

BETÜL BULCA SOKUR

ASSOC. PROF.

Email : bbulca@uludag.edu.tr

Office Phone : [+90 224 294 2851](tel:+902242942851)

International Researcher IDs

ScholarID: 3rxvcqsAAAAJ

ORCID: 0000-0001-5861-0184

Publons / Web Of Science ResearcherID: AAG-7693-2021

ScopusID: 35226209600

Yoksis Researcher ID: 25447

Learning Knowledge

Doctorate 2008 - 2013	Bursa Uludağ University, FEN BİLİMLERİ ENSTİTÜSÜ, Matematik (Dr), Turkey
Postgraduate 2006 - 2008	Bursa Uludağ University, FEN BİLİMLERİ ENSTİTÜSÜ, Matematik (YI) (Tezli), Turkey
Undergraduate 2002 - 2006	Anadolu University, Faculty Of Science, Department Of Mathematics, Turkey

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, E4 deki yüzeylerin bir karakterizasyonu, Bursa Uludağ University, FEN BİLİMLERİ ENSTİTÜSÜ, Matematik (Dr), 2013

Postgraduate, En deki elastik eğrilerin bir karakterizasyonu, Bursa Uludağ University, FEN BİLİMLERİ ENSTİTÜSÜ, Matematik (YI) (Tezli), 2008

Academic Titles / Tasks

Associate Professor 2017 - Continues	Bursa Uludağ University, FEN-EDEBİYAT FAKÜLTESİ, MATEMATİK
Assistant Professor 2016 - 2017	Bursa Uludağ University, FEN-EDEBİYAT FAKÜLTESİ, MATEMATİK
Research Assistant 2013 - 2016	Bursa Uludağ University, FEN-EDEBİYAT FAKÜLTESİ, MATEMATİK

Published journal articles indexed by SCI, SSCI, and AHCI

1. **General Rotational Surfaces Satisfying $\Delta x(T) = \phi x(T)$**
Demirbas E., Arslan K., Bulca B.
MEDITERRANEAN JOURNAL OF MATHEMATICS, vol.19, no.1, 2022 (SCI-Expanded)
2. **General rotational xi-surfaces in Euclidean spaces**
Arslan K., Aydin Y., Bulca B.
TURKISH JOURNAL OF MATHEMATICS, vol.45, no.3, pp.1287-1299, 2021 (SCI-Expanded)
3. **Rotational submanifolds in Euclidean spaces**
ARSLAN K., Bayram B., BULCA B., Ozturk G.
INTERNATIONAL JOURNAL OF GEOMETRIC METHODS IN MODERN PHYSICS, vol.16, no.2, 2019 (SCI-Expanded)
4. **A GEOMETRIC MODELING OF TRACHEAL ELEMENTS OF THE CHARD (Beta vulgaris) LEAF**
Arslan K., Bulca B., Ozdemir C., Ozdemir A., Bozdog B.
PLANTA DANINHA, vol.37, 2019 (SCI-Expanded)
5. **ON GENERALIZED ROTATIONAL SURFACES IN EUCLIDEAN SPACES**
ARSLAN K., BULCA B., Kosova D.
JOURNAL OF THE KOREAN MATHEMATICAL SOCIETY, vol.54, no.3, pp.999-1013, 2017 (SCI-Expanded)
6. **Meridian Surfaces with Constant Mean Curvature in Pseudo-Euclidean 4-Space with Neutral Metric**
BULCA B., Milousheva V.
MEDITERRANEAN JOURNAL OF MATHEMATICS, vol.14, no.2, 2017 (SCI-Expanded)
7. **MERIDIAN SURFACES IN E-4 WITH POINTWISE 1-TYPE GAUSS MAP**
ARSLAN K., BULCA B., Milousheva V.
BULLETIN OF THE KOREAN MATHEMATICAL SOCIETY, vol.51, no.3, pp.911-922, 2014 (SCI-Expanded)
8. **Semiparallel wintgen ideal surfaces in E_n**
BULCA B., ARSLAN K.
Comptes Rendus de L'Academie Bulgare des Sciences, vol.67, no.5, pp.613-622, 2014 (SCI-Expanded)
9. **Coordinate Finite Type Rotational Surfaces in Euclidean Spaces**
Bayram B. (., ARSLAN K., Onen N., BULCA B.
FILOMAT, vol.28, no.10, pp.2131-2140, 2014 (SCI-Expanded)
10. **SEMIPARALLEL WINTGEN IDEAL SURFACES IN E_n**
BULCA B., ARSLAN K.
COMPTES RENDUS DE L ACADEMIE BULGARE DES SCIENCES, vol.67, no.5, pp.613-622, 2014 (SCI-Expanded)
11. **Surfaces given with the Monge patch in E_4**
BULCA B., ARSLAN K.
Journal of Mathematical Physics, Analysis, Geometry, vol.9, no.4, pp.435-447, 2013 (SCI-Expanded)
12. **Surfaces Given with the Monge Patch in $E-4$**
Bulca B., Arslan K.
JOURNAL OF MATHEMATICAL PHYSICS ANALYSIS GEOMETRY, vol.9, no.4, pp.435-447, 2013 (SCI-Expanded)
13. **Generalized Rotation Surfaces in $E-4$**
ARSLAN K., Bayram B. (., BULCA B., Ozturk G.
RESULTS IN MATHEMATICS, vol.61, pp.315-327, 2012 (SCI-Expanded)
14. **SPHERICAL PRODUCT SURFACES IN $E-4$**
BULCA B., ARSLAN K., Bayram B. (., Ozturk G.
ANALELE STIINTIFICE ALE UNIVERSITATII OVIDIUS CONSTANTA-SERIA MATEMATICA, vol.20, no.1, pp.41-54, 2012 (SCI-Expanded)

