

# **Assoc. Prof. Kadiriye ŞİMŞEK ALAN**

## **Personal Information**

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## **International Researcher IDs**

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## **Education Information**

Doctorate, Yıldız Technical University, Fen-Edebiyat Fakültesi/Matematik, Turkey 2000 - 2006

Postgraduate, Yıldız Technical University, Fen-Edebiyat Fakültesi/Fen Bilimleri Enstitüsü/Matematik, Turkey 1997 - 1999

Undergraduate, Hacettepe University, Eğitim Fakültesi, Matematik Ve Fen Bilimleri Eğitimi Bölümü, Turkey 1987 - 1993

## **Foreign Languages**

English, B2 Upper Intermediate

German, B2 Upper Intermediate

## **Dissertations**

Doctorate, Yerel Eğrilikli Tek lif Ve Sarılı Tek Lif İçeren Sonsuz Ortamların Gerilme Durumuna Ait Nonlinear Sınır Değer Problemleri, Yıldız Teknik Üniversitesi, Fbe Matematik Anabilimdalı, Matematik, 2006

Postgraduate, Modüler Grupların Alt Grupları, Yıldız Teknik Üniversitesi, Graduate School of Natural and Applied Sciences, Matematik/Matematik, 1999

## **Research Areas**

Civil Engineering, Mechanical, Mathematics, Multivariate Complex Functions and Analytic Spaces, General Mathematics, Natural Sciences, Engineering and Technology

## **Academic Titles / Tasks**

Associate Professor, Yıldız Technical University, Faculty Of Chemical And Metallurgical Engineering, Department Of Mathematics Engineering, 2019 - Continues

Assistant Professor, Yıldız Technical University, Faculty Of Chemical And Metallurgical Engineering, Department Of Mathematics Engineering, 2018 - Continues

Assistant Professor, Yıldız Technical University, Faculty Of Chemical And Metallurgical Engineering, Department Of Mathematics Engineering, 2007 - 2018

## Courses

SOYUT MATEMATİK, Undergraduate, 2016 - 2017, 2015 - 2016

BİTİRME TEZİ, Undergraduate, 2016 - 2017, 2013 - 2014

MATEMATİK MÜHENDİSLİĞİNDE TASARIM UYGULAMALARI, Undergraduate, 2016 - 2017

MATEMATİK MÜHENDİSLİĞİNDE TASARIM UYGULAMALARI, Undergraduate, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014

MATEMATİK MÜHENDİSLİĞİNDE TASARIM UYGULAMALARI(2.ÖĞRETİM), Undergraduate, 2014 - 2015

BİTİRME TEZİ , Undergraduate, 2014 - 2015, 2013 - 2014

MATEMATİK MÜHENDİSLİĞİNDE TASARIM UYGULAMALARI, Undergraduate, 2013 - 2014

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

### I. Products of three Fibonacci numbers that are repdigit

Alan M., Şimşek Alan K.

Advanced Studies: Euro-Tbilisi Mathematical Journal, vol.16, no.4, pp.57-88, 2023 (SCI-Expanded)

### II. Normal Stresses in an Infinite Elastic Body with a locally Curved and Hollow Nanofiber

ŞİMŞEK ALAN K.

CMC-COMPUTERS MATERIALS & CONTINUA, vol.44, no.1, pp.1-21, 2014 (SCI-Expanded)

### III. ANALYSIS OF STRESSES IN AN INFINITE ELASTIC BODY WITH A LOCALLY CURVED COVERED NANOFIBER

Alan K. S., AKBAROV S.

MECHANICS OF COMPOSITE MATERIALS, vol.47, no.3, pp.343-358, 2011 (SCI-Expanded)

### IV. The Self-Balanced Shear Stresses in the Elastic Body with a Locally Curved Covered Fiber

Alan K. S., Akbarov S.

ADVANCES IN MECHANICAL ENGINEERING, 2010 (SCI-Expanded)

### V. Stress distribution in an infinite elastic body with a locally curved fiber in a geometrically nonlinear statement

Akbarov S., Kosker R., Simsek K.

MECHANICS OF COMPOSITE MATERIALS, vol.41, no.4, pp.291-302, 2005 (SCI-Expanded)

## Articles Published in Other Journals

### I. A Novel Alternative Algorithm to Find All Multiple Solutions of General Integer Linear Program

Şimşek Alan K.

SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES, vol.4, pp.1-14, 2024 (ESCI)

### II. Mersenne numbers which are products of two Pell numbers

Alan M., Şimşek Alan K.

BOLETIN DE LA SOCIEDAD MATEMATICA MEXICANA, vol.28, no.2, 2022 (Peer-Reviewed Journal)

### III. A Novel Alternative Algorithm for Solving Linear Integer Programming Problems with Four Variables

Şimşek Alan K.

Avrupa Bilim ve Teknoloji Dergisi, no.29, pp.81-86, 2021 (Peer-Reviewed Journal)

### IV. Doğrusal Tamsayılı Programlama Problemlerinin Çözümü İçin Yeni Alternatif Bir Algoritma

Şimşek Alan K.

Avrupa Bilim ve Teknoloji Dergisi, no.29, pp.93-98, 2021 (Peer-Reviewed Journal)

### V. A Solution Approach for a Class of Parametric Linear Programming Problems

SİVRİ M., ALBAYRAK F. İ., ŞİMŞEK ALAN K., TEMELCAN G.

İğdır Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.10, pp.2901-2906, 2020 (Peer-Reviewed Journal)

- VI. **A Novel Alternative Algorithm for Solving Integer Linear Programming Problems Having Three Variables**  
 Alan K.  
 CYBERNETICS AND INFORMATION TECHNOLOGIES, vol.20, no.4, pp.27-35, 2020 (ESCI)
- VII. **An Alternative Algorithm for Solving Pure Integer Linear Programming Problems Having Two Variables**  
 Şimşek Alan K., Sivri M., Albayrak F. İ., Güler C.  
 International Journal of Applied Information Systems, pp.6-9, 2019 (Peer-Reviewed Journal)
- VIII. **Normal Stress Analysis In an Infinite Elastic Body With A Locally Curved Carbon Nanotube**  
 ŞİMŞEK ALAN K.  
 Sakarya University Journal of Science, vol.22, no.6, pp.1931-1938, 2018 (Peer-Reviewed Journal)
- IX. **The Normal Stress Distribution in an Infinite Elastic Body with a Locally Curved and Hollow Fiber under Geometrical Nonlinear Statement**  
 Şimşek Alan K.  
 NONLINEAR ANALYSIS AND DIFFERENTIAL EQUATIONS, vol.4, no.6, pp.295-304, 2016 (Peer-Reviewed Journal)
- X. **ON THE NORMAL STRESSES IN THE ELASTIC BODY WITH A LOCALLY CURVED FIBRE UNDER GEOMETRIC NONLINEAR STATEMENT**  
 KÖŞKER R., ŞİMŞEK ALAN K.  
 Sigma Mühendislik ve Fen Bilimleri Dergisi, vol.3, pp.97-108, 2007 (ESCI)
- XI. **NORMAL STRESSES IN THE ELASTIC BODY WITH A LOCALLY CURVED COVERED FIBRE**  
 KÖŞKER R., ŞİMŞEK ALAN K.  
 Sigma Mühendislik ve Fen Bilimleri Dergisi, vol.25, no.3, pp.223-235, 2006 (ESCI)

### Refereed Congress / Symposium Publications in Proceedings

- I. **A Novel Alternative Algorithm for Solving Linear Integer Programming Problems with Four Variables**  
 Şimşek Alan K.  
 5th International Symposium on Multidisciplinary Studies and Innovative Technologies, Bolu, Turkey, 21 - 23 October 2021, pp.14
- II. **A Novel Alternative Algorithm for Solving Linear Integer Programming Problems**  
 Şimşek Alan K.  
 5th International Symposium on Multidisciplinary Studies and Innovative Technologies, Bolu, Turkey, 21 - 23 October 2021, pp.15
- III. **An Algorithm for Solving Pure Integer Linear Programming Problems**  
 SİVRİ M., ALBAYRAK F. İ., Gonca Kocken H., ŞİMŞEK ALAN K.  
 INTERNATIONAL CONFERENCE ON APPLIED ANALYSIS AND MATHEMATICAL MODELING, 2019, 10 March - 13 October 2019
- IV. **A study on normal stress in an infinite elastic body with a locally curved carbon nanotube**  
 Alan K.  
 International Conference of Mathematical Sciences 2018, ICMS 2018, İstanbul, Turkey, 31 July - 06 August 2018, vol.2086
- V. **The Effect of Geometric Nonlinearity on Self-Balanced Normal Stress Distribution in Infinite Elastic Body With a Single Locally Curved Hollow Fiber and Nanofiber and Comparison of Results**  
 ŞİMŞEK ALAN K.  
 INTERNATIONAL CONFERENCE ON APPLIED ANALYSIS AND MATHEMATICAL MODELING, 2019, 10 - 13 March 2019
- VI. **Examination Of The Self- Balanced Normal Stress In An Elastic Body With A Single Locally Curved And Hollow Nanofiber**  
 ŞİMŞEK ALAN K.

