

Res. Asst. PhD Sedat K  m  rc  

Personal Information

Mobile Phone: [+90 537 970 0121](tel:+905379700121)

Email: komurcus@itu.edu.tr

Web: <http://akademi.itu.edu.tr/komurcus/>

Address: Ayazađa Yerleşkesi İnşaat Fak  ltesi Binası, Maslak, 34469 Sarıyer/İstanbul

International Researcher IDs

ScholarID: wylXd7sAAAAJ

ORCID: 0000-0003-2981-0755

Publons / Web Of Science ResearcherID: F-7247-2015

ScopusID: 57197855673

Yoksis Researcher ID: 226082

Education Information

Doctorate, Istanbul Technical University, Fen Bilimleri Enstit  s  , Yapı M  hendisliđi, Turkey 2017 - 2023

Postgraduate, Istanbul Technical University, Fen Bilimleri Enstit  s  , Yapı M  hendisliđi, Turkey 2014 - 2017

Undergraduate, Istanbul Technical University, İnşaat Fak  ltesi, İnşaat M  hendisliđi, Turkey 2008 - 2013

Foreign Languages

English, C1 Advanced

Certificates, Courses and Trainings

IT, Autocad, İT   Elektrik M  hendisliđi B  l  m  , 2011

Dissertations

Doctorate, Karışık sonlu elemanlar y  ntemiyle d  zlem kompozit eđri eksenli   bukların geometrik dođrusal olmayan davranışlarının analizi, Istanbul Technical University, Lisans  st   Eđitim Enstit  s  , 2023

Postgraduate, Yıđma Duvarların D  zlem İ i Davranışlarının Modellenmesi ve Analizi, İstanbul Teknik   niversitesi, Yapı M  hendisliđi, İnşaat M  hendisliđi, 2017

Research Areas

Mechanics of Solid Bodies, Civil Engineering, Mechanical, Structural Mechanics, Structure, Masonry Structures, Building materials, Composite materials, Numerical Analysis, Engineering and Technology

Academic Titles / Tasks

Academic and Administrative Experience

Araştırma Görevlisi Üniversite Temsilcisi, Istanbul Technical University, 2016 - 2018

Courses

Statics, Undergraduate, 2023 - 2024

Statics and Strength of Materials, Undergraduate, 2023 - 2024

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Nonlinear mixed finite element formulations for the analysis of planar curved beams**
Doğruoğlu A. N., Kömürcü S.
COMPUTERS & STRUCTURES, vol.221, pp.63-81, 2019 (SCI-Expanded)

Articles Published in Other Journals

- I. **Macro and Micro Modeling of the Unreinforced Masonry Shear Walls**
Kömürcü S.
European Journal of Engineering and Natural Sciences, vol.3, pp.116-123, 2019 (Peer-Reviewed Journal)
- II. **Preliminary structural analysis of arch dams using a flat shell finite element formulation**
Kömürcü S., Yılmaz M.
Journal of Structural Engineering Applied Mechanics, vol.2, no.2019, pp.47-52, 2019 (Peer-Reviewed Journal)
- III. **Numerical modelling of the in-plane loaded homogenized masonry walls**
Kömürcü S., Gedikli A.
Periodicals of Engineering and Natural Sciences, vol.5, pp.314-321, 2017 (Scopus)

Refereed Congress / Symposium Publications in Proceedings

- I. **ELASTİK TEMEL ÜZERİNDE RİJİTLİĞİ ANİ DEĞİŞEN TABAKALI KOMPOZİT BERNOULLI-EULER ÇUBUKLARIN STABİLİTE ANALİZİ**
Kömürcü S., Doğruoğlu A. N.
22. ULUSAL MEKANİK KONGRESİ, Adana, Turkey, 6 - 08 September 2021, pp.1-15
- II. **YIĞMA YAPILARIN ANALİZİ İÇİN DETAYLI MİKRO MODELLEME TEKNİĞİNİN UYGULANMASI VE MODELLEME STRATEJİLERİ**
Kömürcü S.
22. ULUSAL MEKANİK KONGRESİ, Adana, Turkey, 6 - 08 September 2021, pp.1-8
- III. **Nonlinear Investigation of the Short Column Effect for Confined Walls Under Cyclic Loading**
Kömürcü S.
9th Turkish Conference on Earthquake Engineering, İstanbul, Turkey, 2 - 03 June 2021, vol.21, no.1, pp.173-180
- IV. **The Behavior of Masonry Wall Constructed Using Biaxial Interlocking Concrete Block, Solid Concrete Block and Cement Sand Brick Subjected to the Compressive Load**
Kömürcü S., Aziz F., Mansor H., Arshad F.
ICMSMM 2020 : International Conference on Masonry Structures and Masonry Materials, Singapore, Singapore, 9 - 10 January 2020, vol.14, no.1, pp.1

