

Prof. AHMET REFİK BAHADIR

Personal Information

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Education Information

Doctorate, The University of Bath, Department Of Mathematical Sciences, Uygulamalı Matematik, United Kingdom 1991 - 1994

Post Graduate, The University of Bath, Department Of Mathematical Sciences, Uygulamalı Matematik, United Kingdom 1989 - 1991

Post Graduate, Inonu University, Fen Bilimleri Enstitüsü, Analiz Ve Fonksiyonlar Teorisi, Turkey 1985 - 1987

Under Graduate, Inonu University, Fen-Edebiyat Fakültesi, Matematik, Turkey 1980 - 1984

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, Two-Dimensional Computer Simulation of In-Situ Combustion Oil Recovery Process and Iterative Methods, The University of Bath, Department Of Mathematical Sciences, Numerical Analysis, 1994

Post Graduate, On an In-Situ Combustion Simulator, The University of Bath, Department Of Mathematical Sciences, Numerical Analysis, 1991

Post Graduate, Banach Limitleri ve Kuvvetli Regüler Matrisler Hakkında, Inonu University, Fen Bilimleri Enstitüsü, Analiz Ve Fonksiyonlar Teorisi Anabilim Dalı, 1987

Research Areas

Mathematics, Differential Equations, Numerical Analysis, Natural Sciences

Academic Titles / Tasks

Professor, Inonu University, Fen-Edebiyat Fakültesi, Matematik Bölümü, 2008 - Continues

Associate Professor, Inonu University, Fen-Edebiyat Fakültesi, Matematik Bölümü, 2000 - 2008

Assistant Professor, Inonu University, Fen-Edebiyat Fakültesi, Matematik Bölümü, 1995 - 2000

Research Assistant, University of Bath, Mathematical Sciences, Mathematics, 1989 - 1994

Research Assistant, Inonu University, Fen-Edebiyat Fakültesi, Matematik Bölümü, 1984 - 1989

Professional Experience

Head of Department, Inonu University, Fen-Edebiyat Fakültesi, Matematik Bölümü, 2006 - Continues

Head of Department, Inonu University, Fen-Edebiyat Fakültesi, Matematik Bölümü, 1997 - 2006

Advising Theses

- BAHADIR A. R. , Burger Denkleminin Kapalı Üstel Sonlu Fark Yöntemi İle Çözümü, Doctorate, B.İnan(Student), 2014
BAHADIR A. R. , Isı Denkleminin Üstel Sonlu Fark Yöntemi ile Çözümü, Post Graduate, B.İnan(Student), 2009
BAHADIR A. R. , Burger Denkleminin Sınır Eleman Yöntemi İle Çözümü, Post Graduate, M.Sağlam(Student), 2002

