

Assoc. Prof. Ali Demirci

Personal Information

Office Phone: [+90 212 285 3253](tel:+902122853253)

Fax Phone: [+90 212 285 6386](tel:+902122856386)

Email: demircial@itu.edu.tr

Web: <https://avesis.itu.edu.tr/demircial>

International Researcher IDs

ORCID: 0000-0001-9780-0132

ScopusID: 56376114600

Yoksis Researcher ID: 152859

Education Information

Doctorate, Istanbul Technical University, Fen-Edebiyat Fakültesi, Matematik Bölümü, Turkey 2008 - 2013

Postgraduate, Istanbul Technical University, Fen-Edebiyat Fakültesi, Matematik Bölümü, Turkey 2005 - 2008

Undergraduate Double Major, Istanbul Technical University, Elektrik-Elektronik Fakültesi, Elektronik Mühendisliği Bölümü, Turkey 2002 - 2007

Undergraduate, Istanbul Technical University, Fen-Edebiyat Fakültesi, Matematik Bölümü, Turkey 2000 - 2005

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Nonlinear dispersif elastik dalgalar, İstanbul Teknik Üniversitesi, Fen-Edebiyat Fakültesi, Matematik Bölümü, 2013

Postgraduate, Nonlinear ince bir tabaka ile kaplı elastik bir yarım uzayda yüzey SH dalgalarının yayılması, İstanbul Teknik Üniversitesi, Fen-Edebiyat Fakültesi, Matematik Bölümü, 2008

Research Areas

Mechanical Engineering, Mechanical, Continuous Mechanics, Mathematics, Differential Equations, Natural Sciences, Engineering and Technology

Academic Titles / Tasks

Associate Professor, Istanbul Technical University, Fen-Edebiyat, Matematik Mühendisliği, 2021 - Continues

Lecturer PhD, Istanbul Technical University, Fen-Edebiyat, Matematik Mühendisliği, 2015 - 2021

Research Assistant, University of Colorado at Boulder, Mühendislik Fakültesi, Uygulamalı Matematik, 2014 - 2015

Lecturer PhD, Istanbul Technical University, Fen-Edebiyat, Matematik Mühendisliği, 2013 - 2014

Research Assistant, Istanbul Technical University, Fen-Edebiyat, Matematik Mühendisliği, 2005 - 2013

Academic and Administrative Experience

Deputy Head of Department, Istanbul Technical University, Fen-Edebiyat, Matematik Mühendisliği, 2020 - 2023
İstanbul Teknik Üniversitesi, Fen-Edebiyat Fakültesi, Matematik Bölümü, 2016 - 2017