- V. **FINITE ELEMENT SIMULATION OF MASONRY WALLS UNDER CYCLIC LOADING USING A HETEROGENEOUS MODEL**
KÖMÜRCÜ S.
5. International Conference on Earthquake Engineering and Seismology (5ICEES), 8 - 11 October 2019
- VI. **SIMULATION OF THE NONLINEAR BEHAVIOUR OF FRAME-WALL INTERACTION FOR CONFINED MASONRY SHEAR WALLS**
KÖMÜRCÜ S.
5. International Conference on Earthquake Engineering and Seismology (5ICEES), 8 - 11 October 2019
- VII. **ELASTİK ZEMİN ÜZERİNE OTURAN TIMOSHENKO KİRİŞLERİN YAYILI YÜK ETKİSİ ALTINDA BURKULMA ANALİZİ**
DOĞRUOĞLU A. N., KÖMÜRCÜ S.
21. ULUSAL MEKANİK KONGRESİ, Turkey, 2 - 06 September 2019
- VIII. **YALITIMLI CAM ÜNİTELERİNDE YAYILI YÜKLEME ALTINDA PLAKALAR ARASINDAKİ YÜK PAYLAŞIMININ SONLU ELEMENLAR YÖNTEMİ İLE ANALİZİ**
YILMAZ M., KÖMÜRCÜ S., DEMİRKAN E., ÇELİK M.
21. ULUSAL MEKANİK KONGRESİ, Turkey, 02 September 2019
- IX. **Investigation of Mortar Thickness Effect for Masonry Walls Using a Continuous Micro Model**
KÖMÜRCÜ S.
iSTE-CE'xx2019- International Conference on Innovation, Sustainability, Technology and Education in Civil Engineering, 13 - 15 June 2019
- X. **Nonlinear Finite Element Analysis of Different Masonry Wall Brick Bond Styles**
KÖMÜRCÜ S.
iSTE-CE'xx2019- International Conference on Innovation, Sustainability, Technology and Education in Civil Engineering, 13 - 15 June 2019
- XI. **Numerical Analysis Of The Structural Behaviour Of Arch Dams Using Shell Finite Element Formulation**
Kömürcü S., Yılmaz M.
5th INTERNATIONAL SYMPOSIUM on DAM SAFETY, İstanbul, Turkey, 27 - 31 October 2018, vol.1, pp.252-257
- XII. **Numerical Large Deflection Analysis of Annular Plates**
DEMİRKAN E., KÖMÜRCÜ S., Yılmaz M.
13th International Congress on Advances in Civil Engineering, İzmir, Turkey, 12 - 14 September 2018
- XIII. **Geometrical Nonlinear Interaction Model of Thin Insulating Glass Units**
Yılmaz M., KÖMÜRCÜ S., DEMİRKAN E.
13th International Congress on Advances in Civil Engineering, İzmir, Turkey, 12 - 14 September 2018
- XIV. **Comparative Analysis of the Nonlinear Mixed Finite Element Formulations for the in-plane Curved Beams**
Doğruoğlu A. N., Kömürcü S.
13. INTERNATIONAL CONFERENCE ON COMPUTATIONAL STRUCTURES TECHNOLOGY, Barselona, Spain, 4 - 06 September 2018
- XV. **3D Finite Element Modeling of the Nonlinear Behavior of Confined Masonry Walls**
KÖMÜRCÜ S.
International Conference on Applied Mathematics in Engineering (ICAME), Balıkesir, Turkey, 27 - 29 June 2018
- XVI. **Investigation of the Structural Design Parameters of Masonry Walls Based on Nonlinear Finite Element Analysis**
KÖMÜRCÜ S.
International Conference on Applied Mathematics in Engineering (ICAME), Balıkesir, Turkey, 27 - 29 June 2018
- XVII. **Buckling Analysis of Beams with Varying Flexural Rigidity on Elastic Foundation**
Doğruoğlu A. N., Kömürcü S.
IV INTERNATIONAL CONFERENCE ON ENGINEERING AND NATURAL SCIENCES (ICENS), Kyiv, Ukraine, 2 - 06 May 2018, pp.198-202
- XVIII. **Stability Analysis of Beams Subjected to Distinct Loading Types on Elastic Foundation**

Doğruoğlu A. N., Kömürcü S.

