Res. Asst. PhD YALÇIN KARAKAYA

Personal Information

Email: yalcin.karakaya@cbu.edu.tr
Web: https://avesis.mcbu.edu.tr/yalcin.karakaya

International Researcher IDs
ScholarID: z7ZH-ooAAAAJ
ORCID: 0000-0003-1036-7941
Publons / Web Of Science ResearcherID: QXJ-2472-2026
ScopusID: 60651887800
Yoksis Researcher ID: 191159

Education

Doctorate, Middle East Technical University, Faculty Of Engineering, Department Of Civil Engineering, Turkey 2015 - 2022
Postgraduate, Middle East Technical University, Faculty Of Engineering, Department Of Civil Engineering, Turkey 2012 - 2015
Undergraduate, Karadeniz Technical University, Mühendislik Fakültesi, İnşaat Mühendisliği, Turkey 2007 - 2011

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Investigation of variatons in performance properties of asphalt concrete using image-based finite element model, Middle East Technical University, 2022
Postgraduate, Low temperature performance of asphalt concrete under direct tension loading, Middle East Technical University, Faculty Of Engineering, Department Of Civil Engineering, 2015

Research Areas

Avesis Research Areas: Transportation Engineering
WoS Research Areas: Materials Science Characterization & Testing, Mechanics, Engineering Civil
Scopus Research Areas: Civil and Structural Engineering

Academic Positions

Research Assistant PhD, Manisa Celal Bayar University, Mühendislik Ve Doğa Bilimleri Fakültesi, İnşaat Mühendisliği, 2022 - Present

Articles

Articles

I. **Effects of mixture design and cooling rate on the low-temperature TSRST responses of asphalt mixtures: Experimental evaluation and artificial neural network modelling**
Qadir A., Guler M., Karakaya Y.
CONSTRUCTION AND BUILDING MATERIALS, pp.148751, 2026 (SCI-Expanded, Scopus)

II. **Effects of mixture design variables on low-temperature cracking and thermal fatigue resistance of asphalt mixtures**
Karakaya Y., Qadir A., Arabzadeh A., Güler M.
CONSTRUCTION AND BUILDING MATERIALS, vol.542, 2026 (SCI-Expanded, Scopus)

III. **Fatigue and Rutting Performance of FAA and Conventional Asphalt Mixture Systems**
Karakaya Y., Güler M.
Fatigue and Fracture of Engineering Materials and Structures, vol.49, no.8, pp.3500-3511, 2026 (SCI-Expanded, Scopus)

Papers Presented at Peer-Reviewed Scientific Conferences

I. **Investigating the Tensile Properties of Geocell Reinforced Pavement System Using a 2D FE Model**
KARAKAYA Y., YILDIRIM UNCU D., ÖZER A.
15th International Congress on Advances in Civil Engineering, Famagusta, Cyprus (Kktc), 6 - 08 September 2023, pp.870-883, (Full Text)

II. **EVALUATION OF PERFORMANCE PROPERTIES OF ASPHALT MIXTURES USING NANO-ORGANOSILANE ADDITIVE**
Karakaya Y., Güler M.
7th Eurasphalt & Eurobitume Congress | Asphalt 4.0 , Madrid, Spain, 15 - 17 June 2021, (Unpublished)

III. **EVALUATION OF LABORATORY PERFORMANCE OF ZYCOTHERM ADDITIVE FOR EXTENDED MOISTURE RESISTANCE OF HMA PAVEMENTS**
Karakaya Y., Varli Bingöl B., Güler M.
International Civil Engineering & Architecture Conference (ICEARC 2019), Trabzon, Turkey, 17 - 20 April 2019, (Unpublished)

IV. **Investigating Material Toughness of Asphalt Concrete Under Direct Tension Loading**
Karakaya Y., Güler M.
13th International Congress on Advances in Civil Engineering, İzmir, Turkey, 12 - 14 September 2018, (Unpublished)

V. **THERMAL FATIGUE BEHAVIOR OF ASPHALT CONCRETE UNDER CONSTANT AMPLITUDE STRAIN LOADING**
Karakaya Y., Arabzadeh A., Güler M.
94th Annual Meeting of Transportation Research Board (TRB 94th), Washington, United States Of America, 11 - 15 January 2015, (Unpublished)

Metrics

Publication: 9