Prof. Ersin Özuğurlu

Personal Information

Office Phone: <u>+90 0212 285 3311</u> Email: ozugurlue@itu.edu.tr Web: https://web.itu.edu.tr/ozugurlue/

International Researcher IDs ScholarID: A ORCID: 0000-0002-1301-6963 Publons / Web Of Science ResearcherID: H-6909-2013 ScopusID: 7801403518 Yoksis Researcher ID: 11345

Education Information

Doctorate, University of Wisconsin-Madison, United States Of America 1994 - 1999 Postgraduate, Carnegie Mellon University, Uygulamalı Matematik, United States Of America 1992 - 1994 Postgraduate, University of Wisconsin-Madison, Uygulamalı Matematik, United States Of America 1990 - 1992 Undergraduate, Istanbul Technical University, Fen-Edebiyat Fakültesi, Matematik Bölümü, Turkey 1983 - 1987

Foreign Languages

English

Dissertations

Doctorate, The effect of variable surface tension on free surface problems., University Of Wisconsin-Madison, 1999

Research Areas

Mathematics

Academic Titles / Tasks

Professor, Istanbul Technical University, Fen-Edebiyat, Matematik Mühendisliği, 2022 - Continues Associate Professor, Istanbul Technical University, Fen-Edebiyat, Matematik Mühendisliği, 2015 - 2022 Associate Professor, Bahcesehir University, Faculty Of Engineering And Natural Sciences, Department Of Software Engineering, 2012 - 2015 Assistant Professor, Bahcesehir University, Faculty Of Arts And Sciences, Department Of Mathematics And Computer, 2006 - 2015 Expert, University of St. Andrews, Arts And Sciences, Applied Mathematics, 2004 - 2006 Expert, Iowa State University, Arts And Sciences, Applied Mathematics, 2001 - 2001

Expert, Arizona State University, Arts And Sciences, Applied Mathematics, 1999 - 2001

Expert, State University of New York at Stony Brook, Engineering, Mechanical Engineering, 1999 - 1999 Expert, Texas A&M University, Arts And Sciences, Applied Mathematics, 1999 - 1999

Academic and Administrative Experience

Deputy Head of Department, Bahcesehir University, Faculty Of Science And Letters, Department Of Mathematics And Computer, 2012 - 2015

Courses

Numerical solution of partial differential equations, Postgraduate, 2021 - 2022

Advising Theses

Özuğurlu E., Eşlenik gradyan metodu ve uygulamaları, Postgraduate, B.ÖZKAN(Student), 2015 Özuğurlu E., Kısmi diferensiyel denklemlerin sayısal çözümleri, Postgraduate, A.GAMZE(Student), 2014 Özuğurlu E., Adi diferansiyel denklemlerin sayısal çözümleri, Postgraduate, E.GÜLENÇ(Student), 2014 Özuğurlu E., Beyin tümörlerinin matematiksel modellenmesi ve analizi, Postgraduate, R.TELLİOĞLU(Student), 2011

Designed Lessons

Özuğurlu E., Numerical Analysis, Undergraduate, 2015 - 2016 Özuğurlu E., Differential Equations , Undergraduate, 2014 - 2015

Taught Courses And Trainings

Özuğurlu E., Applications of numerical analysis in engineering, 2019 - 2019 Özuğurlu E., Applications of numerical analysis in engineering, 2014 - 2014 Özuğurlu E., Applications of numerical analysis in engineering, 2010 - 2010

Published journal articles indexed by SCI, SSCI, and AHCI

I. Electron spin resonance and photoluminescence studies of Co/Mg co-doped ZnO nanoparticles Arda L., Karatas O., Alphan M. C., Özuğurlu E.

International Journal of Applied Ceramic Technology, vol.21, no.3, pp.2458-2473, 2024 (SCI-Expanded)

II. Double Facet Coated Substrate transmittance model for Cd-doped ZnO thin films Özuğurlu E.

MICRO AND NANOSTRUCTURES, vol.163, 2022 (SCI-Expanded)

III. Cd-doped ZnO nanoparticles: An experimental and first-principles DFT studies Özuğurlu E.

JOURNAL OF ALLOYS AND COMPOUNDS, vol.861, 2021 (SCI-Expanded)

IV. A first-principles study of Mg/Ni induced magnetic properties of Zn0.95-xMgxNi0.050 Duru I., Özuğurlu E., Arda L.

Journal of Magnetism and Magnetic Materials, vol.504, 2020 (SCI-Expanded)

V. Synthesis, structure and optical properties of (Mn/Cu) co-doped ZnO nanoparticles Senol S., Özuğurlu E., Arda L. Journal of Alloys and Compounds, vol.822, 2020 (SCI-Expanded)