15. **On the solution of the monge-ampere equation $Z_{xx}Z_{yy}-Z^2_{xy} = f(x,y)$ with quadratic right side**
Aminov Y., ARSLAN K., Kiliç Bayram B., BULCA B., MURATHAN C., Öztürk G.
Journal of Mathematical Physics, Analysis, Geometry, vol.7, no.3, pp.203-211, 2011 (SCI-Expanded)
16. **TENSOR PRODUCT SURFACES WITH POINTWISE 1-TYPE GAUSS MAP**
ARSLAN K., BULCA B., Kilic B., Kim Y. H., MURATHAN C., Ozturk G.
BULLETIN OF THE KOREAN MATHEMATICAL SOCIETY, vol.48, no.3, pp.601-609, 2011 (SCI-Expanded)
17. **VRANCEANU SURFACE IN E-4 WITH POINTWISE 1-TYPE GAUSS MAP**
Arslan K., Bayram B. K., Bulca B., Kim Y. H., Murathan C., Ozturk G.
INDIAN JOURNAL OF PURE & APPLIED MATHEMATICS, vol.42, no.1, pp.41-51, 2011 (SCI-Expanded)
18. **Rotational embeddings in E-4 with pointwise 1-type gauss map**
ARSLAN K., Bayram B. K., BULCA B., Kim Y. H., MURATHAN C., Ozturk G.
TURKISH JOURNAL OF MATHEMATICS, vol.35, no.3, pp.493-499, 2011 (SCI-Expanded)
19. **On the Solution of the Monge-Ampere Equation $Z(xx)Z(yy)-Z(xy)^2=f(x, y)$ with Quadratic Right Side**
Aminov Y., Arslan K., Bayram B. (., Bulca B., Murathan C., Ozturk G.
JOURNAL OF MATHEMATICAL PHYSICS ANALYSIS GEOMETRY, vol.7, no.3, pp.203-211, 2011 (SCI-Expanded)
20. **Superconformal ruled surfaces in E4**
Bayram B., Bulca B., ARSLAN K., Öztürk G.
Mathematical Communications, vol.14, no.2, pp.235-244, 2009 (SCI-Expanded)

