

## Assoc. Prof. MERVE ESRA TÜRKAY

### Personal Information

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### International Researcher IDs

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### Education Information

Doctorate, Kahramanmaraş Sutcu Imam University, Institute Of Science, Turkey 2015 - 2018

Doctorate, Ankara University, Institute Of Science, Turkey 2014 - 2015

Postgraduate, Ankara University, Institute Of Science, Turkey 2012 - 2014

Undergraduate, Ankara University, Faculty Of Science, Department Of Mathematics, Turkey 2008 - 2012

### Dissertations

Doctorate, SOME HERMİTE-HADAMARD TYPE INTEGRAL INEQUALITIES FOR GENERALIZED FRACTIONAL INTEGRALS, Kahramanmaraş Sutcu Imam University, Institute Of Science, 2018

Postgraduate, Kompleks düzlemde carleson eğrileri üzerinde tanımlı morrey uzaylarında maksimal operatör, kesirli maksimal operatör, potansiyel operatör ve cauchy singüler integral operatörünün sınırlılığı, Ankara University, Institute Of Science, 2014

### Research Areas

Natural Sciences

### Academic Titles / Tasks

Assistant Professor, Sivas Cumhuriyet University, Fen Fakültesi, Matematik Bölümü, 2020 - Continues

Research Assistant PhD, Sivas Cumhuriyet University, Fen Fakültesi, Matematik Bölümü, 2018 - 2020

Research Assistant, Sivas Cumhuriyet University, Fen Fakültesi, Matematik Bölümü, 2015 - 2018

### Courses

Analiz - I, Undergraduate, 2019 - 2020

Analiz - II, Undergraduate, 2018 - 2019

Analiz - II, Undergraduate, 2018 - 2019

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

- I. **Some estimates in  $L_p(\Gamma)$  for maximal commutator and commutator of maximal function**  
TÜRKAY M. E., Mursaleen M.  
Filomat, vol.38, no.1, pp.1-15, 2024 (SCI-Expanded)
- II. **THE SPECTRUM OF  $q$ -CESARO MATRICES ON  $c$  AND ITS VARIOUS SPECTRAL DECOMPOSITION FOR  $0 < q < 1$**   
DURNA N., TÜRKAY M. E.  
OPERATORS AND MATRICES, vol.15, no.3, pp.795-813, 2021 (SCI-Expanded)
- III. **The Spectrum and Fine Spectrum of  $q$ -Cesàro Matrices with  $0 < q < 1$  on  $c_0$**   
Yıldırım M. E.  
Numerical Functional Analysis And Optimization, vol.41, no.3, pp.361-377, 2020 (SCI-Expanded)

## Articles Published in Other Journals

- I. **The spectrum and some subdivisions of the spectrum of the generalized  $\alpha$   $q$ -Cesàro operators on  $p$  ( $1 < p < \infty$ )**  
TÜRKAY M. E.  
Asian-European Journal of Mathematics, vol.16, no.9, 2023 (ESCI)
- II. **Some New Estimates for Maximal Commutator and Commutator of Maximal Function in  $L_{\{p,\lambda\}}(\Gamma)$**   
TÜRKAY M. E.  
Journal of New Theory, vol.2022, no.40, pp.74-81, 2022 (Peer-Reviewed Journal)
- III. **Some spectrum estimates of the  $\alpha q$ -Cesàro matrices with  $0 < \alpha, q < 1$  on  $c_0$**   
TÜRKAY M. E.  
Konuralp Journal of Mathematics, vol.10, no.2, pp.313-325, 2022 (Peer-Reviewed Journal)
- IV. **The Generalized Hermite-Hadamard-Fejer Type Inequalities for Generalized Fractional Integral Operators**  
TÜRKAY M. E., SARIKAYA M. Z., YILDIRIM H.  
Konuralp Journal of Mathematics, vol.10, no.1, pp.79-86, 2022 (Peer-Reviewed Journal)
- V. **SOME HERMITE-HADAMARD TYPE INEQUALITIES FOR CO-ORDINATED CONVEX FUNCTIONS VIA GENERALIZED FRACTIONAL INTEGRALS**  
TÜRKAY M. E., SARIKAYA M. Z., BUDAK H., YILDIRIM H.  
Journal of Applied Mathematics and Computing with application, vol.2, no.1, pp.1-21, 2021 (Peer-Reviewed Journal)
- VI. **On some special functions for conformable fractional integrals**  
SARIKAYA M. Z., AKKURT A., BUDAK H., TÜRKAY M. E., YILDIRIM H.  
Konuralp Journal of Mathematics, vol.8, no.2, pp.376-383, 2020 (Peer-Reviewed Journal)
- VII. **Hermite-Hadamard's Inequalities for Conformable Fractional Integrals**  
SARIKAYA M. Z., AKKURT A., BUDAK H., YILDIRIM M. E., YILDIRIM H.  
An International Journal of Optimization and Control: Theories Applications, vol.9, no.1, pp.46-59, 2019 (Scopus)
- VIII. **Non-Isotropic Potential Theoretic Inequality**  
YILDIRIM M. E., AKKURT A., YILDIRIM H.  
Cumhuriyet Science Journal, vol.9, no.2, pp.325-338, 2018 (Peer-Reviewed Journal)
- IX. **On the Hadamard's type Inequalities for Convex Functions via Conformable Fractional Integrals**  
YILDIRIM M. E., Akkurt A., Yildirim H.  
JOURNAL OF INEQUALITIES AND SPECIAL FUNCTIONS, vol.9, no.3, pp.1-10, 2018 (ESCI)
- X. **A NEW GENERALIZED FRACTIONAL DERIVATIVE AND INTEGRAL**  
AKKURT A., YILDIRIM M. E., YILDIRIM H.  
Konuralp Journal of Mathematics, vol.5, no.2, pp.248-259, 2017 (Peer-Reviewed Journal)
- XI. **On Some Integral Inequalities for Conformable Fractional Integrals**  
AKKURT A., YILDIRIM M. E., YILDIRIM H.  
Asian Journal of Mathematics and Computer Research, vol.15, no.3, pp.205-212, 2017 (Peer-Reviewed Journal)

