

Prof. İLKAY KARACA

Personal Information

Email: ilkay.karaca@ege.edu.tr

Education Information

Post Graduate, Ege Üniversitesi, Fen Bilimleri Enstitüsü, Matematik (Dr), Turkey 2010 - 2014

Doctorate, Ege Üniversitesi, Fen Bilimleri Enstitüsü, Matematik (YI), Turkey 1993 - 1996

Under Graduate, Ege Üniversitesi, Fen Fakültesi, Matematik Bölümü, Turkey 1985 - 1989

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, Periyodik ve Süreksiz Fonksiyon Katsayılı Sturm-Liouville Denkleminin Spektral Teorisi Üzerine, Ege Üniversitesi, Fen Bilimleri Enstitüsü, Matematik (YI), 1996

Post Graduate, Distribüsyon Uzayları ve Bazı Konvalüsyon Denklemlerinin Distribüsyon Çözümlerinin Araştırılması, Ege Üniversitesi, Fen Bilimleri Enstitüsü, Matematik (Dr), 1993

Research Areas

Mathematics, Differential Equations, Functional Analysis, Natural Sciences

Academic Titles / Tasks

Professor, Ege Üniversitesi, Fen Fakültesi, Matematik Bölümü, 2015 - Continues

Associate Professor, Ege Üniversitesi, Fen Fakültesi, Matematik Bölümü, 2008 - 2015

Assistant Professor, Ege Üniversitesi, Fen Fakültesi, Matematik Bölümü, 1997 - 2008

Research Assistant, Ege Üniversitesi, Fen Fakültesi, Matematik Bölümü, 1989 - 1997

Professional Experience

Head of Department, Ege Üniversitesi, Fen Fakültesi, Matematik Bölümü, 2010 - Continues

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

- **Existence of positive solutions for fourth-order impulsive integral boundary value problems on time scales**

Fen F. T. , Karaca I. Y.

MATHEMATICAL METHODS IN THE APPLIED SCIENCES, vol.40, pp.5727-5741, 2017 (Journal Indexed in SCI)

- **EXISTENCE OF POSITIVE SOLUTIONS FOR A NONLINEAR n TH-ORDER m -POINT p -LAPLACIAN IMPULSIVE BOUNDARY VALUE PROBLEM**

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MATHEMATICA SLOVACA, vol.67, pp.467-482, 2017 (Journal Indexed in SCI)

- **Positive Solutions of Boundary Value Problems for p-Laplacian Fractional Differential Equations**
Fen F. T. , Karaca I. Y. , Ozen Ö.
FILOMAT, vol.31, pp.1265-1277, 2017 (Journal Indexed in SCI)
- **POSITIVE SOLUTIONS OF nTH-ORDER m-POINT BOUNDARY VALUE PROBLEMS**
KARACA İ., FEN F.
BULLETIN OF THE IRANIAN MATHEMATICAL SOCIETY, vol.42, pp.1429-1439, 2016 (Journal Indexed in SCI)
- **On the Solvability of a System of Multi-Point Second Order Boundary Value Problem**
Cerdiki T. S. , KARACA İ., SİNANOĞLU A., FEN F.
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- **Existence of Positive Solutions for Nonlinear Second-Order Impulsive Boundary Value Problems on Time Scales**
Fen F. T. , Karaca I. Y.
MEDITERRANEAN JOURNAL OF MATHEMATICS, vol.13, pp.191-204, 2016 (Journal Indexed in SCI)
- **Positive solutions of nth order impulsive differential equations with integral boundary conditions**
FEN F., KARACA İ.
Analele Stiintifice Ale Universitatii Ovidius Constanta-Seria Matematica, vol.24, pp.243-261, 2016 (Journal Indexed in SCI Expanded)
- **Existence of positive solutions for nonlinear third order m point impulsive boundary value problems on time scales** **Ukrain Mat Zh 68 2016 no 3 408 422**
FEN F., KARACA İ.
Ukrainian Mathematical Journal, vol.68, pp.408-422, 2016 (Journal Indexed in SCI Expanded)
- **EXISTENCE OF POSITIVE SOLUTIONS TO nTH ORDER p-LAPLACIAN BOUNDARY VALUE PROBLEMS WITH INTEGRAL BOUNDARY CONDITIONS**
KARACA İ., FEN F.
MISKOLC MATHEMATICAL NOTES, vol.17, pp.381-397, 2016 (Journal Indexed in SCI)
- **On positive solutions of nonlinear third order impulsine boundary value problems on time scales**
KARACA İ., FEN F.
Mediterranean Journal Of Mathematics, vol.13, pp.4447-4461, 2016 (Journal Indexed in SCI Expanded)
- **On positive solutions of m-point boundary value problems for p-Laplacian impulsive dynamic equations on time scales**
Fen F. T. , Karaca I. Y.
INDIAN JOURNAL OF PURE & APPLIED MATHEMATICS, vol.46, pp.723-738, 2015 (Journal Indexed in SCI)
- **The Existence of Symmetric Positive Solutions for a Nonlinear Multi-Point Boundary Value Problem on Time Scales**
Tokmak F., KARACA İ., ŞENLİK T., SİNANOĞLU A.
JOURNAL OF COMPUTATIONAL ANALYSIS AND APPLICATIONS, vol.19, pp.670-677, 2015 (Journal Indexed in SCI)
- **Multiple Positive Solutions for Nonlinear Second-Order m-Point Impulsive Boundary Value Problems on Time Scales**
Karaca I. Y. , Fen F. T.
FILOMAT, vol.29, pp.817-827, 2015 (Journal Indexed in SCI)
- **Positive solutions of nth order m point impulsive boundaryvalue problems**
KARACA İ., FEN F.
Georgian Mathematical Journal, vol.22, pp.373-384, 2015 (Journal Indexed in SCI Expanded)
- **On positive solutions for fourth order four pointboundary value problems with alternating coefficient on time scales**
KARACA İ.
Dynamic Systems And Applications, vol.24, pp.313-326, 2015 (Journal Indexed in SCI Expanded)
- **Positive solutions of nth order boundary value problems withintegral boundary conditions**
KARACA İ., FEN F.
Mathematical Modelling And Analysis, vol.20, pp.188-204, 2015 (Journal Indexed in SCI Expanded)
- **Existence of positive solutions for boundary value problems of p-Laplacian difference equations**