Articles Published in Other Journals

1. **Rotational Self-Shrinkers in Euclidean Spaces**
ARSLAN K., Aydın Y., Sokur B.
International Electronic Journal of Geometry, vol.17, no.1, pp.34-43, 2024 (ESCI)
2. **On constant-ratio surfaces of rotation in Euclidean 4-space**
ARSLAN K., BULCA SOKUR B., Demirbaş E.
Asian-European Journal of Mathematics, vol.16, no.11, 2023 (ESCI)
3. **Conchoidal Surfaces in Euclidean 3-space Satisfying $\Delta x_{\{i\}}=\lambda_{\{i\}}x_{\{i\}}$**
Sokur B., Dirim T.
Universal Journal of Mathematics and Applications, vol.6, no.3, pp.114-121, 2023 (Scopus)
4. **Translation-Factorable Surfaces in 4-dimensional Euclidean Space**
PAMUK E. A., BULCA B.
Konuralp Journal of Mathematics, vol.9, no.1, pp.193-200, 2021 (Peer-Reviewed Journal)
5. **A geometric and mechanical description of the talus and cochlea tibiae in horse and ox**
İşbilir F., Çelik A. B., Arslan K., Bulca B., Yıldız B.
Journal of research in veterinary medicine (Online), vol.40, no.1, pp.54-60, 2021 (Peer-Reviewed Journal)
6. **The Geometry of Ribbons**
Arslan K., Bulca B., Öztürk G.
TURKISH JOURNAL OF SCIENCE, vol.6, no.1, pp.36-44, 2021 (Peer-Reviewed Journal)
7. **Rotational λ – hypersurfaces in Euclidean spaces**
Arslan K., Sütveren A., Bulca B.
Creative Mathematics and Informatics, vol.30, no.1, pp.29-40, 2021 (Peer-Reviewed Journal)
8. **Rotational surfaces with rotations in x^3x^4 -plane**
ARSLAN K., BULCA SOKUR B.
Applied Mathematics E - Notes, vol.21, pp.103-109, 2021 (ESCI)
9. **ON WEAK BIHARMONIC GENERALIZED ROTATIONAL SURFACE IN E^4**
Harmanlı M., ARSLAN K., BULCA B.
Journal of Universal Mathematics, vol.2, no.2, pp.166-174, 2019 (Peer-Reviewed Journal)
10. **Generalized Aminov surfaces given by a Monge patch in the Euclidean four space**

