Assoc. Prof. ARZU AKGÜL

Personal Information

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International Researcher IDs
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Publons / Web Of Science ResearcherID: AAR-8223-2020
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Education Information

Doctorate, Kocaeli University, Fen-Edebiyat Fakültesi, Matematik Bölümü, Turkey 1998 - 2004
Postgraduate, Kocaeli University, Fen Bilimleri Enstitüsü, Matematik Anabilim Dalı, Turkey 1994 - 1998
Undergraduate, Eskisehir Osmangazi University, Fen-Edebiyat Fakültesi, Turkey 1990 - 1994

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, Operatörler ailesinin spektral teorisi, Kocaeli Üniversitesi, Fen-Edebiyat Fakültesi, Matematik Bölümü, 2004
Postgraduate, Genelleşmiş fonksiyonlar ve sobolev uzayları, Kocaeli Üniversitesi, Fen Bilimleri Enstitüsü, Matematik Anabilim Dalı, 1998

Research Areas

Mathematics, Functional Analysis, Functions of a Complex Variable, Natural Sciences

Academic Titles / Tasks

Associate Professor, Kocaeli University, Fen Edebiyat Fakültesi, Matematik, 2020 - Continues
Assistant Professor, Kocaeli University, Fen Edebiyat Fakültesi, Matematik, 2005 - Continues
Research Assistant, Kocaeli University, Fen Edebiyat Fakültesi, Matematik, 1998 - 2005
Lecturer, Kocaeli University, Kocaeli Meslek Yüksekokulu, 1997 - 1998

Academic and Administrative Experience

Head of Department, Kocaeli University, Fen Edebiyat Fakültesi, Matematik, 2023 - Continues
Head of Department, Kocaeli University, Fen Edebiyat Fakültesi, Matematik, 2005 - 2008

Courses

SEMİNER1 , Undergraduate, 2023 - 2024

YÜKSEK LİSANS SEMİNER, Postgraduate, 2022 - 2023

MATHEMATICS 1, Undergraduate, 2023 - 2024

ADVANCED COMPLEX ANALYSIS, Postgraduate, 2022 - 2023

COMPLEX ANALYSIS 2, Undergraduate, 2022 - 2023

UZMANLIK ALAN, Postgraduate, 2023 - 2024

MATEMATİK 1, Undergraduate, 2023 - 2024

UZMANLIK ALAN, Postgraduate, 2022 - 2023

SEMINER 2, Undergraduate, 2022 - 2023

ADVANCED COMPLEX ANALYSIS, Postgraduate, 2023 - 2024

Differential Equations in Engineering, Undergraduate, 2023 - 2024

MATEMATİK2, Undergraduate, 2022 - 2023

LINEAR ALGEBRA, Undergraduate, 2023 - 2024

İLERİ KOMPLEKS ANALİZ, Postgraduate, 2022 - 2023

COMPLEX ANAYSIS2, Undergraduate, 2021 - 2022

KOMPLEKS ANALİZ, Undergraduate, 2022 - 2023

İLERİ KOMPLEKS ANALİZ, Doctorate, 2021 - 2022

mATEMATİK 1, Undergraduate, 2021 - 2022

DIFFERENTIAL EQUATIONS, Undergraduate, 2022 - 2023

Mathematics 1, Undergraduate, 2021 - 2022

Master Thesis, Postgraduate, 2021 - 2022

Specialization Field Course, Postgraduate, 2021 - 2022

Mathematics 1, Undergraduate, 2021 - 2022

Complex Analysis I, Undergraduate, 2021 - 2022

Mathematics1, Undergraduate, 2021 - 2022

Mathematics 1, Undergraduate, 2021 - 2022

Mathematical Analysis II, Doctorate, 2021 - 2022

İleri Analiz2, Undergraduate, 2018 - 2019

DİFERANSİYEL DENKLEMLER, Undergraduate, 2017 - 2018

UZMANLIK ALAN DERSİ, Postgraduate, 2017 - 2018

EBB285 UYGULAMALI DİFERANSİYEL DENKLEMLER (163747) TEKMİMARLIK FAK. GENEL MATEMATİK, Undergraduate, 2017 - 2018

TEMEL MATEMATİK, Undergraduate, 2017 - 2018

GENEL MATEMATİK, Undergraduate, 2016 - 2017

MAT103 LİNEER CEBİR (297190) MÜHENDİSLİK MAKİNE MÜHENDİSLİĞİ 1 B, Undergraduate, 2016 - 2017

