

Assoc. Prof. Nilay Değirmen

Personal Information

Office Phone: [+90 362 312 1919](tel:+903623121919) Extension: 5039

Email: nilay.sager@omu.edu.tr

Web: <https://avesis.omu.edu.tr/nilay.sager>

International Researcher IDs

ScholarID: sU5iX0EAAAAJ

ORCID: 0000-0001-8192-8473

Publons / Web Of Science ResearcherID: AHH-4131-2022

Yoksis Researcher ID: 191434

Education Information

Doctorate, Ondokuz Mayıs University, Lisansüstü Eğitim Enstitüsü, Matematik (Dr), Turkey 2015 - 2021

Postgraduate, Ondokuz Mayıs University, Fen Bilimleri Enstitüsü, Matematik (YI) (Tezli), Turkey 2012 - 2015

Undergraduate, Ege University, Fen Fakültesi, Matematik Bölümü, Turkey 2007 - 2012

Dissertations

Doctorate, Klasik ve *-kalkülüse göre bikompleks dizi uzayları ve bazı özellikleri, Ondokuz Mayıs University, Lisansüstü Eğitim Enstitüsü, Matematik (Dr), 2021

Postgraduate, C- cebirlerinde bazı spektrum özellikleri, Ondokuz Mayıs University, Fen Bilimleri Enstitüsü, Matematik (YI) (Tezli), 2015

Research Areas

Multivariate Complex Functions and Analytic Spaces, Sequences, Series, Summability, Functional Analysis, General Mathematics, General Topology, Real Functions, Operators

Academic Titles / Tasks

Research Assistant, Ondokuz Mayıs University, Fen-Edebiyat Fakültesi, Matematik Bölümü, 2012 - Continues

Courses

Analiz IV, Undergraduate, 2022 - 2023

Analiz III, Undergraduate, 2022 - 2023

Published journal articles indexed by SCI, SSCI, and AHCI

1. BICOMPLEX MATRIX TRANSFORMATIONS BETWEEN c_0 AND c IN BICOMPLEX SETTING

Sağır Duyar B., Değirmen N., Duyar C.

UPB SCIENTIFIC BULLETIN, SERIES A: APPLIED MATHEMATICS AND PHYSICS, vol.85, no.4, pp.115-128, 2023 (SCI-Expanded)

II. **On bicomplex BC-modules ${}^l\mathcal{B}^k$ (BC) and some of their geometric properties**

Değirmen N., Sağır Duyar B.

GEORGIAN MATHEMATICAL JOURNAL, vol.30, no.1, pp.65-79, 2023 (SCI-Expanded)

III. **A new perspective on Fibonacci and Lucas numbers**

Değirmen N., Duyar C.

FILOMAT, vol.37, no.28, pp.9561-9574, 2023 (SCI-Expanded)

IV. **Non-Newtonian approach to C^* -algebras**

Değirmen N.

COMMUNICATIONS IN ALGEBRA, vol.50, no.6, pp.2653-2671, 2022 (SCI-Expanded)

V. **Some Inequalities in Quasi-Banach Algebra of Non-Newtonian Bicomplex Numbers**

Sager N., Sağır Duyar B.

FILOMAT, vol.35, no.7, pp.2231-2243, 2021 (SCI-Expanded)

Articles Published in Other Journals

I. **Common Fixed, Coupled Coincidence and Common Coupled Fixed Point Results in Hyperbolic Valued Metric Spaces**

Sager N., Sağır B.

BOLETIM SOCIEDADE PARANAENSE DE MATEMATICA, vol.41, 2023 (ESCI)

II. **SOME FUNDAMENTAL PROPERTIES OF BANACH SPACES $l(p)$ (BC (N)) WITH THE $*$ -NORM $\dot{(2)}.(l_p(BC(N)))$**

Değirmen N., Sağır Duyar B.

TRANSACTIONS OF A RAZMADZE MATHEMATICAL INSTITUTE, vol.176, no.2, pp.183-195, 2022 (ESCI)

III. **Bicomplex numbers with respect to the geometric calculus and some inequalities**

DEĞİRMEN N., SAĞIR DUYAR B.

Erciyes Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.38, no.2, pp.335-348, 2022 (Peer-Reviewed Journal)

IV. **SOME NEW NOTES ON THE BICOMPLEX SEQUENCE SPACES l_p BC**

Değirmen N., Sağır Duyar B.

