

## Asst. Prof. Abdullah Dertli

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: W-2925-2017

Yoksis Researcher ID: 57770

### Education Information

Doctorate, Ondokuz Mayıs University, Fen Bilimleri Enstitüsü, Matematik (Dr), Turkey 2012 - 2016

Postgraduate, Trakya University, Fen Bilimleri Enstitüsü, Matematik (Yl) (Tezli), Turkey 2009 - 2012

Undergraduate, Trakya University, Fen-Edebiyat Fakültesi, Matematik Pr., Turkey 2005 - 2009

### Dissertations

Doctorate, Halkalar üzerinde tanımlı kodlar hakkında bazı araştırmalar, Ondokuz Mayıs University, Fen Bilimleri Enstitüsü, Matematik (Dr), 2016

Postgraduate, Belirli tipteki halkalar üzerindeki kodlar hakkında, Trakya University, Fen Bilimleri Enstitüsü, Matematik (Yl) (Tezli), 2012

### Research Areas

Mathematics

### Academic Titles / Tasks

Assistant Professor, Ondokuz Mayıs University, Fen Fakültesi, Matematik Bölümü, 2019 - Continues

Research Assistant, Ondokuz Mayıs University, Fen Fakültesi, Matematik Bölümü, 2012 - 2019

### Published journal articles indexed by SCI, SSCI, and AHCI

- I. **REVERSIBLE  $G$ -CODES OVER THE RING  $F_{j,k}$  WITH APPLICATIONS TO DNA CODES**  
ÇENGELLENMİŞ Y., Dertli A., Dougherty S. T., Korban A., Sahinkaya S., Ustun D.  
ADVANCES IN MATHEMATICS OF COMMUNICATIONS, vol.17, no.6, pp.1406-1421, 2023 (SCI-Expanded)
- II. **APPLICATION OF CONSTACYCLIC CODES OVER THE SEMI LOCAL RING  $F_{\mathfrak{p}^m} + vF(\mathfrak{p}^m)$**   
Bag T., Dertli A., Cengellenmis Y., Upadhyay A. K.  
INDIAN JOURNAL OF PURE & APPLIED MATHEMATICS, vol.51, no.1, pp.265-275, 2020 (SCI-Expanded)

- III. **SKEW CONSTACYCLIC CODES OVER THE LOCAL FROBENIUS NON-CHAIN RINGS OF ORDER 16**  
Aydin N., Cengellenmis Y., Dertli A., Dougherty S. T., Salturk E.  
ADVANCES IN MATHEMATICS OF COMMUNICATIONS, vol.14, no.1, pp.53-67, 2020 (SCI-Expanded)
- IV. **Some Constacyclic Codes over  $Z(4)[u]/\langle u^2 \rangle$ , New Gray Maps, and New Quaternary Codes**  
ÇENGELLENMİŞ Y., Dertli A., Aydin N.  
ALGEBRA COLLOQUIUM, vol.25, no.3, pp.369-376, 2018 (SCI-Expanded)
- V. **On some constacyclic codes over , their images, and new codes**  
Aydin N., ÇENGELLENMİŞ Y., Dertli A.  
DESIGNS CODES AND CRYPTOGRAPHY, vol.86, no.6, pp.1249-1255, 2018 (SCI-Expanded)
- VI. **Some results on the linear codes over the finite ring  $F_2 + v(1)F_2 + \dots + v(r)F_2$**   
Dertli A., ÇENGELLENMİŞ Y., Eren Ş.  
INTERNATIONAL JOURNAL OF QUANTUM INFORMATION, vol.14, no.1, 2016 (SCI-Expanded)
- VII. **On quantum codes obtained from cyclic codes over  $A(2)$**   
Dertli A., ÇENGELLENMİŞ Y., Eren Ş.  
INTERNATIONAL JOURNAL OF QUANTUM INFORMATION, vol.13, no.3, 2015 (SCI-Expanded)