UZMANLIK ALAN DERSİ, Postgraduate, 2016 - 2017

MAT103 LİNEER CEBİR (297190) MÜHENDİSLİK MAKİNE MÜHENDİSLİĞİ 1A, Undergraduate, 2016 - 2017

MAT102 MATEMATİK-2 (247798) MÜHENDİSLİK JEOLOJİ MÜHENDİSLİĞİ, Undergraduate, 2016 - 2017

DİFERANSİYEL DENKLEMLER, Undergraduate, 2016 - 2017

MAT517 LİNEER OPERATÖRLER, Postgraduate, 2016 - 2017

MATEMATİKSEL ANALİZ I, Postgraduate, 2016 - 2017

TEMEL MATEMATİK, Undergraduate, 2016 - 2017

Advising Theses

Akgül A., NOOR İNTEGRAL OPERATÖRÜNÜN Q-ANALOĞU YARDIMIYLA TANIMLANAN YENİ BİR Bİ-UNİVALENT FONKSİYONLAR SINIFI İÇİN MACLAURIN KATSAYI TAHMİNLERİ, Postgraduate, B.ALÇIN(Student), 2023

Akgül A., AL-OBOUDİ DİFERANSİYEL OPERATÖRÜ YARDIMIYLA TANIMLANAN ANALİTİK M-KATLI SİMETRİK Bİ-

ÜNİVALENT FONKSİYONLARIN YENİ BİR ALT SINIFI İÇİN KATSAYI TAHMİNLER, Postgraduate, A.KOÇAL(Student), 2019

Jury Memberships

Doctorate, Doctorate, Anna University Madras, May, 2022
Doctorate, Doctorate, Bursa Uludağ Üniversitesi, May, 2019
Post Graduate, Post Graduate, Batman Üniversitesi, January, 2019
Post Graduate, Post Graduate, Bursa Uludağ Üniversitesi, January, 2017

Published journal articles indexed by SCI, SSCI, and AHCI

I.   **An application of modified sigmoid function to a class of q(-)starlike and q(-) convex analytic error functions**
Akgül A.
TURKISH JOURNAL OF MATHEMATICS, 2022 (SCI-Expanded)

II. **Coefficient Estimates for a Family of Starlike Functions Endowed with Quasi Subordination on Conic Domain**
Akgül A., Cotirla L.
SYMMETRY-BASEL, vol.14, no.3, 2022 (SCI-Expanded)

III. **Based on a family of bi-univalent functions introduced through the Faber polynomial expansions and Noor integral operator**
Sakar F. M., Akgül A.
AIMS MATHEMATICS, vol.7, no.4, pp.5146-5155, 2022 (SCI-Expanded)

IV. **A new general subclass of m-fold symmetric bi-univalent functions given by subordination**
Akgül A.
TURKISH JOURNAL OF MATHEMATICS, vol.43, no.3, pp.1688-1698, 2019 (SCI-Expanded)

V.   **A certain subclass of bi-univalent analytic functions introduced by means of the q-analogue of Noor integral operator and Horadam polynomials**
Akgül A., Sakar F. M.
TURKISH JOURNAL OF MATHEMATICS, vol.43, no.5, pp.2275-2286, 2019 (SCI-Expanded)

VI. **(P, Q)-Lucas polynomial coefficient inequalities of the bi-univalent function class**
Akgül A.
TURKISH JOURNAL OF MATHEMATICS, vol.43, no.5, pp.2170-2176, 2019 (SCI-Expanded)