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

- I. **A Fully Implicit Finite Difference Approach for Numerical Solution of the Generalized Equal Width (GEW) Equation**
İNAN B., BAHADIR A. R.
PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES INDIA SECTION A-PHYSICAL SCIENCES, vol.90, pp.299-308, 2020 (Journal Indexed in SCI)
- II. **Numerical solution of the one-dimensional Burgers' equation: Implicit and fully implicit exponential finite difference methods**
İNAN B., BAHADIR A. R.
PRAMANA-JOURNAL OF PHYSICS, vol.81, pp.547-556, 2013 (Journal Indexed in SCI)
- III. **A numerical approach to hydromagnetic squeezed flow and heat transfer between two parallel disks**
BAHADIR A. R. , ABBASOV T.
INDUSTRIAL LUBRICATION AND TRIBOLOGY, vol.63, pp.63-71, 2011 (Journal Indexed in SCI)
- IV. **Beta globin gene cluster haplotypes of the beta thalassemia mutations observed in Denizli province of Turkey.**
BAHADIR A. R. , Öztürk O., ATALAY A., ATALAY E.
Turkish journal of haematology : official journal of Turkish Society of Haematology, vol.26, pp.129-37, 2009 (Journal Indexed in SCI)
- V. **Surprising magnetic behavior of cobalt(II) ion in recently prepared macrocycle complexes. Distortion versus intermolecular antiferromagnetic exchange interactions**
Bayri A., Bahadır A. R. , Avcu F. M. , AYTEKİN O.
TRANSITION METAL CHEMISTRY, vol.30, pp.987-991, 2005 (Journal Indexed in SCI)
- VI. **Magnetoimpedance effect in electrochemically etched CoFeSiB amorphous wires**
Atalay F., Atalay S., Kaya H., Bahadır A. R.
PHYSICA B-CONDENSED MATTER, vol.364, pp.294-299, 2005 (Journal Indexed in SCI)
- VII. **Exponential finite-difference method applied to Korteweg-de Vries equation for small times**
Bahadır A. R.
APPLIED MATHEMATICS AND COMPUTATION, vol.160, pp.675-682, 2005 (Journal Indexed in SCI)
- VIII. **A numerical investigation of the liquid flow velocity over an infinity plate which is taking place in a magnetic field**
Bahadır A. R. , Abbasov T.
INTERNATIONAL JOURNAL OF APPLIED ELECTROMAGNETICS AND MECHANICS, vol.21, pp.1-10, 2005 (Journal Indexed in SCI)
- IX. **The investigation of the transient regimes in the nonlinear systems by the generalized classical method**
Abbasov T., Bahadır A. R.
MATHEMATICAL PROBLEMS IN ENGINEERING, pp.503-519, 2005 (Journal Indexed in SCI)
- X. **Application of cubic B-spline finite element technique to the thermistor problem**
Bahadır A. R.
APPLIED MATHEMATICS AND COMPUTATION, vol.149, pp.379-387, 2004 (Journal Indexed in SCI)
- XI. **A fully implicit finite-difference scheme for two-dimensional Burgers' equations**
Bahadır A. R.
APPLIED MATHEMATICS AND COMPUTATION, vol.137, pp.131-137, 2003 (Journal Indexed in SCI)

- XII. **On the performance of certain direct and iterative methods on equations arising on a two-dimensional in situ combustion simulator**
Bahadir A. R. , ELLERBY F.
APPLIED MATHEMATICS AND COMPUTATION, vol.125, pp.347-358, 2002 (Journal Indexed in SCI)
- XIII. **Steady-state solution of the PTC thermistor problem using a quadratic spline finite element method**
Bahadir A. R.
MATHEMATICAL PROBLEMS IN ENGINEERING, vol.8, pp.101-109, 2002 (Journal Indexed in SCI)
- XIV. **A small time solutions for the Korteweg-de Vries equation**
Kutluay S., Bahadir A. R. , Ozdes A.
APPLIED MATHEMATICS AND COMPUTATION, vol.107, pp.203-210, 2000 (Journal Indexed in SCI)
- XV. **A variety of finite difference methods to the thermistor with a new modified electrical conductivity**
Kutluay S., Bahadir A. R. , Ozdes A.
APPLIED MATHEMATICS AND COMPUTATION, vol.106, pp.205-213, 1999 (Journal Indexed in SCI)
- XVI. **Various methods to the thermistor problem with a bulk electrical conductivity**
Kutluay S., Bahadir A. R. , Ozdes A.
INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN ENGINEERING, vol.45, pp.1-12, 1999 (Journal Indexed in SCI)
- XVII. **Numerical solution of one-dimensional Burgers equation: explicit and exact-explicit finite difference methods**
Kutluay S., Bahadir A. R. , Ozdes A.
JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.103, pp.251-261, 1999 (Journal Indexed in SCI)
- XVIII. **The numerical solution of one-phase classical Stefan problem**
Kutluay S., Bahadir A. R. , Ozdes A.
JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.81, pp.135-144, 1997 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **A fully implicit finite difference scheme for the regularized long wave equation**
INAN B., BAHADIR A. R.
General Mathematics Notes, vol.33, pp.40-59, 2016 (Refereed Journals of Other Institutions)
- II. **Numerical solutions of the generalized Burgers-Huxley equation by implicit exponential finite difference method**
Inan B., BAHADIR A. R.
JOURNAL OF APPLIED MATHEMATICS STATISTICS AND INFORMATICS, vol.11, pp.57-67, 2015 (Journal Indexed in ESCI)
- III. **Two different exponential finite difference methods for numerical solutions of the linearized Burgers' equation**
INAN B., BAHADIR A. R.
International Journal of Modern Mathematical Sciences, vol.13, pp.449-461, 2015 (Refereed Journals of Other Institutions)
- IV. **Numerical Solutions of MRLW Equation by a Fully Implicit Finite-Difference Scheme**
Inan B., BAHADIR A. R.
JOURNAL OF MATHEMATICS AND COMPUTER SCIENCE-JMCS, vol.15, pp.228-239, 2015 (Journal Indexed in ESCI)
- V. **A numerical solution of the Burgers' equation using a Crank-Nicolson exponential finite difference method**
INAN B., BAHADIR A. R.
Journal of Mathematical and Computational Science, vol.4, pp.849-860, 2014 (Refereed Journals of Other Institutions)
- VI. **A numerical solution of the equal width wave equation using a fully implicit finite difference method**
INAN B., BAHADIR A. R.