- Bulca B., Arslan K.
Differential Geometry -Dynamical Systems, vol.21, pp.52-62, 2019 (Peer-Reviewed Journal)
11. **Conchoid curves and surfaces in Euclidean 3-Space**
BULCA B., Oruç S. N., ARSLAN K.
Balıkesir Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.20, no.2, pp.467-481, 2018 (Peer-Reviewed Journal)
 12. **On Total Shear Curvature of Surfaces in $E\{n,2\}$**
BULCA B., ARSLAN K.
Sakarya University Journal of Science, vol.22, pp.1765-1769, 2018 (Peer-Reviewed Journal)
 13. **Rotational surfaces in higher dimensional Euclidean spaces**
Arslan K., Bayram B., Bulca B., Kosova D., Ozturk G.
Rendiconti del Circolo Matematico di Palermo, vol.67, no.1, pp.59-66, 2018 (Scopus)
 14. **A Characterization of Involutes and Evolutes of a Given Curve in $E-n$**
Ozturk G., ARSLAN K., BULCA B.
KYUNGPOOK MATHEMATICAL JOURNAL, vol.58, no.1, pp.117-135, 2018 (ESCI)
 15. **ON GENERALIZED SPHERICAL SURFACES IN EUCLIDEAN SPACES**
Bayram B., ARSLAN K., BULCA B.
HONAM MATHEMATICAL JOURNAL, vol.39, no.3, pp.363-377, 2017 (ESCI)
 16. **Pseudo-Riemannian Submanifolds with 3-planar Geodesics**
Arslan K., Bulca B., Öztürk G.
Sinop University Journal of Natural Sciences, vol.2, no.1, pp.107-112, 2017 (Peer-Reviewed Journal)
 17. **Meridian Surfaces with Parallel Normalized Mean Curvature Vector Field in Pseudo-Euclidean 4-space with Neutral Metric**
BULCA B., Milousheva V.
International Journal of Geometry, vol.6, no.1, pp.67-84, 2017 (Peer-Reviewed Journal)
 18. **Canal surfaces in 4-dimensional Euclidean space**
BULCA B., ARSLAN K., BAYRAM B., ÖZTÜRK G.
An International Journal of Optimization and Control: Theories Applications (IJOCTA), vol.7, no.1, pp.83-89, 2017 (Peer-Reviewed Journal)
 19. **On translation surfaces in 4-dimensional Euclidean space**
ARSLAN K., Bayram B., BULCA B., Ozturk G.
ACTA ET COMMENTATIONES UNIVERSITATIS TARTUENSIS DE MATHEMATICA, vol.20, no.2, pp.123-133, 2016 (ESCI)
 20. **Surface pencils in Euclidean 4-space $E-4$**
BULCA B., ARSLAN K.
ASIAN-EUROPEAN JOURNAL OF MATHEMATICS, vol.9, no.4, 2016 (ESCI)
 21. **Mixed Product Surfaces in E^4**
BULCA B., ARSLAN K.
Beyken Üniversitesi Fen ve Mühendislik Bilimleri Dergisi, vol.9, no.1, pp.1-12, 2016 (Peer-Reviewed Journal)
 22. **MERIDIAN SURFACES OF WEINGARTEN TYPE IN 4 DIMENSIONAL EUCLIDEAN SPACE E^4**
ÖZTÜRK G., BULCA B., BAYRAM B., ARSLAN K.
Konuralp Journal of Mathematics, vol.4, no.1, pp.239-245, 2016 (Peer-Reviewed Journal)
 23. **Mixed product surfaces in euclidean 3 space E^3**
BULCA B., ARSLAN K.
New Trends in Mathematical Science, vol.4, no.2, pp.203-210, 2016 (Peer-Reviewed Journal)
 24. **Focal representation of k-slant Helices in E^{m+1}**
Ozturk G., BULCA B., Bayram B., ARSLAN K.
ACTA UNIVERSITATIS SAPIENTIAE-MATHEMATICA, vol.7, no.2, pp.200-209, 2015 (ESCI)
 25. **SEMI-PARALLEL MERIDIAN SURFACES IN $E-4$**
BULCA B., ARSLAN K.
INTERNATIONAL ELECTRONIC JOURNAL OF GEOMETRY, vol.8, no.2, pp.147-153, 2015 (ESCI)
 26. **Normal transport surfaces in Euclidean 4 space E^4**

