



Kısmi Türevli Diferansiyel Denklemler, Postgraduate, 2019 - 2020  
Matematiğin Temelleri I, Undergraduate, 2019 - 2020  
ANALİZ 3, Undergraduate, 2019 - 2020, 2015 - 2016  
Matematik Tarihi, Undergraduate, 2019 - 2020  
Matematik II, Undergraduate, 2019 - 2020  
Matematik I, Undergraduate, 2019 - 2020  
Bilgisayar Tabanlı Diferansiyel Denkler Çözümleri, Postgraduate, 2019 - 2020  
Topluma Hizmet Uygulamaları, Undergraduate, 2019 - 2020  
BİLGİSAYAR DESTEKLİ MATEMATİK EGİTİMİ, Undergraduate, 2018 - 2019, 2016 - 2017  
Diferansiyel Denklemler II, Undergraduate, 2018 - 2019  
MATEMATİK 2, Undergraduate, 2018 - 2019, 2016 - 2017, 2014 - 2015  
diferansiyel denklemler, Postgraduate, 2016 - 2017  
GENEL MATEMATİK, Undergraduate, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014  
Matematiksel Bilişim ve Teknoloji, Undergraduate, 2016 - 2017  
MATEMATİK 1, Undergraduate, 2016 - 2017, 2015 - 2016  
SEÇMELİ , Undergraduate, 2014 - 2015, 2012 - 2013

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

- I. **Unified approach for transient heat transfer in a longitudinal fin with functional grading**  
Demir H., Sungu İ., Keles I.  
EUROPEAN PHYSICAL JOURNAL PLUS, vol.138, no.5, 2023 (SCI-Expanded)
- II. **On the convergence and stability analysis of finite-difference methods for the fractional Newell-Whitehead-Segel equations**  
Süngü İ., Aydin E.  
Turkish Journal of Mathematics, vol.46, no.7, pp.2806-2818, 2022 (SCI-Expanded)
- III. **A New Approach and Solution Technique to Solve Time Fractional Nonlinear Reaction-Diffusion Equations**  
ÇİLİNİR SÜNGÜ İ., Demir H.  
MATHEMATICAL PROBLEMS IN ENGINEERING, vol.2015, 2015 (SCI-Expanded)

### **Articles Published in Other Journals**

- I. **New Algorithm for the Lid-driven Cavity Flow Problem with Boussinesq-Stokes Suspension**  
ÇİLİNİR SÜNGÜ İ., DEMİR H.  
Karaelmas Fen ve Mühendislik Dergisi, vol.8, no.2, pp.462-472, 2018 (Peer-Reviewed Journal)
- II. **A Computational Method for the Time-Fractional Navier-Stokes Equation**  
ÇİLİNİR SÜNGÜ İ., DEMİR H.  
Cumhuriyet Science Journal, vol.39, no.33, pp.900-911, 2018 (Peer-Reviewed Journal)
- III. **Temporal Differential Transform and Spatial Finite Difference Methods for Unsteady Heat Conduction Equations with Anisotropic Diffusivity**  
Çilingir Süngü İ., Demir H.  
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.27, no.4, pp.1063-1076, 2014 (Scopus)
- IV. **Solving a System of Three Dimensional Partial Differential Equations by Differential Transform/Finite Difference Method**  
ÇİLİNİR SÜNGÜ İ., DEMİR H.  
Turkish Journal of Science and Technology, vol.7, no.2, pp.145-151, 2012 (Peer-Reviewed Journal)
- V. **Solutions of the system of differential equations by differential transform/ finite difference method**  
DEMİR H., ÇİLİNİR SÜNGÜ İ.

- Physical Science (NWSA), vol.7, no.2, pp.66-73, 2012 (Peer-Reviewed Journal)
- VI. **Application of the Hybrid Differential Transform Method to the Nonlinear Equations**  
 ÇİLİNİR SÜNGÜ İ., DEMİR H.  
 Applied Mathematics, vol.3, no.03, pp.246-250, 2012 (Peer-Reviewed Journal)
- VII. **Numerical Solution of a Class of Nonlinear Emden Fowler Equations by Using Differential Transform Method**  
 DEMİR H., ÇİLİNİR SÜNGÜ İ.  
 Journal of Arts and Sciences, no.12, pp.75-81, 2009 (Peer-Reviewed Journal)

### Refereed Congress / Symposium Publications in Proceedings

- I. **ON NUMERICAL SOLUTION OF TWO POINT BOUNDARY VALUE PROBLEMS WITH LINEAR SHOOTING METHOD**  
 Baltürk Y., DEMİR H., ÇİLİNİR SÜNGÜ İ.  
 6 th INTERNATIONAL CONFERENCE ON COMPUTATIONAL MATHEMATICS AND ENGINEERING SCIENCES, Ordu, Turkey, 20 May 2022
- II. **On Numerical Solution of Lid Driven Problem in a square Cavity Filled with Nanofluid**  
 Baltürk Y., DEMİR H., ÇİLİNİR SÜNGÜ İ.  
 6 th INTERNATIONAL CONFERENCE ON COMPUTATIONAL MATHEMATICS AND ENGINEERING SCIENCES, Ordu, Turkey, 20 May 2022
- III. **ON THE SEMI-ANALYTICAL METHODS FOR THE FIFTH ORDER NONLINEAR KdV EQUATIONS**  
 ÇİLİNİR SÜNGÜ İ., AYDIN E.  
 6 th INTERNATIONAL CONFERENCE ON COMPUTATIONAL MATHEMATICS AND ENGINEERING SCIENCES, Ordu, Turkey, 20 May 2022
- IV. **On The Numerical Solution of the Time Fractional Newell Whitehead-Segel Equations**  
 ÇİLİNİR SÜNGÜ İ., AYDIN E.  
 The Fifth International Conference on Computational Mathematics and Engineering Sciences, Van, Turkey, 8 - 10 June 2021
- V. **Numerical Investigation on MHD Flow and Heat Transfer over an Exponentially Stretching Sheet with Viscous Dissipation and Radiation Effects**  
 ÇİLİNİR SÜNGÜ İ.  
 2nd international conference on computational mathematics and engineering sciences-cmes2017, İstanbul, Turkey, 20 - 22 May 2017
- VI. **A New hybrid method for the numerical solution of vorticity - stream function formulations**  
 ÇİLİNİR SÜNGÜ İ., DEMİR H.  
 International Conference on Fluid Dynamics & its Applications, Bangalore, India, 20 July 2011
- VII. **Zamana Bağlı Sikiştirilamaz Yapışkan Akişkan Denklemleri İçin Sonlu Fark Metodunun Analizi,**  
 ÇİLİNİR SÜNGÜ İ., DEMİR H.  
 II. Turk Dunyası Matematik Sempozyumu Sakarya Üniversitesi, 4-7 Temmuz, 2007, Sakarya., Sakarya, Turkey, 04 July 2007
- VIII. **Accelerating The Convergence Of Iterative Process With Finite Difference Approximation (To Laplace's Equation),**  
 ÇİLİNİR SÜNGÜ İ., DEMİR H.  
 16. Jangjeon International Symposium on Mathematics, Antalya, Turkey, 04 July 2005