- XII. **On Some Integral Inequalities for Twice Differentiable Convex and Quasi Convex Functions via Fractional Integrals**  
YILDIRIM M. E., AKKURT A., YILDIRIM H.  
British Journal of Mathematics & Computer Science, vol.16, no.6, pp.1-11, 2016 (Peer-Reviewed Journal)
- XIII. **On some integral inequalities for  $kh$  Riemann Liouville fractional integral**  
AKKURT A., YILDIRIM M. E., YILDIRIM H.  
New Trends in Mathematical Science, vol.4, no.1, pp.138-146, 2016 (Peer-Reviewed Journal)
- XIV. **Generalized  $Q_i$  s Integral Inequality**  
YILDIRIM M. E., AKKURT A., YILDIRIM H.  
Cumhuriyet Science Journal, vol.37, no.1, pp.12-19, 2016 (Peer-Reviewed Journal)
- XV. **Hermite Hadamard type inequalities for coordinated  $m$   $m$  Convex Functions via Fractional Integrals**  
YILDIRIM M. E., AKKURT A., YILDIRIM H.  
Contemporary Analysis and Applied Mathematics, vol.4, no.1, pp.48-63, 2016 (Peer-Reviewed Journal)
- XVI. **ON SOME INTEGRAL INEQUALITIES FOR GENERALIZED FRACTIONAL INTEGRAL**  
Akkurt A., Yıldırım M. E., Yıldırım H.  
Advances in Inequalities and Applications, vol.2016, no.17, 2016 (Peer-Reviewed Journal)
- XVII. **On Hermite Hadamard Inequalities for Differentiable Preinvex Functions via Fractional Integrals**  
AKKURT A., YILDIRIM M. E., YILDIRIM H.  
British Journal of Mathematics & Computer Science, 2016 (Peer-Reviewed Journal)
- XVIII. **SOME INTEGRAL INEQUALITIES FOR FUNCTIONS WHOSE SECOND DERIVATIVES ARE CONVEX BY USING FRACTIONAL INTEGRALS**  
YILDIRIM M. E., AKKURT A., YILDIRIM H.  
Konuralp Journal of Mathematics, 2016 (Peer-Reviewed Journal)
- XIX. **On the boundedness of the maximal operator and Riesz potential in the modified Morrey spaces**  
AYKOL YÜCE C., YILDIRIM M. E.  
COMMUNICATIONS FACULTY OF SCIENCES UNIVERSITY OF ANKARA-SERIES A1 MATHEMATICS AND STATISTICS, vol.63, no.2, pp.1-11, 2014 (Peer-Reviewed Journal)

