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Education Information

Doctorate, Iskenderun Technical University, Institute Of Engineering And Natural Sciences, Turkey 2017 - 2021

Postgraduate, Iskenderun Technical University, Institute Of Engineering And Natural Sciences, Turkey 2015 - 2017

Undergraduate, Gaziantep University, Faculty Of Engineering, Department Of Civil Engineering (English), Turkey 2009 - 2014

Dissertations

Doctorate, Yeni nesil yapılar için elektromanyetik dalga soğurma özelliği kazandırılmış çimento esaslı kompozitlerin geliştirilmesi, Iskenderun Technical University, Institute Of Engineering And Natural Sciences, 2021

Postgraduate, Beton özelliklerinin elektromanyetik dalgalar yoluyla tespiti, Iskenderun Technical University, Institute Of Engineering And Natural Sciences, 2017

Research Areas

Civil Engineering, Engineering and Technology

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Exploring the Capacitance-Based Stress Self-Sensing Mechanism in Geopolymer Mortar and Its Correlation with Stress Levels**
ÖZTÜRK M., Xi X.
Journal of Electronic Materials, vol.53, no.9, pp.5629-5636, 2024 (SCI-Expanded)
- II. **First study of quantitative relationship between electric polarization and electromagnetic interference (EMI) shielding effectiveness of CFRP**
Xi X., ÖZTÜRK M., Cai J., Wang L., Zhao Z., Chu H., Ran Q.
Carbon, vol.225, 2024 (SCI-Expanded)
- III. **Piezopermittivity of cement mortar with various water contents and its application to capacitance-based structural self-sensing of stress**
Öztürk M., Chung D.
SENSORS AND ACTUATORS, A: PHYSICAL, vol.369, pp.115206-115214, 2024 (SCI-Expanded)

- IV. **Capacitive compressive stress self-sensing behavior of cement mortar and its dependence on the thickness**
ÖZTÜRK M.
PHYSICA SCRIPTA, vol.99, no.2, 2024 (SCI-Expanded)
- V. **Spatially resolved capacitance-based stress self-sensing in concrete**
Chung D., ÖZTÜRK M.
ISA Transactions, 2024 (SCI-Expanded)
- VI. **Capacitive self tension sensing properties of steel beam: electrode configuration and stress regime**
ÖZTÜRK M.
PHYSICA SCRIPTA, vol.98, no.11, 2023 (SCI-Expanded)
- VII. **Prevention of Wave Propagation via Circular Arrangement of Seismic Metamaterials Formed with Concrete Piles**
Kaçın S., Öztürk M., Sevim U. K., Karaaslan M., Akgöl O., Özer Z., Demirci M., Ünal E., Mert B. A., Erdoğan Alkurt M., et al.
SYMMETRY, vol.15, no.8, pp.1489-1501, 2023 (SCI-Expanded)
- VIII. **Capacitance-based compression self-sensing effectiveness of cement paste with curing time**
Ozturk M.
MAGAZINE OF CONCRETE RESEARCH, vol.75, no.18, pp.965-972, 2023 (SCI-Expanded)
- IX. **Sinusoidally located concrete metastructures for attenuation of seismic surface vibrations**
Kacin S., Ozturk M., Sevim U. K., Karaaslan M., Akgol O., Ozer Z., Demirci M., Unal E., Mert B. A., Alkurt M. E., et al.
NATURAL HAZARDS, vol.116, no.1, pp.551-563, 2023 (SCI-Expanded)
- X. **High-temperature effect on mechanical properties of fiber reinforced concretes including waste tire rubber**
Ozturk M., Bankir M. B., Sevim U. K.
STRUCTURAL CONCRETE, vol.24, pp.1521-1530, 2023 (SCI-Expanded)
- XI. **Investigation of the Effect of Alkali Curing on the Strength Properties of GBFS-Added Composites**
Ozturk M., Bankir M. B., Sevim U. K.
JOURNAL OF MATERIALS IN CIVIL ENGINEERING, vol.34, no.9, 2022 (SCI-Expanded)
- XII. **Design of a linear to circular polarization converter integrated into a concrete construction for radome applications**
Ozturk M., Sevim U. K., Altintas O., Unal E., Akgol O., Karaaslan M., SABAH C.
INTERNATIONAL JOURNAL OF MICROWAVE AND WIRELESS TECHNOLOGIES, vol.14, no.7, pp.824-831, 2022 (SCI-Expanded)
- XIII. **Capacitance-based stress self-sensing in asphalt without electrically conductive constituents, with relevance to smart pavements**
Ozturk M., Chung D. D. L.
SENSORS AND ACTUATORS A-PHYSICAL, vol.342, 2022 (SCI-Expanded)
- XIV. **Self-sensing reinforced concrete for damage assessment and real time strength development in smart structures**
Ozturk M.
JOURNAL OF MICROWAVE POWER AND ELECTROMAGNETIC ENERGY, vol.56, no.3, pp.168-177, 2022 (SCI-Expanded)
- XV. **Electromagnetic skin depth of cement paste and its thickness dependence**
Chung D. D. L., Ozturk M.
JOURNAL OF BUILDING ENGINEERING, vol.52, 2022 (SCI-Expanded)
- XVI. **Embedded smart sensor dipole antennas for real-time damage assessment, humidity, and temperature monitoring in reinforced and non-reinforced concrete structures**
Ozturk M.
INTERNATIONAL JOURNAL OF MICROWAVE AND WIRELESS TECHNOLOGIES, vol.14, no.4, pp.482-491, 2022 (SCI-Expanded)
- XVII. **DC electric polarization of cured cement paste being unexpectedly hindered by free water**

