

Assoc. Prof. Yasemen UÇAN

Personal Information

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International Researcher IDs

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Education Information

Doctorate, Trakya University, Fen Bilimleri, Matematik, Turkey 1992 - 2001

Postgraduate, Trakya University, Fen.Fak., Matematik, Turkey 1989 - 1992

Undergraduate, Trakya University, Fen.Fak., Matematik, Turkey 1985 - 1989

Foreign Languages

English, B1 Intermediate

Dissertations

Doctorate, Kesirsel Süpersimetri Grupları ve Cebirleri, Yıldız Teknik Üniversitesi, Trakya Üniversitesi Fen Bilimleri Enstitüsü, Matematik, 2001

Postgraduate, Banach Uzaylarında Diferansiyel Hesaplar, Yıldız Teknik Üniversitesi, Trakya Univ.Fen Bilimleri Enstitüsü, Matematik/ Fonk.Aanaliz Anabilimdalı, 1992

Research Areas

Mathematics, Functional Analysis, Topological Groups, Lie Groups, Natural Sciences

Academic Titles / Tasks

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

Assistant Professor, Yildiz Technical University, Faculty Of Chemical And Metallurgical Engineering, Department Of Mathematics Engineering, 2006 - 2018

Courses

Undergraduate

Soyut Matematik, Undergraduate, 2014 - 2015

Supervised Theses

Uçan Y., Güler Bayazıt N., Kaba Kümeler ve Uygulamaları, Postgraduate, A.TOPAL(Student), 2022

UÇAN Y., Poincare Grup ve Cebirleri, Postgraduate, Ö.HIDIRLAR(Student), 2016

Jury Memberships

Competition, Tübitak Lise Öğrencileri Araştırma Projeleri Yarışması, Tübitak, Lise Öğrencileri Araştırma Projeleri Yarışması, February, 2019

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Bitcoin, Fintech, Energy Consumption, and Environmental Pollution Nexus: Chaotic Dynamics with Threshold Effects in Tail Dependence, Contagion, and Causality**
Bildirici M. E., Ersin Ö. Ö., Uçan Y.
FRACTAL AND FRACTIONAL, vol.8, no.9, pp.540, 2024 (SCI-Expanded)
- II. **A Method to Handle the Missing Values in Multi-Criteria Sorting Problems Based on Dominance Rough Sets**
Topal A., GÜLER BAYAZIT N., UÇAN Y.
Mathematics, vol.12, no.18, 2024 (SCI-Expanded)
- III. **A Hybrid Approach Combining the Lie Method and Long Short-Term Memory (LSTM) Network for Predicting the Bitcoin Return**
Bildirici M. E., Ucan Y., Tekercioglu R.
Fractal and Fractional, vol.8, no.7, 2024 (SCI-Expanded)
- IV. **Interest Rate Based on The Lie Group $SO(3)$ in the Evidence of Chaos**
Bildirici M. E., Uçan Y., Lousada S.
MATHEMATICS, vol.10, pp.2-9, 2022 (SCI-Expanded)
- V. **AIR TEMPERATURE MEASUREMENT BASED ON LIE GROUP $SO(3)$**
Uçan Y., Bildirici M. E.
THERMAL SCIENCE, vol.26, no.4A, pp.3089-3095, 2022 (SCI-Expanded)
- VI. **Modelling Oil Price with Lie Algebras and Long Short-Term Memory Networks**
Bildirici M. E., Güler Bayazıt N., Uçan Y.
MATHEMATICS, vol.9, no.14, 2021 (SCI-Expanded)
- VII. **The Real Forms of the Fractional Supergroup $SL(2, C)$**
Uçan Y., Köşker R.
MATHEMATICS, vol.9, no.9, 2021 (SCI-Expanded)
- VIII. **Analyzing Crude Oil Prices under the Impact of COVID-19 by Using LSTARGARCHLSTM**
BİLDİRİCİ M. E., GÜLER BAYAZIT N., UÇAN Y.
ENERGIES, vol.13, no.11, 2020 (SCI-Expanded)
- IX. **A new method for obtaining the inconsistent elements in a decision table based on dominance principle**
Uçan Y., Topal A., Güler Bayazıt N.
Turkish Journal of Mathematics, vol.44, pp.561-568, 2020 (SCI-Expanded)
- X. **Fractional supersymmetric $su(2)$ algebras**
Uçan Y.
Mathematical Methods in the Applied Sciences, vol.42, pp.5340-5345, 2019 (SCI-Expanded)
- XI. **INFLUENCE OF THE INTERACTION BETWEEN FIBERS PERIODICALLY LOCATED IN A COMPOSITE MATERIAL ON THE DISTRIBUTION OF STRESSES IN IT**
Akbarov S., Köşker R., Uçan Y.