- ARSLAN K., BULCA B., BAYRAM B., ÖZTÜRK G.
Differential Geometry - Dynamical Systems, no.17, pp.13-23, 2015 (Peer-Reviewed Journal)
27. **Normal Transport Surfaces in Euclidean 4 space**
ARSLAN K., BULCA B., BAYRAM B., ÖZTÜRK G.
Differential Geometry and Dynamical Systems(DGDS), vol.17, no.1, pp.13-23, 2015 (Peer-Reviewed Journal)
28. **SEMIPARALLEL TENSOR PRODUCT SURFACES IN E4**
BULCA B., ARSLAN K.
INTERNATIONAL ELECTRONIC JOURNAL OF GEOMETRY, vol.7, no.1, pp.36-43, 2014 (ESCI)
29. **ON GENERALIZED LN SURFACES IN E4**
BULCA B.
MATHEMATICAL SCIENCES AND APPLICATIONS E-NOTES, vol.1, no.2, pp.35-41, 2013 (Peer-Reviewed Journal)
30. **Characterization of curves in E²ⁿ⁻¹ with 1 type Darboux vector**
KOCAYİĞİT H., ÖZTÜRK G., BULCA B., BAYRAM B., ARSLAN K.
Mathematica Moravica, vol.17, no.2, pp.29-37, 2013 (Peer-Reviewed Journal)
31. **SELF SIMILAR SURFACES IN EUCLIDEAN SPACES**
ETEMOĞLU E., ARSLAN K., BULCA B.
SELÇUK J. APPL. MATH., vol.14, no.1, pp.71-81, 2013 (Peer-Reviewed Journal)
32. **BENZ SURFACES INDUCED BY ROTATIONAL SURFACES IN E4**
ARSLAN K., BULCA B., MILOUSHEVA V.
DIFFERENTIAL GEOMETRY DYNAMICAL SYSTEMS, vol.14, pp.5-18, 2012 (Peer-Reviewed Journal)
33. **On canal surfaces in E³**
ÖZTÜRK G., BAYRAM B., BULCA B., ARSLAN K.
Selçuk J. Appl. Math., vol.11, no.2, pp.103-108, 2010 (Peer-Reviewed Journal)
34. **A Geometric Description of the Peritechia of the Pseudonectria rousseliana Mont Wollenw**
ARSLAN K., AKGÜL H., ERGÜL C. C., HÜSEYİN E., ÖZTÜRK G., BULCA B.
J. BIOL. ENVIRON. SCI., vol.3, no.9, pp.67-70, 2009 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

1. **CONCHOIDAL SURFACES IN EUCLIDEAN 3-SPACE SATISFYING $\Delta x_i = \lambda x_i$**
Dirim T., BULCA SOKUR B.
ISTANBUL INTERNATIONAL MODERN SCIENTIFIC RESEARCH CONGRESS –III, İstanbul, Turkey, 06 May 2022, pp.35
2. **The theory and the geometric modelling of curves and surfaces in Euclidean spaces**
BULCA B.
Women in Mathematics in South-Eastern Europe, Bulgaria, 10 - 11 December 2020
3. **A Characterization of Weak Biharmonic Rotational Surfaces in E4**
BULCA B., ARSLAN K., Harmanlı M.
17. International Geometry Symposium, Erzincan, Turkey, 19 - 22 June 2019
4. **On Weak Biharmonic Generalized Rotation Surface in E4**
Harmanlı M., ARSLAN K., BULCA B.
2nd International Conference on Mathematical Advances and Applications, İstanbul, Turkey, 3 - 05 May 2019
5. **Translation-Factorable surfaces in 4-dimensional Euclidean Space**
Pamuk E. A., BULCA B.
2nd International Conference on Mathematical Advances and Applications, İstanbul, Turkey, 3 - 05 May 2019
6. **Meridian Surfaces with Parallel Normalized and Constant Mean Curvature in Pseudo-Euclidean 4-Space with Neutral Metric**
BULCA B., Milousheva V.
ICM 2018, Rio, Brazil, 1 - 09 August 2018
7. **A Geometric Modeling of Tracheal Elements of Chard (Beta vulgaris var. cicla L.) Leaf**