FEN F., KARACA İ.

ADVANCES IN DIFFERENCE EQUATIONS, 2014 (Journal Indexed in SCI)

- **Eigenvalues for iterative systems of nonlinear m-point boundary value problems on time scales**
KARACA İ., Tokmak F.
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- **Eigenvalues for iterative systems of nonlinear m-point boundary value problems on time scales**
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- **Existence of three symmetric positive solutions for a second order multi point boundary value problem on time scales**
AYCAN S., KARACA İ., FEN F., TUĞBA Ş.
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- **Existence of Positive Solutions for Nonlinear Third-Order m-Point Boundary Value Problems on Time Scales**
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- **Existence of Solutions for Nonlinear Impulsive Fractional Differential Equations with p-Laplacian Operator**
KARACA İ., Tokmak F.
MATHEMATICAL PROBLEMS IN ENGINEERING, 2014 (Journal Indexed in SCI)
- **Existence results for p-Laplacian boundary value problems of impulsive dynamic equations on time scales**
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- **Existence of positive solutions for third-order boundary value problems with integral boundary conditions on time scales**
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- **On positive solutions for second-order boundary value problems of functional differential equations**
KARACA İ.
APPLIED MATHEMATICS AND COMPUTATION, vol.219, pp.5433-5439, 2013 (Journal Indexed in SCI)
- **Positive solutions of an impulsive second order boundary value problem on time scales**
FEN F., KARACA İ.
Dynamics Of Continuous Discrete And Impulsive Systems-Series A-Mathematical Analysis, vol.20, pp.695-708, 2013 (Journal Indexed in SCI Expanded)
- **Positive solutions to a nonlinear 2nth order boundary value problems on time scales**
KARACA İ.
Journal Of Computational Analysis And Applications, vol.15, pp.604-611, 2013 (Journal Indexed in SCI Expanded)
- **Existence of symmetric positive solutions for a multipoint boundary value problem with sign changing nonlinearity on time scales** **Boundary Value Problems 2013 2013 52**
FEN F., KARACA İ.
Boundary Value Problems, vol.2013, pp.1-13, 2013 (Journal Indexed in SCI Expanded)
- **POSITIVE SOLUTIONS OF AN nTH ORDER THREE-POINT BOUNDARY VALUE PROBLEM**
KARACA İ.
ROCKY MOUNTAIN JOURNAL OF MATHEMATICS, vol.43, pp.205-224, 2013 (Journal Indexed in SCI)
- **Triple positive solutions of m-point time scale BVPs with p-Laplacian on infinite intervals**
FEN F., KARACA İ.
Dynamic Systems And Applications, vol.6, pp.205-212, 2012 (Journal Indexed in SCI Expanded)
- **Existence of Positive Solutions for Third-Order m-Point Boundary Value Problems with Sign-Changing Nonlinearity on Time Scales**
Tokmak F., KARACA İ.
ABSTRACT AND APPLIED ANALYSIS, 2012 (Journal Indexed in SCI)
- **Upper and Lower Solution Method for Fourth-Order Four-Point Boundary Value Problem on Time Scales**

