

Res. Asst. Barış BAYRAK

Personal Information

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Education Information

Doctorate, Ataturk University, Mühendislik Fakültesi, İnşaat Mühendisliği, Turkey 2015 - 2021

Postgraduate, Ataturk University, Mühendislik Fakültesi, İnşaat Mühendisliği, Turkey 2012 - 2015

Undergraduate, Ataturk University, Mühendislik Fakültesi, İnşaat Mühendisliği, Turkey 2008 - 2012

Foreign Languages

English, B1 Intermediate

Certificates, Courses and Trainings

Occupational Health and Safety, İŞ SAĞLIĞI VE GÜVENLİĞİ KATILIM BELGESİ, ATATÜRK ÜNİVERSİTESİ, 2017

Dissertations

Doctorate, BETONARME PERDE DUVARLARIN BURULMA DAVRANIŞININ DENEYSEL VE SAYISAL OLARAK İNCELENMESİ, Ataturk University, Fen Bilimleri Enstitüsü, İnşaat Mühendisliği Anabilim Dalı, 2021

Postgraduate, BETONARME KİRİŞLERİN BURULMA DAVRANIŞI, Ataturk Üniversitesi, İnşaat Mühendisliği, Yapı, 2015

Research Areas

Civil Engineering, Structure, Concrete Structures, Engineering and Technology

Academic Titles / Tasks

Research Assistant, Ataturk University, Fen Bilimleri Enstitüsü, -, 2015 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

- The plastic hinge length prediction of RC members by using ANN**
Bayrak B., Akarsu O., KAPLAN G., AYDIN A. C.

Sadhana - Academy Proceedings in Engineering Sciences, vol.48, no.3, 2023 (SCI-Expanded)

- II. **Synergic effect of some waste pozzolans on the mechanical and shielding properties of geopolymer concretes**
Bayrak B., ÖZ A., KAVAZ E., KAPLAN G., ÇELEBİ O., Alcan H. G., AYDIN A. C.
RADIATION EFFECTS AND DEFECTS IN SOLIDS, vol.178, no.7-8, pp.855-884, 2023 (SCI-Expanded)
- III. **A comprehensive characterization on geopolymer concretes with low content slag and quartz aggregates: the shielding features**
Alcan H. G., Bayrak B., ÖZ A., KAVAZ E., KAPLAN G., ÇELEBİ O., AYDIN A. C.
RADIATION EFFECTS AND DEFECTS IN SOLIDS, vol.178, no.7-8, pp.769-798, 2023 (SCI-Expanded)
- IV. **Effect of quartz powder on mid-strength fly ash geopolymers at short curing time and low curing temperature**
KAPLAN G., ÖZ A., Bayrak B., Alcan H. G., ÇELEBİ O., AYDIN A. C.
CONSTRUCTION AND BUILDING MATERIALS, vol.329, 2022 (SCI-Expanded)
- V. **Buckling behavior of double-layered composite cylindrical shells**
Maali M., BAYRAK B., KILIÇ M., Sagiroglu M., AYDIN A. C.
INTERNATIONAL JOURNAL OF PRESSURE VESSELS AND PIPING, vol.191, 2021 (SCI-Expanded)
- VI. **The effect of trio-fiber reinforcement on the properties of self-compacting fly ash concrete**
Öz A., Bayrak B., Aydın A. C.
Construction and Building Materials, vol.274, 2021 (SCI-Expanded)
- VII. **The shear and flexural behavior of cold-formed steel composite I and U beams**
Aydın A. C., Bayrak B., Maali M., Mete E., Cebi K., Kılıç M.
Scientia Iranica, vol.28, no.4, pp.2119-2132, 2021 (SCI-Expanded)
- VIII. **The mechanical behavior of thermally enhanced polypropylene concrete**
AYDIN A. C., Alcan H. G., BAYRAK B., KILIÇ M., Maali M.
CONSTRUCTION AND BUILDING MATERIALS, vol.262, 2020 (SCI-Expanded)
- IX. **The torsional behavior of reinforced self-compacting concrete beams**
Aydın A. C., Bayrak B.
Advances in Concrete Construction, vol.8, no.3, pp.187-198, 2019 (SCI-Expanded)

Articles Published in Other Journals

- I. **A numerical perspective for CFRP-wrapped thin-walled steel cylinders**
Aydın A. C., Maali M., Kılıç M., Bayrak B., Akarsu O.
STEEL CONSTRUCTION-DESIGN AND RESEARCH, vol.16, no.4, pp.227-236, 2023 (ESCI)
- II. **DESIGN AND PERFORMANCE PARAMETERS OF SHEAR WALLS: A REVIEW**
AYDIN A. C., Bayrak B.
ARCHITECTURE CIVIL ENGINEERING ENVIRONMENT, vol.14, no.4, pp.69-93, 2021 (ESCI)
- III. **HIGH TEMPERATURE PERFORMANCE OF SELF-COMPACTING CONCRETE CONTAINING BORON ACTIVE BELITE CEMENT**
AYDIN A. C., ÖZ A., Gök N., BAYRAK B.
ARCHITECTURE CIVIL ENGINEERING ENVIRONMENT, vol.14, no.2, pp.67-78, 2021 (ESCI)
- IV. **THE TORSIONAL AND SHEAR BEHAVIOR OF STEEL FIBER REINFORCED RC MEMBERS**
AYDIN A. C., KILIÇ M., Maali M., BAYRAK B., Tunç E.
ARCHITECTURE CIVIL ENGINEERING ENVIRONMENT, vol.14, no.2, pp.47-65, 2021 (ESCI)
- V. **BETONARME PERDE DUVARLARIN FARKLI YAPI MALZEMELERİ AÇISINDAN DEĞERLENDİRİLMESİ**
Aydın A. C., Bayrak B.
Ömer Halisdemir Üniversitesi Mühendislik Bilimleri Dergisi, vol.10, no.1, pp.217-240, 2021 (Peer-Reviewed Journal)
- VI. **Shear Wall Design within the Light of Prominent Standards**
AYDIN A. C., BAYRAK B., Maali M., KILIÇ M., ALCAN H. G.

