

Asst. Prof. BAHAR DOĞAN YAZICI

Personal Information

Office Phone: [+90 228 214 2137](tel:+902282142137)

Email: bahar.dogan@bilecik.edu.tr

Web: <https://avesis.bilecik.edu.tr/bahar.dogan>

International Researcher IDs

ScholarID: MEwVDPEAAAAJ

ORCID: 0000-0001-5690-4840

Publons / Web Of Science ResearcherID: GLF-1777-2022

ScopusID: 57917306400

Yoksis Researcher ID: 277960

Education

Doctorate, Sakarya University, Institute Of Science, Matematik, Turkey 2018 - 2023

Postgraduate, Bilecik Seyh Edebali University, Fen Bilimleri Enstitüsü, Matematik (Yl) (Tezli) (Anadolu Üniv. Ortak), Turkey 2015 - 2018

Undergraduate, Sakarya University, Faculty Of Arts And Sciences, Department Of Mathematics, Turkey 2011 - 2015

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, Özel singüler eğrilerin geometrisi üzerine, Sakarya University, 2022

Postgraduate, Kuaterniyonik normal eğriler, Bilecik Seyh Edebali University, Fen Bilimleri Enstitüsü, 2018

Research Areas

Differential Geometry, Geometry

Academic Positions

Assistant Professor, Bilecik Seyh Edebali University, Fen Fakültesi, Matematik, 2023 - Continues

Research Assistant, Bilecik Seyh Edebali University, Fen Fakültesi, Matematik, 2018 - 2023

Academic and Administrative Experience

Deputy Head of Department, Bilecik Seyh Edebali University, Fen Fakültesi, Matematik, 2024 - 2027

Courses

Postgraduate

Singülerite Teorinin Diferansiyel Geometriye Uygulamaları, Postgraduate, 2024 - 2025

Sayıların Geometrisi, Postgraduate, 2024 - 2025

Undergraduate

Araştırma Projesi (BDY), Undergraduate, 2024 - 2025, 2023 - 2024

Matematik II, Undergraduate, 2024 - 2025

Dönüşümler ve Geometriler, Undergraduate, 2024 - 2025, 2023 - 2024

Öğretmenlik Uygulaması (Pedagojik Formasyon) (BDY), Undergraduate, 2024 - 2025, 2023 - 2024

Undergraduate, 2024 - 2025, 2023 - 2024

Matematik Öğretim Yöntemleri, Undergraduate, 2023 - 2024

Matematik I, Undergraduate, 2024 - 2025

Undergraduate, 2024 - 2025, 2023 - 2024

Undergraduate, 2023 - 2024

Öğretmenlik Uygulaması (Pedagojik Formasyon) (D), Undergraduate, 2023 - 2024

Journal articles indexed in SCI, SSCI, and AHCI

- I. **On special curves in Lie groups with Myller configuration**
İşbilir Z., Doğan Yazıcı B., Tosun M.
Mathematical Methods in the Applied Sciences, vol.47, no.14, pp.11693-11708, 2024 (SCI-Expanded)
- II. **On electromagnetic curves and geometric phase associated with frontals in de-Sitter 2-space**
DOĞAN YAZICI B., ÖZKALDI KARAKUŞ S.
Indian Journal of Physics, vol.98, no.3, pp.1021-1030, 2024 (SCI-Expanded)
- III. **Quasi-type frame and quasi-type osculating curves in Myller configuration**
DOĞAN YAZICI B., Tosun M.
Filomat, vol.38, no.8, pp.2813-2820, 2024 (SCI-Expanded)
- IV. **Generalized Rectifying Ruled Surfaces of Special Singular Curves**
İşbilir Z., Yazıcı B., Tosun M.
Analele Stiintifice ale Universitatii Ovidius Constanta, Seria Matematica, vol.31, no.3, pp.177-206, 2023 (SCI-Expanded)
- V. **Generalized osculating-type ruled surfaces of singular curves**
DOĞAN YAZICI B., İşbilir Z., Tosun M.
Mathematical Methods in the Applied Sciences, vol.46, no.8, pp.8532-8545, 2023 (SCI-Expanded)
- VI. **The spinor representations of framed Bertrand curves**
İşbilir Z., Yazıcı B., Tosun M.
Filomat, vol.37, no.9, pp.2831-2843, 2023 (SCI-Expanded)
- VII. **Framed curves in three-dimensional Lie groups and a Berry phase model**
DOĞAN YAZICI B., OKUYUCU O. Z., Tosun M.
Journal of Geometry and Physics, vol.182, 2022 (SCI-Expanded)
- VIII. **On the classification of framed rectifying curves in Euclidean space**
Yazıcı B., Karakuş S., Tosun M.
Mathematical Methods in the Applied Sciences, vol.45, no.18, pp.12089-12098, 2022 (SCI-Expanded)
- IX. **Electromagnetic curves and Berry phase construction of a polarized light wave along an optical fiber which is a singular curve on S²**
Yazıcı B., OKUYUCU O. Z., Tosun M.
Optik, vol.264, 2022 (SCI-Expanded)
- X. **Spinor representation of framed Mannheim curves**
Yazıcı B., İşbilir Z., Tosun M.
Turkish Journal of Mathematics, vol.46, no.7, pp.2690-2700, 2022 (SCI-Expanded)