Journal of Fractional Calculus and Applications, vol.13, no.2, pp.66-76, 2022 (Peer-Reviewed Journal)

V. **$*$ -Complex Valued Metric Spaces And Zamfirescu Type Contractions**

Değirmen N., Sağır Duyar B.

APPLIED MATHEMATICS E-NOTES, vol.22, pp.105-120, 2022 (ESCI)

VI. **Some Geometric Properties of Bicomplex Sequence Spaces l_p BC**

Değirmen N., Sağır Duyar B.

Konuralp Journal of Mathematics, vol.10, no.1, pp.44-49, 2022 (Peer-Reviewed Journal)

VII. **D-Topological Duals of Bicomplex BC-Modules ${}^l\mathcal{B}^k$ (BC)**

Değirmen N., Sağır B.

JOURNAL OF MATHEMATICAL EXTENSION, no.10, 2022 (ESCI)

VIII. **D-Topological Duals of Bicomplex BC-Modules $l_{\{p\}}^{\{k\}}(BC)$**

Değirmen N., Sağır Duyar B.

JOURNAL OF MATHEMATICAL EXTENSION, vol.16, no.10, pp.1-25, 2022 (Peer-Reviewed Journal)

IX. **Fixed Points of Hyperbolic Contraction Mappings on Hyperbolic Valued Metric Spaces**

DEĞİRMEN N., SAĞIR DUYAR B.

Sarajevo Journal of Mathematics, vol.17, no.2, pp.223-236, 2021 (Peer-Reviewed Journal)

X. **Hyperbolic Valued Dislocated Metric Spaces**

DEĞİRMEN N.

Avrupa Bilim ve Teknoloji Dergisi, vol.28, pp.1152-1158, 2021 (Peer-Reviewed Journal)

- XI. **Banach spaces $l(p)$ ($BC(N)$) with the $\ast$ - norm (parallel to)double over dot . (parallel to)double over dot($2,lp(BC(N))$) and some properties**
Sager N., Sağır Duyar B.
TBILISI MATHEMATICAL JOURNAL, vol.14, no.2, pp.65-81, 2021 (ESCI)
- XII. **On the Space $A_{\{p_1,q_1\}^{\{p_2,q_2\}}(G,w)$ and Some of Its Topological Properties**
DEĞİRMEN N., DEĞİRMEN İ.
İğdir Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.11, no.2, pp.1468-1480, 2021 (Peer-Reviewed Journal)
- XIII. **On Continuity of Functions Involving the Translation Operator on the Space $A_{\{p_1,q_1\}^{\{p_2,q_2\}}left(G,;wright)$**
DEĞİRMEN N., DEĞİRMEN İ.
Afyon Kocatepe Üniversitesi Fen ve Mühendislik Bilimleri Dergisi, vol.21, no.3, pp.549-558, 2021 (Peer-Reviewed Journal)
- XIV. **Some New Results on the Banach Space $\square \square 2 2 1 1 , , , p q A G w$**
DEĞİRMEN N.
Düzce Üniversitesi Bilim ve Teknoloji Dergisi, vol.9, no.4, pp.1420-1435, 2021 (Peer-Reviewed Journal)
- XV. **On Completeness of Some Bicomplex Sequence Spaces**
Değirmen N., Sağır Duyar B.
Palestine Journal of Mathematics, vol.9, no.2, pp.891-902, 2020 (Scopus)
- XVI. **Mappings Between $C^\ast$ -Algebra That Preserve The Spectrum**
AVCI H., DEĞİRMEN N.
Bulletin of Mathematics and Statistics Research, vol.6, no.1, pp.8-12, 2018 (Peer-Reviewed Journal)
- XVII. **Some Spectrum Properties in $C^\ast$ -Algebras**
DEĞİRMEN N., AVCI H.
Turkish Journal of Science & Technology, vol.10, no.1, pp.27-30, 2015 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **Non-Newtonian Leonardo Numbers**
DEĞİRMEN N.
in: Reflections of Change in Engineering, Science, Maths and Education, Dr. Begümhan TURGUT, Editor, Strategic Researches Academy (SRA), pp.37-60, 2023
- II. **Hyperbolic Valued Rectangular b-Metric Spaces and Some Fixed Point Results**
DEĞİRMEN N.
in: New Developments in Science and Mathematics, Kasımoğulları Rahmi, Manisa Kaan, Editor, Hiperyayın, İstanbul, pp.477-488, 2022