- Xi X., Ozturk M., Chung D. D. L.
JOURNAL OF THE AMERICAN CERAMIC SOCIETY, vol.105, no.2, pp.1074-1082, 2022 (SCI-Expanded)
- XVIII. Experimental verification of phononic crystal based on square arrays of cylindrical holes against seismic vibrations in full-scale systems: modeling, sensing and signal processing of seismic vibrations**
Kacin S., Ozturk M., Sevim U. K., Karaaslan M., Ozer Z., Akgol O., Mert B. A., Unal E.
ARCHIVE OF APPLIED MECHANICS, vol.92, no.1, pp.309-323, 2022 (SCI-Expanded)
- XIX. Enhancing the electromagnetic interference shielding effectiveness of carbon-fiber reinforced cement paste by coating the carbon fiber with nickel**
Ozturk M., Chung D. D. L.
JOURNAL OF BUILDING ENGINEERING, vol.41, 2021 (SCI-Expanded)
- XX. Capacitance-based stress self-sensing effectiveness of a model asphalt without functional component**
Ozturk M., Chung D. D. L.
CONSTRUCTION AND BUILDING MATERIALS, vol.294, 2021 (SCI-Expanded)
- XXI. Radio-wave shielding behavior of steel structures**
Ozturk M., Chung D. D. L.
JOURNAL OF ELECTROMAGNETIC WAVES AND APPLICATIONS, vol.35, no.11, pp.1407-1419, 2021 (SCI-Expanded)
- XXII. Seismic metamaterials for low-frequency mechanical wave attenuation**
Kacin S., Ozturk M., Sevim U. K., Mert B. A., Ozer Z., Akgol O., Unal E., Karaaslan M.
NATURAL HAZARDS, vol.107, no.1, pp.213-229, 2021 (SCI-Expanded)
- XXIII. Radio-wave absorption by aluminum and its dependence on the absorption distance**
Chung D. D. L., Ozturk M.
JOURNAL OF MATERIALS SCIENCE, vol.56, no.15, pp.9263-9273, 2021 (SCI-Expanded)
- XXIV. Compressive strength prediction models for cementitious composites with fly ash using machine learning techniques**
Sevim U. K., Bilgic H. H., Cansiz O. F., Ozturk M., ATIŞ C. D.
CONSTRUCTION AND BUILDING MATERIALS, vol.271, 2021 (SCI-Expanded)
- XXV. Mechanical and electromagnetic performance of cement based composites containing different replacement levels of ground granulated blast furnace slag, fly ash, silica fume and rice husk ash**
Ozturk M., Karaaslan M., Akgol O., Sevim U. K.
CEMENT AND CONCRETE RESEARCH, vol.136, 2020 (SCI-Expanded)
- XXVI. Investigation of the mechanic, electromagnetic characteristics and shielding effectiveness of concrete with boron ores and boron containing wastes**
Ozturk M., Sevim U. K., Akgol O., Unal E., Karaaslan M.
CONSTRUCTION AND BUILDING MATERIALS, vol.252, 2020 (SCI-Expanded)
- XXVII. Synergetic effect of waste tire rubber and mil scale on electromagnetic wave attenuation properties of new generation mortar**
Ozturk M., Depci T., Karaaslan M., Sevim U. K., Akgol O., Hacioglu S. O.
JOURNAL OF BUILDING ENGINEERING, vol.30, 2020 (SCI-Expanded)
- XXVIII. Effect of n-CaCO₃ on fresh, hardened properties and acid resistance of granulated blast furnace slag added mortar**
Bankir M. B., Ozturk M., Sevim U. K., Depci T.
JOURNAL OF BUILDING ENGINEERING, vol.29, 2020 (SCI-Expanded)
- XXIX. Production of new electromagnetic wave shielder mortar using waste mill scales**
Ozturk M., Depci T., Bahceci E., Karaaslan M., Akgol O., Sevim U. K.
CONSTRUCTION AND BUILDING MATERIALS, vol.242, 2020 (SCI-Expanded)
- XXX. Metamaterial sensor application concrete material reinforced with carbon steel fiber**
Dalgac S., KARADAĞ F., Unal E., Ozkaner V., BAKIR M., Akgol O., Sevim U. K., Delihacioglu K., Ozturk M., Karaaslan M., et al.
MODERN PHYSICS LETTERS B, vol.34, no.10, 2020 (SCI-Expanded)
- XXXI. An electromagnetic non-destructive approach to determine dispersion and orientation of fiber**

