

## Assoc. Prof. MUSTAFA KARAKAPLAN

### Personal Information

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### Education Information

Doctorate, Inonu University, Fen-Bilimleri Enstitüsü, Analitik Kimya Abd, Turkey 1988 - 1992

Postgraduate, Inonu University, Fen-Bilimleri Enstitüsü, Analitik Kimya Abd, Turkey 1986 - 1988

Undergraduate, Inonu University, Temel Bilimler Fakültesi, Kimya Müh, Turkey 1981 - 1985

### Dissertations

Doctorate, Adsorbif sıyırma voltametri ve diferansiyel puls polarografisi ile molibdenin çevre örneklerinde tayini, Inonu University, Fen Bilimleri, Kimya, 1992

### Academic Titles / Tasks

Associate Professor, Inonu University, Fen Edebiyat, Kimya, 2014 - Continues

### Academic and Administrative Experience

Inonu University, Enformatik Bölümü, 1997 - 2009

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

- I. **Deconvolution of Gaussian peaks with mixed real and discrete-integer optimization based on evolutionary computing**  
KARAKAPLAN M., AVCU F. M.  
JOURNAL OF CHEMOMETRICS, vol.34, no.6, 2020 (SCI-Expanded)
- II. **A parallel and non-parallel genetic algorithm for deconvolution of NMR spectra peaks**  
Karakaplan M., AVCU F. M.  
CHEMOMETRICS AND INTELLIGENT LABORATORY SYSTEMS, vol.125, pp.147-152, 2013 (SCI-Expanded)
- III. **An attempt to understand the observed plateau of the magnetization in tetranuclear iron(II) complexes of thiacalixarene macrocycles**  
Bayri A., BAKIR H. G., SÜLÜ M., KARAKAPLAN M.  
PRAMANA-JOURNAL OF PHYSICS, vol.74, no.3, pp.391-397, 2010 (SCI-Expanded)
- IV. **Magnetochemistry of some trinuclear Co(II) thiocarboxylates**  
Bayri A., AYTEKİN O., SÜLÜ M., KARAKAPLAN M.  
MODERN PHYSICS LETTERS B, vol.22, no.9, pp.677-684, 2008 (SCI-Expanded)
- V. **Sizeable amount of antiferromagnetic exchange interactions in newly reported dimeric cobalt (II) complex of the antiprine Schiff base of 3-formylsalicylic acid**

AVCU F. M., AYTEKIN O., KARAKAPLAN M., BAYRI A.

JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, vol.10, no.3, pp.589-591, 2008 (SCI-Expanded)

- VI. **Theoretical approach to the magnetic properties of Mn(II), Cr(III), and Cu(II) complexes in the newly reported 12-and 15-membered macrocyclic ligands**  
Bayri A., Karakaplan M.  
PRAMANA-JOURNAL OF PHYSICS, vol.69, no.2, pp.301-306, 2007 (SCI-Expanded)
- VII. **Magnetic properties of crystalline gamma-MnS thin films**  
GUMUS C., BAYRI A., ULUTAS C., Karakaplan M., UFUKTEPE Y.  
JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, vol.8, no.1, pp.261-265, 2006 (SCI-Expanded)
- VIII. **Clustering in some randomly occupied two- and three-dimensional lattices**  
ULUG A., Karakaplan M., ULUG B.  
CANADIAN JOURNAL OF PHYSICS, vol.82, no.4, pp.323-329, 2004 (SCI-Expanded)
- IX. **PROPERTIES OF AMPEROMETRIC HPLC DETECTORS BASED ON MERCURY-ELECTRODES**  
JUST P., KARAKAPLAN M., HENZE G., SCHOLZ F.  
FRESENIUS JOURNAL OF ANALYTICAL CHEMISTRY, vol.345, no.1, pp.32-35, 1993 (SCI-Expanded)
- X. **ULTRA TRACE ANALYSIS OF MOLYBDENUM BY DIFFERENTIAL PULSE POLAROGRAPHY AND ADSORPTIVE STRIPPING VOLTAMMETRY IN THE PRESENCE OF 2,5-DICHLORO-3,6-DIHYDROXY-1,4-BENZOQUINONE**  
KARAKAPLAN M., GUCER S., HENZE G.  
FRESENIUS JOURNAL OF ANALYTICAL CHEMISTRY, vol.342, pp.186-190, 1992 (SCI-Expanded)