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Undular bores in the (3+1) dimensional mKP equation**
Özdemir N., Demirci A., Ahmetolan S.
Physics Letters, Section A: General, Atomic and Solid State Physics, vol.483, 2023 (SCI-Expanded)
- II. **Hopf bifurcation of a financial dynamical system with delay**
Calis Y., Demirci A., Özemir C.
MATHEMATICS AND COMPUTERS IN SIMULATION, vol.201, pp.343-361, 2022 (SCI-Expanded)
- III. **A Susceptible-Infectious (SI) model with two infective stages and an endemic equilibrium**
Ahmetolan S., Bilge A. H., Demirci A., Peker A.
Mathematics and Computers in Simulation, vol.194, pp.19-35, 2022 (SCI-Expanded)
- IV. **Modulated periodic wavetrains in the spherical Gardner equation**
Aslanova G., Demirci A., Ahmetolan S.
Wave Motion, vol.109, 2022 (SCI-Expanded)
- V. **On the Rosenau equation: Lie symmetries, periodic solutions and solitary wave dynamics**
Demirci A., Hasanoğlu Y., Muslu G. M., Özemir C.
Wave Motion, vol.109, 2022 (SCI-Expanded)
- VI. **Bifurcation analysis of Friedkin-Johnsen and Hegselmann-Krause models with a nonlinear interaction potential**
Ata F., Demirci A., Özemir C.
MATHEMATICS AND COMPUTERS IN SIMULATION, vol.185, pp.676-686, 2021 (SCI-Expanded)
- VII. **Nonlinear modulation of periodic waves in the cylindrical Gardner equation**
Aslanova G., Ahmetolan S., Demirci A.
PHYSICAL REVIEW E, vol.102, no.5, 2020 (SCI-Expanded)
- VIII. **On the Time Shift Phenomena in Epidemic Models**
Peker-Dobie A., Demirci A., Bilge A. H., Ahmetolan S.
FRONTIERS IN PHYSICS, vol.8, 2020 (SCI-Expanded)
- IX. **What Can We Estimate From Fatality and Infectious Case Data Using the Susceptible-Infected-Removed (SIR) Model? A Case Study of Covid-19 Pandemic**
Ahmetolan S., Bilge A. H., Demirci A., Peker-Dobie A., Ergonul O.
FRONTIERS IN MEDICINE, vol.7, 2020 (SCI-Expanded)
- X. **Dispersive shock waves in three dimensional Benjamin-Ono equation**
Demirci A.
Wave Motion, vol.94, pp.1-10, 2020 (SCI-Expanded)
- XI. **On the propagation of nonlinear SH waves in a two-layered compressible elastic medium**
Ahmetolan S., Peker-Dobie A., Demirci A.
ZEITSCHRIFT FÜR ANGEWANDTE MATHEMATIK UND PHYSIK, vol.70, 2019 (SCI-Expanded)
- XII. **Nonlinear interaction of co-directional shear horizontal waves in a two-layered elastic medium**
Ahmetolan S., Demirci A.
ZEITSCHRIFT FÜR ANGEWANDTE MATHEMATIK UND PHYSIK, vol.69, no.6, 2018 (SCI-Expanded)
- XIII. **Dispersive shock waves in the Kadomtsev-Petviashvili and two dimensional Benjamin-Ono equations**
Ablowitz M. J., Demirci A., MA Y.
PHYSICA D-NONLINEAR PHENOMENA, vol.333, pp.84-98, 2016 (SCI-Expanded)
- XIV. **Propagation of surface SH waves on a half space covered by a nonlinear thin layer**
Teymur M., DEMIRCI A., Ahmetolan S.

Articles Published in Other Journals

- I. **HARMONIC RESONANCE PHENOMENA ON NONLINEAR SH WAVES**
Ahmetolan S., Ozdemir N., Peker A., Demirci A.
Turkish World Mathematical Society Journal of Applied and Engineering Mathematics, vol.13, no.2, pp.409-424, 2023 (Scopus)
- II. **ÖZEL BİR BAŞLANGIÇ KOŞULU ALTINDA (N1) BOYUTLU BENJAMİN- ONO DENKLEMİ İÇİN WHITHAM MODÜLASYON TEORİSİ**
DEMİRCİ A.
Ömer Halisdemir Üniversitesi Mühendislik Bilimleri Dergisi, vol.8, no.3, pp.89-98, 2019 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **Kâtip Çelebi'nin Hendese Bilen Kadısına Müşahhas Bir Örnek: Ebû Sehl Nu'xxmân Efendi**
POLAT A., DEMİRCİ A.
in: Sahn-ı Semân'xxdan Dârülfünûn'xxa Osmanlı'xxda İlim ve Fikir Dünyası Âlimler, Müesseseler ve Fikrî Eserler XVIII. Yüzyıl, Cilt II, Furat Ahmet Hamdi, Kalkan Yorulmaz Nilüfer, Arı Osman Sacid, Editor, Zeytinburnu Belediyesi, İstanbul, pp.157-177, 2018

