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International Researcher IDs

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Education Information

Doctorate, Karadeniz Technical University, -, Matematik, Turkey 1999 - 2002

Postgraduate, Karadeniz Technical University, -, Matematik, Turkey 1995 - 1999

Undergraduate, Karadeniz Technical University, Fen-Edebiyat Fakültesi, Matematik Bölümü, Turkey 1991 - 1995

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, Parametrik Eğrilerin Afin Diferansiyel İnvaryantları, Karadeniz Technical University, -, Matematik, 2002

Postgraduate, Karakteristik Sınıflar, Karadeniz Technical University, -, Matematik, 1999

Research Areas

Mathematics, Differential Geometry, Geometry, Manifolds and Cell Complexes, Natural Sciences

Academic Titles / Tasks

Professor, Karadeniz Technical University, Fen Fakültesi, Matematik, 2020 - Continues

Associate Professor, Karadeniz Technical University, Fen Fakültesi, Matematik Bölümü, 2015 - 2020

Assistant Professor, Karadeniz Technical University, Fen Fakültesi, Matematik Bölümü, 2008 - 2015

Lecturer PhD, Karadeniz Technical University, Fen-Edebiyat Fakültesi, Matematik Bölümü, 2004 - 2008

Research Assistant PhD, Karadeniz Technical University, Fen-Edebiyat Fakültesi, Matematik Bölümü, 2002 - 2004

Research Assistant, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Matematik Bölümü, 1997 - 1999

Academic and Administrative Experience

Courses

Diferansiyel Geometri, Undergraduate, 2012 - 2013

Advising Theses

- SAĞIROĞLU Y., Hiperyüzeylerin Diferansiyel İnvaryantları, Doctorate, U.GÖZÜTOK(Student), Continues
- Sağiroğlu Y., k-constant Curves, Postgraduate, G.Öztürk(Student), 2019
- SAĞIROĞLU Y., Düzlemde İki Eğri Ailesinin Afin Diferansiyel İnvaryantları ve Denklik Problemleri, Postgraduate, D.AYDEMİR(Student), 2017
- SAĞIROĞLU Y., Spacelike Altmanifoldlar Boyunca Lightlike Hiperyüzeyler, Doctorate, G.Güner(Student), 2017
- SAĞIROĞLU Y., Düzlemde Bir Eğrinin Afin Diferansiyel İnvaryantları, Postgraduate, U.GÖZÜTOK(Student), 2016
- SAĞIROĞLU Y., Chern Eşitsizlikleri, Doctorate, Ş.Eken(Student), 2016
- SAĞIROĞLU Y., Galile ve Yarı-Galile Uzaylarında Eğriler, Postgraduate, Y.Keleş(Student), 2014
- SAĞIROĞLU Y., Küresel Eğriler ve Bertrand Eğrileri, Postgraduate, G.Güner(Student), 2011

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **A new method to detect projective equivalences and symmetries of rational 3D curves**
GÖZÜTOK U., ÇOBAN H. A., SAĞIROĞLU Y., Alcázar J. G.
Journal of Computational and Applied Mathematics, vol.419, 2023 (SCI-Expanded)
- II. **Global differential invariants of nondegenerate hypersurfaces**
SAĞIROĞLU Y., GÖZÜTOK U.
TURKISH JOURNAL OF MATHEMATICS, vol.46, no.6, pp.2208-2230, 2022 (SCI-Expanded)
- III. **Ruled surfaces obtained by bending of curves**
GÖZÜTOK U., ÇOBAN H. A., SAĞIROĞLU Y.
TURKISH JOURNAL OF MATHEMATICS, vol.44, no.1, pp.300-306, 2020 (SCI-Expanded)
- IV. **Global Invariants of Paths and Curves in the Two-Dimensional Real Vector Space for Linear Similarity Groups Generated by Dual Numbers**
SAĞIROĞLU Y.
ADVANCES IN APPLIED CLIFFORD ALGEBRAS, vol.29, no.1, 2019 (SCI-Expanded)
- V. **Frenet Frame With Respect to Conformable Derivative**
GÖZÜTOK U., ÇOBAN H. A., SAĞIROĞLU Y.
FILOMAT, vol.33, no.6, pp.1541-1550, 2019 (SCI-Expanded)
- VI. **Metric properties of fuzzy curves and fuzzy invariants**
SAĞIROĞLU Y., GÖZÜTOK U.
JOURNAL OF INTELLIGENT & FUZZY SYSTEMS, vol.37, no.1, pp.1385-1397, 2019 (SCI-Expanded)
- VII. **Scalar curvature of Lagrangian Riemannian submersions and their harmonicity**
MERİÇ Ş. E., KILIÇ E., SAĞIROĞLU Y.
INTERNATIONAL JOURNAL OF GEOMETRIC METHODS IN MODERN PHYSICS, vol.14, no.12, 2017 (SCI-Expanded)
- VIII. **EQUI-AFFINE DIFFERENTIAL INVARIANTS OF A PAIR OF CURVES**
SAĞIROĞLU Y.
TWMS JOURNAL OF PURE AND APPLIED MATHEMATICS, vol.6, no.2, pp.238-245, 2015 (SCI-Expanded)
- IX. **The equivalence of curves in $SL(n, R)$ and its application to ruled surfaces**
Sagiroglu Y.
APPLIED MATHEMATICS AND COMPUTATION, vol.218, no.3, pp.1019-1024, 2011 (SCI-Expanded)

