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Doctorate, Karadeniz Technical University, Mühendislik Fakültesi, İnşaat Mühendisliği, Turkey 2015 - 2021
Postgraduate, Karadeniz Technical University, Mühendislik Fakültesi, İnşaat Mühendisliği, Turkey 2013 - 2015
Undergraduate, Karadeniz Technical University, Mühendislik Fakültesi, İnşaat Mühendisliği Bölümü, Turkey 2008 - 2013

Research Areas

Civil Engineering, Building materials, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Karadeniz Technical University, Mühendislik Fakültesi, İnşaat Mühendisliği, 2023 - Continues
Research Assistant, Karadeniz Technical University, Fen Bilimleri Enstitüsü, 2013 - 2021

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Investigation of Global Warming Potential of Concrete with Silica Fume and Blast Furnace Slag**
NAYIR S., BAHADIR Ü., TOĞAN V.
IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY-TRANSACTIONS OF CIVIL ENGINEERING, 2023 (SCI-Expanded)

II. **Automated Estimation of Exposed Temperature and Strength Changing Ratio for Fire-Damaged Concrete Using Deep Learning Method**
Hacıefendioğlu K., Akbulut Y. E., Nayır S., Başağa H. B., Altunışık A. C.
EXPERIMENTAL TECHNIQUES, vol.46, no.5, pp.793-810, 2022 (SCI-Expanded)

III. **Automatic Estimation of Post-fire Compressive Strength Reduction of Masonry Structures Using Deep Convolutional Neural Network**
HACIEFENDİOĞLU K., GENÇ A. F., NAYIR S., AYAS S., ALTUNIŞIK A. C.
FIRE TECHNOLOGY, vol.58, no.5, pp.2779-2809, 2022 (SCI-Expanded)

IV. **Long-Term Efficiency of Silica Fume in Terms of Sulfate Resistance of Concrete Immersed in Sulfate Solutions and Seawater**
Erdoğdu Ş., Kurbetci Ş., Nayır S.
IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY-TRANSACTIONS OF CIVIL ENGINEERING, vol.46, no.4, pp.2739-

2746, 2022 (SCI-Expanded)

V. **Pozzolanic properties of trachyte and rhyolite and their effects on alkali-silica reaction**
Baki V. A., NAYIR S., ERDOĞDU Ş., USTABAŞ İ.
ADVANCES IN CONCRETE CONSTRUCTION, vol.11, no.4, pp.299-306, 2021 (SCI-Expanded)

VI. **The Effects of Structural Lightweight Concrete on Energy Performance and Life Cycle Cost in Residential Buildings**
NAYIR S., BAHADIR Ü., ERDOĞDU Ş., TOĞAN V.
PERIODICA POLYTECHNICA-CIVIL ENGINEERING, vol.65, no.2, pp.500-509, 2021 (SCI-Expanded)

VII. **Determination of the Pozzolanic Activities of Trachyte and Rhyolite and Comparison of the Test Methods Implemented**
Baki V. A., Nayır S., Erdoğdu Ş., Ustabaş İ.
INTERNATIONAL JOURNAL OF CIVIL ENGINEERING, vol.18, pp.1053-1066, 2020 (SCI-Expanded)

VIII. **Effects of cement dosage and steel fiber ratio on the mechanical properties of reactive powder concrete**
ERDOĞDU Ş., KANDİL U., NAYIR S.
ADVANCES IN CONCRETE CONSTRUCTION, vol.8, no.2, pp.139-144, 2019 (SCI-Expanded)

IX. **Effectiveness of mineral additives in mitigating alkali-silica reaction in mortar**
NAYIR S., ERDOĞDU Ş., KURBETCİ Ş.
COMPUTERS AND CONCRETE, vol.20, no.6, pp.705-710, 2017 (SCI-Expanded)

Articles Published in Other Journals

I. **Evaluation of structural lightweight concrete in terms of energy performance: A case study**
Nayır S., Bahadır Ü., Erdoğdu Ş., Toğan V.
Pamukkale University Journal of Engineering Science, vol.27, no.6, pp.696-702, 2021 (ESCI)

