

Assoc. Prof. TUBA KÜTÜK

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International Researcher IDs

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Publons / Web Of Science ResearcherID: DBL-5216-2022

ScopusID: 37099016000

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Education Information

Doctorate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, İnşaat Mühendisliği Abd, Turkey 2004 - 2010

Undergraduate, Ataturk University, Mühendislik Fakültesi, İnşaat Mühendisliği Bölümü, Turkey 1999 - 2003

Foreign Languages

English, B2 Upper Intermediate

Research Areas

Civil Engineering, Transportation Engineering, Highways, Transportation Engineering, Traffic Engineering, Road Materials, Geotechnical, Ground Improvement, Building materials, Concrete Technology, Engineering and Technology

Academic Titles / Tasks

Associate Professor, Recep Tayyip Erdogan University, MÜHENDİSLİK VE MİMARLIK FAKÜLTESİ, İNŞAAT MÜHENDİSLİĞİ, 2021 - Continues

Assistant Professor, Recep Tayyip Erdogan University, MÜHENDİSLİK VE MİMARLIK FAKÜLTESİ, İNŞAAT MÜHENDİSLİĞİ, 2018 - 2021

Assistant Professor, Recep Tayyip Erdogan University, Mühendislik Fakültesi, İnşaat Mühendisliği Bölümü, 2012 - 2018

Courses

Girişimcilik ve Etik, Undergraduate, 2023 - 2024

Ulaşım-I, Undergraduate, 2023 - 2024

Ulaşım, Undergraduate, 2015 - 2016

Uzmanlık Alan Dersi 1, Postgraduate, 2015 - 2016

İnşaat Mühendisliğine Giriş, Undergraduate, 2014 - 2015

Asfalt Kaplamalarda Katkılar, Postgraduate, 2015 - 2016

Esnek Üstyapı Tasarımı ve Bitümlü Kaplamalar, Postgraduate, 2015 - 2016

Beton Yollar, Postgraduate, 2014 - 2015

Jury Memberships

Academic Staff Examination, Araştırma Görevlisi Alımı Sınavı, Recep Tayyip Erdogan Univ. Muhendislik Fak. Insaat Muh. Bolumu , July, 2013

Academic Staff Examination, Araştırma Görevlisi Alımı Sınavı, Recep Tayyip Erdogan Univ. Muhendislik Fak. Insaat Muh. Bolumu, August, 2012

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Improvement of the durability of concrete by substitution of raw ground colemanite**
Kara C., Kütük S., Kutuk-Sert T.
Case Studies in Construction Materials, vol.19, 2023 (SCI-Expanded)
- II. **Digital image processing of warm mix asphalt enriched with nanocolemanite and nanoulexite minerals**
Kutuk-Sert T., Öztürk M., Kütük S.
Construction and Building Materials, vol.399, 2023 (SCI-Expanded)
- III. **An examination of nanoparticle colemanite mineral added warm mix asphalt**
Kutuk S., Kutuk-Sert T.
CONSTRUCTION AND BUILDING MATERIALS, vol.243, 2020 (SCI-Expanded)
- IV. **Investigation of nano ulexite mineral effects on mechanical behaviour of warm mix asphalt pavements**
Kutuk-Sert T., Gunbey E.
GRADEVINAR, vol.72, pp.503-513, 2020 (SCI-Expanded)
- V. **Effect of PCA on Nanosized Ulexite Material Prepared by Mechanical Milling**
Kutuk S., Kutuk-Sert T.
ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, vol.42, pp.4801-4809, 2017 (SCI-Expanded)
- VI. **Stability analyses of submicron-boron mineral prepared by mechanical milling process in concrete roads**
Kutuk-Sert T.
CONSTRUCTION AND BUILDING MATERIALS, vol.121, pp.255-264, 2016 (SCI-Expanded)
- VII. **Physical and Marshall Properties of Borogypsum Used as Filler Aggregate in Asphalt Concrete**
Kutuk-Sert T., Kutuk S.
JOURNAL OF MATERIALS IN CIVIL ENGINEERING, vol.25, no.2, pp.266-273, 2013 (SCI-Expanded)
- VIII. **INVESTIGATION OF GEOGRID APERTURE SIZE EFFECTS ON SUBBASE-SUBGRADE STABILIZATION OF ASPHALT PAVEMENTS**
Sert T., AKPINAR M. V.
BALTIC JOURNAL OF ROAD AND BRIDGE ENGINEERING, vol.7, no.2, pp.160-168, 2012 (SCI-Expanded)
- IX. **Investigation of Geogrid Performance on Highway Subbase By Using The Pullout Test Device**
Sert T., AKPINAR M. V.
TEKNIK DERGI, vol.22, no.1, pp.5285-5304, 2011 (SCI-Expanded)