VII. **SECOND-ORDER DIFFERENTIAL SUBORDINATIONS ON A CLASS OF ANALYTIC FUNCTIONS DEFINED BY THE RAFID OPERATOR**
Akgül A.
UKRAINIAN MATHEMATICAL JOURNAL, vol.70, no.5, pp.673-686, 2018 (SCI-Expanded)

VIII. **On second-order differential subordinations for a class of analytic functions defined by convolution**
Akgül A.
JOURNAL OF NONLINEAR SCIENCES AND APPLICATIONS, vol.10, no.3, pp.954-963, 2017 (SCI-Expanded)

Articles Published in Other Journals

I.   **Coefficient Estimates of a New Bi-Univalent Function ClassIntroduced by Lucas-Balancing Polynomial**
Akgül A.
International Journal of Open Problems in Computer Science and Mathematics (IJOPCM), vol.16, no.3, pp.37-47, 2023 (Peer-Reviewed Journal)

II. **Initial Coefficient Estimates of Bi-Univalent Functions Linked with Balancing Coefficients**

Akgül A.

WSEAS Transactions on Mathematics, vol.22, pp.792-797, 2023 (Scopus)

III. **(U; V)-Lucas polynomial coefficient relations of the bi-univalent function class**

Akgül A., Shaba T. G.

COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS, vol.71, pp.1120-1134, 2022 (ESCI)

IV. **A new characterization of (P, Q)-Lucas polynomial coefficients of the bi-univalent function class associated with q-analogue of Noor integral operator**

Akgül A., Sakar F. M.

AFRIKA MATEMATIKA, vol.33, no.3, 2022 (ESCI)

V. **On Uniformly Starlike FunctionsWith Negative CoefficientsGiven by Polylogarithms**

Akgül A., Vankatesvarlu B., Reddy P. T., Rani N.

Palestine Journal of Mathematics, vol.11, no.3, pp.228-236, 2022 (Scopus)

VI. **Based on a family of bi-univalent functions introduced throughthe q -analogue of Noor integral operator**

Akgül A., Alçın B.

International Journal of Open Problems in Computer Science and Mathematics (IJOPCM), vol.15, no.1, pp.20-33, 2022 (Peer-Reviewed Journal)

VII. **On a family of bi-univalent functionsrelated to the Fibonacci numbers**

Akgül A.

Mathematica Moravica, vol.26, no.1, pp.103-112, 2022 (Peer-Reviewed Journal)

VIII. **A new approach to the bi-univalent analytic functions connected with q-analogue of Noor integral operator**

Akgül A.

COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS, vol.70, no.2, pp.940-949, 2021 (ESCI)

IX. **On a Special Second-order differential subordination using q-analoque of noor integral operator**

Akgül A.

Tblisi Mathematical Journal, vol.8, pp.109-123, 2021 (ESCI)

X. **Certain Inequalities for a General Class of Analytic and Bi-univalent Functions**

Akgül A.

SAHAND COMMUNICATIONS IN MATHEMATICAL ANALYSIS, vol.14, no.1, pp.1-13, 2019 (ESCI)

XI. **THE FEKETE–SZEGO COEFFICIENT INEQUALITY ¨FOR A NEW CLASS OF m-FOLD SYMMETRICBI-UNIVALENT FUNCTIONS SATISFYINGSUBORDINATION CONDITION**

Akgül A.

HONAM MATHEMATICAL JOURNAL, vol.40, pp.733-748, 2018 (ESCI)

XII. **Identification of Initial Taylor-Maclaurin Coefficients for Generalized Subclasses of Bi-Univalent Functions**

Akgül A.

SAHAND COMMUNICATIONS IN MATHEMATICAL ANALYSIS, vol.11, no.1, pp.133-143, 2018 (ESCI)

XIII. **Coefficient Estimates for Certain Subclass ofBi-Univalent Functions Obtained With Polylogarithms**

Akgül A.

Mathematical Sciences and Applications E-Notes, vol.6, pp.70-76, 2018 (Peer-Reviewed Journal)

XIV. **COEFFICIENT ESTIMATES ASSOCIATED WITH A NEWSUBCLASS OF BI-UNIVALENT FUNCTIONS**

Akgül A., Altınkaya S.

