

Prof. BENGİ AYKAÇ

Personal Information

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Dissertations

Doctorate, Mantolama tekniđi ile güçlendirilmiş betonarme kolonların davranışını etkileyen parametreler, Gazi University, Mühendislik Fakültesi, 2003

Research Areas

Structural Engineering, Concrete Structures, Repair and Strengthening in Buildings

Academic Titles / Tasks

Associate Professor, Gazi University, Mühendislik-Mimarlık Fakültesi, 2015 - Continues

Lecturer PhD, Gazi University, Mühendislik Fakültesi, 2003 - 2015

Courses

Betonarme sistem tasarımı, Undergraduate, 2020 - 2021

YAPI İŞLERİ ŞANTIYE TEKNİĐİ, Undergraduate, 2017 - 2018

İş Sağlığı ve Güvenliđi, Undergraduate, 2017 - 2018

yüksek lisans Uzmanlık Alan dersi, Postgraduate, 2017 - 2018

Bitirme Projesi(ÖD), Undergraduate, 2017 - 2018

Yüksek Lisans Tez Çalışması, Postgraduate, 2017 - 2018

Advising Theses

AYKAÇ B., Strengthening Of Reinforced Concrete Flat Slabs With Posttensioning, Postgraduate, O.SOLAK(Student), 2019

AYKAÇ B., Modeling And Design Of Prefabricated External Scaffoldings, Postgraduate, S.ÖZKAN(Student), 2019

AYKAÇ B., Behaviour Of Reinforced Concrete Beams Strengthened With Wire Rope, Postgraduate, A.KOFOĞLU(Student), 2019

AYKAÇ B., Behaviour and strength of reinforced concrete beams strengthened with steel plates and cfrp fabric, Postgraduate, D.ACAR(Student), 2014

AYKAÇ B., EVALUATION OF ACCIDENTS AT CEMENT INDUSTRY BY ARTIFICIAL INTELLIGENCE APPROACH, Postgraduate, S.GÜVEN(Student), 2010

AYKAÇ B., Düzenli kare veya dairesel boşluklara sahip betonarme kirişlerin davranış ve dayanımı, Postgraduate, Y.EMRE(Student), 2008

AYKAÇ B., THE EFFECT OF REPAIRING CRACKS WITH EPOXY INJECTION ON BENDING STIFFNESS OF REINFORCED CONCRETE BEAMS, Postgraduate, A.YAVUZCAN(Student), 2008

AYKAÇ S., AYKAÇ B., STRENGTHENING OF REINFORCED CONCRETE BEAMS WITH STEEL PLATES, Postgraduate, S.KARAHAN(Student), 2008

AYKAÇ B., BEHAVIOR AND STRENGTH OF R/C BEAMS WITH REGULAR RECTANGULAR OR CIRCULAR WEB OPENINGS, Postgraduate, Y.EMRE(Student), 2008