- 2nd INTERNATIONAL CONFERENCE OF MATHEMATICAL SCIENCES, İstanbul, Turkey, 31 July - 06 August 2018,  
pp.163
- VII. **Investigation of the Normal Stress In An Infinite Elastic Body With A Locally Curved Carbon Nanotube**  
ŞİMŞEK ALAN K.  
2nd INTERNATIONAL CONFERENCE OF MATHEMATICAL SCIENCES, İstanbul, Turkey, 31 July - 06 August 2018
- VIII. **The Normal Stress Distribution In An Elastic Body with a Locally Curved and Hollow Fiber**  
ŞİMŞEK ALAN K.  
International Conference On Engineering and Natural Sciences, 24 - 28 May 2016
- IX. **On The Self-Balanced Normal Stresses in the Elastic body with a Locally Curved and hollow fiber**  
ŞİMŞEK ALAN K.  
2'nd International Conference on Engineering and Natural Sciences (ICENS2016), Sarajevo, Albania, 24 May 2016,  
pp.211
- X. **STRESS ANALYSESE IN AN ELASTIC BODY WITH A LOCALLY CURVED AND HOLLOW FIBER**  
ŞİMŞEK ALAN K.  
2'nd Lobal Conference on Materials Sciences, 17 - 19 October 2015
- XI. **Stress analysis in an infinite elastic body with a locally curved covered nanofiber,**  
ŞİMŞEK ALAN K., Akbarov S.  
MCM 2010, 01 May 2010
- XII. **GEOMETRİK NONLİNEERİTE DURUMUNDA YEREL EĞRİLİKLİ ÖRTÜKLÜ LİF İÇEREN ELASTİK ORTAMDAKİ KENDİ-KENDİ DENGELEYEN NORMAL GERİLMELER**  
ŞİMŞEK ALAN K.  
XVI. Ulusal Mekanik Kongresi, Kayseri, Turkey, 22 - 26 June 2009, vol.1, pp.175-180
- XIII. **Tek Yönlü Düşük Yoğunluklu Lifli Kompozitlerin Basınç Altında Kırılmasının Teorik Limiti**  
Köşker R., Akbarov S., Şimşek Alan K.  
XIV. Ulusal Mekanik Kongresi, Hatay, Turkey, 12 - 16 September 2005, pp.25-34
- XIV. **On the theoretical strength limit in compression of viscoelastic unidirectional fibrous composite materials**  
AKBAROV S. D., KÖŞKER R., ŞİMŞEK ALAN K.  
IFC 7 th international Fracture Conference, Kocaeli, Turkey, 19 - 21 October 2005, vol.2, no.2, pp.791-800
- XV. **Stress Distribution in an Infinite Elastic Body with a Locally Curved Fibers in a Geometrically Non-Linear Statement**  
Akbarov S., Köşker R., Şimşek Alan K.  
Thirteenth International Conference Mechanics of Composite Materials (MCM-2004), Riga, Latvia, 16 - 20 May 2004, pp.8

## Supported Projects

ŞİMŞEK ALAN K., Project Supported by Higher Education Institutions, A Novel Alternative Algorithm For Solving Integer Linear Programming Problems, 2021 - 2024

ALAN M., ŞİMŞEK ALAN K., Project Supported by Higher Education Institutions, Logaritmalı Doğrusal Formlar ve Diofant Denklemelere Uygulamaları, 2021 - 2023

ŞİMŞEK ALAN K., Other International Funding Programs, 24-07-03-01: Biokompozitlerin gerilme durumuna ve kırılmasına ait matematik modellemelerin geliştirilmesi, 2004 - 2006

## Metrics

Publication: 34

Citation (WoS): 11

Citation (Scopus): 13

H-Index (WoS): 2

H-Index (Scopus): 2

### **Non Academic Experience**

K.Çekmece Marmara Lisesi