

Assoc. Prof. ABDÜLKADİR DOĞAN

Personal Information

Email: abdukkadir.dogan@agu.edu.tr

Web: <https://avesis.agu.edu.tr/abdukkadir.dogan>

Education Information

Post Doctorate, The University of Tennessee at Chattanooga, Fen Bilimleri Enstitüsü, Matematik, United States Of America
2009 - 2009

Post Doctorate, University of Leicester, Fen Bilimleri Enstitüsü, Matematik, United Kingdom 2001 - 2001

Doctorate, University of Wales, Bangor, Bilgisayar Bilimleri Fakültesi, Uygulamalı Matematik, United Kingdom 1994 -
1997

Postgraduate, Hacettepe University, Fen Bilimleri Enstitüsü, Matematik, Turkey 1989 - 1993

Undergraduate, Hacettepe University, Fen Fakültesi, Matematik, Turkey 1984 - 1988

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Petrov Galerkin Finite Element Methods, University of Wales, Bangor, Applied Mathematics, Mathematics,
1997

Postgraduate, Klasik Fuzzy Ölçümleri ve Sugeno Fuzzy Ölçümleri Arasındaki İlişkiler, Hacettepe Üniversitesi, Fen Bilimleri
Enstitüsü, Matematik, 1993

Research Areas

Mathematics, Differential Equations, Numerical Analysis, Natural Sciences

Academic Titles / Tasks

Associate Professor, Abdullah Gul University, Bilgisayar Bilimleri Fakültesi, Matematik, 2012 - Continues

Academic and Administrative Experience

Head of Department, Abdullah Gul University, Bilgisayar Bilimleri Fakültesi, Matematik, 2012 - 2015

Head of Department, Nigde Omer Halisdemir University, Fen -Edebiyat Fakültesi, Matematik, 2005 - 2008

Courses

Differential Equations, , Undergraduate, 2022 - 2023
Differential Equations , Undergraduate, 2022 - 2023
Numerical Analysis with Engineering Applications, Undergraduate, 2021 - 2022
Differential Equations , Undergraduate, 2022 - 2023
Differential Equations , Undergraduate, 2022 - 2023
Mathematical Methods for Engineering Applications, Undergraduate, 2021 - 2022
Numerical Analysis with Engineering Applications, Undergraduate, 2021 - 2022
Differential Equations, Undergraduate, 2016 - 2017
Discrete Mathematics, Undergraduate, 2016 - 2017
Introductory Calculus, Undergraduate, 2016 - 2017
Advanced Enginering Mathematics, Postgraduate, 2015 - 2016
Advanced Engineering Mathematics, Postgraduate, 2013 - 2014

Advising Theses

Doğan A., Zaman skalası üzerine lineer olmayan dinamik denklemler için m-noktalı sınır değer problemlerinin çözümleri, Postgraduate, A.Kaya(Student), 2011
Doğan A., Burgers denklemlerinin sayısal çözümü, Postgraduate, M.Gülbahar(Student), 2007
Doğan A., Galerkin sonlu eleman metoduyla kısmi diferansiyel denklemlerin çözümleri, Postgraduate, S.Güleç(Student), 2007
Doğan A., Düzenli uzun dalga denkleminin nümerik çözümü, Postgraduate, Ş.AYDIN(Student), 2007
Doğan A., En küçük kareler metoduyla kısmi diferansiyel denklemlerin nümerik çözümü, Postgraduate, E.Yıldırım(Student), 2005
Doğan A., Bazı kısmi türevli diferansiyel denklemlerin sayısal çözümleri, Postgraduate, N.Ocak(Student), 2004