- MECHANICS OF COMPOSITE MATERIALS, vol.52, pp.243-256, 2016 (SCI-Expanded)
- XII. **The Effect of the Geometrical Non-Linearity on the Stress Distribution in the Infinite Elastic Body with a Periodically Curved Row of Fibers**
Akbarov S., Köşker R., Uçan Y.
CMC-COMPUTERS MATERIALS & CONTINUA, vol.17, pp.77-102, 2010 (SCI-Expanded)
- XIII. **Stress distribution in a composite material with a row of antiphase periodically curved fibers**
Akbarov S., Kosker R., Ucan Y.
INTERNATIONAL APPLIED MECHANICS, vol.42, no.4, pp.486-493, 2006 (SCI-Expanded)
- XIV. **Stress distribution in an elastic body with a periodically curved row of fibers**
Akbarov S., Kosker R., Ucan V.
MECHANICS OF COMPOSITE MATERIALS, vol.40, pp.191-202, 2004 (SCI-Expanded)
- XV. **Fractional superLie algebras and groups**
Ahmedov H., Yildiz A., Ucan Y.
Journal of Physics A: Mathematical and General, vol.34, pp.6413-6423, 2001 (SCI-Expanded)

Articles Published in Other Journals

- I. **The real forms of the S3-graded algebras $sl(2, C)$**
Uçan Y., Tekercioğlu R., Yeşil Ü.
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES, vol.43, no.3, pp.1-11, 2025 (ESCI)
- II. **Prediction of compressive strength class of concrete with dominance based rough set approach**
TOPAL A., GÜLER BAYAZIT N., UÇAN Y.
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES, vol.41, no.6, pp.1008-1095, 2023 (ESCI)
- III. **PİEZOELEKTRİK PRİZMATİK DOLGU İÇEREN DİKDÖRTGEN KALIN PLAĞIN FEM İLE ELEKTRO-STATİK ANALİZİ**
Yeşil Ü., Yahnioğlu N., Uçan Y.
Niğde Ömer Halisdemir Üniversitesi Mühendislik Bilimleri Dergisi, vol.8, no.3, pp.69-81, 2019 (Peer-Reviewed Journal)
- IV. **PREDICTION OF CONSUMER BEHAVIOUR WITH ROUGH SET APPROACH**
Güler Bayazıt N., Uçan Y.
Marmara Üniversitesi İktisadi ve İdari Bilimler Dergisi, vol.41, no.1, pp.51-64, 2019 (Peer-Reviewed Journal)
- V. **Fractional Super *-Algebra**
Uçan Y.
AIP, vol.2042, no.20050, pp.200501-200504, 2018 (Scopus)
- VI. **Belirsizlik Koşullarında Fuzzy Rough Algoritması: Kredi Skoru'da Bir Uygulama**
Uçan Y., Güler Bayazıt N.
Doğuş Üniversitesi Dergisi, vol.19, pp.57-64, 2018 (Peer-Reviewed Journal)
- VII. **Fractional Supersymmetric $iso(1,1)$**
Uçan Y., Köşker R., Hıdırlar Ö.
Doğuş Üniversitesi Dergisi, vol.19, no.1, pp.19-22, 2018 (Peer-Reviewed Journal)
- VIII. **On the Normal Stresses in the Elastic Body with Periodically Curved Row Fibres**
KÖŞKER R., UÇAN Y.
Sigma, Journal of Engineering and Natural Sciences, no.4, pp.294-304, 2004 (ESCI)
- IX. **Fractional Supersymmetric $sl(2)$**
Uçan Y.
Sigma, Journal of Engineering and Natural Sciences, no.1, pp.82-87, 2004 (ESCI)

