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### **Education Information**

Doctorate, Yildiz Technical University, Faculty Of Chemical And Metallurgical Engineering, Matematik Mühendisliği, Turkey 2001 - 2005

## **Research Areas**

**Engineering and Technology** 

## **Courses**

#### **Postgraduate**

Mühendisler İçin Matematiksel Metodlar, Postgraduate, 2015 - 2016

## Undergraduate

Analitik Geometri, Undergraduate, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014

integral dönüşümler, Undergraduate, 2016 - 2017, 2015 - 2016

İleri Analiz 1, Undergraduate, 2015 - 2016

Diferansiyel Denklemler, Undergraduate, 2014 - 2015

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

I. Operational matrix method approach for fractional partial differential-equations

TURAN DİNCEL A., TURAL POLAT S. N.

Physica Scripta, vol.99, no.12, 2024 (SCI-Expanded)

II. Numerical simulation for fractional optimal control problems via euler wavelets

Turan Dincel A., Tural Polat S. N., Afacan M. O.

Physica Scripta, vol.99, no.9, 2024 (SCI-Expanded)

III. Wavelet methods for fractional electrical circuit equations

TURAL POLAT S. N., Dincel A. T.

Physica Scripta, vol.98, no.11, 2023 (SCI-Expanded)

IV. Hermite Wavelet Method for Nonlinear Fractional Differential Equations

TURAN DİNCEL A., TURAL POLAT S. N., Sahin P.

Fractal and Fractional, vol.7, no.5, 2023 (SCI-Expanded)

V. Solution Method for Systems of Nonlinear Fractional Differential Equations Using Third Kind Chebyshev Wavelets

Tural Polat S. N., Turan Dincel A.

Axioms, vol.2023, no.12, pp.546, 2023 (SCI-Expanded)

VI. Euler Wavelet Method as a Numerical Approach for the Solution of Nonlinear Systems of Fractional Differential Equations

TURAL POLAT S. N., TURAN DİNCEL A.

Fractal and Fractional, vol.7, no.3, 2023 (SCI-Expanded)

VII. Numerical solution method for multi-term variable order fractional differential equations by shifted Chebyshev polynomials of the third kind

TURAL POLAT S. N., TURAN DİNCEL A.

Alexandria Engineering Journal, vol.61, no.7, pp.5145-5153, 2022 (SCI-Expanded)

VIII. Fourth kind Chebyshev Wavelet Method for the solution of multi-term variable order fractional differential equations

Dincel A. T., TURAL POLAT S. N.

ENGINEERING COMPUTATIONS, vol.39, no.4, pp.1274-1287, 2022 (SCI-Expanded)

IX. Flow field analysis of grooved surfaces

Bayraktar S., Tekercioglu R., Dincel A.

INTERNATIONAL JOURNAL OF ENVIRONMENTAL SCIENCE AND TECHNOLOGY, vol.16, no.9, pp.5365-5368, 2019 (SCI-Expanded)

X. Solution to fractional-order Riccati differential equations using Euler wavelet method

TURAN DİNCEL A.

Scientia Iranica, vol.26, pp.1608-1616, 2019 (SCI-Expanded)

XI. Investigation of energy release rate under mode II loading in a rectangular orthotropic plate with a band crack using 3D finite element analysis

TURAN DİNCEL A.

Arabian Journal Of Geosciences, vol.12, pp.1-5, 2019 (SCI-Expanded)

XII. Calculation and 3D analyses of ERR in the bandcrack front contained in a rectangular plate made of multilayered material

TURAN DİNCEL A., SURKHAY A.

OPEN CHEMISTRY, vol.16, pp.516-519, 2018 (SCI-Expanded)

XIII. Mathematical modelling and 3D FEM analysis of the influence of initial stresses on the ERR in a band crack's front in the rectangular orthotropic thick plate

Dincel A., AKBAROV S.

Computers, Materials and Continua, vol.53, no.3, pp.249-270, 2017 (SCI-Expanded)

XIV. On the Energy Release Rate at the Crack Tips in a Finite Pre-Strained Strip

AKBAROV S., TURAN A.

CMC-COMPUTERS MATERIALS & CONTINUA, vol.24, no.3, pp.257-270, 2011 (SCI-Expanded)

XV. ENERGY RELEASE RATE IN A PRESTRESSED SANDWICH PLATE-STRIP CONTAINING INTERFACE CRACKS

AKBAROV S., TURAN A.

MECHANICS OF COMPOSITE MATERIALS, vol.45, no.6, pp.597-608, 2009 (SCI-Expanded)

XVI. Mathematical modelling and the study of the influence of initial stresses on the SIF and ERR at the crack tips in a plate-strip of orthotropic material

AKBAROV S., TURAN A.