II. **YÜKSEK FIRIN CÜRUFLU BETONLARIN BAZI MEKANİK VE DURABİLİTE ÖZELLİKLERİ**
Erdoğdu Ş., Kurbetci Ş., Kandil U., Nayır S., Nas M.
Hazır beton Dergisi, no.167, pp.65-71, 2021 (Non Peer-Reviewed Journal)

III. **EVALUATION OF THE DEPENDENCY OF THE COMPRESSIVE STRENGTH OF CONCRETE ON THE CORE DRILLING DIRECTION THROUGH ANOVA TEST**
Erdoğdu Ş., Nayır S., Kandil U., Kurbetci Ş., Nas M.
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES-SIGMA MUHENDISLIK VE FEN BILIMLERI DERGISI, vol.38, no.4, pp.1879-1895, 2020 (ESCI)

IV. **Ultrasonic Pulse Velocity and Compressive Strength Evaluation of Concrete Containing Fly Ash Exposed to High Temperatures**
ERDOĞDU Ş., KANDİL U., NAS M., KURBETCİ Ş., NAYIR S.
Nevşehir Bilim ve Teknoloji Dergisi, vol.6, pp.314-325, 2017 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

I. **Investigation effect of neoprene capping material on strength of concrete cylinders**
Nayır S.
3rd International Civil Engineering and Architecture Congress, Trabzon, Turkey, 12 - 14 October 2023, vol.1, pp.708-715

II. **Effect of Different Concrete Types on Building Heating and Cooling Loads**
Nayır S., Bahadır Ü., Erdoğdu Ş., Toğan V.
4th International Symposium of Engineering Application on Civil Engineering and Earth Sciences, Karabük, Turkey, 31 May - 02 June 2023, pp.247-256

III. **Investigation of Structural Lightweight Concrete in terms of Energy Efficiency in Residential**

Buildings
Nayır S., Bahadır Ü., Erdoğdu Ş., Toğan V.
14th INTERNATIONAL CONGRESS ON ADVANCES IN CIVIL ENGINEERING (ACE 2020-21), İstanbul, Turkey, 6 - 08 September 2021, pp.247-254

IV. **High Temperature Effects on Concretes Containing Silica Fume**
ERDOĞDU Ş., KANDİL U., NAYIR S.
10. International Concrete Congress, Bursa, Turkey, 2 - 04 May 2019, pp.541-550

V. **Evaluation of Heat of Hydration of Mortar Containing Ground Trachyte and Rhyolite**
ERDOĞDU Ş., USTABAŞ İ., BAKİ V. A., NAYIR S., KANDİL U.
International Civil Engineering and Architecture, Trabzon, Turkey, 17 - 20 April 2019, vol.1, pp.2387-2393

VI. **Investigation on Strength and Durability Properties of Concrete Containing Zeolite**
NAS M., KURBETCİ Ş., NAYIR S.
13th International Congress on Advances in Civil Engineering, İzmir, Turkey, 12 - 14 September 2018

VII. **Evaluation of the Compressive Strength of Concrete by means of Cores Taken from Different Casting Direction**
ERDOĞDU Ş., KURBETCİ Ş., KANDİL U., NAS M., NAYIR S.
13th International Congress on Advances in Civil Engineering, İzmir, Turkey, 12 - 14 September 2018, pp.1-10

VIII. **Effects of Different Curing Conditions on Some Mechanical and Durability Properties of Concretes Containing Silica Fume**
ERDOĞDU Ş., KURBETCİ Ş., KANDİL U., NAYIR S., NAS M.
13th International Congress on Advances in Civil Engineering, İzmir, Turkey, 12 - 14 September 2018, pp.1-9

IX. **Ultrasonic Pulse Velocity Evaluation Of Concrete Containing Silica Fume Exposed To High Temperatures**
ERDOĞDU Ş., KURBETCİ Ş., NAS M., KANDİL U., NAYIR S.
3. International Conference on Civil and Environmental Engineering, İzmir, Turkey, 24 - 27 April 2018, pp.108

X. **Investigation Of Some Mechanical And Durability Properties Of Fly Ash Concrete Subjected To Different Curing Conditions**
ERDOĞDU Ş., KURBETCİ Ş., NAYIR S., KANDİL U., NAS M.
3. International Conference on Civil and Environmental Engineering, İzmir, Turkey, 24 - 27 April 2018, pp.107