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Existence results for a class of boundary value problems for fractional differential equations**
DOĞAN A.
TURKISH JOURNAL OF MATHEMATICS, vol.45, no.3, pp.1149-1165, 2021 (SCI-Expanded)
- II. **Positive Solutions of a Three-Point Boundary-Value Problem for the p-Laplacian Dynamic Equation on Time Scales**
Dogan A.
UKRAINIAN MATHEMATICAL JOURNAL, vol.72, no.6, pp.917-934, 2020 (SCI-Expanded)
- III. **Existence of positive solutions for nonlinear multipoint p-Laplacian dynamic equations on time scales**
DOĞAN A.
TURKISH JOURNAL OF MATHEMATICS, vol.44, no.3, pp.676-697, 2020 (SCI-Expanded)
- IV. **Solutions to nonlinear second-order three-point boundary value problems of dynamic equations on time scales**
DOĞAN A.
TURKISH JOURNAL OF MATHEMATICS, vol.43, no.3, pp.1276-1295, 2019 (SCI-Expanded)
- V. **Positive solutions of nonlinear multi-point boundary value problems**
DOĞAN A.
POSITIVITY, vol.22, no.5, pp.1387-1402, 2018 (SCI-Expanded)
- VI. **POSITIVE SOLUTIONS OF THE p-LAPLACIAN DYNAMIC EQUATIONS ON TIME SCALES WITH SIGN CHANGING NONLINEARITY**
DOĞAN A.
ELECTRONIC JOURNAL OF DIFFERENTIAL EQUATIONS, 2018 (SCI-Expanded)

- VII. **On the existence of positive solutions of the p -Laplacian dynamic equations on time scales**
DOĞAN A.
MATHEMATICAL METHODS IN THE APPLIED SCIENCES, vol.40, no.12, pp.4385-4399, 2017 (SCI-Expanded)
- VIII. **TRIPLE POSITIVE SOLUTIONS OF m -POINT BOUNDARY VALUE PROBLEM ON TIME SCALES WITH p -LAPLACIAN**
DOĞAN A.
BULLETIN OF THE IRANIAN MATHEMATICAL SOCIETY, vol.43, no.2, pp.373-384, 2017 (SCI-Expanded)
- IX. **EIGENVALUE PROBLEMS FOR SINGULAR MULTI-POINT DYNAMIC EQUATIONS ON TIME SCALES**
DOĞAN A.
ELECTRONIC JOURNAL OF DIFFERENTIAL EQUATIONS, 2017 (SCI-Expanded)
- X. **Eigenvalue problems for nonlinear third-order m -point p -Laplacian dynamic equations on time scales**
DOĞAN A.
MATHEMATICAL METHODS IN THE APPLIED SCIENCES, vol.39, no.7, pp.1634-1645, 2016 (SCI-Expanded)
- XI. **Multiple positive solutions of nonlinear m -point dynamic equations for p -Laplacian on time scales**
DOĞAN A.
TURKISH JOURNAL OF MATHEMATICS, vol.40, no.5, pp.941-959, 2016 (SCI-Expanded)
- XII. **THE EXISTENCE OF POSITIVE SOLUTIONS FOR A SEMIPOSITONE SECOND-ORDER m -POINT BOUNDARY VALUE PROBLEM**
DOĞAN A.
DYNAMIC SYSTEMS AND APPLICATIONS, vol.24, no.4, pp.419-427, 2015 (SCI-Expanded)
- XIII. **On the existence of positive solutions for the second-order boundary value problem**
Dogan A.
APPLIED MATHEMATICS LETTERS, vol.49, pp.107-112, 2015 (SCI-Expanded)
- XIV. **ON THE EXISTENCE OF POSITIVE SOLUTIONS FOR THE ONE-DIMENSIONAL p -LAPLACIAN BOUNDARY VALUE PROBLEMS ON TIME SCALES**
DOĞAN A.
DYNAMIC SYSTEMS AND APPLICATIONS, vol.24, no.3, pp.295-303, 2015 (SCI-Expanded)
- XV. **TRIPLE POSITIVE SOLUTIONS FOR m -POINT BOUNDARY-VALUE PROBLEMS OF DYNAMIC EQUATIONS ON TIME SCALES WITH p -LAPLACIAN**
Dogan A.
ELECTRONIC JOURNAL OF DIFFERENTIAL EQUATIONS, 2015 (SCI-Expanded)
- XVI. **Existence of Countably Many Positive Solutions for Nonlinear Boundary Value Problems on Time Scales**
Dogan A.
APPLIED MATHEMATICS & INFORMATION SCIENCES, vol.8, no.5, pp.2177-2187, 2014 (SCI-Expanded)
- XVII. **EXISTENCE OF POSITIVE SOLUTIONS FOR p -LAPLACIAN AN m -POINT BOUNDARY VALUE PROBLEM INVOLVING THE DERIVATIVE ON TIME SCALES**
Dogan A.
ELECTRONIC JOURNAL OF DIFFERENTIAL EQUATIONS, 2014 (SCI-Expanded)
- XVIII. **Existence of multiple positive solutions for p -Laplacian multipoint boundary value problems on time scales**
Dogan A.
ADVANCES IN DIFFERENCE EQUATIONS, 2013 (SCI-Expanded)
- XIX. **EXISTENCE OF THREE POSITIVE SOLUTIONS FOR AN m -POINT BOUNDARY-VALUE PROBLEM ON TIME SCALES**
Dogan A.
ELECTRONIC JOURNAL OF DIFFERENTIAL EQUATIONS, 2013 (SCI-Expanded)
- XX. **HIGHER-ORDER SINGULAR MULTI-POINT BOUNDARY-VALUE PROBLEMS ON TIME SCALES**
DOĞAN A., Graef J. R., Kong L.
PROCEEDINGS OF THE EDINBURGH MATHEMATICAL SOCIETY, vol.54, pp.345-361, 2011 (SCI-Expanded)