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- **EXISTENCE OF THREE POSITIVE SOLUTIONS FOR M-POINT TIME SCALE BOUNDARY VALUE PROBLEMS ON INFINITE INTERVALS**

KARACA İ., Tokmak F.

DYNAMIC SYSTEMS AND APPLICATIONS, vol.20, pp.355-367, 2011 (Journal Indexed in SCI)

- **Fourth order m point boundary value problems on time scales Dynam Systems Appl 19 2010 no 2 249 269**

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Dynamic Systems And Applications, vol.19, pp.249-269, 2010 (Journal Indexed in SCI Expanded)

- **ON POSITIVE SOLUTIONS FOR HIGHER-ORDER BOUNDARY VALUE PROBLEMS WITH IMPULSE**

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DYNAMIC SYSTEMS AND APPLICATIONS, vol.18, pp.687-700, 2009 (Journal Indexed in SCI)

- **On positive solutions for fourth-order boundary value problem with impulse**

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JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.225, pp.356-364, 2009 (Journal Indexed in SCI)

- **Positive solutions for boundary value problems of second order functional dynamic equations on time scales Adv Difference Equ 2009**

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Advances in Difference Equations, vol.2009, pp.1-13, 2009 (Journal Indexed in SCI Expanded)

- **Fourth-order four-point boundary value problem on time scales**

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APPLIED MATHEMATICS LETTERS, vol.21, pp.1057-1063, 2008 (Journal Indexed in SCI)

- **Higher order three point boundary value problem on time scales**

ANDERSON D. R. , KARACA İ.

Computers & Mathematics With Applications, vol.56, pp.2429-2443, 2008 (Journal Indexed in SCI Expanded)

- **Nonlinear triple point problems with change of sign Comput Math Appl**

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Computers & Mathematics With Applications, vol.55, pp.691-703, 2008 (Journal Indexed in SCI Expanded)

- **Multiple positive solutions for dynamic m point boundary value problems**

KARACA İ.

Dynamic Systems And Applications, vol.17, pp.25-42, 2008 (Journal Indexed in SCI Expanded)

- **On the existence of positive solutions for three point boundary value problems with alternating coefficients**

KARACA İ.

Mathematical And Computer Modelling, vol.47, pp.1019-1034, 2008 (Journal Indexed in SCI Expanded)

- **Discrete third-order three-point boundary value problem**

KARACA İ.

JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.205, pp.458-468, 2007 (Journal Indexed in SCI)

- **Existence and nonexistence of positive solutions to a right focal boundary value problem on time scales**

KARACA İ.

Advances in Difference Equations, vol.2006, pp.1-13, 2006 (Journal Indexed in SCI Expanded)

- **Instability intervals of a Hill s equation with piecewise constant and alternating coefficient**

KARACA İ.

Computers & Mathematics With Applications, vol.47, pp.319-326, 2004 (Journal Indexed in SCI Expanded)

Articles Published in Other Journals

- **EIGENVALUES FOR ITERATIVE SYSTEMS OF DYNAMIC EQUATIONS WITH INTEGRAL BOUNDARY CONDITIONS**

Karaca I. Y. , Fen F. T.

