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Kişisel Bilgiler

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Eğitim Bilgileri

Doktora, Ankara Üniversitesi, Fen Bilimleri Enstitüsü, Matematik (Dr), Türkiye 1999 - 2005

Yüksek Lisans, Ankara Üniversitesi, Fen Bilimleri Enstitüsü, Matematik (YI) (Tezli), Türkiye 1996 - 1999

Lisans, Ankara Üniversitesi, Fen Fakültesi, Matematik Bölümü, Türkiye 1991 - 1995

Araştırma Alanları

Matematik, Temel Bilimler

Akademik Unvanlar / Görevler

Prof. Dr., Gazi Üniversitesi, Fen Fakültesi, Matematik Bölümü, 2017 - Devam Ediyor

Doç. Dr., Gazi Üniversitesi, Fen Fakültesi, Matematik Bölümü, 2010 - 2017

Araştırmacı, University of Central Florida, Department of Mathematics, 2015 - 2015

Yrd. Doç. Dr., Gazi Üniversitesi, Fen Fakültesi, Matematik Bölümü, 2007 - 2010

Yrd. Doç. Dr., Çanakkale Onsekiz Mart Üniversitesi, Fen-Edebiyat Fakültesi, Matematik Bölümü, 2006 - 2007

Araştırma Görevlisi, Ankara Üniversitesi, Fen Bilimleri Enstitüsü, Matematik (Dr), 1996 - 2005

Yönetilen Tezler

Erkus-Duman E., Bazı özel fonksiyonların q- analogları, Yüksek Lisans, Y.AVCI(Öğrenci), 2019

Erkus-Duman E., Bazı polinomlar için doğurucu fonksiyonların yeni bir sınıfı, Yüksek Lisans, Ö.AKYEL(Öğrenci), 2019

Erkus-Duman E., Bernstein tipi ve beta tipi polinomları ve özellikleri, Yüksek Lisans, D.UÇAK(Öğrenci), 2019

Erkus-Duman E., Çok değişkenli hipergeometrik fonksiyonlar, Doktora, D.KORKMAZ(Öğrenci), 2017

Erkus-Duman E., Genelleştirilmiş Bernoulli, Euler ve Genocchi polinomları, Yüksek Lisans, E.GÜLDOĞAN(Öğrenci), 2015

Erkus-Duman E., Çok değişkenli polinomların bazı aileleri için doğurucu fonksiyonlar, Doktora, N.ÖZMEN(Öğrenci), 2014

Erkus-Duman E., Fibonacci ve lucas polinomları için doğurucu fonksiyonlar, Yüksek Lisans, M.ŞENOCAK(Öğrenci), 2014

Erkus-Duman E., Genelleştirilmiş humber polinomları, Yüksek Lisans, O.ÇELİK(Öğrenci), 2013

Erkus-Duman E., d-ortogonal polinomlar, Yüksek Lisans, G.ORUCOVA(Öğrenci), 2013

Erkus-Duman E., Diskret Değişkenli Klasik Ortogonal Polinomlar, Yüksek Lisans, B.AYATA(Öğrenci), 2012

Erkus-Duman E., Genişletilmiş Lineer Doğurucu Fonksiyonlar, Yüksek Lisans, E.ÇİMEN(Öğrenci), 2012
Erkus-Duman E., Kesirli Türevlerin Hipergeometrik Fonksiyonlara Uygulamaları, Yüksek Lisans, B.ÜNAL(Öğrenci), 2011
Erkus-Duman E., Özel Fonksiyonların Bazı Özellikleri, Yüksek Lisans, T.MERCAN(Öğrenci), 2009

SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayımlanan Makaleler

- I. **Kantorovich Version of Vector-Valued Shepard Operators**
Duman O., Della Vecchia B., Erkus-Duman E.
Axioms, cilt.13, sa.3, ss.1-12, 2024 (SCI-Expanded)
- II. **A new family of two-variable polynomials based on hermite polynomials**
Erkus-Duman E., ÇİFTÇİ H.
MATHEMATICA SLOVACA, cilt.72, sa.4, ss.885-898, 2022 (SCI-Expanded)
- III. **Gottlieb Polynomials and Their q-Extensions**
Erkus-Duman E., Choi J.
MATHEMATICS, cilt.9, sa.13, 2021 (SCI-Expanded)
- IV. **On Some Families of New Constructed Polynomials**
Çiftci H., Erkuş-Duman E.
BULLETIN OF THE MALAYSIAN MATHEMATICAL SCIENCES SOCIETY, cilt.43, ss.1111-1125, 2020 (SCI-Expanded)
- V. **SOME NEW PROPERTIES OF UNIVARIATE AND MULTIVARIATE GOTTLIEB POLYNOMIALS**
Erkus-Duman E.
MISKOLC MATHEMATICAL NOTES, cilt.19, sa.2, ss.835-845, 2018 (SCI-Expanded)
- VI. **Harmonic functions associated with some polynomials in several variables**
Tasdelen F., AKTAŞ R., Erkus-Duman E.
TURKISH JOURNAL OF MATHEMATICS, cilt.42, sa.4, ss.1803-1814, 2018 (SCI-Expanded)
- VII. **Generalized Vieta-Jacobsthal and Vieta-Jacobsthal-Lucas polynomials**
Yalcin N. F., TAŞCI D., Erkus-Duman E.
MATHEMATICAL COMMUNICATIONS, cilt.20, sa.2, ss.241-251, 2015 (SCI-Expanded)
- VIII. **GENERATING FUNCTIONS FOR THE GENERALIZED BIVARIATE FIBONACCI AND LUCAS POLYNOMIALS**
Erkus-Duman E., TUĞLU N.
JOURNAL OF COMPUTATIONAL ANALYSIS AND APPLICATIONS, cilt.18, sa.5, ss.815-821, 2015 (SCI-Expanded)
- IX. **FAMILIES OF GENERATING FUNCTIONS FOR THE JACOBI AND RELATED MATRIX POLYNOMIALS**
ALTIN A., ÇEKİM B., Erkus-Duman E.
ARS COMBINATORIA, cilt.117, ss.257-273, 2014 (SCI-Expanded)
- X. **The Laguerre polynomials in several variables**
AKTAŞ R., Erkus-Duman E.
MATHEMATICA SLOVACA, cilt.63, sa.3, ss.531-544, 2013 (SCI-Expanded)
- XI. **Extended Jacobi Functions via Riemann-Liouville Fractional Derivative**
ÇEKİM B., Erkus-Duman E.
ABSTRACT AND APPLIED ANALYSIS, 2013 (SCI-Expanded)
- XII. **On a Family of Multivariate Modified Humbert Polynomials**
AKTAŞ R., Erkus-Duman E.
SCIENTIFIC WORLD JOURNAL, 2013 (SCI-Expanded)
- XIII. **STATISTICAL APPROXIMATION BY MEANS OF OPERATORS CONSTRUCTED BY q-LAGRANGE POLYNOMIALS**
Erkus-Duman E.
JOURNAL OF COMPUTATIONAL ANALYSIS AND APPLICATIONS, cilt.14, sa.1, ss.67-77, 2012 (SCI-Expanded)
- XIV. **STATISTICAL KOROVKIN-TYPE THEORY FOR MATRIX-VALUED FUNCTIONS**
DUMAN O., Erkus-Duman E.
STUDIA SCIENTIARUM MATHEMATICARUM HUNGARICA, cilt.48, sa.4, ss.489-508, 2011 (SCI-Expanded)
- XV. **Statistical approximation properties of high order operators constructed with the Chan-Chyan-**

Srivastava polynomials

Erkus-Duman E., DUMAN O.