- Turkish Journal of Mathematics & Computer Science, vol.2, pp.1-14, 2014 (Refereed Journals of Other Institutions)
- VII. **An explicit exponential finite difference method for the Burgers' equation**
INAN B., BAHADIR A. R.
European International Journal of Science and Technology, vol.2, pp.61-72, 2013 (Refereed Journals of Other Institutions)
- VIII. **Numerical solution for one-dimensional Burgers' equation using a fully implicit finite-difference method**
BAHADIR A. R.
International Journal of Applied Mathematics, vol.1, pp.897-909, 1999 (Refereed Journals of Other Institutions)
- IX. **A heat balance integral solution to Burger's equation in one space dimension**
ÖZDEŞ A., KUTLUAY S., BAHADIR A. R. , ŞAHİN A.
Balkan Physics Letters, vol.4, pp.251-256, 1986 (Refereed Journals of Other Institutions)

Refereed Congress / Symposium Publications in Proceedings

- I. **A New Numerical Solution of the Linearized Burgers' Equation**
INAN B., BAHADIR A. R.
28. Ulusal Matematik Sempozyumu, (UMS2015), Antalya, Turkey, 7 - 09 September 2015, pp.179
- II. **Solitary waves of the MRLW equation using fully implicit finite difference method**
INAN B., BAHADIR A. R.
2. nd International Eurasian Conference on Mathematical Science and Applications, Saraybosna, Bosnia And Herzegovina, 26 - 29 August 2013, pp.145
- III. **Torsional stress impedance effect in Fe71Cr7Si9B13 amorphous wire**
Atalay F., Bayri N., Bahadir A. R. , ATALAY S.
2nd Seeheim Conference on Magnetism (SCM2004), Seeheim, Germany, 27 June - 01 July 2004, pp.3328-3331
- IV. **Salter osteotomisinin yeni ve değişik bir modifikasyonu: Basamaklı osteotomi**
Kaygusuz A., Bora A., BAHADIR A. R.
XVII. Ulusal Ortopedi ve Travmatoloji Kongresi, Antalya, Turkey, 24 - 29 October 2001, pp.304-306
- V. **Burger denkleminin sonlu farklar ile çözümü**
BAHADIR A. R.
I. Türk Dünyası Sempozyumu, Elazığ, Turkey, 29 June - 02 July 1999, pp.159
- VI. **Stefan problemi için değişken zaman adım yönteminin bir modifikasyonu**
KUTLUAY S., BAHADIR A. R. , ÖZDEŞ A.
XI. Ulusal Matematik Sempozyumu, Isparta, Turkey, 7 - 11 September 1998, pp.64
- VII. **1-boyutlu parabolik problemler için bir direkt varyasyonel ardışık yaklaşım yöntemi**
ÖZDEŞ A., BAHADIR A. R. , KUTLUAY S.
Atatürk Üniversitesi 40. Kuruluş Yıldönümü Matematik Sempozyumu, Erzurum, Turkey, 20 - 22 May 1998, pp.154-162

Citations

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