Papers Published in Refereed Scientific Meetings

- I. **An application on the fuzzy- rough set approach**
Uçan Y., Yıldız N.
International Aegean Conferences-X, İzmir, Turkey, 5 - 07 October 2024, vol.9786253678746, pp.261-262
- II. **Beton Basınç Dayanıklılığının Baskın Kaba Küme Yaklaşımı ile İncelenmesi**
Topal A., Güler Bayazıt N., Uçan Y.
22.Ulusal Mekanik Konferansı, Adana, Turkey, 6 - 08 September 2021, pp.415-423
- III. **Piezoelektrik Prizmatik Dolgu İçeren Dikdörtgen Kalın Plâğın FEM ile Analizi**
Yeşil Ü., Yahnioğlu N., Uçan Y.
21.Ulusal Mekanik Kongresi, Niğde, Turkey, 2 - 06 September 2019
- IV. **A Comparative Study for Fuzzy Rough Approximation Algorithms on Datasets with Different Characteristics**
Topal A., Uçan Y.
3. International Conference on Mathematics: "An Istanbul Meeting for World Mathematicians", İstanbul, Turkey, 3 - 05 July 2019, vol.1, pp.21
- V. **Comparison of Rough Sets and Dominance-Based Rough Sets**
UÇAN Y., GÜLER BAYAZIT N.
International Conference on Applied Analysis and Mathematical Modeling (ICAAMM 2019), İstanbul, Turkey, 10 March 2019, pp.247
- VI. **Forecasting Consumer Behaviour with Rough Set Approach**
Güler Güler Bayazıt N., Uçan Y.
IV. European Congress on Economic Issues, Kocaeli, Turkey, 15 November 2018, pp.77
- VII. **Fractional Super Star Algebra**
Uçan Y.
Türk Fizik Derneği 34.Uluslararası fizik Kongresi, Muğla, Turkey, 5 - 09 September 2018, pp.361
- VIII. **S3-Graded iso(1,3)**
UÇAN Y.
International Conference on Mathematics: An Istanbul Meeting for World Mathematicians, İstanbul, Turkey, 03 July 2018, pp.376
- IX. **Fractional super su(2) Algebras**
UÇAN Y.
International Conference on Mathematics: An Istanbul Meeting for World Mathematicians, İstanbul, Turkey, 03 July 2018, pp.377
- X. **S3 Graded iso (1,2)**
Uçan Y., Köşker R., Tekercioğlu R.
6th International Eurasian Conference on Mathematical Sciences and Applications, Budapest, Hungary, 15 - 18 August 2017, pp.30-31
- XI. **Two Dimensional Fractional Poincare Algebra**
UÇAN Y., KÖŞKER R., HİDİRLAR Ö.
3rd International Eurasian conference on Mathematical Sciences and Applications, Viyana, Austria, 25 - 28 August 2014, pp.72
- 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. **The influence of the interaction between the periodically located row of fibers in a composite materials on the stress distribution**
Köşker R., Akbarov S., Uçan Y.
XVII. International Conference on Mechanics of Composite Materials (MCM-2012), Riga, Latvia, 28 May - 02 June 2012, vol.1, no.1, pp.119
- XIV. **Internal Stability Loss of a Row Unidirected Periodically Located Fibers in the Visco-elastic Matrix**
AKBAROV S., KÖŞKER R., UÇAN Y.