Articles Published in Other Journals

ARTICLES PUBLISHED IN OTHER JOURNALS

- I. **Bor ve Bor Atığının İnşaat Yıkıntı Atığı ile Normal Beton Üzerindeki Etkileri**
Yentimur M. F., Kütük T., Kütük S.
Journal of Innovations in Civil Engineering and Technology, vol.4, no.2, pp.47-60, 2022 (Peer-Reviewed Journal)
- II. **Thermal properties of nanoparticle colemanite mineral and its advantages in application**
Kütük S., Kütük T.
Gümüşhane Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.11, no.1, pp.198-208, 2021 (Peer-Reviewed Journal)
- III. **Öğütülmüş Kolemanit Minerali İkameli Beton Yollardaki Aşınma Kaybının Araştırılması**
Kütük T., Kara C., Kütük S.
Afyon Kocatepe Üniversitesi Fen ve Mühendislik Bilimleri Dergisi, vol.20, no.2, pp.287-295, 2020 (Peer-Reviewed Journal)
- IV. **A Study on the Effects of Highway Reinforcement on Load Distribution**
KÜTÜK T., GÜRBÜZ A., AKPINAR M. V.
Sciennovation_a Journal on Structural Science and Innovation, vol.1, no.2, pp.51-58, 2020 (Peer-Reviewed Journal)
- V. **Kara C., Kütük T., Kütük S.**
Düzce Üniversitesi Bilim ve Teknoloji Dergisi, vol.8, no.1, pp.499-510, 2020 (Peer-Reviewed Journal)
- VI. **Farklı Kür Koşullarının Kolemanit İkameli Betonların Dayanımına Etkisi**
KÜTÜK T., KARA C.
Journal of Investigations on Engineering and Technology, vol.1, no.2, pp.19-23, 2018 (Peer-Reviewed Journal)
- VII. **Particle size distribution of nanoscale ulexite mineral prepared by ball milling**
KÜTÜK T., KUTUK S.
MATTER: International Journal of Science and Technology, vol.3, no.3, pp.86-103, 2017 (Peer-Reviewed Journal)
- VIII. **Sub-Mikron Boyutlarında Üleksit Mineralinin Asfalt Karışımların Suya Hassasiyetine Etkisinin İncelenmesi**
Kütük T.
Gümüşhane Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.7, no.2, pp.141-152, 2017 (Peer-Reviewed Journal)
- IX. **Field and Loading Unit Analysis of Vertical Pressure Distribution on Highway Sublayers**
KÜTÜK T., GÜRBÜZ A., AKPINAR M. V.
American Academic Scholarly Research Journal, vol.8, pp.65-72, 2016 (Peer-Reviewed Journal)
- X. **Calculation Of Shear Strength Probability Of Geogrids Used In Highway Embankments**
KÜTÜK T., GÜRBÜZ A.
VFAST Transactions on Mathematics, vol.5, pp.10-17, 2014 (Peer-Reviewed Journal)
- XI. **Beton yollarda karışım incelik modülünün sürtünme kaybına etkisi**
KARPUZ O., AKPINAR M. V., KÜTÜK T., ÖRNEK M.
Çukurova Üniversitesi Mühendislik Mimarlık Fakültesi Dergisi, vol.23, no.2, pp.137-146, 2008 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **Investigation of the effect of using tea waste ash in hybrid cements with XRD, FTIR, and TGA analyses**
Terzi C., Kütük S., Kütük T.
5th International Engineering Research Symposium, Düzce, Turkey, 7 - 09 March 2024, vol.1, pp.43
- II. **Effect of tea waste ash on compressive strength and setting time of hybrid cement mortars**
Terzi C., Kütük T., Kütük S.
5th International Engineering Research Symposium, Düzce, Turkey, 7 - 09 March 2024, vol.1, pp.44
- III. **Mechanical properties of eco-friendly warm mix asphalt containing nano-sized raw colemanite**
Kütük S., Kütük T.
7th International Conference on Engineering Technologies, Konya, Turkey, 23 - 25 November 2023, vol.1, pp.109
- IV. **Investigation of Biochar Additive As a Performance Enhancer in Asphalt Coatings**
Aslan M. T., Kütük T., İskender E., Aksoy A., İskender C.