### Articles Published in Other Journals

- I. **On the DNA codes**  
DERTLİ A., ÇENGELLENMİŞ Y.  
Malaya Journal of Matematik, vol.11, no.4, pp.332-343, 2023 (Peer-Reviewed Journal)
- II. **Gaussian Leonardo Polynomials and Applications of Leonardo Numbers to Coding Theory**  
ÖZÇEVİK S. B., DERTLİ A.  
JOURNAL OF SCIENCE AND ARTS, vol.23, no.4, 2023 (ESCI)
- III. **On the Codes over a Family of Rings and Their Applications to DNA Codes**  
DERTLİ A., Çengellenmiş Y.  
Mathematical Sciences and Applications E-Notes, vol.11, no.3, pp.164-177, 2023 (Peer-Reviewed Journal)
- IV. **DNA Code Constructions from Some Codes over a Family of Finite Rings**  
DERTLİ A., ÇENGELLENMİŞ Y.  
PSJ, vol.14, no.5, pp.544-556, 2023 (Peer-Reviewed Journal)
- V. **THE CYCLIC CODES OF ODD LENGTH OVER THE FINITE RING  $R_{u^4, v^2, 2}$  AND THEIRS DNA APPLICATIONS**  
DERTLİ A., ÇENGELLENMİŞ Y.  
Acta Universitatis Apulensis, 2022 (Peer-Reviewed Journal)
- VI. **ON THE TRANSVERSAL INTERSECTION OF THE SURFACES GENERATED BY TIMELIKE BERTRAND CURVES**  
KARAAHMETOĞLU S., DERTLİ A., DERTLİ R.  
Acta Universitatis Apulensis, 2022 (Peer-Reviewed Journal)
- VII. **On skew cyclic codes over a mixed alphabet and their applications to DNA codes**  
Dertli A., ÇENGELLENMİŞ Y., Aydin N.  
DISCRETE MATHEMATICS ALGORITHMS AND APPLICATIONS, vol.14, no.04, 2022 (ESCI)
- VIII. **Quantum Codes from  $(1-2w-2uv)$ -constacyclic Codes over the  $F_q + uF_q + vF_q + wF_q + uvF_q$**   
TETİK C., DERTLİ A.  
Erzincan Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.15, 2022 (Peer-Reviewed Journal)
- IX. **On Constacyclic Codes over  $F_p + \dots + v_{1v_2}F_p$**   
Balaha A., DERTLİ A.  
Prespacetime Journal, 2021 (Peer-Reviewed Journal)
- X. **The Transversal Intersection of Special Surfaces of Mannheim Curve Pairs**  
KARAAHMETOĞLU S., TETİK C., DERTLİ A.  
Prespacetime Journal, 2021 (Peer-Reviewed Journal)

