

Prof. DEVRİM ÇAKMAK

Personal Information

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Education Information

Doctorate, Gazi University, Fen Bilimleri Enstitüsü, Matematik (Dr), Turkey 1999 - 2003

Postgraduate, Gazi University, Fen Bilimleri Enstitüsü, Matematik Eğitimi Anabilim Dalı, Turkey 1996 - 1999

Undergraduate, Gazi University, Gazi Eğitim Fakültesi, Matematik Ve Fen Bilimleri Eğitimi Bölümü, Turkey 1992 - 1996

Foreign Languages

English, B1 Intermediate

Dissertations

Doctorate, İkinci basamaktan lineer olmayan diferensiyel denklemlerin çözümlerinin salınımlılığı üzerine, Gazi University, Fen Bilimleri Enstitüsü, Matematik (Dr), 2003

Postgraduate, Lyapunov fonksiyonlarının oluşturulması üzerine, Gazi University, Fen Bilimleri Enstitüsü, Matematik Eğitimi Anabilim Dalı, 1998

Research Areas

Differential Equations, Mathematics Education

Academic Titles / Tasks

Professor, Gazi University, Gazi Eğitim Fakültesi, Matematik Ve Fen Bilimleri Eğitimi Bölümü, 2018 - Continues

Associate Professor, Gazi University, Gazi Eğitim Fakültesi, Matematik Ve Fen Bilimleri Eğitimi Bölümü, 2013 - 2018

Assistant Professor, Gazi University, Gazi Eğitim Fakültesi, Matematik Ve Fen Bilimleri Eğitimi Bölümü, 2006 - 2013

Lecturer, Gazi University, Gazi Eğitim Fakültesi, Matematik Ve Fen Bilimleri Eğitimi Bölümü, 2005 - 2006

Research Assistant, Gazi University, Gazi Eğitim Fakültesi, Matematik Ve Fen Bilimleri Eğitimi Bölümü, 1997 - 2005

Academic and Administrative Experience

Head of Department, Gazi University, Gazi Eğitim Fakültesi, Matematik Ve Fen Bilimleri Eğitimi, 2020 - Continues

Gazi University, Gazi Eğitim Fakültesi, 2007 - 2008

Advising Theses

ÇAKMAK D., 5e öğretim modeline dayalı eğitim bilişim ağı (EBA) kullanımının 5. sınıf öğrencilerinin kesirlerle toplama ve çıkarma işlemleri konusundaki başarısına, tutumuna ve bilgilerinin kalıcılığına etkisi, Postgraduate, E.ANKAY(Student), 2019

ÇAKMAK D., Eğitim Bilişim Ağı (EBA) destekli öğretimin 6. sınıf öğrencilerinin cebirsel ifadeler alt öğrenme alanında matematik başarılarına ve tutumlarına etkisi, Postgraduate, E.KELİSMAİL(Student), 2019

ÇAKMAK D., Ondalık gösterimler konusunun ortaokul 5. sınıf öğrencilerinde gerçekçi matematik eğitimiyle öğretiminin başarıya etkisi, Postgraduate, K.KARATAŞ(Student), 2019

ÇAKMAK D., The Effect Of Linear Equation Systems And Inequalities On The Mathematical Success Of The 8th Grade Students Of The 5e Learning Cycle Modeling Process, Postgraduate, A.BURCU(Student), 2017

ÇAKMAK D., Examining the development of pre-service elementary mathematics teachers' specialized content knowledge regarding the multiplication and division of fractions, Doctorate, S.SEÇİR(Student), 2017

ÇAKMAK D., The impact of using concept maps on academic achievement in the sub-learned area of polygons in 7th grade maths and interviews of student, Postgraduate, N.BİÇER(Student), 2017

ÇAKMAK D., Teachers' Opinions Towards Mathematics Content in Education Information Network, Postgraduate, Z.ARSLAN(Student), 2016

ÇAKMAK D., The effects of using virtual manipulatives on student's achievement when teaching fractions in primary class, Postgraduate, Ü.YENİÇERİ(Student), 2013

ÇAKMAK D., The effect of teaching triangle lower learning area gains 8th grades' mathematics lessons according to active learning approach onto the achievement and permanence of the students, Postgraduate, H.BOZTAŞ(Student), 2012

