

## Res. Asst. SEBAHAT ŞİMŞEK

### Personal Information

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### Education Information

Post Graduate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, İnşaat Mühendisliği, Turkey 2014 - 2017

Under Graduate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, İnşaat Mühendisliği, Turkey 2009 - 2014

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Post Graduate, Çatlaklı elastik kirişlerin dinamik davranışlarının analitik, sayısal ve deneysel yöntemlerle incelenmesi, Karadeniz Technical University, Fen Bilimleri Enstitüsü, İnşaat Mühendisliği, 2017

### Research Areas

Civil Engineering, Mechanical, Engineering and Technology

### Academic Titles / Tasks

Research Assistant, Karadeniz Technical University, Fen Bilimleri Enstitüsü, İnşaat Mühendisliği, 2015 - Continues

### Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **Damage Localization in Laminated Composite Beams with Multiple Edge Cracks Based on Vibration Measurements**  
KAHYA V., Karaca S., OKUR F. Y. , ALTUNIŞIK A. C. , ASLAN M.  
IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY-TRANSACTIONS OF CIVIL ENGINEERING, 2020 (Journal Indexed in SCI)
- II. **Shear-deformable finite element for free vibrations of laminated composite beams with arbitrary lay-up**  
KAHYA V., Karaca S., VO T. P.  
STEEL AND COMPOSITE STRUCTURES, vol.33, pp.473-487, 2019 (Journal Indexed in SCI)
- III. **Free vibrations of laminated composite beams with multiple edge cracks: Numerical model and experimental validation**  
KAHYA V., Karaca S., OKUR F. Y. , ALTUNIŞIK A. C. , ASLAN M.

INTERNATIONAL JOURNAL OF MECHANICAL SCIENCES, vol.159, pp.30-42, 2019 (Journal Indexed in SCI)

**IV. Vibration-based damage detection in beam structures with multiple cracks: modal curvature vs. modal flexibility methods**

ALTUNIŞIK A. C. , OKUR F. Y. , Karaca S., KAHYA V.

NONDESTRUCTIVE TESTING AND EVALUATION, vol.34, pp.33-53, 2019 (Journal Indexed in SCI)

**V. Hareketli yük etkisindeki çatlaklı elastik kirişlerde gerilme şiddeti faktörleri**

KAHYA V., ŞİMŞEK S.

JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.33, pp.1309-1319, 2018 (Journal Indexed in SCI Expanded)

## Articles Published in Other Journals

**I. Free Vibration of Cracked Cantilever Beams: Analytical and Experimental Modelling**

KAHYA V., ŞİMŞEK S.

Fırat University Turkish Journal of Science & Technology, vol.13, pp.1-7, 2018 (National Refreed University Journal)

## Refereed Congress / Symposium Publications in Proceedings

**I. HASARLI KONİK KİRİŞLERİN SERBEST TİTREŞİM ANALİZLERİ İÇİN BİR SONLU ELEMAN MODELİ**

KAHYA V., Güneş S. D. , ŞİMŞEK S.

TUMTMK 21. ULUSAL MEKANİK KONGRESİ, Niğde, Turkey, 2 - 06 September 2019, pp.887-897

**II. Free vibrations of laminated composite beams with arbitrary lay-up using finite element method**

KAHYA V., ŞİMŞEK S., Vo T. P.

International Civil Engineering & Architecture Conference (ICEARC 2019), Trabzon, Turkey, 17 - 20 April 2019, pp.976-989

**III. Localization of Open Transverse Cracks in Laminated Composite Beams Based on Modal Data**

KAHYA V., ŞİMŞEK S., ALTUNIŞIK A. C. , OKUR F. Y. , ASLAN M.

International Congress on Engineering and Architecture, Antalya, Turkey, 14 - 16 November 2018, pp.70-91

**IV. Finite Element Model for Free Vibration Analysis of Tapered Elastic Beams with Multiple Cracks**

KAHYA V., Güneş S. D. , ŞİMŞEK S.

International Congress on Engineering and Architecture, Antalya, Turkey, 14 - 16 November 2018, pp.59-69

**V. A Finite Element for Free Vibration Analysis of Tapered Beams**

KAHYA V., Güneş S. D. , ŞİMŞEK S.

International Conference on Innovative Engineering Applications, Sivas, Turkey, 20 - 22 September 2018, pp.286-292

**VI. Natural Frequency Analysis of Laminated Composite Beams with Multiple Open Transverse Cracks**

KAHYA V., ŞİMŞEK S., OKUR F. Y. , ALTUNIŞIK A. C. , ASLAN M.

International Conference on Innovative Engineering Applications, Sivas, Turkey, 20 - 22 September 2018, pp.327-334

**VII. Damage detection of a multiple cracked cantilever beam**

ALTUNIŞIK A. C. , OKUR F. Y. , KAHYA V., KARACA S.

8th International Advanced Technologies Symposium, Elazığ, Turkey, 19 - 22 October 2017, pp.75-82

**VIII. A FINITE ELEMENT MODEL FOR ANISOTROPIC LAMINATED COMPOSITE BEAMS**

ŞİMŞEK S., KAHYA V.

World Multidisciplinary Civil Engineering-Architecture-Urban Planning Symposium, Prag, Czech Republic, 12 - 16 June 2017, pp.368

**IX. DAMAGE LOCALIZATION IN STEEL CANTILEVER BEAMS WITH MULTIPLE CRACKS USING MODAL CHARACTERISTICS**

KAHYA V., ŐİMŐEK S.

World Multidisciplinary Civil Engineering-Architecture-Urban Planning Symposium, Prag, Czech Republic, 12 - 16 June 2017, pp.370

X. **Free vibration of cracked cantilever beams: Analytical and experimental modelling**

KAHYA V., KARACA S.

International Conference on Advances and Innovations in Engineering, Elazığ, Turkey, 10 - 12 May 2017, pp.695-700

XI. **Atasu Barajı (Trabzon) İçme Suyu Kalitesinin İncelenmesi**

SATILMIŐ U., BAYRAM A., BAHADIR Ü., KARACA S.

Çankırı Havza Yönetimi Sempozyumu, Çankırı, Turkey, 10 - 12 September 2014, vol.0, no.0

## **Memberships / Tasks in Scientific Organizations**

TMMOB İnőaat Mühendisleri Odası, Member, 2014 - Continues

## **Citations**

Total Citations (WOS):8

h-index (WOS):2