APPLIED MATHEMATICAL MODELLING, vol.33, no.9, pp.3682-3692, 2009 (SCI-Expanded)

XVII. Influence of initial stresses on stress intensity factors at crack tips in a composite

AKBAROV S., YAHNİOĞLU N., TURAN DİNCEL A.

Mechanics Of Composite Materials, vol.40, pp.299-308, 2004 (SCI-Expanded)

# Articles Published in Other Journals

I. Genocchi polynomial method for the multiterm variable-order fractional differential equations TURAL POLAT S. N., TURAN DİNCEL A.

SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES-SIGMA MUHENDISLIK VE FEN BILIMLERI DERGISI, vol.40, no.1, pp.79-84, 2022 (ESCI)

II. A sine-cosine wavelet method for the approximation solutions of the fractional Bagley-Torvik equation

TURAN DINCEL A.

SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES-SIGMA MUHENDISLIK VE FEN BILIMLERI DERGISI, vol.40, no.1, pp.150-154, 2022 (ESCI)

III. Efficient Method for the Solution of Fractional-order Differential Equations with Variable Coefficients

TURAN DİNCEL A.

European Journal of Science and Technology, pp.205-210, 2019 (Peer-Reviewed Journal)

IV. The Effect of the Shear Modulus on Planes which is Perpendicular to the Crack's Edge-planes and Parallel to the Crack's Front on the ERR in an Orthotropic Rectangular Prism with a Band Crack TURAN DİNCEL A.

Afyon Kocatepe University Journal of Sciences and Engineering, vol.17, pp.338-345, 2017 (Peer-Reviewed Journal)

V. INFLUENCE OF THE INITIAL STRESSES ON THE ENERGY RELEASERATE IN A COMPOSITE BEAM WITH SINGLE EDGE-CRACK

TURAN DİNCEL A.

Academic Journal of Science, vol.5, pp.493-498, 2016 (Peer-Reviewed Journal)

VI. The Comparison of the Initial Stresses Influence on Stress Intensity Factor of Mode I and Mode II at the Crack Tips in a Composite Strip

TURAN DİNCEL A.

Academic Journal of Science, vol.3, pp.65-73, 2014 (Peer-Reviewed Journal)

VII. On loss of stability of a strip with two parallel macro-cracks under finite precritical deformation TURAN DİNCEL A., AKBAROV S.

INTERNATIONAL APPLIED MECHANICS, vol.46, no.3, pp.359-365, 2010 (Scopus)

VIII. ÇATLAK İÇEREN ÖNGERİLMELİ ŞERİTTEKİ GERİLME BİRİKİMİ ŞİDDETİ FAKTÖRÜ NÜN SONLU ELEMANLAR YÖNTEMİ İLE HESAPLANMASINDA SİNGÜLER SONLU ELEMANLARIN ETKİSİ TURAN DİNCEL A.

SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES-SIGMA MUHENDISLIK VE FEN BILIMLERI DERGISI, vol.23, pp.16-24, 2005 (ESCI)

# Papers Published in Refereed Scientific Meetings

I. A Numerical Method for Linear Fractional Differential Equations

Şahin P., Turan Dincel A., Tural Polat S. N.

International Conference on Applied Physics and Mathematics, Lisbon, Portugal, 29 - 30 January 2022, pp.47

II. Fourth-Kind Chebyshev Wavelets Based Approximation Method for Solving Bagley-Torvik Equation TURAN DİNCEL A.

International Natural Science, Engineering and Material Technologies Conference, İstanbul, Turkey, 9 - 10 September 2019, pp.29

III. Taylor Wavelet Method for Solving Fractional-order Differential Equations

TURAN DİNCEL A.

5th International Conference on Computational and Experimental Science and Engineering, 12 - 16 October 2018

IV. Investigation of energy release rate under mode II loading in a rectangular orthotropic plate with a band crack using 3D finite element analysis

TURAN DINCEL A.

International Conference on Sustainable Sciences and Technology, 12 - 16 October 2018

## V. Flow Field Analysis of Grooved Surfaces

BAYRAKTAR S., Tekercioglu R., TURAN DİNCEL A.

4th International Conference on Computational and Experimental Science and Engineering, Antalya, Turkey, 4 - 08 October 2017

# VI. Calculation and 3D ERR Analyses in the Band Crack Front Contained in a Rectangular Plate Made of Multilayered Material

TURAN DINCEL A., AKBAROV S. D.

4th INTERNATIONAL CONFERENCE ON COMPUTATIONAL AND EXPERIMENTAL SCIENCE AND ENGINEERING, 4 - 08 October 2017

# VII. Legendre-Wavelet Galerkin Method for the Solution of Fractional Order Differential Equations System

Seçer A., Taşçi F., Turan Dincel A., Tekercioğlu R.