ÇAKMAK D., EFFECT OF THE EDUCATION WITH CARICATURES ON ACADEMIC ACHIEVEMENTS AND ATTITUDES OF ELEMENTARY SCHOOL SIXTH GRADE STUDENTS TOWARDS MATHEMATICS COURSE IN TERMS OF NATURAL NUMBERS SUB-LEARNING, Postgraduate, H.Kübra(Student), 2010

ÇAKMAK D., THE EFEECT OF TEACHING OF THE 8th GRADES' MATHEMATICS LESSON BASED ON ANALOGY METHOD IN THE AREA OF MEASUREMENT AND LEARNING ONTO THE ACADEMIC ACHIEVEMENTS OF THE STUDENTS, Postgraduate, T.KANALMAZ(Student), 2010

ÇAKMAK D., THE EFFECT OF TEACHING MEASUREMENT UNIT OF THE 8th GRADES'MATHEMATICS LESSON BASED ON TEACHING TO V DIAGRAMS ONTO THE ACADEMIC ACHIEVEMENTS OF THE STUDENTS, Postgraduate, S.SUBAŞI(Student), 2010

ÇAKMAK D., Karikatür kullanılarak yapılan öğretimin ilköğretim 6. sınıf öğrencilerinin matematik dersi doğal sayılar alt öğrenme alanındaki akademik başarılarına ve matematik dersine karşı tutumlarına etkisi, Postgraduate, H.KÜBRA(Student), 2010

ÇAKMAK D., Sınıf öğretmeni adaylarının Temel Matematik I-II Derslerine ilişkin kavram yanlışlarının incelenmesi, Postgraduate, S.AKBABA(Student), 2009

ÇAKMAK D., THE ANALYSIS OF PROSPECTIVE ELEMENTARY SCHOOL TEACHERS MISCONCEPTIONS REGARDING BASIC MATHEMATICS I AND II COURSES, Postgraduate, S.AKBABA(Student), 2009

ÇAKMAK D., THE INFLUENCE OF TEACHING ACTIVITIES WITH RESPECT TO 5E LEARNING CYCLE MODEL ON ACADEMIC ACHIEVEMENTS IN MATHEMATICS LESSON OF 7th GRADE STUDENTS IN PRIMARY SCHOOL ABOUT LINEAR EQUATIONS IN ONE VARIABLE, Postgraduate, B.HİÇCAN(Student), 2008

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **On Lyapunov-type inequalities for odd order boundary value problems**
AKTAŞ M. F. , ÇAKMAK D., AHMETOĞLU A.
JOURNAL OF INEQUALITIES AND APPLICATIONS, 2019 (Journal Indexed in SCI)
- II. **Lyapunov-type inequalities for fourth-order boundary value problems**
AKTAŞ M. F. , ÇAKMAK D., AHMETOĞLU A.
REVISTA DE LA REAL ACADEMIA DE CIENCIAS EXACTAS FISICAS Y NATURALES SERIE A-MATEMATICAS, vol.113, no.2, pp.615-625, 2019 (Journal Indexed in SCI)
- III. **Lyapunov-type inequalities for third order linear differential equations with two points boundary conditions**