Refereed Congress / Symposium Publications in Proceedings

- I. **ON SUM FORMULAS OF SQUARES AND CUBES OF NON-NEWTONIAN FIBONACCI AND NON-NEWTONIAN LUCAS NUMBERS**
DEĞİRMEN N.
V. INTERNATIONAL HALICH CONGRESS ON MULTIDISCIPLINARY SCIENTIFIC RESEARCH, İstanbul, Turkey, 15 - 16 January 2023, pp.871-879
- II. **SOME FINITE SUM FORMULAS AND INEQUALITIES INVOLVING NON-NEWTONIAN FIBONACCI NUMBERS**
DEĞİRMEN N.
V. INTERNATIONAL HALICH CONGRESS ON MULTIDISCIPLINARY SCIENTIFIC RESEARCH, İstanbul, Turkey, 15 - 16 January 2023, pp.864-870

- III. **Hyperbolic Valued Rectangular b-Metric Spaces and Some Fixed Point Results**
DEĞİRMEN N.
INTERNATIONAL DUMLUPINAR SCIENCE AND MATHEMATICS CONGRESS (IDUSMAC 2022), Kütahya, Turkey, 5 - 07 September 2022, pp.298-299
- IV. **On Fixed Circles in Hyperbolic Valued Metric Spaces**
DEĞİRMEN N.
IFSCOM2022 8TH IFS AND CONTEMPORARY MATHEMATICS CONFERENCE, Mersin, Turkey, 16 - 19 June 2022, pp.117-126
- V. **On Fixed Points of d_D^b Cyclical Contractions**
DEĞİRMEN N.
IFSCOM2022 8TH IFS AND CONTEMPORARY MATHEMATICS CONFERENCE, Mersin, Turkey, 16 - 19 June 2022, pp.105-116
- VI. **HYPERBOLIC VALUED b-METRIC SPACES AND ZAMFIRESCU TYPE CONTRACTIONS**
DEĞİRMEN N.
12th INTERNATIONAL CONFERENCE ON ENGINEERING & NATURAL SCIENCES, Bingöl, Turkey, 24 - 25 December 2021, pp.138-148
- VII. **Hyperbolic Valued Dislocated Metric Spaces**
DEĞİRMEN N.
1st International Conference on Applied Engineering and Natural Sciences ICAENS 2021, Konya, Turkey, 1 - 03 November 2021, pp.790
- VIII. **Bikompleks Maddox Dizi Uzaylarının Tamlığı Üzerine**
SAGER N., SAĞIR DUYAR B.
32. ULUSAL MATEMATİK SEMPOZYUMU, Samsun, Turkey, 31 August - 03 September 2019
- IX. **Mappings Between C^* -Algebras That Preserve the Spectrum**
AVCI H., SAGER N.
International Conference on Analysis and Its Applications (ICAA-2016), Kırşehir, Turkey, 12 - 15 July 2016
- X. **Some Spectrum Properties in C^* -Algebras**
SAGER N., AVCI H.
International Congress in Honour of Professor Ravi P. Agarwal, Bursa, Turkey, 23 - 26 June 2014

Scientific Refereeing

KRAGUJEVAC JOURNAL OF MATHEMATICS, Journal Indexed in ESCI, March 2024
 Journal of Mathematics, Journal Indexed in SCI-E, October 2023
 DISCRETE DYNAMICS IN NATURE AND SOCIETY, Journal Indexed in SCI-E, September 2023
 DISCRETE DYNAMICS IN NATURE AND SOCIETY, Journal Indexed in SCI-E, May 2023
 KRAGUJEVAC JOURNAL OF MATHEMATICS, Journal Indexed in ESCI, February 2023
 Journal of Mathematics, Journal Indexed in SCI-E, February 2023
 AN INTERNATIONAL JOURNAL OF OPTIMIZATION AND CONTROL: THEORIES & APPLICATIONS (IJOCTA), Other Indexed Journal, March 2022
 Balıkesir Üniversitesi Fen Bilimleri Enstitüsü Dergisi, National Scientific Refreed Journal, November 2021
 Mathematical Sciences and Applications E-Notes, National Scientific Refreed Journal, February 2021

Awards

Değirmen N., Best Scientific Work, V. International Halich Congress On Multidisciplinary Scientific Research , May 2023