4th International Conference on Advanced Engineering Technologies, Bayburt, Turkey, 28 - 30 September 2022, vol.1, pp.141-148

- V. **Çay atığı külü ve öğütülmüş yüksek fırın cürufu harçların basınç dayanımları**
Terzi C., Kütük S., Kütük T.
The International Online Engineering and Natural Sciences Conference (IOCENS'21), Gümüşhane, Turkey, 5 - 07 July 2021, vol.1, pp.44
- VI. **Çay atığı külünün pozolanik özelliğinin XRD ve XRF analizi ile araştırılması**
Kütük S., Terzi C., Kütük T.
The International Online Engineering and Natural Sciences Conference (IOCENS'21), Gümüşhane, Turkey, 5 - 07 July 2021, vol.1, pp.43
- VII. **Investigation of compressive strength of concrete roads containing milled colemanite mineral additive**
KÜTÜK S., KÜTÜK T., GÜNER N. U.
The International Symposium on Innovations in Civil Engineering and Technology, Afyonkarahisar, Turkey, 23 - 25 October 2019, vol.1, pp.161-170
- VIII. **Effect of colemanite mineral for abrasion resistance on concrete roads**
KÜTÜK T., KARA C., KÜTÜK S.
The International Symposium on Innovations in Civil Engineering and Technology, Afyonkarahisar, Turkey, 23 - 25 October 2019, pp.149-150
- IX. **Effect of colemanite mineral for abrasion resistance on concrete roads**
KÜTÜK T., KARA C., KÜTÜK S.
The International Symposium on Innovations in Civil Engineering and Technology, Afyon, Turkey, 23 - 25 October 2019, pp.149-150
- X. **The Effect of Wetting and Drying on Concrete Roads Substituted Colemanite**
KÜTÜK T., KARA C., KÜTÜK S.
International Civil Engineering Architecture Conference, 17 - 20 April 2019, vol.1
- XI. **Thermal Analysis of Submicron Colemanite Mineral Prepared With Mechanical Milling Process**
KÜTÜK S., KÜTÜK T.
4. International Conference on Civil, Environmental, Geology and Mining Engineering-Trabzon (ICOCM 2019), Trabzon, Turkey, 20 - 22 April 2019
- XII. **TEM analysis of submicron colemanite mineral prepared with mechanical milling process**
KÜTÜK S., KÜTÜK T.
International Conference on Civil Environmental, Geology and Mining Engineering, Trabzon, Turkey, 20 - 22 April 2019, pp.714-720
- XIII. **The effect of wetting and drying on concrete roads substituted colemanite**
KÜTÜK T., KARA C., KÜTÜK S.
International Civil Engineering and Architecture Conference, Trabzon, Turkey, 17 - 20 April 2019, vol.1, pp.2550-2557
- XIV. **Physical properties of nano boron minerals and their effects on Indirect Tensile Stiffness Modulus in asphalt mixtures**
KÜTÜK T., KUTUK S.
Turkish Physical Society 34th International Physics Congress, Muğla, Turkey, 5 - 09 September 2018, vol.1, pp.180
- XV. **A Segmentation Method for Asphalt Quality Analysis**
CİVELEK Ö., ÖZTÜRK M., Kutuk T., Kutuk S.
26th IEEE Signal Processing and Communications Applications Conference (SIU), İzmir, Turkey, 2 - 05 May 2018
- XVI. **Evaluation of submicron particle sized colemanite minerals in warm mix asphalt mixtures**
KÜTÜK T., KUTUK S., GÜNBAY R. E., ÇANAKÇI A., KOCAKERİM M. M.
8th International Advanced Technologies Symposium (IATS'17), Elazığ, Turkey, 19 - 22 October 2017, vol.1, pp.143
- XVII. **Compressive strength analysis of rigid pavements including submicron particle sized boron mineral**
GÜNER M. S., KÜTÜK T., KUTUK S.
8th International Advanced Technologies Symposium (IATS'17), Elazığ, Turkey, 19 - 22 October 2017, vol.1, pp.144