- AKTAŞ M. F. , ÇAKMAK D.
HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, vol.48, no.1, pp.59-66, 2019 (Journal Indexed in SCI)
- IV. **LYAPUNOV-TYPE INEQUALITIES FOR THIRD-ORDER LINEAR DIFFERENTIAL EQUATIONS**
AKTAŞ M. F. , ÇAKMAK D.
ELECTRONIC JOURNAL OF DIFFERENTIAL EQUATIONS, 2017 (Journal Indexed in SCI)
- V. **On the Lyapunov-type inequalities of a three-point boundary value problem for third order linear differential equations**
AKTAŞ M. F. , ÇAKMAK D., Tiryaki A.
APPLIED MATHEMATICS LETTERS, vol.45, pp.1-6, 2015 (Journal Indexed in SCI)
- VI. **LYAPUNOV-TYPE INEQUALITIES FOR TWO CLASSES OF DIRICHLET QUASILINEAR SYSTEMS**
Tiryaki A., ÇAKMAK D., AKTAŞ M. F.
MATHEMATICAL INEQUALITIES & APPLICATIONS, vol.17, no.3, pp.843-863, 2014 (Journal Indexed in SCI)
- VII. **LYAPUNOV-TYPE INEQUALITY FOR QUASILINEAR SYSTEMS WITH ANTI-PERIODIC BOUNDARY CONDITIONS**
AKTAŞ M. F. , ÇAKMAK D., Tiryaki A.
JOURNAL OF MATHEMATICAL INEQUALITIES, vol.8, no.2, pp.313-320, 2014 (Journal Indexed in SCI)
- VIII. **On lyapunov-type inequality for a class of quasilinear systems**
Çakmak D.
Electronic Journal of Qualitative Theory of Differential Equations, 2014 (Journal Indexed in SCI Expanded)
- IX. **Lyapunov-type inequalities for two classes of nonlinear systems with anti-periodic boundary conditions**
ÇAKMAK D.
APPLIED MATHEMATICS AND COMPUTATION, vol.223, pp.237-242, 2013 (Journal Indexed in SCI)
- X. **LYAPUNOV-TYPE INEQUALITIES FOR NONLINEAR SYSTEMS INVOLVING THE $(p(1), p(2), \dots, p(n))$ -LAPLACIAN**
ÇAKMAK D., AKTAŞ M. F. , Tiryaki A.
ELECTRONIC JOURNAL OF DIFFERENTIAL EQUATIONS, 2013 (Journal Indexed in SCI)
- XI. **ON LYAPUNOV-TYPE INEQUALITY FOR A CLASS OF NONLINEAR SYSTEMS**
ÇAKMAK D.
MATHEMATICAL INEQUALITIES & APPLICATIONS, vol.16, no.1, pp.101-108, 2013 (Journal Indexed in SCI)
- XII. **Lyapunov-type inequalities for a certain class of nonlinear systems**
Tiryaki A., ÇAKMAK D., AKTAŞ M. F.
COMPUTERS & MATHEMATICS WITH APPLICATIONS, vol.64, no.6, pp.1804-1811, 2012 (Journal Indexed in SCI)
- XIII. **MEAN VALUE THEOREM FOR HOLOMORPHIC FUNCTIONS**
ÇAKMAK D., Tiryaki A.
ELECTRONIC JOURNAL OF DIFFERENTIAL EQUATIONS, 2012 (Journal Indexed in SCI)
- XIV. **A note on Tang and He's paper**
AKTAŞ M. F. , ÇAKMAK D., Tiryaki A.
APPLIED MATHEMATICS AND COMPUTATION, vol.218, no.9, pp.4867-4871, 2012 (Journal Indexed in SCI)
- XV. **On the qualitative behaviors of solutions of third-order nonlinear functional differential equations**
AKTAŞ M. F. , ÇAKMAK D., Tiryaki A.
APPLIED MATHEMATICS LETTERS, vol.24, no.11, pp.1849-1855, 2011 (Journal Indexed in SCI)
- XVI. **On the qualitative behaviors of solutions of third order nonlinear differential equations**
AKTAŞ M. F. , ÇAKMAK D., Tiryaki A.
COMPUTERS & MATHEMATICS WITH APPLICATIONS, vol.62, no.4, pp.2029-2036, 2011 (Journal Indexed in SCI)
- XVII. **Oscillation Criteria for Nonlinear Delay Differential Equations of Second Order**
ÇAKMAK D., Tiryaki A.
ELECTRONIC JOURNAL OF QUALITATIVE THEORY OF DIFFERENTIAL EQUATIONS, no.84, pp.1-9, 2011 (Journal Indexed in SCI)
- XVIII. **Lyapunov-type inequality for a class of Dirichlet quasilinear systems involving the $(p(1), p(2), \dots, p(n))$ -Laplacian**