reinforced concretes

Ozturk M., Sevim U. K., Akgol O., Karaaslan M., Unal E.

MEASUREMENT, vol.138, pp.356-367, 2019 (SCI-Expanded)

- XXXII. **A Nondestructive Method for Determining Fiber Content and Fiber Ratio in Concretes Using a Metamaterial Sensor Based on a V-Shaped Resonator**
Akgol O., Unal E., Bagmanci M., Karaaslan M., Sevim U. K., Ozturk M., Bhadauria A.
JOURNAL OF ELECTRONIC MATERIALS, vol.48, no.4, pp.2469-2481, 2019 (SCI-Expanded)
- XXXIII. **Utilization of boron waste borogypsum in mortar**
Sevim U. K., Ozturk M., Onturk S., Bankir M. B.
JOURNAL OF BUILDING ENGINEERING, vol.22, pp.496-503, 2019 (SCI-Expanded)
- XXXIV. **Alkali activation of electric arc furnace slag: Mechanical properties and micro analyzes**
Ozturk M., Bankir M. B., Bolukbasi O. S., Sevim U. K.
JOURNAL OF BUILDING ENGINEERING, vol.21, pp.97-105, 2019 (SCI-Expanded)
- XXXV. **MLR & ANN approaches for prediction of compressive strength of alkali activated EAFS**
Ozturk M., Cansiz O. F., Sevim U. K., Bankir M. B.
COMPUTERS AND CONCRETE, vol.21, no.5, pp.559-567, 2018 (SCI-Expanded)
- XXXVI. **Determination of Physical Properties of Concrete by Using Microwave Nondestructive Techniques**
Ozturk M., Sevim U. K., Akgol O., Unal E., Karaaslan M.
APPLIED COMPUTATIONAL ELECTROMAGNETICS SOCIETY JOURNAL, vol.33, no.3, pp.265-272, 2018 (SCI-Expanded)
- XXXVII. **Experimental work on mechanical, electromagnetic and microwave shielding effectiveness properties of mortar containing electric arc furnace slag**
Ozturk M., Akgol O., Sevim U. K., Karaaslan M., Demirci M., Unal E.
CONSTRUCTION AND BUILDING MATERIALS, vol.165, pp.58-63, 2018 (SCI-Expanded)

Articles Published in Other Journals

- I. **Direct Analysis of Chlorine Ionized Cement-Based Composites and Its Sensor Application By 2,5GHz Antennas**
Öztürk M., Alkurt F. Ö., Sevim U. K., Akgöl O., Karaaslan M.
Osmaniye Korkut Ata Üniversitesi Fen Bilimleri Enstitüsü Dergisi (Online), vol.6, no.3, pp.2086-2094, 2023 (Peer-Reviewed Journal)
- II. **Capacitance-Based Self-Sensing Cement-Based Composite Produced by Traditional Methods**
ÖZTÜRK M.
SELÇUK UNIVERSITY JOURNAL OF ENGINEERING, SCIENCE AND TECHNOLOGY, vol.10, no.2, pp.388-395, 2022 (Peer-Reviewed Journal)
- III. **Elevated Temperature Resistance of Mortars Including Ground Granulated Blast Furnace Slag, Fly ash and Silica Fume**
ÖZTÜRK M.
Osmaniye Korkut Ata Üniversitesi Fen Bilimleri Enstitüsü Dergisi (Online), vol.5, no.1, pp.143-153, 2022 (Peer-Reviewed Journal)
- IV. **Farklı Konfigurasyonlarda Çelik Metamalzemeler Kullanarak Sismik Etkilerin Azaltılması**
KAÇIN S., SEVİM U. K., ÖZTÜRK M., KARAASLAN M., DEMİRCİ M., AKGÖL O., ÜNAL E., ÖZER Z., BAŞAR M., MERT B. A., et al.
Türk deprem araştırma dergisi (Online), vol.3, no.1, pp.20-32, 2021 (Scopus)
- V. **Investigation of mechanical and microstructural performance of alkali activated electrical arc furnace slag mortars**
ÖZTÜRK M., SEVİM U. K., BALÇIKANLI BANKİR M., BÖLÜKBAŞI Ö. S.
International Advanced Researches and Engineering Journal, vol.3, pp.55-59, 2019 (Peer-Reviewed Journal)
- VI. **Utilization of Colemanite waste in Concrete Design**