- XXI. **Higher order semipositone multi-point boundary value problems on time scales**
Dogan A., Graef J. R., Kong L.
COMPUTERS & MATHEMATICS WITH APPLICATIONS, vol.60, no.1, pp.23-35, 2010 (SCI-Expanded)
- XXII. **Numerical integration of the RLW equation using cubic splines**
Irk D., Dag W., Dogan A.
ANZIAM JOURNAL, vol.47, pp.131-142, 2005 (SCI-Expanded)
- XXIII. **Application of Galerkin's method to equal width wave equation**
DOĞAN A.
APPLIED MATHEMATICS AND COMPUTATION, vol.160, no.1, pp.65-76, 2005 (SCI-Expanded)
- XXIV. **A Galerkin finite element approach to Burgers' equation**
DOĞAN A.
APPLIED MATHEMATICS AND COMPUTATION, vol.157, no.2, pp.331-346, 2004 (SCI-Expanded)
- XXV. **Galerkin method for the numerical solution of the RLW equation using quadratic B-splines**
Saka B., Dag I., DOĞAN A.
INTERNATIONAL JOURNAL OF COMPUTER MATHEMATICS, vol.81, no.6, pp.727-739, 2004 (SCI-Expanded)
- XXVI. **Numerical investigation of heat and mass transfer in a metal hydride bed**
DOĞAN A., Kaplan Y., Veziroğlu T. N.
APPLIED MATHEMATICS AND COMPUTATION, vol.150, no.1, pp.169-180, 2004 (SCI-Expanded)
- XXVII. **B-spline collocation methods for numerical solutions of the RLW equation**
Dag I., DOĞAN A., Saka B.
INTERNATIONAL JOURNAL OF COMPUTER MATHEMATICS, vol.80, no.6, pp.743-757, 2003 (SCI-Expanded)
- XXVIII. **Numerical solution of RLW equation using linear finite elements within Galerkin's method**
DOĞAN A.
APPLIED MATHEMATICAL MODELLING, vol.26, no.7, pp.771-783, 2002 (SCI-Expanded)
- XXIX. **Numerical solution of regularized long wave equation using Petrov-Galerkin method**
DOĞAN A.
COMMUNICATIONS IN NUMERICAL METHODS IN ENGINEERING, vol.17, no.7, pp.485-494, 2001 (SCI-Expanded)
- XXX. **A Petrov-Galerkin finite element scheme for Burgers' equation**
Gardner L. R., Gardner G., DOĞAN A.
ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, vol.22, pp.99-109, 1997 (SCI-Expanded)
- XXXI. **A least-squares finite element scheme for the RLW equation**
Gardner L. R., Gardner G., DOĞAN A.
COMMUNICATIONS IN NUMERICAL METHODS IN ENGINEERING, vol.12, no.11, pp.795-804, 1996 (SCI-Expanded)