ACTA UNIVERSITATIS APULENSIS, vol.52, pp.121-128, 2017 (ESCI)

XV. **A SUBCLASS OF MEROMORPHIC FUNCTIONS DEFINED BY A CERTAIN INTEGRAL OPERATOR ON HILBERT SPACE**

Akgül A.

CREATIVE MATHEMATICS AND INFORMATICS, vol.26, pp.115-125, 2017 (Peer-Reviewed Journal)

XVI. **NEW SUBCLASSES OF ANALYTIC AND BI-UNIVALENT FUNCTIONS INVOLVING A NEW INTEGRAL**

OPERATOR DEFINED BY POLYLOGARITHM FUNCTION

Akgül A.

Theory and Applications of Mathematics & Computer Science, vol.7, no.2, pp.31-40, 2017 (Peer-Reviewed Journal)

XVII. **A CERTAIN SUBCLASS OF MEROMORPHIC FUNCTIONS WITH POSITIVE COEFFICIENTS ASSOCIATED WITH AN INTEGRAL OPERATOR**

Akgül A.

HONAM MATHEMATICAL JOURNAL, vol.39, no.3, pp.331-347, 2017 (ESCI)

XVIII. **ON THE COEFFICIENT ESTIMATES OF ANALYTIC AND BI-UNIVALENT M-FOLD SYMMETRIC FUNCTIONS**

Akgül A.

Mathematica Aeterna - International Journal for Pure and Applied Mathematics, vol.7, no.3, pp.253-260, 2017 (Peer-Reviewed Journal)

XIX. **SOME FAMILIES OF MEROMORPHIC FUNCTIONS WITH POSSITIVE COEFFICIENTS DIVEN BY AN INTEGRAL OPERATOR**

Akgül A.

ACTA UNIVERSITATIS APULENSIS, vol.50, pp.81-95, 2017 (Peer-Reviewed Journal)

XX. **A NEW SUBCLASS OF MEROMORPHIC FUNCTIONS WITH POSITIVE AND FIXED SECOND COEFFICIENTS DEFINED BY THE RAFID-OPERATOR**

Akgül A.

COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS, vol.66, no.2, pp.1-13, 2017 (ESCI)

XXI. **A NEW SUBCLASS OF MEROMORPHIC FUNCTIONS DEFINED BY HILBERT SPACE OPERATOR**

Akgül A.

HONAM MATHEMATICAL JOURNAL, vol.38, no.3, pp.495-506, 2016 (ESCI)

Refereed Congress / Symposium Publications in Proceedings

I. **A new family of starlike functions by means of quasi subordination on conic domain**
AKGÜL A.
ICRAPAM 2021, Muğla, Turkey, 24 September 2021, pp.18

II. **On a new class of bi-univalent holomorphic functions connected with the Fibonacci numbers**
AKGÜL A.
ICRAPAM 2021, Muğla, Turkey, 24 September 2021, pp.17

III. **On Some Inequalities For A General Class Of Analytic And Bi-Univalent Functions**
AKGÜL A.
4th INTERNATIONAL CONFERENCE ON MATHEMATICS "An Istanbul Meeting for World Mathematicians" 27-30 October 2020, Istanbul, Turkey This conference is dedicated to 67th birthday of Prof. M. Mursaleen ICOM 2020 ISTANBUL / TURKEY 4th International Conference on Mathematics "An Istanbul Meeting for World Mathematicians" ICOM 2020 ICOM 2020 Conference Abstracts Book ISBN: 978-, İstanbul, Turkey, 27 October 2020, pp.135

IV. **A new subclass of bi-univalent analytic functions introduced by the q -analogue of Noor integral operator and Fibonacci numbers**
AKGÜL A.
4th INTERNATIONAL CONFERENCE ON MATHEMATICS "An Istanbul Meeting for World Mathematicians" 27-30 October 2020, Istanbul, Turkey, İstanbul, Turkey, 27 October 2020

V. **On q-Starlike Analytic Error Functions Related With Modified Sigmoid Activation Function**
AKGÜL A.
ICRAPAM 2020, Muğla, Turkey, 25 September 2020, pp.13

VI. **On (PQ) Lucas Polynomial Coefficients fora New Class of Bi-Univalent FunctionsAssociated with q-Analogue of RuscheweyhOperator**

AKGÜL A.