- XI. **On the DNA Codes as Images of Reversible Complement Cyclic Codes of Odd Length Over the Finite Ring**  
ÇENGELLENMİŞ Y., DERTLİ A.  
Prespacetime Journal|, 2021 (Peer-Reviewed Journal)
- XII. **QUANTUM CODES FROM CYCLIC CODES OVER THE  $F_q$**   
Tetik C., Dertli A.  
JOURNAL OF SCIENCE AND ARTS, no.3, pp.611-616, 2021 (ESCI)
- XIII. **Reversible DNA codes from skew cyclic codes over a ring of order 256**  
ÇENGELLENMİŞ Y., Aydın N., DERTLİ A.  
JOURNAL OF ALGEBRA COMBINATORICS DISCRETE STRUCTURES AND APPLICATIONS, 2021 (Scopus)
- XIV. **Skew  $\lambda$ -cyclic Codes over  $Y_2$**   
DERTLİ A., ÇENGELLENMİŞ Y.  
Erzincan Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.13, no.Özel Sayı - 1, pp.92-96, 2020 (Peer-Reviewed Journal)
- XV. **On the Reversibility Problem**  
ÇENGELLENMİŞ Y., DERTLİ A.  
Erzincan Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.13, no.3, pp.1383-1388, 2020 (Peer-Reviewed Journal)
- XVI. **On the Skew Cyclic Codes and the Reversibility Problem for DNA 4-Bases**  
Cengellenmis Y., Dertli A.  
MATHEMATICS IN COMPUTER SCIENCE, vol.14, no.2, pp.431-435, 2020 (ESCI)
- XVII. **Quantum Codes Obtained from Some Constacyclic Codes Over a Family of Finite Rings  $F_{p+uF(p)+vF(p)}$**   
Dertli A., Cengellenmis Y.  
MATHEMATICS IN COMPUTER SCIENCE, vol.14, no.2, pp.437-441, 2020 (ESCI)
- XVIII. **Quantum Codes**  
DERTLİ A., ÇENGELLENMİŞ Y.  
İğdır Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.10, no.1, pp.556-562, 2020 (Peer-Reviewed Journal)
- XIX. **Linear Codes Over the Family of Finite Rings  $A_t$**   
DERTLİ A., ÇENGELLENMİŞ Y.  
Prespacetime Journal, vol.11, no.3, pp.250-257, 2020 (Peer-Reviewed Journal)
- XX. **Skew  $\lambda$ -cyclic Codes over  $Y_2$**   
DERTLİ A., ÇENGELLENMİŞ Y.  
Erzincan Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.13, pp.92-96, 2020 (Peer-Reviewed Journal)
- XXI. **ON THE QUANTUM CODES OVER  $Y_q$**   
Dertli A., Cengellenmis Y.  
JOURNAL OF SCIENCE AND ARTS, no.4, pp.809-814, 2020 (ESCI)
- XXII. **Reversible DNA Codes Over a Family of the Finite Rings**  
DERTLİ A., ÇENGELLENMİŞ Y.  
MATHEMATICAL COMBINATORICS, no.2, pp.74-79, 2020 (Peer-Reviewed Journal)
- XXIII. **On the Gray images of some linear codes and quantum codes**  
Dertli A., ÇENGELLENMİŞ Y.  
Palestine Journal of Mathematics, vol.9, no.2, pp.626-638, 2020 (Scopus)
- XXIV. **The Quantum Codes over  $F_q$  and Quantum Quasi-cyclic Codes over  $F_p$**   
ÇENGELLENMİŞ Y., DERTLİ A.  
Mathematical Sciences and Applications E-Notes, vol.7, no.1, pp.87-93, 2019 (Peer-Reviewed Journal)
- XXV. **ON GRAY IMAGES OF CONSTACYCLIC CODES OVER THE FINITE RING  $F_2 + u(1)F(2) + u(2)F(2)$**   
ÖZKAN M., Dertli A., ÇENGELLENMİŞ Y.  
TWMS JOURNAL OF APPLIED AND ENGINEERING MATHEMATICS, vol.9, no.4, pp.876-881, 2019 (ESCI)
- XXVI. **ON THE CYCLIC DNA CODES OVER THE FINITE RING**  
ÇENGELLENMİŞ Y., DERTLİ A.  
Acta Universitatis Apulensis, 2019 (Peer-Reviewed Journal)

