATIONAL METHODS, vol.10, no.3, 2013 (SCI-Expanded)
- XV. **Inverse propagation of uncertainties in finite element model updating through use of fuzzy arithmetic**  
Erdogan Y. S., BAKIR P. G.  
ENGINEERING APPLICATIONS OF ARTIFICIAL INTELLIGENCE, vol.26, no.1, pp.357-367, 2013 (SCI-Expanded)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Cam Fiber Takviyeli Kutu Kirişlerin Eğilme Altında Sözde Sünekliğinin İncelenmesi**

Erdoğan Y. S., İnal M. G.

4 th International Symposium of Engineering Applications on Civil Engineering and Earth Sciences 2023 (IEACES2023), Karabük, Turkey, 31 May - 02 July 2023, pp.333-342

**II. Earthquake Response of A Highway Bridge In Case Of Vehicle-Bridge Interaction**

Erdoğan Y. S., Ada M.

4th Eurasian Conference on Civil and Environmental Engineering, İstanbul, Turkey, 17 - 19 June 2019, pp.1-11

**III. Effect of Soil Structure Interactions on the Seismic Behaviour of a Contemporary Monumental Masonary Structure**

ERDOĞAN Y. S., ADA M.

16th European Earthquake Engineering, Selanik, Greece, 18 June 2018, pp.1-11

## **Metrics**

Publication: 18

Citation (WoS): 129

Citation (Scopus): 207

H-Index (WoS): 7

H-Index (Scopus): 8