ICCESEN 2017, Antalya, Turkey, 04 October 2017, vol.1, no.1, pp.204

# VIII. Calcutation and 3D ERR Analyses in the band crack front contained in the rectangular plate made of multilayered material Rectansular Plate Made of Multilayeled Mateial

TURAN DİNCEL A., AKBAROV S.

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### IX. On the ERR at the Band Crack Front in a Rectangular Prism

TURAN DİNCEL A.

82nd The IIER International Conference, Germany, 3 - 04 October 2016

# X. Influence of the Initial Stresses on the Energy Release Rate in a composite beam with single edge crack

TURAN DİNCEL A.

International journal art and sciences, 3 - 06 November 2015

## XI. On the Energy Release Rate in a composite thick plate with band crack

TURAN DİNCEL A.

XVII International on Mechanics of Composite Materials, 26 - 30 May 2014

#### XII. Fractional Supersymmetric sl(2): U35(sl(2)) and U36(sl(2))

UÇAN Y., KÖŞKER R., TEKERCİOĞLU R., TURAN DİNCEL A.

IECMSA-2013: 2nd International Eurasian Conference on Mathematical Sciences and Applications, Sarajevo, Kosova, 26 August 2013, pp.217

## XIII. Some spectral properties of singular Sturm Liouville problem

TURAN DİNCEL A.

International Journal of Arts and Sciences, 1 - 04 December 2008

# XIV. Energy Release Rate in a Prestressed Sandwich Plate Strip Containing Interfacial Cracks AKBAROV S., TURAN DİNCEL A.

XV International Conference - Mechanics of Composite Materials, Latvia, 26 - 30 May 2008

# XV. The Influence of the Initial Stresses on Stress Intensity Factor of Mode II at the Crack Tips in a Composite Strip

AKBAROV S., TURAN DİNCEL A.

Conference on Damage in Composite Materials: Simulation and Non-Destructive Testing, Germany, 18 - 19 September 2006

### XVI. On The Energy Release Rate at crack tips in a Finite prestrained strip

AKBAROV S., TURAN DİNCEL A.

FOURTEENTH INTERNATIONAL CONFERENCE MECHANICS OF COMPOSITE MATERI ALS, 29 May - 02 June 2006, pp.8-9

XVII. The Influence of the Finite Initial Strain-State to the SIF of Mode I at the Crack Tips in a Strip AKBAROV S., TURAN DİNCEL A.

- Twelfth Annual International Conference on Composites/Nano Engineering, Spain, 1 06 August 2005
- XVIII. Influence of Initial Stresses on Stress Intensity Factors at Crack Tips in a Composite Strip AKBAROV S., YAHNİOĞLU N., TURAN DİNCEL A.
  - Thirteenth International Conference, Mechanics of Composite Materials, Latvia, 16 20 May 2004
  - XIX. On the Determination of the SIF at the Macro-Crack Tips in the Pre-stretched Anisotrop Strip YAHNİOĞLU N., TURAN DİNCEL A.
    - 6th International Fracture Conference, Konya, Turkey, 10 September 2003, pp.20-24
  - XX. Çatlak içeren öngerilmeli şeritte gerilme birikimi şiddeti faktörüne öngerilmenin etkisi YAHNİOĞLU N., Turan A.
    - 13. Ulusal Mekanik Konferansı 8-12 Eylül 2003 Gaziantep Üniversitesi-Gaziantep, 2003, 01 September 2003
  - XXI. Mathematical Modelling of Friction, Wear and Lubrication in Artificial Hip Joints TURAN DİNCEL A., Turan A.
    - The International Journal of Arts & Sciences (IJAS) Conferences, Orlando, USA

## **Supported Projects**

TURAN DİNCEL A., TURAL POLAT S. N., Project Supported by Higher Education Institutions, Kesirli mertebeden integrodiferansiyel denklem sistemlerinin nümerik çözümüne Hermite dalgacık metodu yaklaşımı, 2023 - 2024
TURAN DİNCEL A., TURAL POLAT S. N., Project Supported by Higher Education Institutions, Kesirli mertebeden diferansiyel denklem sistemlerinin Euler dalgacık metoduyla nümerik çözümleri, 2023 - 2023
TURAL POLAT S. N., TURAN DİNCEL A., Project Supported by Higher Education Institutions, Kesirli Mertebeden Elektrik Devre Denklemlerinin Dalgacık Yöntemleri ile Yaklaşık Çözümleri, 2021 - 2022
TURAN DİNCEL A., TURAL POLAT S. N., Şahin P., Project Supported by Higher Education Institutions, Kesirli Mertebeden Diferansiyel Denklemlerin Dalgacık Yöntemleriyle Yaklaşık Çözümleri, 2021 - 2022

## **Metrics**

Publication: 48
Citation (WoS): 28
Citation (Scopus): 74
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