- ARSLAN K., BULCA B., ÖZDEMİR A., bozdağ b., ÖZDEMİR C.
16th International Geometry Symposium, Manisa, Turkey, 04 July 2018
8. **Geometric Modeling and Statistical Comparison of Some Sage (Salvia L.) Glandular Hairs**
ÖZDEMİR A., BULCA B., bozdağ b., ÖZDEMİR C., ARSLAN K.
16th International Geometry Symposium, Manisa, Turkey, 04 July 2018
9. **On Rotational Submanifolds in Euclidean Spaces**
ARSLAN K., BAYRAM B., BULCA B., ÖZTÜRK G.
16th International Geometry Symposium, Manisa, Turkey, 4 - 07 July 2018
10. **Grassmann Image of Surfaces in 4-dimensional Euclidean Spaces**
demirbaş e., ARSLAN K., BULCA B.
15th International Geometry Symposium, Amasya, Turkey, 3 - 06 July 2017
11. **Rotational surfaces in Higher Dimensional Euclidean Spaces**
ARSLAN K., BAYRAM B., BULCA B., Kosova D., ÖZTÜRK G.
15. International Geometry Symposium, 3 - 06 July 2017
12. **Convolution of Curves and Surfaces in Euclidean Spaces**
aydöner s., ARSLAN K., BULCA B.
15th International Geometry Symposium, 3 - 06 July 2017
13. **Surface Pencils in Euclidean Spaces**
bulca B., ARSLAN K.
13. Geometri Sempozyumu, Turkey, 27 - 30 July 2015
14. **Coordinate Finite Type Surfaces in Euclidean Spaces**
BAYRAM B., ARSLAN K., ÖNEN N., BULCA B.
13. Geometri Sempozyumu, İstanbul, Turkey, 27 - 30 July 2015, pp.64
15. **Self similar surfaces in Euclidean spaces , Balıkesir , 2012**
ETEMOĞLU E., ARSLAN K., BULCA B.
X. Ulusal Geometri Sempozyumu, Balıkesir, Turkey, 13 - 16 June 2012
16. **On Translation Surface in Euclidean Space", 9. Geometri Sempozyumu, (2011),07-10 Haziran 2011.**
BULCA B., ARSLAN K., BAYRAM B., ÖZTÜRK G.
IX. Geometri Sempozyumu, Samsun, Turkey, 7 - 10 June 2011
17. **On spherical product surfaces in E^3**
ARSLAN K., Bulca B., Bayram B. (., Ozturk G., Ugail H.
2009 International Conference on CyberWorlds, CW '09, Bradford, United Kingdom, 7 - 11 September 2009,
pp.132-137

Courses

- Calculus 2, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022
Calculus 2, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022
Calculus 1, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022
Calculus 1, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022
Matematik 2, Undergraduate, 2022 - 2023
Uygulamalı Geometriye Giriş, Undergraduate, 2022 - 2023, 2021 - 2022
Uygulamalı Geometri, Undergraduate, 2021 - 2022
Matematik 1, Undergraduate, 2022 - 2023
Uygulamalı Geometriye Giriş, Undergraduate, 2020 - 2021
UYGULAMALI GEOMETRİ, Undergraduate, 2017 - 2018
LİNEER CEBİR, Undergraduate, 2017 - 2018, 2016 - 2017
MODERN GEOMETRİK METODLAR VE UYGULAMALARI 1, Postgraduate, 2017 - 2018
LİNEER CEBİR 2, Undergraduate, 2017 - 2018
LİNEER CEBİR 1, Undergraduate, 2017 - 2018

Modern Geometrik Metodlar ve Uygulamaları 2, Postgraduate, 2017 - 2018
MATEMATİK, Undergraduate, 2017 - 2018, 2016 - 2017
TEMEL MATEMATİK 1, Undergraduate, 2017 - 2018, 2016 - 2017
TEMEL MATEMATİK 2, Undergraduate, 2016 - 2017
Temel Diferansiyel Geometri 1, Postgraduate, 2016 - 2017

Scientific Refereeing

Journal of Mathematics, National Scientific Refreed Journal, May 2024
COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS,
National Scientific Refreed Journal, February 2024

Metrics

Publication: 110
Citation (WoS): 224
Citation (Scopus): 186
H-Index (WoS): 9
H-Index (Scopus): 9