Refereed Congress / Symposium Publications in Proceedings

- I. **Üç Boyutlu Benjamin- Ono Denklemi İçin Whitham Modülasyon Teorisi**
DEMİRCİ A.
32. Ulusal Matematik Sempozyumu, Turkey, 31 August - 03 September 2019
- II. **Applicability of regression analysis on the oxygen enriched combustion of AdıyamanGolbasi lignite**
UĞUZ Ö., DEMİRCİ A., AÇMA H., YAMAN S.
2nd International Conference on Pure and Applied Mathematics, Van, Turkey, 11 - 13 September 2018, pp.141
- III. **Consensus formation in a social group with a leader**
Ataş F., Demirci A., Özemer C.
International Conference on Applied Mathematics, Modeling and Life Sciences, İstanbul, Turkey, 2 - 05 October 2018, pp.20
- IV. **Dispersive Shock Waves in the Cylindrical modified Korteweg de-Vries equation**
DEMİRCİ A., ÖZDEMİR N., AHMETOLAN S.
ICAMLS18 International Conference on Applied Mathematics, Modeling and Life Sciences, 3 - 05 October 2018, pp.58
- V. **Silindirik Gardner Denklemi için Whitham Modülasyon Denklemleri ve Sayısal Çözümleri**
Demirci A., Ahmetolan S., Aslanova G.
31. Ulusal Matematik Sempozyumu, Erzincan, Turkey, 12 - 15 September 2018, pp.102
- VI. **Silindirik Modifiye Korteweg de-Vries Denkleminin Dispersif Şok Dalgı Çözümleri**
Demirci A., Ahmetolan S., Özdemir N.
31. Ulusal Matematik Sempozyumu, Erzincan, Turkey, 12 - 15 September 2018, pp.82
- VII. **Applicability of regression analysis on the oxygen enriched combustion of Kutahya-Tuncbilek lignite**
Uğuz Ö., Demirci A., Açma H., Yaman S.
2nd International Conference on Pure and Applied Mathematics, Van, Turkey, 11 - 13 September 2018, pp.140
- VIII. **Lider etkisindeki sistemlerde nonlinear düşünce dinamiğı**
Ataş F., Demirci A., Özemer C.

20. Ulusal Mekanik Kongresi, Bursa, Turkey, 5 - 09 September 2017, pp.308-313
- IX. **Kadomtsev Petviashvili Denkleminde Dispersif Şok Dalgaları**
DEMİRCİ A., ABLOWİTZ M., YİPİNG M.
28. Ulusal Matematik Sempozyumu, Antalya, Turkey, 6 - 09 September 2015
- X. **Interaction of nonlinear SH waves in a two layered elastic plate**
AHMETOLAN S., DEMİRCİ A.
21st International Congress on Sound and Vibration, Pekin, China, 13 - 17 July 2014
- XI. **Nonlinear modulation of longitudinal waves in a Kelvin Voigt Solid**
DEMİRCİ A., TEYMÜR M.
21st International Congress on Sound and Vibration, Pekin, China, 13 - 17 July 2014
- XII. **Nonlinear Modulation of extensional waves in an elastic layer**
TEYMÜR M., DEMİRCİ A.
8th European Solid Mechanics Conference, Graz, Austria, 9 - 13 July 2012
- XIII. **Nonlinear hiperelastik bir plakta düzlem içi simetrik dalgaların modülasyonu**
DEMİRCİ A., TEYMÜR M.
XVII. ULUSAL MEKANİK KONGRESİ, Turkey, 5 - 09 September 2011
- XIV. **Propagation of Surface SH Waves On A Half Space Coated With A Nonlinear Thin Layer**
Ahmetolan S., DEMİRCİ A., TEYMUR M.
XXII International Congress of Theoretical and Applied Mechanics, Adelaide, Australia, 24 - 29 August 2008, pp.1-2

Supported Projects

Demirci A., Project Supported by Higher Education Institutions, Bir Kelvin-Voigt Katsında Nonlinear Boyuna Dalgaların Modülasyonu, 2014 - 2018

Scientific Refereeing

Süleyman Demirel Üniversitesi Fen Bilimleri Enstitüsü Dergisi, National Scientific Refreed Journal, September 2018
Physica D: Nonlinear Phenomena, SCI Journal, November 2015

Metrics

Publication: 34
Citation (WoS): 37
Citation (Scopus): 73
H-Index (WoS): 3
H-Index (Scopus): 4

Scholarships

2219- Doktora Sonrası Bursu, TUBİTAK, 2014 - 2015