APPLIED MATHEMATICS AND COMPUTATION, cilt.218, sa.5, ss.1927-1933, 2011 (SCI-Expanded)

- XVI. **Miscellaneous properties of some multivariable polynomials**
Erkus-Duman E., ALTIN A., AKTAŞ R.
MATHEMATICAL AND COMPUTER MODELLING, cilt.54, ss.1875-1885, 2011 (SCI-Expanded)
- XVII. **MATRIX EXTENSIONS OF POLYNOMIALS IN SEVERAL VARIABLES**
Erkus-Duman E.
UTILITAS MATHEMATICA, cilt.85, ss.161-180, 2011 (SCI-Expanded)
- XVIII. **STATISTICAL RATES IN APPROXIMATION BY POSITIVE LINEAR OPERATORS**
Erkus-Duman E.
MISKOLC MATHEMATICAL NOTES, cilt.12, sa.2, ss.159-166, 2011 (SCI-Expanded)
- XIX. **Rates of Ideal Convergence for Approximation Operators**
DUMAN O., Ozarslan M. A., Erkus-Duman E.
MEDITERRANEAN JOURNAL OF MATHEMATICS, cilt.7, sa.1, ss.111-121, 2010 (SCI-Expanded)
- XX. **On a multivariable extension for the extended Jacobi polynomials**
Altin A., AKTAŞ R., Erkus-Duman E.
JOURNAL OF MATHEMATICAL ANALYSIS AND APPLICATIONS, cilt.353, sa.1, ss.121-133, 2009 (SCI-Expanded)
- XXI. **Statistical Approximation for Stochastic Processes**
Anastassiou G. A., DUMAN O., Erkus-Duman E.
STOCHASTIC ANALYSIS AND APPLICATIONS, cilt.27, sa.3, ss.460-474, 2009 (SCI-Expanded)
- XXII. **Korovkin Type Error Estimates for Positive Linear Operators Involving Some Special Functions**
Dogru O., Erkus-Duman E.
TURKISH JOURNAL OF MATHEMATICS, cilt.33, sa.1, ss.41-53, 2009 (SCI-Expanded)
- XXIII. **A q-extension of the Erkus-Srivastava polynomials in several variables**
Erkus-Duman E.
TAIWANESE JOURNAL OF MATHEMATICS, cilt.12, sa.2, ss.539-543, 2008 (SCI-Expanded)
- XXIV. **Integral-type generalizations of operators obtained from certain multivariate polynomials**
Erkus-Duman E., DUMAN O.
CALCOLO, cilt.45, sa.1, ss.53-67, 2008 (SCI-Expanded)
- XXV. **Statistical rates on the multivariate approximation theory**
Duman O., Erkus E., Gupta V.
MATHEMATICAL AND COMPUTER MODELLING, cilt.44, ss.763-770, 2006 (SCI-Expanded)
- XXVI. **Statistical approximation of certain positive linear operators constructed by means of the Chan-Chyan-Srivastava polynomials**
Erkus E., Duman O., Srivastava H. M.
APPLIED MATHEMATICS AND COMPUTATION, cilt.182, sa.1, ss.213-222, 2006 (SCI-Expanded)
- XXVII. **The q-Lagrange polynomials in several variables**
Altin A., Erkus E., Tasdelen F.
TAIWANESE JOURNAL OF MATHEMATICS, cilt.10, sa.5, ss.1131-1137, 2006 (SCI-Expanded)
- XXVIII. **Approximation of continuous periodic functions via statistical convergence**
Duman O., Erkus E.
COMPUTERS & MATHEMATICS WITH APPLICATIONS, cilt.52, ss.967-974, 2006 (SCI-Expanded)
- XXIX. **Families of linear generating functions for polynomials in two variables**
Altin A., Erkus E., Oezarslan M. A.
INTEGRAL TRANSFORMS AND SPECIAL FUNCTIONS, cilt.17, sa.5, ss.315-320, 2006 (SCI-Expanded)
- XXX. **A unified presentation of some families of multivariable polynomials**
Erkus E., Srivastava H. M.
INTEGRAL TRANSFORMS AND SPECIAL FUNCTIONS, cilt.17, sa.4, ss.267-273, 2006 (SCI-Expanded)
- XXXI. **On a multivariable extension of the Lagrange-Hermite polynomials**
Altin A., Erkus E.

