

Prof. Semra Ahmetolan

Personal Information

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International Researcher IDs

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Education Information

Doctorate, İstanbul Technical University, Fen Bilimleri Enstitüsü, Matematik Mühendisliği (Dr), Turkey 1996 - 2004

Postgraduate, İstanbul Technical University, Fen-Edebiyat Fakültesi, Matematik Mühendisliği, Turkey 1994 - 1996

Foreign Languages

English

Dissertations

Doctorate, TABAKALI ELASTİK BİR YARIM UZAYDA NONLİNEER RAYLEIGH DALGALARININ YAYILMASI , İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Matematik Mühendisliği, 2004

Postgraduate, İki tabakalı elastik ortamlarda nonlinear dalgalar modülasyonu, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Matematik Mühendisliği, 1996

Research Areas

Mathematics, Differential Equations, Natural Sciences

Academic Titles / Tasks

Associate Professor, İstanbul Technical University, Fen Edebiyat Fakültesi, Matematik Mühendisliği, 2014 - Continues

Assistant Professor, İstanbul Technical University, Fen-Edebiyat Fakültesi, Matematik Bölümü, 2005 - 2014

Lecturer PhD, İstanbul Technical University, Fen-Edebiyat Fakültesi, Matematik Bölümü, 2004 - 2005

Research Assistant, İstanbul Technical University, Fen-Edebiyat Fakültesi, Matematik Bölümü, 1995 - 2004

Academic and Administrative Experience

Deputy Director of the Center, İstanbul Technical University, Fen-Edebiyat, Matematik Mühendisliği, 2022 - Continues

Vice Dean, İstanbul Technical University, 2020 - 2020

Vice Dean, İstanbul Technical University, 2012 - 2016

Fakülte Kurulu Üyesi, İstanbul Technical University, Fen-Edebiyat, Matematik Mühendisliği, 2011 - 2014
Adaptation/Exemption Committee Member, İstanbul Technical University, Fen-Edebiyat, Matematik Mühendisliği, 2008 - 2009
Deputy Head of Department, İstanbul Technical University, Fen-Edebiyat, Matematik Mühendisliği, 2005 - 2008

Jury Memberships

Doctorate, Doktora Savunma Sınavı, Ticaret Üniversitesi, Fen Bilimleri Enstitüsü, Doktora Savunma, July, 2017
Doctorate, Doktora Savunma Sınavı, İTÜ Fen Bilimleri Enstitüsü, Doktora Savunma, July, 2017
Doctoral Examination, Doktora Yeterlilik Sınavı, İTÜ, Fen Bilimleri Enstitüsü, Doktora Yeterlilik, May, 2017
Doctorate, Doktora Savunma Sınavı, İTÜ, Fen Bilimleri Enstitüsü, Doktora Yeterlilik, January, 2013

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. Propagation of Lamb waves in an elastic layer with irregular surfaces
Ahmetolan S., Peker A., Deliktas-Ozdemir E., Caglayan E.
Wave Motion, vol.119, 2023 (SCI-Expanded)
- III. Mathematical modeling and solution of nonlinear vibration problem of laminated plates with CNT originating layers interacting with two-parameter elastic foundation
Avey M., Kadioğlu F., Ahmetolan S., Fantuzzi N.
Journal of the Brazilian Society of Mechanical Sciences and Engineering, vol.45, no.3, 2023 (SCI-Expanded)
- IV. Existence of solitary SH waves in a heterogeneous elastic two-layered plate
Deliktas-Ozdemir E., Ahmetolan S., Tuna D.
ZEITSCHRIFT FÜR ANGEWANDTE MATHEMATIK UND PHYSIK, vol.73, no.6, 2022 (SCI-Expanded)
- V. 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)
- VI. Modulated periodic wavetrains in the spherical Gardner equation
Aslanova G., Demirci A., Ahmetolan S.
Wave Motion, vol.109, 2022 (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. 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)

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)

Supported Projects

Ahmetolan S., Project Supported by Higher Education Institutions, THE LP HARDY INEQUALITY WITH TWO WEIGHT FUNCTIONS AND ITS IMPROVED VERSIONS, 2015 - 2018

Ahmetolan S., Project Supported by Higher Education Institutions, İki Tabakalı Elastik Bir Plakta Lineer Olmayan Kayma Dalgalarının (SH) Etkileşimi, 2014 - 2018

Ahmetolan S., Project Supported by Higher Education Institutions, Sharp Weighted Rellich Type Inequalities for Generalized Grenier Vector Fields, 2012 - 2018

Ahmetolan S., Project Supported by Higher Education Institutions, Elastik Bir Tabakada Nonlinear SH Dalgalarının Etkileşimi, 2011 - 2018

Ahmetolan S., Project Supported by Higher Education Institutions, Doubly Nonlinear Parabolik Kısmı Türevli Diferansiyel Denklemelerin Çözümlerinin İncelenmesi, 2006 - 2011

Metrics

Publication: 35

Citation (WoS): 55

Citation (Scopus): 93

H-Index (WoS): 4

H-Index (Scopus): 4