2th International Conference on Mathematical Advences andApplications (ICOMAA-2019)., İstanbul, Turkey, 03 May 2910 - 05 May 2019, vol.2, pp.13-17

VII. **Faber Ployinomial Coefficient Estimate for bi- Univalent functions**

AKGÜL A., SAKAR F. M., Doğan E.

The First International Conference on Computational Methods in Applied Sciences(IC2MAS 2019), 12 - 16 July 2019

VIII. **On (P,Q)-Lucas polynomials coefficients for a New Class of Bi-Univalent Functions Associated with Al-Aboudi Differential Operator**

AKGÜL A.

International Conference on Life and Engineering Sciences(ICOLES2019), 27 - 29 June 2019

IX. **On Horadam polynomials coefficients for a New Class of Bi-Univalent Functions Associated with q-Analogue of Ruscheweyh Operator**

AKGÜL A.

International Conference on Life and Engineering Sciences(ICOLES 2019), 27 - 28 June 2019

X. **On (P,Q)-Lucas Polynomial coefficients for a New Class of Bi-UnivalentFunctions Given by Subordination**

AKGÜL A.

INTERNATIONAL CONFERENCE on RECENT ADVANCES inPURE AND APPLIED MATHEMATICS (ICRAPAM 2019), İstanbul, Turkey, 12 - 15 June 2019

XI. **AL OBOUDIDİFERANSİYEL OPERATÖRÜ YARDIMIYLA TANIMLANAN ANALİTİK YALINKAT FONKSİYONLARIN YENİBİR ALT SINIFI İÇİN KATSAYI TAHMİNLERİ**

AKGÜL A., Koçal A.

2 INTERNATIONAL CONGRESS ONSTATISTICS MATHEMATICS AND ANALYTICAL METHODS, İstanbul, Turkey, 28 March 2019, pp.246-251

XII. **The Fekete-Szegö functional problems for a new class of m-foldsymmetric bi-univalent functions**

AKGÜL A.

INTERNATIONAL CONFERENCE ON APPLIED ANALYSIS AND MATHEMATICAL MODELLING (ICAAMM2019), 10 - 13 March 2019

XIII. **(p, q)-Lucas polynomial coefficient bounds for a new class of bi-univalent functions**

AKGÜL A.

ICAAMM 2019, İstanbul, Turkey, 10 - 13 March 2019

XIV. **On The Fekete–Szegö Problem For a New Class of m-Fold Symmetric Bi-Univalent FunctionsSatisfying Subordination Condition Given by Symmetric Q-Derivative Operator**

AKGÜL A.

5Th INTERNATIONAL CONFERENCE ON RECENT ADVANCES IN PURE AND APPLIED MATHEMATICS (ICRAPAM 2018)JULY 23-27 2018 at Karadeniz Technical University Prof. Dr. Osman Turan Convention Center in Trabzon, TURKEY, Trabzon, Turkey, 23 - 27 July 2018

XV. **Finding Initial Coefficients for a Class of Bi-Univalent Functions given by q-Derivative**

AKGÜL A.

6th International Eurasian Conference on Mathematical Sciences and Applications (IECMSA), Budapest, Hungary, 15 - 17 August 2017, vol.1926

XVI. **On Quasi-Subordinations for Analytic and Bi-Univalent Function Class**

AKGÜL A.

6 th International Eurasian Conference on Mathematical Sciences and Applications, (IECMSA 2017), Budapest, HUNGARY, 15 - 18 August 2017

XVII. **Finding Initial Coecients For A Class of Bi-UnivalentFunctions Given By q-Derivative**

AKGÜL A.