- INTEGRAL TRANSFORMS AND SPECIAL FUNCTIONS, cilt.17, sa.4, ss.239-244, 2006 (SCI-Expanded)
- XXXII. **A Korovkin type approximation theorem in statistical sense**
Erkus E., Duman O.
STUDIA SCIENTIARUM MATHEMATICARUM HUNGARICA, cilt.43, sa.3, ss.285-294, 2006 (SCI-Expanded)
- XXXIII. **A-statistical extension of the Korovkin type approximation theorem**
Erkus E., Duman O.
PROCEEDINGS OF THE INDIAN ACADEMY OF SCIENCES-MATHEMATICAL SCIENCES, cilt.115, sa.4, ss.499-508, 2005 (SCI-Expanded)
- XXXIV. **A note on the Lagrange polynomials in several variables**
Erkus E., Altin A.
JOURNAL OF MATHEMATICAL ANALYSIS AND APPLICATIONS, cilt.310, sa.1, ss.338-341, 2005 (SCI-Expanded)

Diğer Dergilerde Yayınlanan Makaleler

- I. **Advances in the Continuous Dual Hahn Polynomials**
DUMLUPINAR M., DUMAN E.
JOURNAL OF MATHEMATICAL EXTENSION, cilt.17, sa.4, ss.1-18, 2023 (ESCI)
- II. **The Meixner Polynomials in Several Variables**
Özmen N., Erkuş-Duman E.
International Journal of Applied Physics and Mathematics, cilt.9, sa.3, ss.144-151, 2019 (Hakemli Dergi)
- III. **Extended Multivariable Fourth Type Horn Functions**
Düzgün D., Erkuş-Duman E.
Gazi University Journal of Science, cilt.32, sa.1, ss.225-240, 2019 (ESCI)
- IV. **ON THE GOTTLIEB POLYNOMIALS IN SEVERAL VARIABLES**
Erkuş-Duman E., Özmen N.
FACTA UNIVERSITATIS-SERIES MATHEMATICS AND INFORMATICS, cilt.34, ss.927-940, 2019 (ESCI)
- V. **Generating Functions for k-Hypergeometric Functions**
Düzgün D., Erkuş-Duman E.
International Journal of Applied Physics and Mathematics, cilt.9, sa.3, ss.119-126, 2019 (Hakemli Dergi)
- VI. **An Extension of a Class of Generating Functions For The Cesaro Polynomials of Three Variables**
Özmen N., Erkuş-Duman E.
Journal of Science and Arts, cilt.45, sa.4, ss.939-950, 2018 (ESCI)
- VII. **Fibonacci and Lucas Differential Equations**
Erkuş-Duman E., Çiftci H.
Application and applied mathematics, cilt.13, sa.2, ss.756-763, 2018 (ESCI)
- VIII. **Some Generating Functions For a Class of Hypergeometric Polynomials**
Özmen N., Erkuş-Duman E.
Gazi University Journal of Science, cilt.31, sa.4, ss.1179-1190, 2018 (ESCI)
- IX. **Some Families of Generating Functions for the Generalized Cesaro Polynomials**
Özmen N., Erkuş-Duman E.
Journal Of Computational Analysis And Applications, cilt.25, sa.4, ss.670-683, 2018 (Scopus)
- X. **The Laguerre Type d-Orthogonal Polynomials**
Düzgün D., Erkuş-Duman E.
Journal of Science and Arts, cilt.1, sa.42, ss.95-106, 2018 (ESCI)
- XI. **ON THE POISSON CHARLIER POLYNOMIALS**
Özmen N., Erkuş-Duman E.
Serдика Mathematical Journal, cilt.41, ss.457-470, 2015 (Hakemli Dergi)
- XII. **A generalization of the extended Jacobi polynomials in two variables**
Aktaş R., Erkuş-Duman E.
Gazi University Journal of Science, cilt.28, sa.3, ss.503-521, 2015 (Scopus)