Articles Published in Other Journals

- I. **Positive solutions of multipoint ϕ -Laplacian BVPs with first-order derivative dependence**
Bachouche K., Tair H., DOĞAN A.
Asian-European Journal of Mathematics, vol.16, no.6, 2023 (ESCI)
- II. **Existence of positive solutions to multi-point third order problems with sign changing nonlinearities**
DOĞAN A., Graef J. R.
ACTA ET COMMENTATIONES UNIVERSITATIS TARTUENSIS DE MATHEMATICA, vol.24, no.1, pp.109-129, 2020 (ESCI)
- III. **Three positive solutions of a three-point boundary value problem for the p-Laplacian dynamic equation on time scales**
DOĞAN A.
Communications in Optimization Theory, pp.1-13, 2018 (Peer-Reviewed Journal)
- IV. **On the existence of positive solutions for nonlinear three-point boundary value problem**
DOĞAN A.
Communications in Optimization Theory, 2018 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **Existence criteria of three positive solutions to boundary value problems for p Laplacian dynamic equations on time scales**
DOĞAN A.
3rd International Conference on Recent Advances in Pure and Applied Mathematics, 19 - 23 May 2016
- II. **On the existence of positive solutions for nonlinear three point boundary value problem**
DOĞAN A.
2nd International Conference on Analysis and its Applications, 12 - 15 July 2016

Supported Projects

Doğan A., Project Supported by Other Official Institutions, Sonlu Eleman Methodları, 2002 - 2004

Scientific Refereeing

Journal of Inequalities and Applications, SCI Journal, May 2018
Electronic Journal of Differential Equations, SCI Journal, October 2017
Advances in Difference Equations, SCI Journal, February 2017
Dynamics of Continuous, Discrete and Impulsive Systems Series A Mathematical Analysis, SCI Journal, August 2016
Boundary Value problems, SCI Journal, May 2016
Bulletin of Iranian Mathematical Society, SCI Journal, March 2015
Advances in Difference Equations, SCI Journal, May 2014
Advances in difference Equations, SCI Journal, March 2014
Computers and Mathematics with Applications, SCI Journal, June 2010
Applied Mathematical Modelling, SCI Journal, February 2010
Applied Mathematics and Computation, SCI Journal, May 2005
Journal of Computational and Applied Mathematics, SCI Journal, March 2004

Metrics

Publication: 37
Citation (WoS): 604
Citation (Scopus): 655
H-Index (WoS): 12
H-Index (Scopus): 12

Congress and Symposium Activities

International Conference on Differential&Difference Equations and Applications 2019, July 1-5, 2019, Lisbon, Portugal, Invited Speaker, Lisbon, Portugal, 2019
2 nd International Conference of Analysis and its Applications, July 12-15, 2016 at Ahi Evran University, Kırşehir, Invited Speaker, Kırşehir, Turkey, 2016
The 3rd International Conference on Recent Advances in Pure and Applied Mathematics (ICRAPAM2016), 19-23 May 2016, Bodrum-Muğla, Turkey, Invited Speaker, Muğla, Turkey, 2016
International Conference on Recent Advances in Pure and Applied Mathematics (ICRAPAM2014), 6-9 November 2014, Antalya, Turkey, Invited Speaker, Antalya, Turkey, 2014
10th AIMS International Conference on Dynamical Systems, Differential Equations and Applications, July 7-

11,2014, Madrid, Spain, Invited Speaker, Madrid, Spain, 2014
9th AIMS International Conference on Dynamical Systems, Differential Equations and Applications, July 1-5, 2012, Orlando, Florida, USA, Invited Speaker, Florida, United States Of America, 2012
8th AIMS International Conference on Dynamical Systems, Differential Equations and Applications, May 25-28, 2010
Dresden, Germany, Invited Speaker, Dresden, Germany, 2010
Applications of Time Scales to Biology, Economics and Engineering, American Mathematical Society in San Francisco, CA, January 13-16, 2010, California, USA, Invited Speaker, California, United States Of America, 2010
4th International Conference of Applied Mathematics and Computing, August 12-18, 2007, Plovdiv, Bulgaria, Invited Speaker, Plovdiv, Bulgaria, 2007
Erasmus Teaching Mobility, June 2007, Slovakia, Invited Speaker, Trnava, Slovakia, 2007

Scholarships

Post doktora, University, 2009 - 2009
Post doktora, NATO, 2001 - 2001
Doktora bursu, University, 1993 - 1997
Lisans bursu, Special Institutions and Organizations, 1986 - 1988