

# Prof. Canan ÇELİK KARAASLANLI

## Personal Information

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## International Researcher IDs

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## Education Information

Post Doctorate, Tufts University, College Of Art And Sciences, Mathematics, United States Of America 2001 - 2004

Doctorate, Michigan State University, College Of Art And Sciences, Mathematics, United States Of America 1996 - 2001

Postgraduate, Middle East Technical University, Graduate School Of Natural And Applied Sciences, Matematik, Turkey 1991 - 1993

Undergraduate, Middle East Technical University, Fen Edebiyat Fakültesi, Matematik, Turkey 1986 - 1991

## Dissertations

Doctorate, Solutions to a Nonlinear Heat Equation with Critical Exponent, Michigan State University, Mathematics, 2001

Postgraduate, Numerical Solutions of Hamiltonian Systems in Normal Form., Orta Doğu Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Matematik, 1993

## Research Areas

Mathematics, Differential Equations, Natural Sciences

## Academic Titles / Tasks

Professor, Yıldız Technical University, Fen Edebiyat Fakültesi, Matematik, 2017 - Continues

Professor, Bahçesehir University, Fen Edebiyat Fakültesi, Matematik, 2014 - 2017

Associate Professor, Bahçesehir University, Fen Edebiyat Fakültesi, Matematik, 2009 - 2014

Associate Professor, Tobb University Of Economics And Technology, Fen Edebiyat Fakültesi, Matematik, 2009 - 2009

Associate Professor, Tobb University Of Economics And Technology, Fen Edebiyat Fakültesi, Matematik, 2009 - 2009

Assistant Professor, Tobb University Of Economics And Technology, Fen Edebiyat Fakültesi, Matematik, 2005 - 2009

Assistant Professor, Tufts University, School Of Arts And Sciences, Mathematics, 2001 - 2005

Research Assistant, Michigan State University, College Of Arts And Sciences, Mathematics, 1997 - 2001

Research Assistant, Middle East Technical University, Fen Edebiyat Fakültesi, Matematik, 1991 - 1995

## Academic and Administrative Experience

Bahçeşehir Üniversitesi, 2015 - 2017

Bahçeşehir Üniversitesi, 2014 - 2017

Bahçeşehir Üniversitesi, 2014 - 2017

Bahçeşehir Üniversitesi, Fen Edebiyat Fakültesi, Matematik, 2014 - 2017

Bahçeşehir Üniversitesi, Fen Bilimleri Enstitüsü, Matematik Ve Uygulamalı Matematik Anabilim Dalı, 2014 - 2017

Tobb Ekonomi Ve Teknoloji Üniversitesi, Fen Edebiyat Fakültesi, Matematik, 2009 - 2009

## Advising Theses

ÇELİK KARAASLANLI C., Reaksiyon Difüzyon Denklemleri için Hopf çatallanma ve Kararlılık Analizi, Doctorate, E.Özmen(Student), Continues

ÇELİK KARAASLANLI C., Bir Tümör-Bağışıklık Modeli için Hopf Çatallanma ve Kararlılık Analizi, Postgraduate, V.Kılıç(Student), 2014

ÇELİK KARAASLANLI C., Sinir Ağları Modellerinin Matematiksel Analizi, Postgraduate, G.Çebi(Student), 2014

ÇELİK KARAASLANLI C., Holling-Tanner tipi bir Av-Avcı Modeli için Hopf Çatallanma ve Kararlılık Analizi, Postgraduate, E.Özmen(Student), 2012

ÇELİK KARAASLANLI C., Genel Gecikmeli bir Diferansiyel Denklemin Hopf Çatallanma Analizi, Postgraduate, H.Akçaoğlu(Student), 2011

ÇELİK KARAASLANLI C., Dağılımlı Av-Avcı Sisteminde Hopf Çatallanma ve Kararlılık Analizi, Postgraduate, E.Değirmenci(Student), 2011

ÇELİK KARAASLANLI C., Gecikmeli Av-Avcı Sistemlerinde Hopf Çatallanma ve Kararlılık Analizi, Postgraduate, G.Çekiç(Student), 2009