- XIII. **New generating functions for the Konhauser matrix polynomials**
Erkuş-Duman E., Çekim B.
Communications de la Faculté des Sciences de l'Université d'Ankara, cilt.63, sa.1, ss.35-41, 2014 (Hakemli Dergi)
- XIV. **Integral Representations for Bessel Matrix Functions**
Çekim B., Erkuş-Duman E.
Gazi University Journal of Science, cilt.27, sa.1, ss.663-667, 2014 (Scopus)
- XV. **On a hybrid family of summation integral type operators**
Gupta V., Erkuş E.
Journal of Inequalities in Pure and Applied Mathematics, cilt.7, sa.1, ss.1-11, 2006 (Hakemli Dergi)
- XVI. **The multivariate q Lagrange Hermite polynomials**
Erkuş E.
International Journal of Computational and Numerical Analysis and Applications, cilt.6, sa.2, ss.143-151, 2004 (Hakemli Dergi)

Kitap & Kitap Bölümleri

- I. **Extended Multivariable Hypergeometric Functions**
Düzgün D., Erkuş-Duman E.
Analysis, Probability, Applications, and Computation, Lindahl K., Lindström T., Rodino L., Toft J., Wahlberg P., Editör,
Birkhäuser, Cham, Vaxjö, ss.17-25, 2019
- II. **On the Generalized Sylvester Polynomials**
Özmen N., Erkuş-Duman E.
Analysis, Probability, Applications, and Computation, Karl-Olof Lindahl, Torsten Lindström, Luigi G. Rodino, Joachim
Toft, Patrik Wahlberg, Editör, Birkhäuser, Cham, Vaxjö, ss.47-55, 2019
- III. **On the g -Jacobi Matrix Functions**
Çekim B., Erkuş-Duman E.
Advances in Applied Mathematics and Approximation Theory, Anastassiou, Duman, Editör, Springer-Verlag, Zürich,
ss.73-84, 2013

Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar

- I. **A GENERALIZATION FOR THE HERMITE-BASED APPELL POLYNOMIALS**
SOYARSLAN G., DUMAN E.
6 th INTERNATIONAL CONFERENCE ON MULTIDISCIPLINARY SCIENTIFIC STUDIES, İstanbul, Türkiye, 2 - 03
Haziran 2023, ss.298-305
- II. **SOME NEW RESULTS FOR THE WILSON POLYNOMIALS**
DUMLUPINAR M., DUMAN E.
ANKARA INTERNATIONAL CONGRESS ON SCIENTIFIC RESEARCH-VIII, Ankara, Türkiye, 9 - 11 Haziran 2023,
ss.131-142
- III. **A Generalization of Cesaro Polynomials in Several Variables and the Generalized Lauricella Functions**
Erkus-Duman E., Özmen N.
7th International Conference on Recent Advanced in Pure and Applied Mathematics, Muğla, Türkiye, 25 Eylül 2020,
ss.90
- IV. **On Some Generalized Polynomials**
Korkmaz Düzgün D., Erkus-Duman E.
7th International Conference on Recent Advanced in Pure and Applied Mathematics, Muğla, Türkiye, 25 Eylül 2020,
ss.49
- V. **Generating Functions for The Extended Multivariable Fourth Type Horn Functions**

Düzgün D., Erkuş-Duman E.

The 8th International Conference On Pure and Applied Mathematics, Brussels, Belçika, 22 - 25 Temmuz 2019