- ÇAKMAK D., Tiryaki A.
JOURNAL OF MATHEMATICAL ANALYSIS AND APPLICATIONS, vol.369, no.1, pp.76-81, 2010 (Journal Indexed in SCI)
- XIX. **On Lyapunov-type inequality for quasilinear systems**
ÇAKMAK D., Tiryaki A.
APPLIED MATHEMATICS AND COMPUTATION, vol.216, no.12, pp.3584-3591, 2010 (Journal Indexed in SCI)
- XX. **Lyapunov-type integral inequalities for certain higher order differential equations**
ÇAKMAK D.
APPLIED MATHEMATICS AND COMPUTATION, vol.216, no.2, pp.368-373, 2010 (Journal Indexed in SCI)
- XXI. **A discrete analogue of Lyapunov-type inequalities for nonlinear systems**
Unal M., ÇAKMAK D., Tiryaki A.
COMPUTERS & MATHEMATICS WITH APPLICATIONS, vol.55, no.11, pp.2631-2642, 2008 (Journal Indexed in SCI)
- XXII. **OSCILLATION CRITERIA FOR NONLINEAR SECOND-ORDER DIFFERENTIAL EQUATIONS WITH DAMPING**
ÇAKMAK D.
UKRAINIAN MATHEMATICAL JOURNAL, vol.60, no.5, pp.799-809, 2008 (Journal Indexed in SCI)
- XXIII. **Oscillation for second order nonlinear differential equations with damping**
ÇAKMAK D.
DYNAMIC SYSTEMS AND APPLICATIONS, vol.17, no.1, pp.139-147, 2008 (Journal Indexed in SCI)
- XXIV. **Lyapunov-type inequalities for certain nonlinear systems on time scales**
Unal M., ÇAKMAK D.
TURKISH JOURNAL OF MATHEMATICS, vol.32, no.3, pp.255-275, 2008 (Journal Indexed in SCI)
- XXV. **Comment on the paper "Oscillation of second-order nonlinear ODE with damping"**
ÇAKMAK D., Tiryaki A.
APPLIED MATHEMATICS AND COMPUTATION, vol.191, no.1, pp.298, 2007 (Journal Indexed in SCI)
- XXVI. **Lyapunov-type inequalities for nonlinear systems**
Tiryaki A., Unal M., ÇAKMAK D.
JOURNAL OF MATHEMATICAL ANALYSIS AND APPLICATIONS, vol.332, no.1, pp.497-511, 2007 (Journal Indexed in SCI)
- XXVII. **A note on Kwong and Wong's paper**
ÇAKMAK D.
DYNAMIC SYSTEMS AND APPLICATIONS, vol.15, pp.409-414, 2006 (Journal Indexed in SCI)
- XXVIII. **Oscillation criteria for certain forced second-order nonlinear differential equations with delayed argument**
ÇAKMAK D., Tiryaki A.
COMPUTERS & MATHEMATICS WITH APPLICATIONS, vol.49, pp.1647-1653, 2005 (Journal Indexed in SCI)
- XXIX. **Integral averaging technique for the interval oscillation criteria of certain second-order nonlinear differential equations**
ÇAKMAK D.
JOURNAL OF MATHEMATICAL ANALYSIS AND APPLICATIONS, vol.300, no.2, pp.408-425, 2004 (Journal Indexed in SCI)
- XXX. **Integral averages and oscillation criteria of second-order nonlinear differential equations**
Tiryaki A., ÇAKMAK D.
COMPUTERS & MATHEMATICS WITH APPLICATIONS, vol.47, pp.1495-1506, 2004 (Journal Indexed in SCI)
- XXXI. **Oscillation criteria for certain forced second-order nonlinear differential equations**
ÇAKMAK D., Tiryaki A.
APPLIED MATHEMATICS LETTERS, vol.17, no.3, pp.275-279, 2004 (Journal Indexed in SCI)
- XXXII. **On the oscillation of certain second-order nonlinear differential equations**
Tiryaki A., ÇAKMAK D., Ayanlar B.
JOURNAL OF MATHEMATICAL ANALYSIS AND APPLICATIONS, vol.281, no.2, pp.565-574, 2003 (Journal Indexed in SCI)

XXXIII. Oscillation criteria for nth-order forced functional differential equations

ÇAKMAK D., Tiryaki A.