- XXVII. **On the cyclic DNA codes over the ring  $Z_8uZ_8$**   
 DERTLİ A., ÇENGELLENMİŞ Y.  
 Prespacetime Journal, 2019 (Peer-Reviewed Journal)
- XXVIII. **On the linear codes over the ring  $Z_4 v_1Z_4 \dots vtZ_4$**   
 DERTLİ A., ÇENGELLENMİŞ Y.  
 COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS, 2019 (Peer-Reviewed Journal)
- XXIX. **ON THE LINEAR CODES OVER THE RING  $Z(4)$**   
 Dertli A., ÇENGELLENMİŞ Y.  
 COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS, vol.68, no.1, pp.809-823, 2019 (ESCI)
- XXX. **On gray images of constacyclic codes over the finite ring (Formual presented)**  
 ÖZKAN M., Dertli A., ÇENGELLENMİŞ Y.  
 Turkish World Mathematical Society Journal of Applied and Engineering Mathematics, vol.9, no.4, pp.876-881, 2019 (Scopus)
- XXXI. **On the Codes over the Ring  $Z_4 uZ_4 vZ_4$  Cyclic, Constacyclic, Quasi-Cyclic Codes, Their Skew Codes, Cyclic DNA Skew Cyclic DNA Codes**  
 DERTLİ A., ÇENGELLENMİŞ Y.  
 Prespacetime Journal, 2019 (Peer-Reviewed Journal)
- XXXII. **On cyclic DNA codes over the rings  $Z_4 wZ_4$  and  $Z_4 wZ_4 vZ_4 wvZ_4$**   
 DERTLİ A., ÇENGELLENMİŞ Y.  
 Biomath, 2017 (Peer-Reviewed Journal)
- XXXIII. **On the reverse and reverse complement codes over  $F_4 uF_4 u 2F_4$**   
 DERTLİ A., ÇENGELLENMİŞ Y.  
 Far East Journal of Applied Mathematics, 2017 (Peer-Reviewed Journal)
- XXXIV. **QUANTUM CODES FROM CYCLIC CODES OVER  $A_3$**   
 DERTLİ A., ÇENGELLENMİŞ Y.  
 Acta Universitatis Apulensis, 2017 (Peer-Reviewed Journal)
- XXXV. **SKEW CYCLIC CODES OVER  $F_q$**   
 Dertli A., ÇENGELLENMİŞ Y.  
 JOURNAL OF SCIENCE AND ARTS, vol.47, no.2, pp.862-868, 2017 (ESCI)
- XXXVI. **Skew cyclic codes over  $F_q u F_q v F_q u v F_q$**   
 DERTLİ A., ÇENGELLENMİŞ Y.  
 Journal of Science and Arts, 2017 (ESCI)
- XXXVII. **Some results on linear codes over the finite ring  $Z_4 uZ_4 vZ_4$  MacWilliams identities MDS codes**  
 DERTLİ A., ÇENGELLENMİŞ Y.  
 Journal of Science and Arts, 2016 (ESCI)
- XXXVIII. **On the linear codes over the ring  $R-p$**   
 Dertli A., ÇENGELLENMİŞ Y., Eren Ş.  
 DISCRETE MATHEMATICS ALGORITHMS AND APPLICATIONS, vol.8, no.2, 2016 (ESCI)
- XXXIX. **On Linear Codes Over a Non Chain Ring**  
 DERTLİ A., ÇENGELLENMİŞ Y., EREN Ş.  
 International J.Math. Combin., 2016 (Peer-Reviewed Journal)
- XL. **On  $1 u$  cyclic and Cyclic Codes over  $F_2 uF_2 vF_2$**   
 DERTLİ A., ÇENGELLENMİŞ Y.  
 European Journal of Pure and Applied Mathematics, 2016 (Peer-Reviewed Journal)
- XLI. **Cyclic and Skew Cyclic Codes over the  $F_q v_1 F_q v_k F_q$**   
 DERTLİ A., ÇENGELLENMİŞ Y.  
 Journal of Science and Arts, 2016 (ESCI)
- XLII. **SOME RESULTS ON LINEAR CODES OVER THE FINITE RING  $Z(4)+ uZ(4)$**   
 Dertli A., Cengellenmis Y.

- JOURNAL OF SCIENCE AND ARTS, no.3, pp.209-214, 2016 (ESCI)
- XLIII. **CYCLIC AND SKEW CYCLIC CODES OVER THE  $F_q$**   
Dertli A., ÇENGELLENMİŞ Y.  
JOURNAL OF SCIENCE AND ARTS, no.1, pp.13-22, 2016 (ESCI)
- XLIV. **On  $(1)$**   
Dertli A., ÇENGELLENMİŞ Y.  
EUROPEAN JOURNAL OF PURE AND APPLIED MATHEMATICS, vol.9, no.3, pp.305-313, 2016 (ESCI)
- XLV. **On the Codes over a Semilocal Finite Ring**  
Dertli A., ÇENGELLENMİŞ Y., EREN Ş.  
INTERNATIONAL JOURNAL OF ADVANCED COMPUTER SCIENCE AND APPLICATIONS, vol.6, no.10, pp.283-292, 2015 (ESCI)
- XLVI. **Quantum Codes Over  $F_2[uF_2vF_2]$**   
DERTLİ A., ÇENGELLENMİŞ Y., EREN Ş.  
Palestine Journal of Math., 2015 (Peer-Reviewed Journal)
- XLVII. **On Skew Cyclic and Quasi cyclic Codes Over  $F_2[uF_2u_2F_2]$**   
DERTLİ A., ÇENGELLENMİŞ Y., EREN Ş., NAKİBOĞLU TEZER M., ŞERİFAKİ E. A.  
Palestine Journal of Math., 2015 (Peer-Reviewed Journal)
- XLVIII. **Quantum Codes over the Ring  $F_2[uF_2u_2F_2u_mF_2]$**   
DERTLİ A., ÇENGELLENMİŞ Y., EREN Ş.  
International Journal Of Algebra, 2015 (Peer-Reviewed Journal)
- XLIX. **Quantum codes obtained from some constacyclic codes over a family of the finite rings  $F_{p^u}F_{p^v}F_p$**   
DERTLİ A., ÇENGELLENMİŞ Y.  
MATHEMATICS IN COMPUTER SCIENCE, 1900 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **On the  $(1u_2u_3)$  -Constacyclic and Cyclic Codes Over the Finite Ring  $F_2uF_2u_2F_2u_3F_2vF_2$**   
GÜZEL G. G., DERTLİ A., ÇENGELLENMİŞ Y.  
in: Notes from the International Autumn School on Computational Number Theory, Ilker Inam, Engin Büyükaşık, Editor, Birkhäuser, Cham, pp.323-329, 2019