- **Nonlinear Four point Impulsive Fractional Differential Equations with p Laplacian Operator**
FEN F., KARACA İ.
Discontinuity, Nonlinearity, and Complexity, vol.4, pp.467-486, 2015 (Refereed Journals of Other Institutions)
- **Positive Solutions of Boundary Value Problems for Second order p Laplacian Difference Equations**
FEN F., KARACA İ.
International Journal of Difference Equations, vol.9, pp.243-269, 2014 (Refereed Journals of Other Institutions)
- **Existence of Positive Solutions for a Second Order Eigenvalue Boundary Value Problem with Impulse on Time Scales**
FEN F., KARACA İ.
Journal of Advanced Research in Applied Mathematics, vol.6, pp.32-49, 2014 (Refereed Journals of Other Institutions)
- **Existence of solutions for m point boundary value problem with p Laplacian on time scales**
ÖZEN Ö., KARACA İ.
Nonlinear Dynamics and Systems Theory, vol.13, pp.270-285, 2013 (Refereed Journals of Other Institutions)
- **Positive solutions for second order multi point boundary value problems**
FEN F., KARACA İ.
Chaotic Modeling and Simulation, vol.3, pp.463-471, 2013 (Refereed Journals of Other Institutions)
- **Positive solutions to a system of boundary value problems for higher dimensional dynamic equations on time scales**
KARACA İ.
Aust. J. Math. Anal. Appl., vol.9, pp.1-13, 2012 (Refereed Journals of Other Institutions)
- **Positive solutions to an n th order multi point boundary value problem on time scales**
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Nonlinear Dyn. Syst. Theory, vol.11, pp.285-296, 2011 (Refereed Journals of Other Institutions)
- **symptotic formulas for eigenvalues of a Hill s equation with piecewise constant coefficient**
KARACA İ., YILMAZ Ö.
Math. Proc. R. Ir. Acad., vol.109, pp.19-34, 2009 (Refereed Journals of Other Institutions)
- **Karaca I Yaslan On Hill s equation with piecewise constant and alternating coefficient**
KARACA İ.
Journal of Science and Tecnology, vol.1, pp.157-266, 2007 (Other Refereed National Journals)
- **On Hill s equation with a discontinuous coefficient**
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Int. J. Math. Math. Sci., vol.2003, pp.1599-1614, 2003 (Refereed Journals of Other Institutions)
- **On instability intervals of Hill s equation with a piecewise continuous coefficient**
KARACA İ.
Panamer. Math. J., vol.13, pp.89-98, 2003 (Refereed Journals of Other Institutions)
- **On conjugation in the mod p Steenrod algebra**
KARACA İ., KARACA İ.
Turkish Journal Of Mathematics, vol.24, pp.1-7, 2001 (Refereed Journals of Other Institutions)
- **Some formulas for conjugation**
KARACA İ., KARACA İ.
Southwest Journal of Pure and Applied Mathematics, vol.2, pp.43-52, 2001 (Refereed Journals of Other Institutions)
- **Some formulas for conjugation Southwest J Pure Appl Math 2001 no 2 43 52**
KARACA İ., KARACA İ.
Southwest J. Pure Appl., vol.2001, pp.43-52, 2001 (Refereed Journals of Other Institutions)
- **On conjugation in the mod p Steenrod algebra Turkish J Math 24 2000 no 4 359 365**
KARACA İ., KARACA İ.
Turkish J. Math., vol.24, pp.359-365, 2000 (Refereed Journals of Other Institutions)
- **On the lengths of the instability intervals of the Hill s equation with a piecewise constant coefficient Ege Univ J Fac Sci 21 1998 no 2 85 92**
KARACA İ.

Ege Univ. J. Fac. Sci., vol.21, pp.85-92, 1998 (Refereed Journals of Other Institutions)

- **On Hill s equation with piecewise constant coefficient Turkish J Math 21 1997 no 4 461 474**

KARACA İ., HÜSEYİNOV H.

Turkish J. Math., vol.21, pp.461-474, 1997 (Refereed Journals of Other Institutions)