JOURNAL OF MATHEMATICAL ANALYSIS AND APPLICATIONS, vol.278, no.2, pp.562-576, 2003 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **LYAPUNOV-TYPE INEQUALITIES FOR THIRD-ORDER LINEAR DIFFERENTIAL EQUATIONS UNDER THE NON-CONJUGATE BOUNDARY CONDITIONS**
AKTAŞ M. F. , ÇAKMAK D.
DIFFERENTIAL EQUATIONS & APPLICATIONS, vol.10, no.2, pp.219-226, 2018 (Journal Indexed in ESCI)
- II. **A Note on Multivariate Lyapunov-Type Inequality**
AKTAŞ M. F. , ÇAKMAK D.
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.28, no.2, pp.265-267, 2015 (Journal Indexed in ESCI)
- III. **Lyapunov-Type Inequalities for Two Classes of Difference Systems with Dirichlet Boundary Conditions**
AKTAŞ M. F. , ÇAKMAK D., Arıturk M.
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.28, no.3, pp.473-482, 2015 (Journal Indexed in ESCI)
- IV. **İlköğretim matematik öğretmenleri adaylarının geometrik düşünme düzeylerinin belirlenmesi**
ÇAKMAK D., GÜLER H. K.
Türk Eğitim Bilimleri Dergisi, vol.12, no.1, pp.1-16, 2014 (Other Refereed National Journals)
- V. **Karikatürlerle yapılan matematik öğretiminin öğrencilerin akademik başarılarına ve tutumlarına etkisi**
GÜLER H. K. , ÇAKMAK D., KAVAK N.
Uludağ Üniversitesi Eğitim Fakültesi Dergisi, vol.26, no.1, pp.149-160, 2013 (Other Refereed National Journals)
- VI. **Sahoo and Wayment type integral mean value theorems**
TİRYAKİ A., ÇAKMAK D.
International Journal of Mathematical Education in Science, vol.41, no.4, pp.565-573, 2010 (Refereed Journals of Other Institutions)
- VII. **On the Equivalence of Rolle s and Generalized Mean Value Theorems on Time Scales**
ÇAKMAK D.
International Journal of Mathematical Education in Science and Technology, vol.41, no.7, pp.964-970, 2010 (Refereed Journals of Other Institutions)

Refereed Congress / Symposium Publications in Proceedings

- I. **Ortaokul 5. Sınıf Öğrencilerine Ondalık Gösterim Konusunun Gerçekçi Matematik Eğitimiyle Öğretiminin Akademik Başarıya Etkisi**
KARATAŞ K., ÇAKMAK D., AKSOY N. C.
3. Uluslararası Bilim ve Eğitim Kongresi, 21 - 24 March 2019
- II. **Matematik Öğretmenlerinin Eğitim Bilişim Ağı (EBA)'nı Kullanma Sıklıklarının Bazı Değişkenler Açısından İncelenmesi**
ARSLAN Z., ÇAKMAK D.
26. Uluslararası Eğitim Bilimleri Kongresi, 20 - 23 April 2017
- III. **KAVRAM HARİTASI KULLANIMININ ORTAOKUL 7 SINIF ÖĞRENCİLERİNİN MATEMATİK DERSİ ÇOKGENLER ALTÖĞRENME ALANINDAKİ AKADEMİK BAŞARILARINA VE BİLGİLERİNİN KALICILIK DÜZEYLERİNE ETKİSİ**
Biçer N., ÇAKMAK D.
1. INTERNATIONAL ACADEMIC RESEARCH CONGRESS, Antalya, Turkey, 3 - 05 November 2016, pp.468-477

- IV. **DOĞRUSAL DENKLEM SİSTEMLERİ VE EŞİTSİZLİKLER ALT ÖĞRENME ALANLARI KAZANIMLARINI 5E ÖĞRENME DÖNGÜSÜ MODELİYLE İŞLEMENİN 8 SINIF ÖĞRENCİLERİNİN MATEMATİK DERSİ AKADEMİK BAŞARILARINA ETKİSİ**
Sabahat A. B. , ÇAKMAK D.
12. ULUSAL FEN BİLİMLERİ VE MATEMATİK EĞİTİMİ KONGRESİ, Trabzon, Turkey, 28 - 30 September 2016
- V. **5E Öğrenme Döngüsü Modeline Dayalı Öğretim Etkinliklerinin 7. Sınıf Öğrencilerinin Birinci Dereceden Bir Bilinmeyenli Denklemler Konusundaki Akademik Başarılarına Etkisi**
HİCCAN B., ÇAKMAK D., KAVAK N., KILIÇ ÇAKMAK E.
International Conference on Education Sciences (ICES'08), 23 July - 25 August 2008
- VI. **On the oscillation of certain second order differential equations**
Tiryaki A., ÇAKMAK D., Ayanlar B.
8th International Conference on Nonlinear Functional Analysis and Applications, Chinju, South Korea, 9 - 13 August 2004, vol.4, pp.1-2

Supported Projects

ÇAKMAK D., Project Supported by Higher Education Institutions, 5E Öğrenme Döngüsü Modeline Dayalı Öğretim Etkinliklerinin 7.Sınıf Öğrencilerinin Birinci Dereceden Bir Bilinmeyenli Denklemler Konusundaki Akademik Başarılarına Etkisi, 2007 - 2011

Citations

Total Citations (WOS):468

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