- X. **The equivalence of centro-equiaffine curves**
SAĞIROĞLU Y., Peksen O.
TURKISH JOURNAL OF MATHEMATICS, vol.34, no.1, pp.95-104, 2010 (SCI-Expanded)
- XI. **Infinitely boolean OR-distributive t-norms on complete lattices and pseudo-complements**
KARAÇAL F., SAĞIROĞLU Y.
FUZZY SETS AND SYSTEMS, vol.160, no.1, pp.32-43, 2009 (SCI-Expanded)

Articles Published in Other Journals

- I. **Parallel Curves Based on Normal Vector**
Sağiroğlu Y., Köse G.
Sinop Üniversitesi fen bilimleri dergisi, vol.9, no.1, pp.1-13, 2024 (Peer-Reviewed Journal)
- II. **DIFFERENTIAL INVARIANTS OF TWO AFFINE CURVE FAMILIES**
SAĞIROĞLU Y., AYDEMİR D., GÖZÜTOK U.
JOURNAL OF THE INDONESIAN MATHEMATICAL SOCIETY, vol.25, no.2, pp.85-91, 2019 (ESCI)
- III. **Differential Invariants of Non-degenerate Surfaces**
SAĞIROĞLU Y., KHADJIEV D., GÖZÜTOK U.
APPLICATIONS AND APPLIED MATHEMATICS-AN INTERNATIONAL JOURNAL, vol.3, pp.35-57, 2019 (ESCI)
- IV. **Differential Invariants of Non-degenerate Surfaces**
SAĞIROĞLU Y., KHADJIEV D., GÖZÜTOK U.
APPLICATIONS AND APPLIED MATHEMATICS-AN INTERNATIONAL JOURNAL, vol.Special Is, pp.35-57, 2019 (ESCI)
- V. **Affine Differential Invariants of a Curve in The Plane**
GÖZÜTOK U., SAĞIROĞLU Y.
BULLETIN OF MATHEMATICAL ANALYSIS AND APPLICATIONS, vol.10, no.4, pp.45-57, 2018 (ESCI)
- VI. **Equivalence of Curve Families in $GL(n, R)$ and Differential Invariants**
SAĞIROĞLU Y., GÖZÜTOK U.
GÜMÜŞHANE ÜNİVERSİTESİ FEN BİLİMLERİ ENSTİTÜSÜ DERGİSİ, vol.8, no.2, pp.348-357, 2018 (Peer-Reviewed Journal)
- VII. **DIFFERENTIAL INVARIANTS FOR A CURVE FAMILY IN $GL(n, R)$**
SAĞIROĞLU Y., GÖZÜTOK U.
Sigma Journal of Engineering and Natural Sciences, no.36, pp.341-349, 2018 (ESCI)
- VIII. **Affine Differential Invariants of a Family of n Curves in R^2**
SAĞIROĞLU Y., GÖZÜTOK U.
SAKARYA ÜNİVERSİTESİ JOURNAL OF SCIENCE, no.22, pp.1007-1014, 2018 (Peer-Reviewed Journal)
- IX. **On Fuzzy Length Spaces and Fuzzy Geodesics**
GÖZÜTOK U., SAĞIROĞLU Y.
International Journal of Advanced Engineering Research and Science, no.4, pp.200-202, 2017 (Peer-Reviewed Journal)
- X. **Centro-Equiaffine Differential Invariants of Curve Families**
SAĞIROĞLU Y.
INTERNATIONAL ELECTRONIC JOURNAL OF GEOMETRY, vol.9, pp.23-29, 2016 (Peer-Reviewed Journal)
- XI. **$GL(n, R)$ -Equivalence of a Pair of Curves in Terms of Invariants**
SAĞIROĞLU Y., YAPAR Z.
Journal of Mathematics and System Science, vol.6, pp.16-22, 2016 (Peer-Reviewed Journal)
- XII. **On The Geometry of Closed Timelike Ruled Surfaces in Dual Lorentzian Space**
YAPAR Z., SAĞIROĞLU Y.
International Journal of Applied Mathematics, vol.29, pp.7-18, 2016 (Scopus)
- XIII. **On a motion of a line along two closed ruled surfaces**
YAPAR Z., SAĞIROĞLU Y.
International Journal of Mathematical Analysis, vol.9, no.38, pp.1877-1887, 2015 (Peer-Reviewed Journal)