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **REPAIR OF DAMAGED REINFORCED CONCRETE BEAMS BY EPOXY INJECTION**
AYKAÇ B., Yavuzcan A.
Revista Romana de Materiale/ Romanian Journal of Materials, vol.52, no.4, pp.394-403, 2022 (SCI-Expanded)
- II. **Behavior and strength of hidden Rc beams embedded in slabs**
ÖZBEK E., AYKAÇ B., BÖCEK M., Yılmaz M. C., Mohammed A. B. K., ER Ş. B., AYKAÇ S.
JOURNAL OF BUILDING ENGINEERING, vol.29, 2020 (SCI-Expanded)
- III. **The effects of brick walls strengthened with perforated steel plates on frame behavior**
ÖZBEK E., AYKAÇ B., AYKAÇ S.
ENGINEERING STRUCTURES, vol.189, pp.62-76, 2019 (SCI-Expanded)
- IV. **Behavior of Postfabricated RC Beams under Monotonic Transverse Loading**
AYKAÇ S., Jamal R., ÖZBEK E., KALKAN İ., AYKAÇ B.
JOURNAL OF STRUCTURAL ENGINEERING, vol.145, no.1, 2019 (SCI-Expanded)
- V. **Recommendations for calculation of strengthened brick walls with perforated plates**
ÖZBEK E., AYKAÇ B., Can H., KALKAN İ., AYKAÇ S.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.34, no.1, pp.1-15, 2019 (SCI-Expanded)
- VI. **Discussion on "Seismic capacity of masonry infilled RC frame strengthening with expanded metal ferrocement" by A. Leeanansaksiri, P. Panyakapo, A. Ruangrassamee [Eng. Struct. 159 (2018) 110-127]**
AYKAÇ S., ÖZBEK E., KALKAN İ., AYKAÇ B.
ENGINEERING STRUCTURES, vol.171, pp.928-932, 2018 (SCI-Expanded)
- VII. **Seismic strengthening of infill walls with perforated steel plates**
AYKAÇ B., ÖZBEK E., Babayani R., BARAN M., AYKAÇ S.
ENGINEERING STRUCTURES, vol.152, pp.168-179, 2017 (SCI-Expanded)
- VIII. **Strengthening of hollow brick infill walls with expanded steel plates**
Cumhur A., Altundal A., AYKAÇ S., AYKAÇ B.
EARTHQUAKES AND STRUCTURES, vol.11, no.5, pp.887-904, 2016 (SCI-Expanded)
- IX. **STRENGTHENING OF REINFORCED CONCRETE BEAMS WITH AN EXTERNALLY BONDED COMPOSITE MATERIAL COMPOSED OF FRP FABRIC AND STEEL PLATE**
AYKAÇ B., Acar D.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.29, no.1, pp.175-183, 2014 (SCI-Expanded)
- X. **Flexural Behavior and Strength of Reinforced Concrete Beams with Multiple Transverse Openings**
AYKAÇ B., AYKAÇ S., KALKAN İ., Dundar B., Can H.
ACI STRUCTURAL JOURNAL, vol.111, no.2, pp.267-277, 2014 (SCI-Expanded)
- XI. **Flexural behavior of RC beams with regular square or circular web openings**
AYKAÇ B., KALKAN İ., AYKAÇ S., Egriboz Y. E.
ENGINEERING STRUCTURES, vol.56, pp.2165-2174, 2013 (SCI-Expanded)
- XII. **Strengthening and Repair of Reinforced Concrete Beams Using External Steel Plates**
AYKAÇ S., KALKAN İ., AYKAÇ B., Karahan S., Kayar S.
JOURNAL OF STRUCTURAL ENGINEERING, vol.139, no.6, pp.929-939, 2013 (SCI-Expanded)
- XIII. **Strengthening of RC T-beams with perforated steel plates**
AYKAÇ S., KALKAN İ., AYKAÇ B., ÖZBEK E.

MAGAZINE OF CONCRETE RESEARCH, vol.65, no.1, pp.37-51, 2013 (SCI-Expanded)

XIV. Additional Loads Transferred to Cantilever Beams of RC-Buildings

AYKAÇ S., AYKAÇ B., Ekinci Y.

TEKNIK DERGI, vol.22, no.2, pp.5449-5462, 2011 (SCI-Expanded)

XV. THE APPLICABILITY OF THE JACKETING METHOD IN REINFORCED CONCRETE COLUMNS OF RECTANGULAR GEOMETRY

AYKAÇ B., Can H.

JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.23, no.1, pp.223-229, 2008 (SCI-Expanded)

Articles Published in Other Journals

I. Practical Equations for Calculating the Root Diameter of Bolts

Özbek E., Aykaç B., Aykaç S.

Gazi University Journal of Science Part A: Engineering and Innovation, vol.8, no.2, pp.1-8, 2021 (Peer-Reviewed Journal)

II. A Load Cell Design that can be utilized for The Testing of Reinforced Concrete Members

Özbek E., Aykaç B.

Gazi University Journal of Science Part A: Engineering and Innovation, vol.7, no.4, pp.106-111, 2020 (Peer-Reviewed Journal)

III. The Out of Plane Bending Behavior of Brick Infill Walls Strengthened with Perforated Steel Plates

AYKAÇ B., AYKAÇ S., KALKAN İ., BÖCEK M.