6 th International Eurasian Conference on Mathematical Sciences and Applications, (IECMSA 2017), Budapest, HUNGARY, 15 - 18 August 2017

XVIII. **Estimates of initial coefficients of a new analytic and bi-univalent function class definedby integral**

operator involving polylogarithm function

AKGÜL A.

6 th International Eurasian Conference on Mathematical Sciences and Applications, (IECMSA 2017), Budapest, HUNGARY, 15 - 18 August 2017

XIX. **On the Coefficient Estimates of Analytic and Bi-Univalent M-FoldSymmetric Functions**

AKGÜL A.

International Conference on Mathematics and Engineering (ICOME 2017), İstanbul, Turkey, 10 - 12 May 2017

XX. **On The Coefficient Bounds for a Certain Subclass of Analytic and Bi- Univalent Functions**

AKGÜL A.

International Conference on Mathematics and Engineering (ICOME 2017), İstanbul, Turkey, 10 - 12 May 2017

XXI. **On some inequalities of analytic and biunivalent functions given by subordination**

AKGÜL A.

4 th International Conference on Recent Advences in Pure and Applied Mathematics (ICRAPAM2017), Kşadası,TURKEY, 11 - 15 May 2017

XXII. **On Some Properties of a New Subclass of MeromorphicFunctions With Fixed Second Coecients Defined by RafidOperator**

AKGÜL A.

12th International Symposium onGeometric Function Theory andApplicationsAugust 25-28, 2016, Alba Iulia, Romania, 25 - 28 August 2016

XXIII. **On a new subclass of meromorphicfunctions with positive and second fixed coefficients**

AKGÜL A.

International Congress onFundamental and Applied Sciences (ICFAS2016),İstanbul-Turkey, 22 - 26 August 2016

XXIV. **A CERTAİN SUBCLASS OF MEROMORPHİC FUNCTİONS WİTH POSİTİVE AND FİXED SECONDCOEFFİCİENTS ASSOCİATED WİTH THE RAFİD OPERATOR**

AKGÜL A.

IECMSA-2016 5THINTERNATIONAL EURASIAN CONFERENCE ON MATHEMATICAL SCIENCES AND APPLICATIONS BELGRADE-SERBIA, 16 - 19 August 2016

XXV. **On a New Subclass of Meromorphic Functions with Positive Coeffitients Defined by a CertainIntegral Operator**

AKGÜL A.

'INTERNATIONALCONFERENCE ON RECENT ADVANCES IN PURE AND APPLIED MATHEMATICS(ICRAPAM2016), 19 - 23 May 2016

XXVI. **Fredholm Joint Spectrum for Families of Operators**

AKGÜL A., BAYRAMOV S.

Global Analysis and Applied Mathematics, AIP conferance Proceedings, Ankara, Turkey, 15 - 17 April 2004, vol.729, pp.309-317

Activities in Scientific Journals

Editor, 2020 - 2024

Scientific Refereeing

Int. J. Nonlinear Anal. Appl., Journal Indexed in SCI-E, May 2023

Konuralp Journal of Mathematics, Other Indexed Journal, February 2019

Turkish Journal of Mathematics, National Scientific Refreed Journal, December 2018

ICAMS, National Scientific Refreed Journal, September 2018

Mathematica Moravica, SCI Journal, September 2018

Fundamental Journal of Mathematics and Applications, Other Indexed Journal, July 2018

MASLO, SCI Journal, June 2018

Mathematica Slovaca, Other Indexed Journal, May 2018

Honam Mathematical Journal, Other Indexed Journal, April 2018

EJPAM, Other Indexed Journal, January 2018

JOURNAL OF MATHEMATICAL EXTENSION, Other Indexed Journal, December 2017

Communications Series A1, National Scientific Refreed Journal, May 2017

Mobility Activity

Erasmus Programme, Lecturing, Latvia University, Latvia, 2023 - 2023

Metrics

Publication: 56

Citation (WoS): 80

Citation (Scopus): 39

H-Index (WoS): 5

H-Index (Scopus): 4

Non Academic Experience

Latvia University

Yunus Emre İlköğretim Okulu Tuzla istanbul