IV INTERNATIONAL CONFERENCE ON ENGINEERING AND NATURAL SCIENCES (ICENS), Kiev, Ukraine, 2 - 06 May 2018, pp.203-207

- XIX. **Donatısız Yığma Duvarların Düzlem İçi Davranışlarının Nümerik Olarak İncelenmesi**
KÖMÜRCÜ S., GEDİKLİ A.
Uluslararası Katılımlı 6. Tarihi Yapıların Korunması ve Güçlendirilmesi Sempozyumu, 2 - 04 November 2017
- XX. **Donatısız Yığma Duvarların Düzlem içi Davranışlarının Nümerik Olarak İncelenmesi**
Kömürcü S., Gedikli A.
ULUSLARARASI KATILIMLI 6. TARİHİ YAPILARIN KORUNMASI VE GÜÇLENDİRİLMESİ SEMPOZYUMU, Trabzon, Turkey, 2 - 04 November 2017, pp.279-288
- XXI. **Homojenleştirilen Yığma Duvarların Doğrusal Olmayan Davranışlarının Modellenmesi**
Kömürcü S., Gedikli A.
4. ULUSLARARASI DEPREM MÜHENDİSLİĞİ VE SİSMOLOJİ KONFERANSI, Eskişehir, Turkey, 11 - 13 October 2017
- XXII. **YIĞMA DUVARLARIN DÜZLEM İÇİ KIRILMA MEKANİZMALARININ NÜMERİK OLARAK BELİRLENMESİ**
KÖMÜRCÜ S.
20. ULUSAL MEKANİK KONGRESİ, Turkey, 5 - 09 September 2017
- XXIII. **Yığma Duvar Tasarımında Mikro ve Makro Modelleme Tekniklerinin İncelenmesi**
Kömürcü S., Gedikli A.
2. ULUSLARARASI MÜHENDİSLİK MİMARLIK VE TASARIM KONGRESİ, Kocaeli, Turkey, 12 - 13 May 2017, pp.167-168
- XXIV. **Yığma Duvarlarda Düzlem İçi Hasarların Nümerik Analizi**
KÖMÜRCÜ S., GEDİKLİ A.
2. Uluslararası Mühendislik Mimarlık ve Tasarım Kongresi, Kocaeli, Turkey, 12 - 13 May 2017, pp.165-166
- XXV. **YIĞMA DUVARLARDA DÜZLEM İÇİ HASARLARIN NÜMERİK ANALİZİ**
Kömürcü S., Gedikli A.
2. ULUSLARARASI MÜHENDİSLİK MİMARLIK VE TASARIM KONGRESİ, Kocaeli, Turkey, 12 - 13 May 2017, pp.165-166
- XXVI. **Macro and Micro Modelling of the Unreinforced Masonry Shear Walls**
Kömürcü S., Gedikli A.
3rd. INTERNATIONAL CONFERENCE ON ENGINEERING AND NATURAL SCIENCES, Budapest, Hungary, 3 - 07 May 2017, pp.798-805
- XXVII. **Numerical Modelling of the In-Plane Loaded Homogenized Masonry Walls**
Kömürcü S., Gedikli A.
3rd. INTERNATIONAL CONFERENCE ON ENGINEERING AND NATURAL SCIENCES, Budapeşte, Hungary, 3 - 07 May 2017, pp.790-797
- XXVIII. **24 Serbestlik Dereceli Kabuk Sonlu Elaman Formülasyonu**
Kömürcü S., Yılmaz M.
XIX. ULUSAL MEKANİK KONGRESİ, Trabzon, Turkey, 24 - 28 August 2015, pp.649-658
- XXIX. **24 SERBESTLİK DERECELİ KABUK SONLU ELAMAN FORMULASYONU**
KÖMÜRCÜ S., YILMAZ M.
19. ULUSAL MEKANİK KONGRESİ, Trabzon, Turkey, 24 - 28 August 2015

Supported Projects

Gedikli A., Kömürcü S., Project Supported by Higher Education Institutions, 2016 - 2017

Activities in Scientific Journals

Research on Engineering Structures and Materials (RESM) , Advisory Committee Member, 2020 - Continues

Memberships / Tasks in Scientific Organizations

İnşaat Mühendisleri Odası, Member, 2012 - Continues

Scientific Refereeing

Turkish Journal of Engineering, Other journals, January 2024

Düzce Üniversitesi Bilim ve Teknoloji Dergisi, National Scientific Refreed Journal, November 2022

KSCE JOURNAL OF CIVIL ENGINEERING, Journal Indexed in SCI-E, October 2022

SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES, Journal Indexed in SCI-E, September 2022

