

## Res. Asst. Tuğba Baytak

### Personal Information

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### Education Information

Doctorate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Yapı Mühendisliği Bölümü, Turkey 2018 - Continues

Postgraduate, Istanbul Technical University, İnşaat Fakültesi, Yapı Mühendisliği Bölümü, Turkey 2015 - 2018

Undergraduate Double Major, Istanbul Technical University, Mimarlık Fakültesi, Mimarlık Bölümü, Turkey 2013 - 2017

Undergraduate, Istanbul Technical University, İnşaat Fakültesi, İnşaat Mühendisliği Bölümü, Turkey 2010 - 2015

### Dissertations

Postgraduate, SICAKLIK GENLEŞMESİ İKİ FARKLI MALZEMEDEN YAPILMIŞ LEVHALARDA TERMAL GERİLME ANALİZİ , İstanbul Teknik Üniversitesi, Mekanik, İnşaat Mühendisliği Bölümü, 2018

### Research Areas

Technical Sciences, Civil Engineering, Mechanical, Structural Mechanics, Mechanics of Solid Bodies

### Academic Titles / Tasks

Research Assistant, Istanbul Technical University, İnşaat, İnşaat Mühendisliği, 2016 - Continues

### Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Thermal stress analysis around a cavity on a bimetal**  
Baytak T., Bulut O.  
STRUCTURAL ENGINEERING AND MECHANICS, vol.69, no.1, pp.69-75, 2019 (Journal Indexed in SCI)

### Articles Published in Other Journals

- I. **The Effect of the Unanticipated Geometrical Change of Steel Base Plates' Mounting Holes on The Stress Distribution**  
Özdemir S., Baytak T., Tosun M., Bulut O.  
El-Cezerî Journal of Science and Engineering, vol.7, no.2, pp.461-473, 2020 (Other Refereed National Journals)
- II. **THE ANALYSIS OF A THERMAL STRESS STATE FOR INDUSTRIALCOMPOSITE PLATES**  
BAYTAK T., BULUT O.  
Journal of Trends in the Development of Machineryand Associated Technology, vol.21, pp.113-116, 2018

(Refereed Journals of Other Institutions)

III. **STATIC ANALYSIS OF THE STRESS STATE CAUSED BY HEATINGQUENCHING PROCESS IN TEMPERED GLASSES**

DUMAN C. U. , SÖNMEZ M. Ş. , BAYTAK T., BULUT O.

Journal of Trends in the Development of Machinery and Associated Technology, vol.21, pp.121-124, 2018

(Refereed Journals of Other Institutions)

IV. **Effect of Temperature on stress of Y2O3-ZrO2 Insulation Coating on Stainless Steel Tape**

Dönmez A. A. , Bulut O., Baytak T., Tosun M., Ataoğlu Ş., İpek C., CAKIROGLU O.

Journal of Trends in the Development of Machinery and Associated Technology, vol.20, pp.65-68, 2016

(International Refereed University Journal)

V. **Stress Analysis and Microstructure of the Al2O3/Cu/MgB2 wires**

Ataoğlu Ş., Tosun M., Baytak T., Dönmez A. A. , Bulut O., İpek C.

Journal of Trends in the Development of Machinery and Associated Technology, vol.20, pp.57-60, 2016

(International Refereed University Journal)

VI. **Residual Stress and Microstructure of YSZ Buffer Layers for YBCO Coated Conductor**

Bulut O., Dönmez A. A. , Baytak T., İpek C., Tosun M., Ataoğlu Ş., cakiroğlu O.

Journal of Trends in the Development of Machinery and Associated Technology, vol.20, pp.61-64, 2016

(International Refereed University Journal)

## Refereed Congress / Symposium Publications in Proceedings

I. Baytak T.

22. ULUSAL MEKANİK KONGRESİ, Adana, Turkey, 6 - 10 September 2021, pp.235-249

II. **Effect of Film Thickness on Structural and Mechanical Properties of Zn0.95Cu0.050 Thin Films**

TOPCU İ., TOSUN M., BAYTAK T., BULUT O., İPEK C., ARDA L., ATAĞLU Ş.

International Conference on Condensed Matter and Materials Science ICCMMS-2019, Adana, Turkey, 14 - 19 October 2019, pp.70

III. **Yanal Toprak Basınç Katsayısının Fotoelastisite Yöntemi ile Araştırılması**

BAYTAK T., ÇEVİKBİLEN G., BULUT O.

21. ULUSAL MEKANİK KONGRESİ, Turkey, 2 - 06 September 2019

IV. **Effect of Temperature and Film Thickness on Residual Stress and Microstructure of Er doped ZnO Thin Films**

İPEK C., TOSUN M., BAYTAK T., BULUT O., DÖNMEZ A., ALPHAN M. C. , ATAĞLU Ş., ARDA L.

International Conference on Condensed Matter and Materials Science ICCMMS-2017, 11 - 15 October 2017

V. **Effect of Temperatures on Residual Stress and Microstructure of 3d transition metals doped ZnO Thin Films**

BAYTAK T., ATAĞLU Ş., TOSUN M., BULUT O., İPEK C., ARDA L.

International Conference on Condensed Matter and Materials Science (ICCMMS-2017), Adana, Turkey, 11 - 15 October 2017

VI. **İNCE KOMPOZİT LEVHALARDA ANİZOTROP TERMAL GERİLME ANALİZİ**

BAYTAK T., BULUT O., MOLLAMAHMUTOĞLU Ç., DÖNMEZ a., ATAĞLU Ş.

XX. Ulusal Mekanik Kongresi, Turkey, 5 - 09 September 2017

VII. **TERMAL GERİLME PROBLEMİ İLE YÜZEY KUVVETLERİNİN OLUŞTURDUĞU ELASTİK PROBLEMİN ANALOJİSİNE AİT DENEYSEL ÇALIŞMA**

BULUT O., BAYTAK T., TOSUN M., İPEK C., MOLLAMAHMUTOĞLU Ç., Abdulaliyev Z.

XX. Ulusal Mekanik Kongresi, Turkey, 5 - 09 September 2017

VIII. **Stress analysis of twisted MgB2 cable**

TOSUN M., İPEK C., DÖNMEZ A., BULUT O., BAYTAK T., ATAĞLU Ş., ARDA L.

4th International conference on materials science and nanotechnology for next generation (MSNG2017), 28 - 30 June 2017

**IX. Effect of Temperature and Film Thickness on Residual Stress and Microstructure of ZnMgO Thin Films**

BAYTAK T., TOSUN M., İPEK C., BULUT O., DÖNMEZ A., ATAÖĞLU Ş., ARDA L.

4th International conference on materials science and nanotechnology for next generation (MSNG2017), 28 - 30 June 2017