- Civil Engineering Beyond Limits, vol.1, no.4, pp.13-20, 2020 (Peer-Reviewed Journal)
- VII. **Behavior of Polypropylene Filled Cold Formed Steel Profiles – Part B: Torsion**
Kılıç M., Maali M., Bayrak B., Çebi K., Mete E., Aydın A. C.
Civil Engineering Beyond Limits, vol.1, no.2, pp.7-11, 2020 (Peer-Reviewed Journal)
- VIII. **Behavior of Polypropylene Filled Cold Formed Steel Profiles – Part A: Bending Shear**
Maali M., Kılıç M., Bayrak B., Mete E., Çebi K., Aydın A. C.
Civil Engineering Beyond Limits, vol.1, no.2, pp.1-6, 2020 (Peer-Reviewed Journal)
- IX. **Betonarme Kirişlerin Deneysel ve Teorik Burulma Momenti Değerlerinin Karşılaştırılması**
Aydın A. C., Bayrak B.
SAKARYA UNIVERSITY JOURNAL OF SCIENCE, vol.21, no.5, pp.1-9, 2017 (Peer-Reviewed Journal)
- X. **Kendiliğinden Yerleşen ve Normal Betonlu Betonarme Kirişlerin Burulma Davranışının Deneysel ve Teorik Olarak İncelenmesi**
Bayrak B., Aydın A. C.
Sinop Üniversitesi Fen Bilimleri Dergisi, vol.1, no.1, pp.23-32, 2016 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **The Effect of Curing Temperature on the Early Age Properties of Granulated Furnace Slag Based Reactive Geopolymer Concrete**
Kaplan G., Öz A., Bayrak B., Alcan H. G., Çelebi O., Aydın A. C.
First International Geopolymeric Composites Congress, Erzurum, Turkey, 29 - 30 December 2021, pp.9-16
- II. **Some Mechanical Properties of Polymer Modified Concrete**
Alcan H. G., Bayrak B., Çelebi O., Akarsu O., Aydın A. C.
International Conference on Advances in Engineering, Architecture, Science and Technology (ICA-EAST 2021), Erzurum, Turkey, 15 - 17 December 2021, pp.386-393
- III. **Investigation of Soft Floor Effects On Steel Structures with Eccentric and Central Braced with Passive Isolation System Under Earthquake Effect**
Çelebi O., Bayrak B., Aydın A. C.
6th International Congress of Earthquake Engineering and Seismology, Kocaeli, Turkey, 13 - 15 October 2021, vol.1, no.1, pp.430-441
- IV. **Investigation of Seismic Behavior of Soft Storey Structure in Frequency Time Domain**
Çelebi O., Bayrak B., Alcan H. G., Aydın A. C.
International Congress on the Phenomenological Aspects of Civil Engineering Structures, Erzurum, Turkey, 20 - 23 June 2021, vol.1, no.1, pp.539-544
- V. **Investigation of Floor Vibrations of Steel Structure Under Earthquake**
Çelebi O., Bayrak B., Aydın A. C.
INTERNATIONAL SYMPOSIUM ON APPLIED SCIENCES AND ENGINEERING, Erzurum, Turkey, 7 - 09 April 2021, vol.1, no.1, pp.315-328
- VI. **Theoretical and Experimental Behavior of Reinforced Concrete Beams Under Torsion**
AYDIN A. C., BAYRAK B.
Proc. of Fourth International Conference On Advances in Civil, Structural and Mechanical Engineering - ACSM 2016, Bangkok, Thailand, 7 - 08 May 2016, pp.33-36

Other Publications

- I. **Erzurum Köprüköy Depremi Yapısal Teknik Raporu**
Aydın A. C., Kılıç M., Bayrak B., Çelebi O.
Technical Report, pp.1-17, 2022

Expert Reports

- I. Palandöken Devlet Hastanesi Deprem Tahkiki Raporu (Döner Sermaye)**
Aydın A. C., Kılıç M., Bayrak B., Çelebi O.
Palandöken devlet Hastanesi, pp.67, Erzurum, 2021

Metrics

Publication: 29
Citation (WoS): 78
Citation (Scopus): 72
H-Index (WoS): 5
H-Index (Scopus): 4

Congress and Symposium Activities

ZEMİN MEKANİĞİ VE GEOTEKNİK MÜHENDİSLİĞİ 16. ULUSAL KONGRESİ, Attendee, Erzurum, Turkey, 2016