International Conference on Computational & Experimental Engineering and Sciences (ICCES-12), Girit, Greece, 30 April 2012, vol.1, pp.47-48

- XV. **The Effect of Geometrical Nonlinearity on the Stress Distribution in an Infinite Elastic Body with a Periodically Curved Row of Fibers**
Köşker R., Akbarov S., Uçan Y.
Fifteenth International Conference Mechanics of Composite Materials (MCM-2008), Riga, Latvia, 26 - 30 May 2008, pp.143
- XVI. **The Fracture of The Visco-Elastic Matrix Containing a Row Unidirected Periodically Located Fibers**
Akbarov S., Köşker R., Uçan Y.
7th International Fracture Conference Proceedings, Kocaeli, Turkey, 19 - 21 October 2005, pp.801-811
- XVII. **Aynı fazlı Periyodik Eğilmiş Sıralı Lif İçeren Sonsuz Elastik Ortamda Geometrik Non lineeritinin Gerilme Yayılımına Etkisi**
AKBAROV S., KÖŞKER R., UÇAN Y.
XIV Ulusal Mekanik Kongresi, Hatay, Turkey, 12 September 2005, pp.15-24
- XVIII. **Stress Distribution Caused by Anti-Phase Periodical Curving of Row Neighbouring Fibers in a Composite Material Under Geometrical Non-Linear Statement**
Akbarov S., Köşker R., Uçan Y.
Twelfth International Conference on Composites/ Nano Engineering (ICCE-12), Tenerife, Spain, 1 - 06 August 2005, pp.30-31
- XIX. **Stress Distribution in an Infinite Elastic Body with a Periodically Curved Row of Fibers**
Akbarov S., Köşker R., Uçan Y.
Thirteenth International Conference, Mechanics of Composite Materials, Riga, Latvia, 16 May 2004, pp.220-221

Supported Projects

Uçan Y., Yıldız N., TÜBİTAK Project, Bulanık-kaba küme yaklaşımı ile sirozlu hastaların sağ kalımının tahminlenmesi, 2024 - 2024

TEKERÇİOĞLU R., BİLDİRİCİ M. E., UÇAN Y., Project Supported by Higher Education Institutions, Lie Grup ve Cebirlerinin Uygulamaları, 2024 - 2024

UÇAN Y., TEKERÇİOĞLU R., YEŞİL Ü., Project Supported by Higher Education Institutions, Kesirsel Süpersimetrik Lie Cebirlerinin Reel Formları Üzerine, 2023 - 2024

Kayıkçı F., Köşker R., Uçan Y., Project Supported by Higher Education Institutions, Elastik ve Viskoelastik Ortama Gömülü Çok Duvarlı Karbon Nanotüplerin Gerilme Dağılımı ve Stabilite Kaybı Araştırması, 2021 - 2023

UÇAN Y., GÜLER BAYAZIT N., TOPAL A., Project Supported by Higher Education Institutions, Kaba Kümeler ve Uygulamaları, 2020 - 2022

YEŞİL Ü., YAHNIOĞLU N., UÇAN Y., Project Supported by Higher Education Institutions, Piezoelektrik Malzemeden Yapılmış Silindirik Dolgu İçeren Plakların 3 Boyutlu Statik ve Dinamik Analizi, 2018 - 2021

Akbarov S., Kosker R., Ucan Y., Project Supported by Higher Education Institutions, Biokompozitlerin gerilme durumuna ve kırılmasına ait matematik modellemelerin geliştirilmesi, 2004 - 2006

Peer Reviews in Scientific Publications

Doğuş üniversitesi , Other Indexed Journal, April 2019

Metrics

Publication: 43

Citation (WoS): 70

Citation (Scopus): 103

H-Index (WoS): 5

H-Index (Scopus): 5