### **Refereed Congress / Symposium Publications in Proceedings**

- I. **SOME HERMITE-HADAMARD INEQUALITIES FOR PREINVEX FUNCTIONS VIA CONFORMABLE FRACTIONAL INTEGRALS**  
Türkay M. E., Durna N.  
1. ULUSLARARASI FEN VE UYGULAMALI BİLİMLER KONGRESİ, Adıyaman, Turkey, 13 June 2021
- II. **BOUNDEDNESS OF THE GENERALIZED FRACTIONAL INTEGRAL OPERATORS**  
TÜRKAY M. E.  
10th International Conference of Strategic Research on Scientific Studies and Education (ICoSReSSE) 2019, 17 - 18 June 2019
- III. **NECESSARY AND SUFFICIENT CONDITION FOR THE BOUNDEDNESS OF THE GENERALIZED FRACTIONAL INTEGRAL OPERATOR**  
TÜRKAY M. E.  
5th International Conference on Engineering and Natural Sciences (ICENS 2019), 12 - 16 June 2019
- IV. **ON SOME MINKOWSKI TYPE INEQUALITIES**  
TÜRKAY M. E., DURNA N.  
5th International Conference on Engineering and Natural Sciences (ICENS 2019), 12 - 16 June 2019
- V. **The Generalized Hermite-Hadamard Type Inequalities for Caputo  $k$ -Fractional Derivative**  
YILDIRIM M. E., YILDIRIM H.  
International Conference on Mathematics and Mathematics Educations (ICMME-2018), 27 - 29 July 2018
- VI. **On Minkowski and Inverse Minkowski Inequalities Via Generalized Fractional Integrals**  
YILDIRIM M. E., DURNA N., Kilinc S., YILDIRIM H.

International Conference on Mathematics and Mathematics Educations (ICMME-2018), 27 - 29 July 2018

- VII. **Some Ostrowski type fractional integral inequalities for s-Godunova-Levin functions via generalized k-fractional integrals**  
YILDIRIM M. E., YILDIRIM H.  
4th. International Symposium on Multidisciplinary Studies (ISMS) Paris-France, 27 - 28 April 2018
- VIII. **Some Hermite-Hadamard Type Inequalities Via Midpoint Formula For s-Convex Functions**  
YILDIRIM M. E., DURNA N., AKKURT A., YILDIRIM H.  
2. International Science Symposium Science Festival, 5 - 08 September 2017
- IX. **On Generalized (k,s) -Fractional Calculus**  
YILDIRIM M. E., DURNA N., AKKURT A., YILDIRIM H.  
2. International Science Symposium Science Festival, 5 - 08 September 2017
- X. **Some inequalities involving  $\left( \alpha ,k \right)$  -gamma and  $\left( \alpha ,k \right)$  -beta functions for conformable fractional**  
AKKURT A., YILDIRIM M. E., YILDIRIM H.  
International Conference on Mathematics and Mathematics Education (ICMME-2017), Şanlıurfa, Turkey, 11 - 13 May 2017
- XI. **The Midpoint Type Inequalities for  $\varphi$ -Convex Functions via Fractional Integral Operators**  
YILDIRIM M. E., AKKURT A., YILDIRIM H.  
International Conference on Mathematics and Mathematics Education (ICMME-2017), Şanlıurfa, Turkey, 11 - 13 May 2017
- XII. **A new Generalized fractional derivative and integral**  
AKKURT A., YILDIRIM M. E., YILDIRIM H.  
International Conference on Mathematics and Mathematics Education (ICMME-2017), Şanlıurfa, Turkey, 11 - 13 May 2017
- XIII. **Inequalities Involving the (alpha,k)-Gamma and (alpha,k)-Beta Functions**  
AKKURT A., TÜRKAY M. E., YILDIRIM H.  
International Conference on Mathematics and Mathematics Education (ICMME-2017) , 2017, 11 - 13 May 2017
- XIV. **On Some Integral Inequalities for Convex Functions via conformable Fractional Integrals**  
YILDIRIM M. E., AKKURT A., YILDIRIM H.  
Xth International Statistics Days Conference – ISDC’2016 (IGS 2016), 7 - 09 October 2016
- XV. **On Feng Qi type Integral Inequalities for Conformable Fractional Integrals**  
AKKURT A., YILDIRIM M. E., YILDIRIM H.  
3rd International Intuitionistic Fuzzy Sets and Contemporary Mathematics (IFSCOM2016), 29 August - 01 September 2016
- XVI. **Non Isotropic Potential Theoretic Inequality**  
YILDIRIM M. E., AKKURT A., YILDIRIM H.  
International Conference on Mathematics and Mathematics Education (ICMME-2016), 12 - 14 May 2016

## Supported Projects

Durna N., Türkay M. E., Project Supported by Higher Education Institutions,  $U(r,0,s)$  üst üçgensel bant matrisinin Hahn dizi uzayı üzerindeki spektrumu ve fine spektrumu., 2019 - 2019

Durna N., Türkay M. E., Yıldırım H., Project Supported by Higher Education Institutions, Genelleştirilmiş Kesirli İntegraller Yardımıyla Minkowski ve Ters Minkowski Eşitsizlikleri Üzerine, 2018 - 2019

## Metrics

Publication: 38

Citation (WoS): 16

Citation (Scopus): 27

H-Index (WoS): 3

H-Index (Scopus): 3

## **Scholarships**

Tübitak 2211-B, TUBITAK, 2014 - 2018