- VI. The effect of cobalt and boron on the structural, microstructural, and optoelectronic properties of ZnO nanoparticles Senol S., Özuğurlu E., Arda L. Ceramics International, vol.46, no.6, pp.7033-7044, 2020 (SCI-Expanded)
 VII. Structure, microstructure, optical and photocatalytic properties of Mn-doped ZnO nanoparticles Senol S., Yalcin B., Özuğurlu E., Arda L. Materials Research Express, vol.7, no.1, 2020 (SCI-Expanded)
 VIII. A first-principles study of magnetic properties of ZnO.94Mg0.01Mn0.050 Duru I., Özuğurlu E., Arda L. Materials Research Express, vol.6, no.12, 2020 (SCI-Expanded)
 - IX. The effects of Co/Cu Co-doped ZnO thin films: An optical study Akcan D., Ozharar S., Özuğurlu E., Arda L.
 JOURNAL OF ALLOYS AND COMPOUNDS, vol.797, pp.253-261, 2019 (SCI-Expanded)
 - Size effect on magnetic properties of Zn0.95-xMgxNi0.050 nanoparticles by Monte Carlo simulation Duru I. P., Ozugurlu E., Arda L.
 CERAMICS INTERNATIONAL, vol.45, pp.5259-5265, 2019 (SCI-Expanded)
 - XI. Band Gap Engineering of Mg Doped ZnO Nanorods Prepared by a Hydrothermal Method Şenol S. D., Boyraz C., Özuğurlu E., Güngör A., Arda L.
 CRYSTAL RESEARCH AND TECHNOLOGY, vol.54, 2019 (SCI-Expanded)
- XII. The annealing effect on microstructure and ESR properties of (Cu/Ni) co-doped ZnO nanoparticles Guler A., Arda L., Dogan N., Boyraz C., Ozugurlu E. CERAMICS INTERNATIONAL, vol.45, pp.1737-1745, 2019 (SCI-Expanded)
- XIII. A note on the numerical approach for the reaction-diffusion problem to model the density of the tumor growth dynamics
 Ozugurlu E.
 COMPUTERS & MATHEMATICS WITH APPLICATIONS and CO are 1504 1517 2015 (CCI Emericated)

COMPUTERS & MATHEMATICS WITH APPLICATIONS, vol.69, pp.1504-1517, 2015 (SCI-Expanded)

XIV. A NOTE ON THE NUMERICAL APPROACH FOR THE REACTION-DIFFUSION PROBLEM WITH A FREE BOUNDARY CONDITION Ozugurlu E. ANZIAM JOURNAL, vol.51, pp.317-330, 2010 (SCI-Expanded)

- XV. Analytical and Numerical Methods for the CMKdV-II Equation Akin O., Ozugurlu E.
 MATHEMATICAL PROBLEMS IN ENGINEERING, 2009 (SCI-Expanded)
- XVI. Interaction between two quasi-geostrophic vortices of unequal potential vorticity
 Ozugurlu E., Remaud J. N., Dritschel D. G.
 JOURNAL OF FLUID MECHANICS, vol.597, pp.395-414, 2008 (SCI-Expanded)
- XVII. A note on solitary waves with variable surface tension in water of infinite depth Ozugurlu E., Vanden-Broeck J. -.

ANZIAM JOURNAL, vol.48, pp.225-235, 2006 (SCI-Expanded)

- XVIII. Controlling transport phenomena in the Czochralski crystal growth process
 Gunzburger M., Ozugurlu E., Turner J., Zhang H.
 JOURNAL OF CRYSTAL GROWTH, vol.234, pp.47-62, 2002 (SCI-Expanded)
 - XIX. The influence of variable surface tension on capillary-gravity waves
 Ozugurlu E., Vanden-Broeck J.
 JOURNAL OF ENGINEERING MATHEMATICS, vol.40, pp.269-282, 2001 (SCI-Expanded)
 - XX. The distortion of a bubble in a corner flow
 Ozugurlu E., Vanden-Broeck J.
 EUROPEAN JOURNAL OF APPLIED MATHEMATICS, vol.11, pp.171-179, 2000 (SCI-Expanded)

Articles Published in Other Journals

 I. Estimation of Structural and Optical Parameters of (Mg, B) co-doped ZnO Nanoparticles Özuğurlu E.
 GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.34, no.2, pp.529-548, 2021 (ESCI)

Books & Book Chapters

I. **Ayrık matematik ve uygulamalrı** ÖZUĞURLU E., AKIN Ö., ÖZBAYOĞLU A. M. Palme, Ankara, 2015

Supported Projects

Özuğurlu E., Reinaud J. N., Dritschel D., Project Supported by Public Organizations in Other Countries, A comprehensive exploration of vortex interactions in geophysical flows, 2004 - 2006 Özuğurlu E., Gunzburger M., Turner J., Zhang H., Project Supported by Public Organizations in Other Countries, Controlling Transport Phenomena in the Czochralski crystal growth process, 1999 - 2001

Scientific Refereeing

PHYSICS LETTERS A, SCI Journal, February 2021 COMPUTERS & MATHEMATICS WITH APPLICATIONS, Journal Indexed in SSCI, January 2020 COMPUTERS & MATHEMATICS WITH APPLICATIONS, Journal Indexed in SSCI, October 2018 MATHEMATICAL METHODS IN THE APPLIED SCIENCES, Journal Indexed in SSCI, August 2018 International Journal of Engineering and Technology Innovation , Other journals, November 2003

Mobility Activity

Erasmus Programme, Lecturing, Universidade do Porto, Portugal, 2019 - 2019 Erasmus Programme, Lecturing, University of Applied Sciences, Upper Austria, Wels, Austria, 2014 - 2014 Erasmus Programme, Lecturing, University of Applied Sciences, Emden/Leer, Germany, 2010 - 2010

Metrics

Publication: 25 Citation (WoS): 169 Citation (Scopus): 181 H-Index (WoS): 9 H-Index (Scopus): 9

Non Academic Experience

University of Porto, Faculty of Engineering, Porto, Portekiz University of Applied Science-Upper Austria, Wels, Avusturya University of Applied Science, Emden/Leer, Almanya st andrews üniversitesi, iskoçya arizona state üniversitesi arizona state üniversitesi texas A&M üniversitesi