- XIV. **Curvature Motion on Dual Hyperbolic Unit Sphere H_0^2**
 YAPAR Z., SAĞIROĞLU Y.
 Journal of Applied Mathematics and Physics, vol.2, pp.828-826, 2014 (Peer-Reviewed Journal)
- XV. **The equivalence problem for parametric curves in one-dimensional affine space**
 SAĞIROĞLU Y.
 International Mathematical Forum, no.4, pp.177-184, 2011 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **Affine Differential Invariants of Curves**
 SAĞIROĞLU Y.
 Lap Lambert Academic Publishing, Saarbrücken, 2002

Refereed Congress / Symposium Publications in Proceedings

- I. **Detecting equivalences of hypersurfaces using differential invariants**
 Sağiroğlu Y., Gözütok U.
 ICPAM VAN 2020, Van, Turkey, 3 - 05 September 2020, pp.95
- II. **Detecting affine equivalences of ruled algebraic surfaces using differential invariants**
 Gözütok U., Çoban H. A., Sağiroğlu Y.
 3rd International Conference on Pure and Applied Mathematics (ICPAM-VAN 2020), Van, Turkey, 3 - 05 September 2020, vol.1, pp.71
- III. **Metric Properties of Fuzzy Curves and Fuzzy Invariants**
 SAĞIROĞLU Y., KHADJIEV D., GÖZÜTOK U.
 International Conference on Recent Advances in Pure and applied Mathematics, Trabzon, Turkey, 23 - 27 July 2018, pp.145
- IV. **Conditions for Ruled Surfaces Obtained by Bending to be Developable**
 GÖZÜTOK U., ÇOBAN H. A., SAĞIROĞLU Y.
 International Conference on Recent Advances in Pure and applied Mathematics, Trabzon, Turkey, 23 - 27 July 2018, pp.86
- V. **GL(n,R) Invariants For a Curve Family**
 GÖZÜTOK U., SAĞIROĞLU Y.
 International Conference on Recent Advances in Pure and applied Mathematics, Trabzon, Turkey, 23 - 27 July 2018, pp.85
- VI. **Differential Invariants of Non-degenerate surfaces**
 SAĞIROĞLU Y., KHADJIEV D., GÖZÜTOK U.
 International Conference on Mathematics, İstanbul, Turkey, 3 - 06 July 2018, pp.359
- VII. **Differential Invariants of Non-degenerate Surfaces**
 SAĞIROĞLU Y., KHADJIEV D., GÖZÜTOK U.
 INTERNATIONAL CONFERENCE ON MATHEMATICS, İstanbul, Turkey, 3 - 06 July 2018, pp.359
- VIII. **FUZZY INVARIANTS OF FUZZY CURVES IN THE THREE DIMENSIONAL EUCLIDEAN SPACE**
 SAĞIROĞLU Y., KHADJIEV D., GÖZÜTOK U.
 International Conference on Mathematics and Engineering, İstanbul, Turkey, 10 - 12 May 2017, vol.1, no.1, pp.141
- IX. **Frenet Frame with Respect to Conformable Fractional Derivative**
 GÖZÜTOK U., ÇOBAN H. A., SAĞIROĞLU Y.
 International Conference on Mathematics and Engineering, İstanbul, Turkey, 10 - 12 May 2017, pp.140
- X. **Frenet Frame with Respect to Comformable Fractional Derivative**
 GÖZÜTOK U., ÇOBAN H. A., SAĞIROĞLU Y.
 International Conference on Mathematics and Engineering, İstanbul, Turkey, 10 - 12 May 2017, vol.1, no.1, pp.140