Refereed Congress / Symposium Publications in Proceedings

- **Positive solutions for fractional-order boundary value problems**
KARACA İ.
International conference on recent advances in pure and applied mathematics (ICRAPAM 2017), 11 - 15 Mayıs 2017
- **The existence of positive solutions of boundary value problems with p-Laplacian on the half-line**
KARACA İ., SİNANOĞLU A.
International conference on recent advances in pure and applied mathematics (ICRAPAM 2017), 11 - 15 Mayıs 2017
- **The existence of solutions for a fractional order boundary value problem**
ÖZ D., KARACA İ.
2nd international conference on analysis and its applications, 12 - 15 Temmuz 2016
- **Sonsuz aralıkta kesirli mertebeli sınır değeri problemi için pozitif çözümlerin varlığı**
ÖZ D., KARACA İ.
11. Ankara Matematik Günleri, Turkey, 26 - 27 Mayıs 2016
- **Positive solutions of impulsive time scale boundary value problems with p laplacian on the half line**
KARACA İ., SİNANOĞLU A.
Konferans, 19 - 23 Mayıs 2016
- **The existence of positive solutions for fractional order nonlinear boundary value problems on infinite interval**
KARACA İ., ÖZ D.
Konferans, 19 - 23 Mayıs 2016
- **The existence of positive solutions for fractional order boundary value problems on finite interval**
KARACA İ., ABALIS.
KONFERANS, 19 - 23 Mayıs 2016
- **Impulsive Boundary Value Problem for Nonlinear Differential Equations of Fractional Order 2 3**
KARACA İ., FEN F.
4th International Eurasian Conference on Mathematical Sciences and Applications (IECMSA-2015), 31 Ağustos - 03 Eylül 2015, pp.72
- **Impulsive Boundary Value Problems with Multiple Positive Solutions on Time Scales**
FEN F., KARACA İ.
THE SEVENTH INTERNATIONAL CONFERENCE ON DYNAMIC SYSTEMS AND APPLICATIONS & THE FIFTH INTERNATIONAL CONFERENCE ON NEURAL, PARALLEL, AND SCIENTIFIC COMPUTATIONS, 27 - 30 Mayıs 2015
- **Nonlinear Second Order Impulsive Boundary Value Problems**
FEN F., KARACA İ.
2015 Georgia Scientific Computing Symposium, 28 Şubat 2015

Supported Projects

KARACA İ., AKSOY S., Project Supported by Higher Education Institutions, İMPULSİVE SINIR DEĞER PROBLEMLERİNİN POZİTİF ÇÖZÜMLERİ, 2018 - 2020

KARACA İ., SİNANOĞLU ARISOYA., Project Supported by Higher Education Institutions, ZAMAN SKALASINDA SONSUZ ARALIK ÜZERİNDE İMPULSİVE SINIR DEĞER PROBLEMLERİNİN POZİTİF ÇÖZÜMLERİ, 2016 - 2019

KARACA İ., Project Supported by Higher Education Institutions, KESİRLİ MERTEBEDEN LİNEER OLMAYAN SINIR DEĞER PROBLEMLERİNİN POZİTİF ÇÖZÜMLERİ, 2015 - 2017

KARACA İ., Project Supported by Higher Education Institutions, SONSUZ ARALIKTA KESİRLİ MERTEBEDEN LİNEER OLMAYAN SINIR DEĞER PROBLEMLERİNİN ÇÖZÜMLERİ, 2015 - 2016

KARACA İ., Project Supported by Higher Education Institutions, ZAMAN SKALASINDA İNTEGRAL SINIR KOŞULLU İMPULSİVE SINIR DEĞER PROBLEMLERİNİN POZİTİF ÇÖZÜMLERİ, 2013 - 2015

KARACA İ., Project Supported by Higher Education Institutions, ZAMAN SKALASINDA DÖRDÜNCÜ MERTEBEDEN SINIR DEĞER PROBLEMLERİNİN SİMETRİK POZİTİF ÇÖZÜMLERİ, 2011 - 2012

KARACA İ., Project Supported by Higher Education Institutions, ZAMAN SKALASINDA SONSUZ ARALIK ÜZERİNDE İKİNCİ MERTEBE SINIR DEĞER PROBLEMLERİNİN POZİTİF ÇÖZÜMLERİ, 2011 - 2012

KARACA İ., Project Supported by Higher Education Institutions, ZAMAN SKALASINDA BİR BOYUTLU P-LAPLASİYEN SINIR DEĞER PROBLEMLERİNİN POZİTİF ÇÖZÜMLERİ, 2010 - 2011

KARACA İ., Project Supported by Higher Education Institutions, ZAMAN SKALASINDA YÜKSEK MERTEBELİ SINIR DEĞER PROBLEMLERİNİN POZİTİF ÇÖZÜMLERİ, 2009 - 2010

KARACA İ., Project Supported by Higher Education Institutions, ZAMAN SKALASINDA DÖRDÜNCÜ MERTEBE M-NOKTA SINIR DEĞER PROBLEMLERİ, 2007 - 2009

KARACA İ., Project Supported by Higher Education Institutions, ZAMAN SKALASINDA BİR RIGHT- FOCAL SINIR DEĞER PROBLEMİNİN POZİTİF ÇÖZÜMLERİNİN VARLIĞI VE YOKLUĞU İLE İLGİLİ KRİTERLER., 2004 - 2005

Citations

Total Citations (WOS):116

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