- VI. **Generating Functions for k-Hypergeometric Functions**
Düzgün D., Erkuş-Duman E.
ICPAM, Budapest, Macaristan, 10 - 14 Temmuz 2018
- VII. **Gottlieb Polynomials in several Variables**
Özmen N., Erkuş-Duman E.
V. Kadın Matematikçiler Derneği Çalıştayı, Diyarbakır, Türkiye, 5 - 07 Mayıs 2018, ss.12
- VIII. **On the generalized Sylvester polynomials**
Erkuş-Duman E., Özmen N.
ISAAC 2017, Vaxjö, İsveç, 14 - 18 Ağustos 2017, ss.19
- IX. **EXTENDED MULTIVARIABLE HYPERGEOMETRIC FUNCTIONS**
Erkuş-Duman E., Düzgün D.
ISAAC 2017, Vaxjö, İsveç, 14 - 18 Ağustos 2017
- X. **Extended Multivariable Fourth Type Horn Functions**
Erkuş-Duman E., Düzgün D.
International Conference on Mathematics and Mathematics Education, Şanlıurfa, Türkiye, 11 - 13 Mayıs 2017
- XI. **On the Cesaro polynomials of three variables**
Özmen N., Erkuş-Duman E.
International Conference on Mathematics and Engineering, İstanbul, Türkiye, 10 - 12 Mayıs 2017, ss.378
- XII. **Some New Properties of the Extended Generalized Hypergeometric Functions**
Düzgün D., Erkuş-Duman E.
ETAMM 2016, Perpignan, Fransa, 30 Mayıs - 03 Haziran 2016
- XIII. **On the Generalized Cesaro Polynomials**
Erkuş-Duman E., Özmen N.
ETAMM 2016, Perpignan, Fransa, 30 Mayıs - 03 Haziran 2016
- XIV. **On the Poisson Charlier Polynomials**
Özmen N., Erkuş-Duman E.
International Conference: Mathematics Days in Sofia, Sofija, Bulgaristan, 7 - 10 Temmuz 2014, cilt.41, ss.457-470
- XV. **Some Families of Generating Functions for Laguerre and Charlier Types d Orthogonal Polynomials**
Düzgün D., Erkuş-Duman E.
International Conference on Recenet Developments in Pure and Applied Mathematics - ICRAPAM 2014, Antalya, Türkiye, 6 - 09 Kasım 2014
- XVI. **On the Generalized Bernoulli Euler and Genocchi Polynomials**
Güldoğan E., Erkuş-Duman E.
International Conference on Recenet Developments in Pure and Applied Mathematics - ICRAPAM 2014, Antalya, Türkiye, 6 - 09 Kasım 2014
- XVII. **Some Results For A Family of Multivariable Polynomials**
Özmen N., Erkuş-Duman E.
11th International Conference of Numerical Analysis and Applied Mathematics, Rodos, Yunanistan, 21 - 27 Eylül 2013, cilt.1558, ss.1124-1127
- XVIII. **Çok değişkenli Gottlieb polinomları**
Erkuş-Duman E.
26.Ulusal Matematik Sempozyumu, Diyarbakır, Türkiye, 4 - 07 Eylül 2013
- XIX. **On the g Jacobi matrix functions**
Çekim B., Erkuş-Duman E.
Advances in Applied Mathematics and Approximation Theory, Ankara, Türkiye, 17 - 20 Mayıs 2012
- XX. **Laguerre ve Konfluent Hipergeometrik Fonksiyonların Bir Matris Genellemesi**
Çekim B., Erkuş-Duman E.
7. Ankara Matematik Günleri, Ankara, Türkiye, 31 Mayıs - 01 Haziran 2012
- XXI. **Approximation by matrix valued linear positive operators**

Duman O., Erkuş-Duman E.

Conference on Matrix Analysis and its Applications – MAT TRIAD, Lisbon, Portekiz, 12 - 16 Temmuz 2011

XXII. Integral representations for a class of polynomials in two variables

Erkuş-Duman E.

Mathematical Analysis, Differential Equations and Their Applications, Gazimagusa, Kıbrıs (Kktc), 12 - 15 Eylül 2008

XXIII. Some Mixed Generating Relations for Some Families of Multivariable Polynomials

Erkuş-Duman E.

II. Ankara Matematik Günleri, Ankara, Türkiye, 22 - 23 Mayıs 2008

XXIV. Pozitif lineer operatörler yardımıyla sürekli periyodik fonksiyonlara istatistiksel yaklaşım

Erkuş-Duman E., Duman O.

2nd Turkish World Mathematics Symposium, Sakarya, Türkiye, 4 - 07 Temmuz 2007

XXV. Çok Değişkenli Polinomların Çeşitli Ailelerinin Ortak Bir Gösterimi

Erkuş-Duman E.

XIX. Ulusal Matematik Sempozyumu, Kütahya, Türkiye, 22 - 25 Ağustos 2006

Metrikler

Yayın: 78

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Atf (Scopus): 378

H-İndeks (WoS): 12

H-İndeks (Scopus): 11

Ödüller

Erkuş-Duman E., Best Organizer Award, 10Th International Conference On Mechanical And Aerospace Engineering, Belçika, Temmuz 2019

Akademi Dışı Deneyim

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