- XI. **Affine Differential Invariants of a Planar Curve**
GÖZÜTOK U., SAĞIROĞLU Y.
International Conference on Mathematics and Engineering, İstanbul, Turkey, 10 - 12 May 2017, pp.75
- XII. **AFFINE DIFFERENTIAL INVARIANTS OF A PLANAR CURVE**
GÖZÜTOK U., SAĞIROĞLU Y.
International Conference on Mathematics and Engineering, İstanbul, Turkey, 10 - 12 May 2017, vol.1, no.1, pp.75
- XIII. **Fuzzy Invariants of Fuzzy Curves in the Three Dimensional Euclidean Space**
SAĞIROĞLU Y., KHADJIEV D., GÖZÜTOK U.
International Conference on Mathematics and Engineering, İstanbul, Turkey, 10 - 12 May 2017, pp.141
- XIV. **Differential Invariants of Two Affine Curve Families in Plane**
SAĞIROĞLU Y., AYDEMİR D., GÖZÜTOK U.
5st International Eurasian Conference on Mathematical Sciences and Applications, Belgrade, Serbia And Montenegro, 16 - 19 August 2016, pp.238
- XV. **Centro-Equiaffine Differential Invariants of Curve Families**
SAĞIROĞLU Y.
4st International Eurasian Conference on Mathematical Sciences and Applications, Athens, Greece, 31 August - 03 September 2015, pp.212
- XVI. **Some Inequalities for Lagrangian Riemannian Submersions**
EKEN Ş., KILIÇ E., SAĞIROĞLU Y., MERİÇ Ş.
XII. Geometri Sempozyumu, Bilecik, Turkey, 23 - 26 June 2014, pp.107
- XVII. **The Invariants and Equivalences of curve Families in $GL(n,R)$**
SAĞIROĞLU Y.
XII. Geometri Sempozyumu, Bilecik, Turkey, 23 - 26 June 2014, pp.117
- XVIII. **CR-Submanifolds of Kaehler-Finsler Manifolds**
EKEN Ş., SAĞIROĞLU Y., KILIÇ E., MERİÇ Ş.
XI. Geometri Sempozyumu, Ordu, Turkey, 1 - 05 July 2013, pp.74
- XIX. **Equivalence of Affine Curves**
SAĞIROĞLU Y.
First International Conference on Analysis and Applied Mathematics, Gümüşhane, Turkey, 18 - 21 October 2012, pp.147
- XX. **A Study on the Spherical Curves and Bertrand Curves in Minkowski 4 Spacetime**
GÜNER G., EKMEKÇİ N., SAĞIROĞLU Y.
1st International Eurasian Conference on Mathematical Sciences and Applications, Prishtine, Kosova, 3 - 07 September 2012, pp.338
- XXI. **A Study on the Spherical Null Curves and Bertrand Curves in Minkowski 4-Spacetime**
TUĞ G., Ekmekci N., SAĞIROĞLU Y.
IECMSA 2012, Prishtine, Kosova, 3 - 07 September 2012, pp.338
- XXII. **Affine Differential Invariants of a Pair of Curves**
SAĞIROĞLU Y.
1st International Eurasian Conference on Mathematical Sciences and Applications, Prishtine, Kosova, 3 - 07 September 2012, pp.218
- XXIII. **$GL(n,R)$ -Equivalence of a Pair of Curves in Terms of Invariants**
SAĞIROĞLU Y.
International Congress in Honour of Professor H.M. Srivastava, Bursa, Turkey, 23 - 26 August 2012, pp.51
- XXIV. **$R(2)$ deki Afin Eğrilerin Global Diferansiyel İnvaryantları**
SAĞIROĞLU Y.
IX. Geometri Sempozyumu, Samsun, Turkey, 7 - 10 June 2011, pp.42
- XXV. **The Equivalence of Curves in $SL(n,R)$ and its Application to Ruled Surfaces**
SAĞIROĞLU Y.
International Congress in Honour of Professor H.M. Srivastava on his 70th Birth Anniversary, Bursa, Turkey, 18 - 21 August 2010, pp.118