SEVİM U. K., ÖZTÜRK M., BALÇIKANLI BANKİR M., Aydın U.

International Journal of Advanced Engineering Research and Science, vol.4, pp.172-175, 2017 (Peer-Reviewed Journal)

VII. **Bearing and Swelling Properties of Randomly Distributed Waste Jute Reinforced Soil**

ÖZTÜRK M., ÇABALAR A. F.

Natural and Engineering Sciences (NESciences), 2017 (Peer-Reviewed Journal)

VIII. **Utilization of Boron Waste Borogypsum with Silica Fume as a Supplementary Cementitious Material in Mortar**

ÖZTÜRK M., SEVİM U. K.

International Journal of Advanced Engineering Research and Science, 2016 (Peer-Reviewed Journal)

IX. **Çelik Lif ile Güçlendirilmi Betonlarda Lif Yönünü ve Dağılımını Belirlemede Yeni Bir Yaklaşım**

ÖZTÜRK M., SEVİM U. K., AKGÖL O., KARAASLAN M.

Çukurova Üniversitesi Mühendislik-Mimarlık Fakültesi Dergisi, 2016 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

I. **Olivin Kumu Kullanılarak Yüksek Sıcaklık Direnci Arttırılmış Geleneksel ve Alkali Aktive Edilmiş Cürufllu Harçlar**

ÖZTÜRK M.

3rd International Conference on Applied Engineering and Natural Sciences, 20 July 2022

II. **FARKLI İÇERİKLERE SAHİP ÇİMENTO ESASLI KOMPOZİTLERİN FİZİKSEL VE MEKANİK ÖZELLİKLERİNİN İNCELENMESİ**

ÖZTÜRK M.

2. ISPEC ULUSAL BİLİMSEL ARAŞTIRMALAR KONGRESİ, Adana, Turkey, 17 January 2022

III. **INVESTIGATION OF THE USE OF MARBLE DUST INSTEAD OF AGGREGATE AND CEMENT IN CEMENTITIOUS COMPOSITES**

BALÇIKANLI BANKİR M., ÖZTÜRK M.

HAGIA SOPHIA 3. INTERNATIONAL CONFERENCE ON MULTIDISCIPLINARY SCIENTIFIC STUDIES, 15 September 2021

IV. **ATIK TEKERLEK LASTİĞİ İÇEREN HARCLARIN ASİT VE SÜLFAT SALDIRISINA DAYANIMI**

ÖZTÜRK M., BALÇIKANLI BANKİR M.

2. INTERNATIONAL SCIENTIFIC RESEARCH AND INNOVATION CONGRESS, 11 September 2021

V. **Alkalilerle Aktive Edilen Çevre Dostu Elektrik Ark Fırın Cürufllu Harçların Yüksek Sıcaklık Performansının İncelenmesi**

BALÇIKANLI BANKİR M., ÖZTÜRK M., SEVİM U. K.

5. Uluslararası Multidisipliner Avrasya Kongresinde, BARCELONA, Spain, 24 - 26 July 2018, vol.1, pp.290-295

VI. **Uçucu Kül, Silis Dumanı ve Yüksek Fırın Cürufunun Farklı Kombinasyonlarının Betonun Mekanik ve Aderans Özelliklerine Olan Etkisinin Araştırılması**

BALÇIKANLI BANKİR M., ÖZTÜRK M., SEVİM U. K.

5. Uluslararası Multidisipliner Avrasya Kongresi, BARCELONA, Spain, 24 - 26 July 2018, vol.1, pp.296-302

Patent

Öztürk M., ERKEN UYARI SİSTEMİ OLARAK KENDİNDEN ISI SENSÖRLÜ BETONARME YAPI ELEMANI, Patent, CHAPTER E Constructed Constructions (Construction), The Invention Recourse Number: 2024/000170 , Standard Registration, 2024