Articles Published in Other Journals

- I. **On HD-Split Euler-Rodrigues Equations**
Doğan Yazıcı B., Özkalı Karakuş S., Gül E.
INTERNATIONAL ELECTRONIC JOURNAL OF GEOMETRY, vol.18, no.1, pp.124-134, 2025 (ESCI)
- II. **ON SPECIAL SINGULAR CURVE COUPLES OF FRAMED CURVES IN 3D LIE GROUPS**
Doğan Yazıcı B., Okuyucu O. Z., Tosun M.
Communications Faculty of Sciences University of Ankara Series A1: Mathematics and Statistics, vol.72, no.3, pp.710-720, 2023 (ESCI)
- III. **On adjoint curves of framed curves and some ruled surfaces**
DOĞAN YAZICI B., ÖZKALDI KARAKUŞ S., TOSUN M.
HONAM MATHEMATICAL JOURNAL, vol.45, no.3, pp.380-396, 2023 (ESCI)
- IV. **SPINOR REPRESENTATIONS OF FRAMED CURVES IN THE THREE-DIMENSIONAL LIE GROUPS**
İŞBİLİR Z., DOĞAN YAZICI B., TOSUN M.
JOURNAL OF DYNAMICAL SYSTEMS AND GEOMETRIC THEORIES, vol.21, no.1, pp.61-83, 2023 (ESCI)
- V. **Generalized Bertrand and Mannheim Curves in 3D Lie Groups**
Okuyucu O. Z., Doğan Yazıcı B.
Fundamental journal of mathematics and applications (Online), vol.5, no.3, pp.201-209, 2022 (Peer-Reviewed Journal)
- VI. **ON FRAMED TZITZEICA CURVES IN EUCLIDEAN SPACE**
DOĞAN YAZICI B., ÖZKALDI KARAKUŞ S., TOSUN M.
FACTA UNIVERSITATIS-SERIES MATHEMATICS AND INFORMATICS, vol.37, no.2, 2022 (Peer-Reviewed Journal)
- VII. **Framed Curves and Their Applications Based on a New Differential Equation**
Yazıcı B., Karakus, S., Tosun M.
International Electronic Journal of Geometry, vol.15, pp.41-56, 2022 (Scopus)
- VIII. **Multicomponent hybrid numbers: On algebraic properties and matrix representations of hybrid-hyperbolic numbers**
DOĞAN YAZICI B., TOSUN M.
NOTES ON NUMBER THEORY AND DISCRETE MATHEMATICS, vol.28, no.1, pp.26-40, 2022 (Peer-Reviewed Journal)
- IX. **Characterizations of Framed Curves in Four-Dimensional Euclidean Space**
DOĞAN YAZICI B., ÖZKALDI KARAKUŞ S., TOSUN M.
Universal Journal of Mathematics and Applications, vol.4, no.4, pp.125-131, 2021 (Peer-Reviewed Journal)
- X. **A study on spacelike rectifying curves in Minkowski 3-space**
DOĞAN YAZICI B., ÖZKALDI KARAKUŞ S.
TBILISI MATHEMATICAL JOURNAL, pp.11-26, 2020 (ESCI)

Books

- I. **Generalized Padovan Pauli Quaternions**
İşbilir Z., Doğan Yazıcı B., Tosun M.
in: Changes and Innovations in Social Systems-Part of the book series: Studies in Systems, Decision and Control, Sarka Hoskova-Mayerová, Cristina Flaut, Daniel Flaut, Pavlina Racková, Editor, Springer Nature, Zug, pp.207-228, 2025
- II. **Framed normal curves in Euclidean space**
DOĞAN YAZICI B., ÖZKALDI KARAKUŞ S., TOSUN M.
in: Framed normal curves in Euclidean space (in TBILISI - MATHEMATICS), Hvedri Inassaridze, Editor, Sciendo, pp.27-37, 2021