## Refereed Congress / Symposium Publications in Proceedings

- I. **Tersinirlik Problemi Hakkında**  
ÇENGELLENMİŞ Y., DERTLİ A.  
32. Ulusal Matematik Sempozyumu, Turkey, 31 August - 03 September 2019
- II. **Hadamard Kodlar**  
DERTLİ A., TETİK C.  
32. Ulusal Matematik Sempozyumu, Turkey, 31 August - 03 September 2019
- III.  **$Y_2$  Halkası Üzerinde Tanımlı Skew -cyclic Kodlar**  
DERTLİ A., ÇENGELLENMİŞ Y.  
32. Ulusal Matematik Sempozyumu, Turkey, 31 August - 03 September 2019
- IV.  **$A_t$  Halkası Üzerindeki Lineer Kodlar**  
DERTLİ A., ÇENGELLENMİŞ Y.  
14. Ankara Matematik Günleri, Turkey, 28 - 29 June 2019
- V. **On the Constacyclic and Cyclic Codes over the Class of Finite Rings  $F_2k[uF_2k u_2F_2k vF_2k]$**   
GÜZEL G. G., DERTLİ A., ÇENGELLENMİŞ Y.  
24th Conference on Applications of Computer Algebra, Santiago del Estero, Argentina, 18 - 22 June 2018
- VI. **On the skew cyclic codes and the reversibility problem for DNA 4-bases,**

ÇENGELLENMİŞ Y., DERTLİ A.

24th Conference on Applications of Computer Algebra, ACA2018, 22 - 24 June 2018

VII. **Quantum codes from constacyclic codes over the finite ring  $F_p u F_p v F_p$**

DERTLİ A., ÇENGELLENMİŞ Y.

24th Conference on Applications of Computer Algebra, ACA2018, Santiago de Compostela, Spain, 22 - 24 June 2018

VIII. **Cyclic DNA codes over rings**

ÇENGELLENMİŞ Y., DERTLİ A.

International Conference on Computational and Statistical Methods in Applied Sciences, 9 - 11 November 2017

IX. **Skew cyclic codes over the ring  $Z_4 u Z_4$**

DERTLİ A., ÇENGELLENMİŞ Y., EREN Ş.

International Conference on Computational and Statistical Methods in Applied Sciences, 9 - 11 November 2017

X. **Elipitik eğriler**

DERTLİ A., KARAAHMETOĞLU S., UYSAL Ö.

13. Geometri Sempozyumu, Turkey, 27 - 30 July 2015

XI. **On Skew Cyclic and Quasi cyclic Codes Over  $F_2 u F_2 u 2F_2$**

DERTLİ A., ÇENGELLENMİŞ Y., EREN Ş., TOKUR M.

International Conference on Algebra and Number Theory, 5 - 08 August 2014

XII. **On Quantum Codes Obtained From Cyclic Codes Over  $F_2 u F_2 u 2F_2 u m F_2$**

DERTLİ A., ÇENGELLENMİŞ Y., EREN Ş., DURGUN D., ÇELİK İ.

International Congress in Honour of Professor Ravi P. Agarwal, 23 - 26 June 2014

XIII.  **$F_2 u F_2 v F_2$  Halkası Üzerindeki Kodlar**

DERTLİ A., ÇENGELLENMİŞ Y., EREN Ş.

14. Matematik Sempozyumu, Turkey, 14 May 2015 - 16 May 2014

XIV. **Skew cyclic codes over an infinite family of ring**

ÇENGELLENMİŞ Y., DERTLİ A., Steven D.

ICAAA, İstanbul, Turkey, 20 - 24 June 2012

XV. **On the codes over rings**

ÇENGELLENMİŞ Y., DERTLİ A.

The 24th international conference of jangjeon mathematical society, 19 - 23 July 2011