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

- I. **Implicit fractional differential equations: Existence of a solution revisited**  
Çelik C., DEVELİ F.  
Mathematical Methods in the Applied Sciences, vol.47, no.6, pp.5090-5097, 2024 (SCI-Expanded)
- II. **On the stability analysis of Darboux problem on both bounded and unbounded domains**  
Çelik C., DEVELİ F.  
Applications of Mathematics, vol.69, no.1, pp.139-150, 2024 (SCI-Expanded)
- III. **A new proof of Hartman and Winter's theorem**  
Develi F., Çelik C.  
JOURNAL OF FIXED POINT THEORY AND APPLICATIONS, vol.25, pp.1-6, 2023 (SCI-Expanded)
- IV. **Existence and Hyers-Ulam stability of solutions for a delayed hyperbolic partial differential equation**  
Celik C., Develi F.  
PERIODICA MATHEMATICA HUNGARICA, vol.84, no.2, pp.211-220, 2022 (SCI-Expanded)
- V. **HOPF BIFURCATION ANALYSIS OF A FRACTIONAL-ORDER HOLLING-TANNER PREDATOR-PREY MODEL WITH TIME DELAY**  
Celik C., Degerli K.  
ANZIAM JOURNAL, vol.64, no.1, pp.23-39, 2022 (SCI-Expanded)
- VI. **EXISTENCE OF PERIODIC SOLUTION FOR A TUMOR GROWTH MODEL WITH VACCINE INTERACTION**  
ÇELİK KARAASLANLI C., Ozarslan N. T.  
TOPOLOGICAL METHODS IN NONLINEAR ANALYSIS, vol.55, no.1, pp.37-49, 2020 (SCI-Expanded)
- VII. **Bifurcation analysis of a logistic predator-prey system with delay**  
Celik C., Cekic G.  
ANZIAM Journal, vol.57, no.4, pp.445-460, 2016 (SCI-Expanded)
- VIII. **Stability and Hopf Bifurcation in a delayed ratio dependent Holling-Tanner type model**  
ÇELİK KARAASLANLI C.  
Applied Mathematics and Computation, vol.255, pp.228-237, 2015 (SCI-Expanded)
- IX. **Hopf bifurcation analysis of a system of coupled delayed-differential equations**

- Celik C., Merdan H.  
 APPLIED MATHEMATICS AND COMPUTATION, vol.219, no.12, pp.6605-6617, 2013 (SCI-Expanded)
- X. **Hopf bifurcation analysis of a general non-linear differential equation with delay**  
 Akkocaoglu H., Merdan H., Celik C.  
 JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.237, no.1, pp.565-575, 2013 (SCI-Expanded)
- XI. **Dynamical behavior of a ratio dependent predator-prey system with distributed delay**  
 Celik C.  
 Discrete and Continuous Dynamical Systems - Series B, vol.16, no.3, pp.719-738, 2011 (SCI-Expanded)
- XII. **Hopf bifurcation of a ratio-dependent predator-prey system with time delay**  
 Celik C.  
 CHAOS SOLITONS & FRACTALS, vol.42, no.3, pp.1474-1484, 2009 (SCI-Expanded)
- XIII. **Allee effect in a discrete-time predator-prey system**  
 Celik C., Duman O.  
 CHAOS SOLITONS & FRACTALS, vol.40, no.4, pp.1956-1962, 2009 (SCI-Expanded)
- XIV. **Allee effects on population dynamics in continuous (overlapping) case**  
 Merdan H., Duman O., Akin Ö., Çelik C.  
 Chaos, Solitons and Fractals, vol.39, no.4, pp.1994-2001, 2009 (SCI-Expanded)
- XV. **Allee effects on population dynamics with delay**  
 Celik C., Merdan H., Duman O., Akin O.  
 CHAOS SOLITONS & FRACTALS, vol.37, no.1, pp.65-74, 2008 (SCI-Expanded)
- XVI. **The stability and Hopf bifurcation for a predator-prey system with time delay**  
 Celik C.  
 CHAOS SOLITONS & FRACTALS, vol.37, no.1, pp.87-99, 2008 (SCI-Expanded)
- XVII. **No local L-1 solution for a nonlinear heat equation**  
 Celik C., Zhou Z.  
 COMMUNICATIONS IN PARTIAL DIFFERENTIAL EQUATIONS, vol.28, pp.1807-1831, 2003 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Stability and hopf bifurcation of a predator-prey model with discrete and distributed delays**  
 Çelik C., Degirmenci E.  
 Journal of Applied Nonlinear Dynamics, vol.5, no.1, pp.73-91, 2016 (Scopus)
- II. **Dynamical Analysis of a Ratio Dependent Holling-Tanner Type Predator-Prey Model with Delay**  
 Çelik Karaaslanlı C.  
 Journal of Applied Functional Analysis, vol.8, no.1, pp.194-213, 2013 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **Solutions of Nonlinear Parabolic Differential Equations**  
 Çelik Karaaslanlı C., Çelik Karaaslanlı C.  
 LAP LAMBERT Academic Publishing, Bergisch Gladbach, 2012
- II. **Bifurcation Analysis and Its Applications**  
 Çelik Karaaslanlı C.  
 in: Numerical Simulation - From Theory to Industry, Mykhaylo Andriychuk, Editor, Intech, London, pp.3-34, 2012

## Refereed Congress / Symposium Publications in Proceedings

- I. **Stability analysis of a population dynamics model with Allee effect**

Celik C.

World Congress on Engineering and Computer Science (WCECS 2007), San-Francisco, Costa Rica, 24 - 26 October 2007, pp.7-11

## Supported Projects

ÇELİK KARAASLANLI C., DEVELİ F., Değerli K., DEMİR E., Project Supported by Higher Education Institutions, Kesirli Diferansiyel Denklemler için Varlık Teklik Kararlılık ve Hopf Çatallanma Analizi, 2023 - 2024

ÇELİK KARAASLANLI C., TUBITAK Project, Bir Kanser-Bağışıklık Modelinin İmmünoterapi Etkisi Altındaki Dinamiği, 2017 - 2018

## Metrics

Publication: 22

Citation (WoS): 222

Citation (Scopus): 239

H-Index (WoS): 9

H-Index (Scopus): 9

## Non Academic Experience

Bahçeşehir Üniversitesi

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