Research on Engineering Structures and Materials, Other Indexed Journal, September 2022

SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES, Journal Indexed in SCI-E, July 2022

SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES, Journal Indexed in SCI-E, July 2022

SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES, Journal Indexed in SCI-E, July 2022

SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES, Journal Indexed in SCI-E, May 2022

Research on Engineering Structures and Materials, Other Indexed Journal, May 2022

SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES, Journal Indexed in SCI-E, March 2022

KSCE JOURNAL OF CIVIL ENGINEERING, Journal Indexed in SCI-E, March 2022

KSCE JOURNAL OF CIVIL ENGINEERING, Journal Indexed in SCI-E, May 2021

Research on Engineering Structures and Materials (RESM), Other Indexed Journal, April 2021

Sigma Journal of Engineering and Natural Sciences , Journal Indexed in ESCI, March 2021

SN Applied Sciences, Other Indexed Journal, January 2021

El-Cezeri Journal of Science and Engineering, Other Indexed Journal, November 2020

SCIENTIA IRANICA, Journal Indexed in SCI-E, October 2020

Research on Engineering Structures and Materials (RESM), Other Indexed Journal, July 2020

KSCE JOURNAL OF CIVIL ENGINEERING, Journal Indexed in SCI-E, May 2020

KSCE JOURNAL OF CIVIL ENGINEERING, Journal Indexed in SCI-E, November 2019

Applied Acoustics, SCI Journal, January 2019

Scientific Research / Working Group Memberships

İleri Plak Ve Kabuk Uygulamaları Çalışma Grubu, Istanbul Technical University, Turkey,

<https://avesis.itu.edu.tr/arastirma-grubu/past>, 2018 - Continues

Mobility Activity

Bilateral Collaboration Agreement, Lecturing, Université de Djibouti, Djibouti, 2024 - 2024

Metrics

Publication: 36

Citation (WoS): 8

Citation (Scopus): 15

H-Index (WoS): 1

H-Index (Scopus): 2

Congress and Symposium Activities

22. Mekanik Kongresi, Attendee, Adana, Turkey, 2021

9th Turkish Conference on Earthquake Engineering, Attendee, İstanbul, Turkey, 2021

5. International Conference on Earthquake Engineering and Seismology (5ICEES), Working Group, Ankara, Turkey, 2019

4th International Conference on Buildings, Construction and Environmental Engineering, Working Group, İstanbul, Turkey, 2019

XXI. Ulusal Mekanik Kongresi, Working Group, Niğde, Turkey, 2019

iSTE-CE'2019- International Conference on Innovation, Sustainability, Technology and Education in Civil Engineering, Working Group, Hatay, Turkey, 2019

International 5th National Symposium on Dam Safety, Attendee, İstanbul, Turkey, 2018

13thInternational Conference on Computational Structures Technology, Attendee, Barcelona, Spain, 2018

10th International Conference on Engineering Computational Technology, Attendee, Barcelona, Spain, 2018

13th International Congress on Advances in Civil Engineering, Attendee, İzmir, Turkey, 2018

International Conference on Applied Mathematics in Engineering (ICAME), Attendee, Balıkesir, Turkey, 2018

4th International Conference on Engineering and Natural Science, Working Group, Kyiv, Ukraine, 2018

Uluslararası 6. Tarihi Yığma Yapıların Korunması ve Güçlendirilmesi Sempozyumu, Attendee, Trabzon, Turkey, 2017

4. Uluslararası Deprem ve Sismoloji Konferansı, Attendee, Eskişehir, Turkey, 2017

XX. Ulusal Mekanik Kongresi, Attendee, Bursa, Turkey, 2017

3rd International Conference on Symmetries, Differential Equations and Applications, Attendee, İstanbul, Turkey, 2017

Deprem, İnşaatlar, Kentsel Dönüşüm, Devletin Sorumlulukları Konferansı, Attendee, İstanbul, Turkey, 2017

2. Uluslararası Mühendislik Mimarlık ve Tasarım Kongresi, Attendee, Kocaeli, Turkey, 2017

III International Conference on Engineering and Natural Science, Attendee, Budapest, Hungary, 2017

XIX. Ulusal Mekanik Kongresi, Attendee, Trabzon, Turkey, 2015

Representation and Promotion Activities

Institutional Promotion, İstanbul Teknik Üniversitesi, Turkey, İstanbul, 2023 - 2023

Non Academic Experience

Other Public Institution, Ege Ordu İstihkâm Başkanlığı