- XVIII. **Nano üleksit minerallerinin ılık karışım asfaltın performansı üzerindeki etkileri**
KÜTÜK T., İSKENDER E., KUTUK S., GÜNBEY R. E.
7. Ulusal Asfalt Sempozyumu ve Sergisi, Ankara, Turkey, 29 - 30 November 2017, vol.1, pp.405-419
- XIX. **Laboratory test researches on warm mix and hot mix asphalt included sub-micron sized ulexite mineral**
KÜTÜK T., KUTUK S., GÜNBEY R. E., ÇANAKÇI A., KOCAKERİM M. M.
19th International Conference on Researches in Science Technology (ICRST), Barselona, Spain, 27 - 28 July 2017, vol.1, pp.50-51
- XX. **Particle size distribution of nanoscale ulexite mineral prepared by ball milling**
KUTUK S., KÜTÜK T.
19th International Conference on Researches in Science Technology (ICRST), Barselona, Spain, 27 - 28 July 2017, vol.1, pp.50
- XXI. **Field And Loading Unit Analysis Of Vertical Pressure Distribution On Highway Sublayers**
KÜTÜK T., GÜRBÜZ A., akpınar m. v.
SPEHES'16, Ankara, Turkey, 18 November 2016, pp.1
- XXII. **Nano Boyutlu Üleksit Malzemesinin Mekaniksel Öğütme Yöntemi ile Hazırlanması ve Analizi**
KUTUK S., KÜTÜK T., AKBULUT U., İLHAN M.
Bor ve Bor Teknolojileri Çalıştayı RTEÜ, Rize, Turkey, 24 May 2016
- XXIII. **The shape analysis of geogrids with different aperture structures used for road subgrade reinforcement**
KÜTÜK T., AKPINAR M. V.
28th International Baltic Road Conference, Vilnius, Lithuania, 25 - 28 August 2013
- XXIV. **An Investigation on Pullout Test Device Dimensions**
KÜTÜK T., AKPINAR M. V.
9th International Congress on Advances in Civil Engineering, Trabzon, Turkey, 27 - 30 September 2010, pp.344
- XXV. **Asphaltite Coal in Hot-Mix Asphalt Concrete**
KÜTÜK T., ÇELİK F.
9th International Congress on Advances in Civil Engineering, Trabzon, Turkey, 27 - 30 September 2010, pp.346
- XXVI. **Evaluation of Boron Waste in Hot Mix Asphalt Concrete Design**
KÜTÜK T., ÇELİK F., AKPINAR M. V., MAHDIZADEH M. B.
2nd International Conference Seismic Retrofitting with the Focus on Concrete Technology, Tabriz, Iran, 6 - 07 November 2009
- XXVII. **Evaluation of geogrid displacement on subbase reinforcement using specially designed pullout test**
AKPINAR M. V., Sert T.
8th International Conference on the Bearing Capacity of Roads, Railways and Airfields, Illinois, United States Of America, 29 June - 02 July 2009, pp.1117-1123
- XXVIII. **Determining Geogrid Performance in Railway Ballast by Using a New Pullout Device**
KÜTÜK T., AKPINAR M. V.
2nd International Railway Symposium, Haydarpaşa, İstanbul, Turkey, 15 - 17 October 2008, pp.545-553
- XXIX. **Demiryolu Balast Dolguların Güçlendirilmesinde Geogrid Açıklığının ve Agregası Çapının Değerlendirilmesi**
KÜTÜK T., AKPINAR M. V.
Uluslararası Demiryolu Sempozyumu, Bilkent Otel ve Konferans Merkezi, Ankara, Turkey, 13 - 14 December 2006, pp.1034-1040
- XXX. **Yol Dolgu Malzemelerinde Zemin Sınıflandırması**
KÜTÜK T., AKPINAR M. V.
Zemin Mekaniği ve Temel Mühendisliği 11. Ulusal Kongresi, Trabzon, Turkey, 7 - 08 September 2006, pp.113

Supported Projects

Kütük S., Kütük T., TUBITAK Project, Nano Ölçekli Bor Mineralleriyle Zenginleştirilmiş Ilık Karışım Asfaltın Reolojik Performansının Araştırılması Ve Dijital Görüntüleme Yöntemi İle Analizi, 2015 - 2018

Activities in Scientific Journals

AASCIT (American Association for Science and Technology) kapsamındaki International Journal of Civil Engineering and Construction Science , Editor, 2017 - Continues

Scientific Refereeing

Project Supported by Other Official Institutions, Recep Tayyip Erdogan University, Turkey, August 2023

Project Supported by Other Official Institutions, Erciyes University, Turkey, August 2023

TUBITAK Project, 1002 - Quick Support Program, Recep Tayyip Erdogan University, Turkey, August 2023

Project Supported by Higher Education Institutions, BAP Other, Recep Tayyip Erdogan University, Turkey, June 2023

Project Supported by Other Official Institutions, Recep Tayyip Erdogan University, Turkey, May 2023

ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, National Scientific Refreed Journal, May 2022

Ömer Halisdemir Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, National Scientific Refreed Journal, May 2022