### Articles Published in Other Journals

- I. **Finding exact number of peaks in broadband UV-vis spectra using curve fitting method based on evolutionary computing**  
AVCU F. M., KARAKAPLAN M.  
Journal of the Turkish Chemical Society, Section A: Chemistry, vol.7, no.1, pp.117-124, 2020 (Scopus)
- II. **Why is clozapine more effective than other atypical antipsychotics? DFT and Molecular Docking Approach**  
ÜNAL S., KARAKAPLAN M., ÖZ E., YILMAZ İ., ALTIN S., BAYRI A.  
Bartın University International Journal of Natural and Applied Sciences, vol.2, no.2, 2019 (Peer-Reviewed Journal)

### Refereed Congress / Symposium Publications in Proceedings

- I. **AN OPTIMIZED FRAMEWORK FOR CHEMICAL MEDICINE CLASSIFICATION USING DEEP LEARNING COUPLED WITH GENETIC ALGORITHM**  
KARAKAPLAN M., AVCU F. M.  
INTERNATIONAL MULTIDISCIPLINARY SYMPOSIUM ON DRUG RESEARCH & DEVELOPMENT, Malatya, Turkey, 1 - 03 June 2019, pp.311-312
- II. **Hidden Genes Genetic Algorithms for Gaussian Functions**  
KARAKAPLAN M., AVCU F. M.  
Fourth International Conference on New Trends in Chemometrics and Applications, Aydın, Turkey, 1 May - 03 June 2019, pp.14-15
- III. **Hidden Genes Genetic Algorithms for Gaussian Functions**  
KARAKAPLAN M., AVCU F. M.  
Fourth International Conference on New Trends in Chemometrics and Applications, Aydın, Turkey, 1 May - 03 June 2019, pp.14-15
- IV. **Chemometrical Evaluation of Complex Analytic Signals by Parallel Genetic Algorithm Microwave Spectra Examples**

AVCU F. M., KARAKAPLAN M.

Third International Conference on New Trends in Chemometrics and Applications, 25 - 28 May 2016

V. **Resolution of overlapping UV Vis absorption bands with parallel genetic algorithm**

Avcu F. M., Karakaplan M.

Second International Conference on New Trends in Chemometrics and Applications, Ankara, Turkey, 01 May 2013

## Supported Projects

BEYTUR A., ERMİŞ H., TEKİN S., KARAKAPLAN M., Project Supported by Higher Education Institutions, 7. Ulusal Tıp Öğrenci Kongresi, 2022 - 2022

BEYTUR A., METE YILDIRIM A., ERMİŞ H., KARAKAPLAN M., Project Supported by Higher Education Institutions, İnönü Üniversitesi Tıp Fakültesi Öğrencilerinin Yüz yüze ve Uzaktan Eğitim ile Öğrenme Düzeylerinin Karşılaştırılması, 2022 - 2022

KARAKAPLAN M., AVCU F. M., Project Supported by Higher Education Institutions, Genetik Algoritma ile Spektral Verilerin Ayırıştırılması ve Sonuçların Nitel ve Nicel Olarak İncelenmesi, 2019 - 2021

## Metrics

Publication: 19

Citation (WoS): 61

Citation (Scopus): 62

H-Index (WoS): 5

H-Index (Scopus): 5

## Congress and Symposium Activities

3rd International Conference on New Trends in Chemometrics and Applications, Attendee, Antalya, Turkey, 2015

2nd International Conference on New Trends in Chemometrics and Applications, Attendee, Ankara, Turkey, 2013