XI. **Uçucu Kül ve Polipropilen Lifli Kireç Harçlarının Çimento Takviyesi ile Mekanik Özelliklerinin İyileştirilmesi**
ERDOĞDU Ş., NAS M., NAYIR S., KANDİL U.
Uluslararası Katılımlı 6. Tarihi Yapıların Korunması ve Güçlendirilmesi Sempozyumu, Trabzon, Turkey, 2 - 04 November 2017, pp.247-256

XII. **Çimento-Katkı Uyumu Açısından Silis Dumanı ve Süperakışkanlaştırıcı Katkıların Bileşik Etkisi**
ERDOĞDU Ş., KURBETCİ Ş., KANDİL U., NAS M., NAYIR S.
Uluslararası Yapılarda Kimyasal Katkılar 5. Sempozyumu ve Sergisi, Ankara, Turkey, 19 - 20 October 2017, pp.19-32

XIII. **Ultrasonic Pulse Velocity and Compressive Strength Evaluation of Concrete Containing Fly Ash Exposed to High Temperatures**
ERDOĞDU Ş., KANDİL U., NAS M., KURBETCİ Ş., NAYIR S.
ICOCEE CAPPADOCIA 2017, Nevşehir, Turkey, 8 - 10 May 2017, pp.3075-3089

XIV. **Effects of Mineral Admixtures on the Alkali-Silica Reaction of a River Aggregate**
ERDOĞDU Ş., NAYIR S., KANDİL U.
ICOCEE CAPPADOCIA 2017, Nevşehir, Turkey, 8 - 10 May 2017, pp.3090-3100

XV. **Yüksek Fırın Cüruflu Betonların Bazı Mekanik ve Durabilite Özellkleri**
ERDOĞDU Ş., KURBETCİ Ş., KANDİL U., NAYIR S., NAS M.
Beton 2017, İstanbul, Turkey, 13 - 14 April 2017, pp.355-365

XVI. **Effects of Binary and Ternary Blends of Silica Fume and Metakaolin on the Mitigation of Alkali-Silica Reaction in Concrete**
ERDOĞDU Ş., NAYIR S., NAS M., KANDİL U.

12. International Congress on Advances in Civil Engineering, İstanbul, Turkey, 21 - 23 September 2016, pp.1-7

XVII. **Uçucu Kül ve Polipropilen Lif İçeren Kireç Harçlarının Tarihi Yapıların Güçlendirilmesi Açısından Değerlendirilmesi**
ERDOĞDU Ş., KANDİL U., NAYIR S., NAS M.
5. Tarihi Eserlerin Güçlendirilmesi ve Geleceğe Güvenle Devredilmesi Sempozyumu, Erzurum, Turkey, 1 - 03 October 2015, pp.375-384

XVIII. **Farklı oranlarda uçucu kül ikame edilerek üretilen betonların klor geçirimliliklerinin belirlenmesi**
ERDOĞDU Ş., Kandil U., Nayır S.
9. Ulusal Beton Kongresi, Antalya, Turkey, 16 - 18 April 2015, pp.59-69

Scientific Refereeing

Karadeniz Fen Bilimleri Dergisi, National Scientific Refreed Journal, April 2024
ASIAN JOURNAL OF CIVIL ENGINEERING, Other Indexed Journal, August 2023
IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY - TRANSACTIONS OF CIVIL ENGINEERING, Journal Indexed in SCI-E, July 2023
Journal of Structural Engineering & Applied Mechanics (Online), National Scientific Refreed Journal, June 2023
Journal of Structural Engineering & Applied Mechanics (Online), National Scientific Refreed Journal, June 2023
Journal of Structural Engineering & Applied Mechanics (Online), National Scientific Refreed Journal, May 2023
Balıkesir Üniversitesi Fen Bilimleri Enstitüsü Dergisi, National Scientific Refreed Journal, May 2023
ADVANCES IN CIVIL ENGINEERING, Journal Indexed in SCI-E, January 2021
ADVANCES IN CIVIL ENGINEERING, Journal Indexed in SCI-E, May 2020

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