- XXVI. **Global Invariants of Regular Curves and Null Curves in the Pseudo-Euclidean Geometry**
PEKŞEN Ö., KHADJIEV D., SAĞIROĞLU Y.
V. International Meeting on Lorentzian Geometry, Taranto, Italy, 8 - 11 July 2009, pp.51
- XXVII. **On Invariants of Curves**
SAĞIROĞLU Y.
V. International Meeting on Lorentzian Geometry, Taranto, Italy, 8 - 11 July 2009, pp.52
- XXVIII. **The Equivalence of Centro-Equiaffine Curves**
Sağiroğlu Y., PEKŞEN Ö.
IV. International Geometry Symposium, Zonguldak, Turkey, 17 - 21 July 2006, pp.90
- XXIX. **Parametrik Eğriler İçin Afin Diferansiyel İnvaryantlar**
SAĞIROĞLU Y.
XVIII. Ulusal Matematik Sempozyumu, İstanbul, Turkey, 5 - 09 September 2005, pp.237-242
- XXX. **Bir Boyutlu Afin Uzayda Eğriler İçin Denklik Problemi**
BAHAR Y.
XIV. Ulusal Matematik Sempozyumu, Eskişehir, Turkey, 19 - 21 September 2001, pp.18
- XXXI. **Karakteristik Sınıflar**
BAHAR Y.
I. Türk Dünyası Matematik Sempozyumu, Elazığ, Turkey, 29 June - 02 July 1999, pp.26

Supported Projects

SAĞIROĞLU Y., GÖZÜTOK U., ÇOBAN H. A., Project Supported by Higher Education Institutions, CEBİRSEL EĞRİLERİN BENZERLİKLERİNİN VE SİMETRİLERİNİN YENİ VE ETKİLİ BİR ALGORİTMA İLE SAPTANMASI, 2021 - 2023
SAĞIROĞLU Y., GÖZÜTOK U., TÜBİTAK Project, Hiperyüzeylerin Diferansiyel İnvaryantları, 2019 - 2020
SAĞIROĞLU Y., Project Supported by Higher Education Institutions, Galilean Uzayında Eğriler ve Yüzeyler, 2013 - 2015
SAĞIROĞLU Y., Project Supported by Higher Education Institutions, $R(2)$ de Eğrilerin Afin Diferansiyel İnvaryantları, 2010 - 2012

Memberships / Tasks in Scientific Organizations

Türk Matematik Derneği, Member, 2013 - Continues
Matematik Derneği, Member, 2006 - Continues

Scientific Refereeing

Asian Journal of Mathematics and Computer Research, Other Indexed Journal, May 2018
Turkish Journal of Mathematics, SCI Journal, October 2017
Physical Science International Journal, Other Indexed Journal, June 2017
British Journal of Mathematics and Computer Sciences, Other Indexed Journal, May 2017
British Journal of Mathematics and Computer Sciences, Other Indexed Journal, April 2016
Asian Journal of Mathematics and Computer Research, Other Indexed Journal, December 2015
Iranian journal of science and technology, SCI Journal, November 2014
African Journal of Mathematics and Computer Science Research, Other Indexed Journal, May 2013

Metrics

Publication: 61
Citation (WoS): 54

Citation (Scopus): 45

H-Index (WoS): 5

H-Index (Scopus): 4

Congress and Symposium Activities

Centro-equiaffine differential invariants of curve families, Attendee, Athína, Greece, 2015

The Invariants and Equivalences of Curve Families in $GL(n,R)$, Attendee, Bilecik, Turkey, 2014

Some inequalities for Lagrangian Riemannian submersions, Attendee, Bilecik, Turkey, 2014

Equivalence of Affine Curves, Attendee, Gümüşhane, Turkey, 2012

Affine Differential Invariants of a Pair of Curves, Attendee, Prishtine, Kosova, 2012

A study on the spherical curves and Bertrand curves in Minkowski 4 spacetime, Attendee, Kosova, 2012

$GL(n,R)$ -Equivalence of a Pair of Curves in Terms of Invariants, Attendee, Bursa, Turkey, 2012

$R(2)$ deki Afin Eğrilerin Global Diferansiyel İnvaryantları, Attendee, Samsun, Turkey, 2011

The Equivalence of Curves in $SL(n,R)$ and its Application to Ruled Surfaces, Attendee, Bursa, Turkey, 2010

On invariants of curves, Attendee, Taranto, Italy, 2009

Global invariants of regular curves and null curves in the pseudo-Euclidean geometry, Attendee, Taranto, Turkey, 2009

The Equivalence of Centro-Equiaffine Curves, Attendee, Zonguldak, Turkey, 2006

Parametrik Eğriler İçin Afin Diferansiyel İnvaryantlar, Attendee, İstanbul, Turkey, 2005

Bir Boyutlu Afin Uzayda Eğriler İçin Denklik Problemi, Attendee, Eskişehir, Turkey, 2001

Karakteristik Sınıflar, Attendee, Elazığ, Turkey, 1999

Scholarships

Yurtdışı Araştırma, YOK, 2013 - Continues

Non Academic Experience

Azerbaycan Mimarlık ve İnşaat Üniversitesi

Milli Eğitim Bakanlığı