INTERNATIONAL JOURNAL OF PAVEMENT ENGINEERING, National Scientific Refreed Journal, March 2021

Ulakbim TR Dizinde Taranan Pamukkale Üniversitesi Mühendislik Bilimleri Dergisi (PAJES), National Scientific Refreed Journal, November 2016

International Journal of Pavement Engineering , SCI Journal, April 2015

World Journal of Civil Engineering and Construction Technology, Other Indexed Journal, March 2015

Project Supported by Higher Education Institutions, June 2014

Journal of Civil Engineering and Architecture (David Publishing-USA), Other Indexed Journal, April 2014

Project Supported by Higher Education Institutions, March 2014

Project Supported by Higher Education Institutions, February 2014

Project Supported by Higher Education Institutions, April 2013

Metrics

Publication: 53

Citation (WoS): 127

Citation (Scopus): 58

H-Index (WoS): 5

H-Index (Scopus): 5

Congress and Symposium Activities

Kütük-Sert T., Gürbüz A., Akpınar M. V., "Field And Loading Unit Analysis of Vertical Pressure Distribution on Highway Sublayers", AASRC Multilingual International Conference, 18-19 November 2016, Ankara, Turkey., Attendee, Ankara, Turkey, 2016

Kütük-Sert T., Gürbüz A., "Calculation of Shear Strength Probability of Geogrids Used in Highway Embankments", 2nd International Conference on Computational & Social Sciences, 26-28 August 2014, RTEU, Rize, Turkey., Attendee, Rize, Turkey, 2014

Kütük-Sert T., Akpınar, M. V., "The Shape Analysis of Geogrids with Different Aperture Structures Used for Road Subgrade Reinforcement" 28th International Baltic Road Conference, 26-28 August 2013, LITEXPO, Vilnius, Lithuania., Attendee, Vilnius, Lithuania, 2013

Sert, T., Çelik, F., "Evaluation of Using Asphaltite Coal in Hot-Mix Asphalt Concrete" 9th International Congress on

Advances in Civil Engineering ACE 2010, Karadeniz Technical University, Trabzon, Turkey, 27-30 September 2010, pp. 346., Attendee, Trabzon, Turkey, 2010

Sert, T., Akpınar, M. V., "An Investigation on Pullout Test Device Dimensions" 9th International Congress on Advances in Civil Engineering ACE 2010, Karadeniz Technical University, Trabzon, Turkey, 27-30 September 2010, pp. 344., Attendee, Trabzon, Turkey, 2010

Sert, T., Çelik, F., Akpınar, M. V., Mahdizadeh, M. B., "Evaluation of Boron Waste in Hot Mix Asphalt Concrete Design" Proceedings of the 1st International Conference on Concrete Technology, Tabriz, Iran, 6-7 November 2009, pp.204., Attendee, Tabriz, Iran, 2009

Akpınar, M. V., Sert, T., "Evaluation of Geogrid Displacement on Subbase Reinforcement Using Specially Designed Pullout Test", 8th International Conference on The Bearing Capacity of Roads, Railways and Airfields, I Hotel and Conference Center, University of Illinois, Champaign-Urbana, Illinois, USA, 29 June-2 July 2009, pp.1117-1123., Attendee, Illinois, United States Of America, 2009

Sert, T., Akpınar, M. V., "Determining Geogrid Performance in Railway Ballast by Using a New Pullout Device", 2nd International Railway Symposium, Haydarpaşa, İstanbul, 15-17 October 2008, pp.545-553., Attendee, İstanbul, Turkey, 2008

Akpınar, M. V., Sert, T., "Demiryolu Balast Dolguların Güçlendirilmesinde Geogrid Açıklığının ve Agreganın Değerlendirilmesi", Uluslararası Demiryolu Sempozyumu, 13-14 Aralık 2006, Bilkent Otel ve Konferans Merkezi, Ankara, s.1034-1040., Attendee, Ankara, Turkey, 2006

Sert, T., Akpınar, M. V., "Yol Dolgu Malzemelerinde Zemin Sınıflandırması", Zemin Mekaniği ve Temel Mühendisliği Onbirinci Ulusal Kongresi, 7-8 Eylül 2006, Karadeniz Teknik Üniversitesi, Trabzon, s.113., Attendee, Trabzon, Turkey, 2006

Scholarships

BİDEB Bursu, TUBİTAK, 2006 - 2009

Non Academic Experience

Company, Yüksel İnşaat A.Ş., Borçka Barajı Gövde-Dolusavak İnşaatları
University, Bristol Univ., Civil Engineering Department