Papers Presented at Peer-Reviewed Scientific Conferences

- I. Characterization of parallel Z-equidistant ruled surfaces with Myller configuration
DOĞAN YAZICI B., TOSUN M.
20th International Geometry Symposium, Van, Turkey, 18 - 20 July 2024, (Summary Text)
- II. On the Algebraic Structures of Hybrid Numbers with Matrix Theory
DOĞAN YAZICI B.
7th International HYBRID Conference on Mathematical Advances and Applications, Turkey, 8 - 11 May 2024, (Summary Text)
- III. ON GENERALIZED QUASI-TYPE RECTIFYING CURVES
DOĞAN YAZICI B., TOSUN M.
VII World Congress of Turkic World Mathematicians-TWMS Congress-2023, Turkestan, Kazakhstan, 20 - 23 September 2023, (Full Text)
- IV. SPINOR REPRESENTATIONS OF A CURVE WITH FRENET-TYPE FRAME IN MYLLER CONFIGURATION FOR 3-DIMENSIONAL LIE GROUPS
İŞBİLİR Z., DOĞAN YAZICI B., TOSUN M.
VII World Congress of Turkic World Mathematicians-TWMS Congress-2023, Turkestan, Kazakhstan, 20 - 23 September 2023, (Full Text)
- V. Generalized Normal Ruled Surfaces of Frenet-Type Framed Curves
DOĞAN YAZICI B., İŞBİLİR Z., TOSUN M.
Session of Mathematical Communications, Romania, 10 December 2022, (Summary Text)
- VI. Generalized Rectifying Ruled Surfaces of Special Singular Curves
İŞBİLİR Z., DOĞAN YAZICI B., TOSUN M.
11th INTERNATIONAL EURASIAN CONFERENCE ON MATHEMATICAL SCIENCES AND APPLICATIONS, İstanbul, Turkey, 29 August - 01 September 2022, pp.189-190, (Summary Text)
- VII. Bertrand and Mannheim Curves of Framed Curves in Three-Dimensional Lie Groups
DOĞAN YAZICI B., OKUYUCU O. Z., TOSUN M.
11th INTERNATIONAL EURASIAN CONFERENCE ON MATHEMATICAL SCIENCES AND APPLICATIONS, Turkey, 29 August 2022, (Summary Text)
- VIII. Smarandache Curves of Fronts in the Sphere
DOĞAN YAZICI B., ÖZKALDI KARAKUŞ S., TOSUN M.
11th INTERNATIONAL EURASIAN CONFERENCE ON MATHEMATICAL SCIENCES AND APPLICATIONS, Turkey, 29 August 2022, (Summary Text)
- IX. Smooth curves with singular points in three-dimensional Lie groups
DOĞAN YAZICI B., OKUYUCU O. Z., TOSUN M.
19th INTERNATIONAL GEOMETRY SYMPOSIUM, Turkey, 27 June 2022, (Summary Text)
- X. Parallel p-equidistant ruled surface of special singular curves
DOĞAN YAZICI B., ÖZKALDI KARAKUŞ S., TOSUN M.
19th INTERNATIONAL GEOMETRY SYMPOSIUM, Turkey, 27 June 2022, (Summary Text)
- XI. Characterizations of Framed Curves in Four-Dimensional Euclidean Space
DOĞAN YAZICI B., ÖZKALDI KARAKUŞ S., TOSUN M.
10th International Eurasian Conference on Mathematical Sciences and Applications (IECMSA-2021), Turkey, 25 August 2021, (Summary Text)
- XII. On Framed Tzitzeica Curves in Euclidean Space
DOĞAN YAZICI B., ÖZKALDI KARAKUŞ S., TOSUN M.
18th International Geometry Symposium in Honour of Prof.Dr. Sadık KELEŞ, Turkey, 12 July 2021, (Summary Text)
- XIII. Hybrid-Hyperbolic Numbers
DOĞAN YAZICI B., TOSUN M.
12th International Conference on Clifford Algebras and Their Applications in Mathematical Physics (ICCA12), China, 3 - 07 August 2020, (Summary Text)

- XIV. **A Study on Rectifying Non-Null Curves in Minkowski 3-space**
DOĞAN B., ÖZKALDI KARAKUŞ S.
16th International Geometry Symposium, 4 - 07 July 2018, (Summary Text)
- XV. **Some Characterizations of Quaternionic Normal Curves**
YILDIZ Ö. G., DOĞAN B., ÖZKALDI KARAKUŞ S.
15th International Geometry Symposium, 3 - 06 July 2017, (Summary Text)

Activities in Scientific Journals

Mathematical Sciences and Applications E-Notes, Technical Redactor, 2023 - Continues
Mathematical Sciences and Applications E-Notes, Article Editor, 2023 - Continues
Fundamental journal of mathematics and applications (Online), Article Editor, 2021 - 2022

Peer Reviews in Scientific Publications

Universal Journal of Mathematics and Applications, Other Indexed Journal, March 2024
OPTICAL AND QUANTUM ELECTRONICS, Journal Indexed in SCI-E, March 2024
JOURNAL OF SCIENCE AND ARTS, Journal Indexed in ESCI, December 2023
Erzincan Üniversitesi Fen Bilimleri Enstitüsü Dergisi, National Scientific Refreed Journal, August 2022
Konuralp Journal of Mathematics, Other Indexed Journal, April 2022
Fundamental journal of mathematics and applications (Online), Other Indexed Journal, July 2020
Journal of mathematical sciences and modelling (Online), Other Indexed Journal, January 2019

Awards

Doğan Yazıcı B., Matematik Bölüm Birinciliği, Sakarya Üniversitesi, January 2015