Ingeniería, Investigación y Tecnología, vol.17, no.4, pp.429-435, 2016 (Peer-Reviewed Journal)

IV. Influence of Strengthening the Infill Walls with Perforated Steel Plates on the Behavior of RC Frames

AYKAÇ S., ÖZBEK E., AYKAÇ B., KALKAN İ.

Athens Journal of Engineering and Technology, vol.3, no.2, pp.133-152, 2016 (Peer-Reviewed Journal)

V. Influence of Strengthening the Infill Walls with Perforated Steel Plates on the Behaviour of RC Frames

AYKAÇ S., ÖZBEK E., AYKAÇ B., KALKAN İ.

Athens Journal of Technology and Engineering, 2016 (Peer-Reviewed Journal)

VI. Dikdörtgen Kesitli Betonarme Kolonların Yaklaşık Hesabı İçin Basit Bir Formül

AYKAÇ S., AYKAÇ B., BÖCEK M.

International Journal of Engineering Research and Development, vol.6, no.2, pp.1-6, 2014 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

I. Impacts of Remote Working on Productivity of Civil Engineers during the COVID-19 Pandemic

Tepe A., Aykaç B., Ayhan M.

2nd International Congress on Multidisciplinary Natural Sciences and Engineering, Ankara, Turkey, 01 December 2022, pp.192-203

II. BA Perde Duvar Düzlemine Dik Kirişlerin Deprem Davranışı

BÖCEK M., AYKAÇ B.

Yapı Mekaniği Laboratuvarları 6. Toplantısı / Karadeniz Teknik Üniversitesi, Trabzon, Turkey, 17 - 18 November 2017

III. Sonradan Oluşturulmuş Mekanik Bağlantılı BA Kirişlerin Davranışı

Aykaç S., Jamal R., Kalkan İ., Özbek E., Aykaç B.

3. Türkiye Deprem Mühendisliği ve Sismoloji Konferansı, İzmir, Turkey, 14 - 16 October 2015, pp.1-10

IV. Influence of Strengthening The Infill Walls with Perforated Steel Plates on the Behavior of RC Frames

Aykaç S., Özbek E., Aykaç B., Kalkan İ.

5th Annual International Conference on Civil Engineering, Structural Engineering and Mechanics, Athens, Greece, 25 - 28 May 2015, pp.32-33

V. Delikli Çelik Levhalarla Güçlendirilmiş Tuğla Duvarların Çerçeve Davranışı Üzerindeki Etkisi (Sonuçlar)

Özbek E., Aykaç B., Kalkan İ., Aykaç S.

Ulusal Yapı Mekaniği Laboratuvarları 5. Toplantısı, Kayseri, Turkey, 29 - 30 May 2015, pp.3-4

VI. Eğri Eksenli Kirişlerin Düzlem İçi Eğilme Davranışı

KALKAN İ., AYKAÇ B., BÖCEK M., AYKAÇ S.

Yapı Mekaniği Laboratuvarları Toplantısı, Kayseri, Turkey, 29 - 30 May 2015

VII. Delikli Çelik Levhalarla Güçlendirilmiş Dolgu Duvarların Deprem Davranışı

KALKAN İ., AYKAÇ B., BARAN M., Babayani R., AYKAÇ S.

TMMOB İnşaat Mühendisleri Odası 5. Çelik Yapılar Sempozyumu, İstanbul, Turkey, 13 - 15 November 2013

VIII. Strength and Behavior of Hollow Brick Infill Walls Strengthened with Perforated Steel Plates

AYKAÇ S., KALKAN İ., AYKAÇ B., MAHMUT S.

ICCE-21 Annual International Conference on Composites/Nano Engineering, Tenerife, Spain, 21 - 27 July 2013

IX. Dikdörtgen Kesitli Betonarme Kolonların Yaklaşık Hesabı İçin Basit Bir Formül

AYKAÇ S., AYKAÇ B.

Türkiye İnşaat Mühendisliği XVI. Teknik Kongresi, Turkey, 1 - 03 November 2001

Metrics

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