

Asst. Prof. FIRAT ATALAY

Personal Information

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International Researcher IDs

ORCID: 0000-0001-6349-7745

Publons / Web Of Science ResearcherID: G-5928-2013

ScopusID: 55503491700

Yoksis Researcher ID: 170506

Education Information

Doctorate, Hacettepe University, Fen Bilimleri Enstitüsü, Maden Mühendisliği Bölümü, Turkey 2011 - 2015

Postgraduate, Hacettepe University, Fen Bilimleri Enstitüsü, Maden Mühendisliği Bölümü, Turkey 2008 - 2011

Undergraduate Minor, Hacettepe University, Sosyal Bilimler Fakültesi, İşletme Bölümü, Turkey 2006 - 2008

Undergraduate, Hacettepe University, Mühendislik Fakültesi, Maden Mühendisliği Bölümü, Turkey 2003 - 2008

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Kopulularla maden kaynak kestirimi, Hacettepe Üniversitesi, Fen Bilimleri Enstitüsü, Maden Mühendisliği (Dr), 2015

Postgraduate, Türkiye Tersiyer Kömürlerinin Jeostatistiksel İncelenmesi, Hacettepe Üniversitesi, Fen Bilimleri Enstitüsü, Maden Mühendisliği Bölümü, 2011

Research Areas

Mining Engineering and Technology, Mining Operations, Prospecting and Exploratory Operations, Production Methods (open-pit and underground), Open pit and underground production planning, Ore Bed Modeling, Mining Engineering Process Design, Management and Economics, Mining Methods and Mining System Analysis, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Hacettepe University, Mühendislik Fakültesi, Maden Mühendisliği Bölümü, 2018 - Continues

Assistant Professor, The University of Queensland, School of Mechanical and Mining Engineering, 2022 - 2022

Research Assistant, Hacettepe University, Mühendislik Fakültesi, Maden Mühendisliği Bölümü, 2008 - 2018

Academic and Administrative Experience

Deputy Head of Department, Hacettepe University, Mühendislik Fakültesi, Maden Mühendisliği Bölümü, 2021 - Continues

Courses

Mineral Resource Estimation, Undergraduate, 2018 - 2019

Evaluation of Ore Deposits , Undergraduate, 2018 - 2019

Jury Memberships

Post Graduate, Post Graduate, Orta Doğu Teknik Üniversitesi, July, 2023

Post Graduate, Post Graduate, Hacettepe Üniversitesi, June, 2019

Post Graduate, Post Graduate, Hacettepe Üniversitesi, June, 2019

Post Graduate, Post Graduate, Hacettepe Üniversitesi, July, 2018

Post Graduate, Post Graduate, Hacettepe Üniversitesi, May, 2018

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Uncertainty assessment of soil erodibility by direct sequential Gaussian simulation (DSIM) in semiarid land uses**
Madenoglu S., Atalay F., Erpul G.
Soil and Tillage Research, vol.204, 2020 (SCI-Expanded)
- II. **Coal resource estimation using Gaussian copula**
ATALAY F., TERCAN A. E.
INTERNATIONAL JOURNAL OF COAL GEOLOGY, vol.175, pp.1-9, 2017 (SCI-Expanded)
- III. **Metaheuristic kriging : A new spatial estimation method**
ATALAY F., ERTUNÇ G.
HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, vol.46, no.3, pp.483-492, 2017 (SCI-Expanded)
- IV. **Assessment of Inverse Distance Weighting (IDW) Interpolation on Spatial Variability of Selected Soil Properties in the Cukurova Plain**
TUNCAY T., BAYRAMIN İ., ATALAY F., UNVER İ.
TARIM BİLİMLERİ DERGİSİ-JOURNAL OF AGRICULTURAL SCIENCES, vol.22, no.3, pp.377-384, 2016 (SCI-Expanded)
- V. **Lignite resource estimations and seam modeling of Thar Field, Pakistan**
SIDDIQI F. I., PATHAN A. G., ÜNVER B., TERCAN A. E., HİNDİSTAN M. A., ERTUNÇ G., ATALAY F., UNAL S., KILLIOĞLU Y.
INTERNATIONAL JOURNAL OF COAL GEOLOGY, vol.140, pp.84-96, 2015 (SCI-Expanded)
- VI. **Seam modeling and resource estimation in the coalfields of western Anatolia**
TERCAN A. E., ÜNVER B., HİNDİSTAN M. A., ERTUNÇ G., ATALAY F., Unal S., Killioğlu Y.
INTERNATIONAL JOURNAL OF COAL GEOLOGY, vol.112, pp.94-106, 2013 (SCI-Expanded)
- VII. **Geostatistical estimation of coal quality variables by using covariance matching constrained kriging**
ERTUNÇ G., TERCAN A. E., HİNDİSTAN M. A., ÜNVER B., ÜNAL S., ATALAY F., KILLIOĞLU S. Y.
INTERNATIONAL JOURNAL OF COAL GEOLOGY, vol.112, pp.14-25, 2013 (SCI-Expanded)

Articles Published in Other Journals

- I. **Comparison of Conditioned Radial Bases Function Approach and Kriging: Estimation of Calorific**

Value in a Coal Field

Atalay F.

Scientific Mining Journal, vol.62, no.2, pp.93-98, 2023 (Scopus)

II. Bir Demir Yatağında Radyal Temelli Fonksiyon ve Ortalamasız Krigleme Kestirimlerinin Karşılaştırılması

Atalay F.

Avrupa Bilim ve Teknoloji Dergisi, vol.0, no.27, pp.303-310, 2021 (Peer-Reviewed Journal)

III. APPLICATION OF SUPPORT VECTOR MACHINES IN COAL DEPOSIT BOUNDARY DECISION ERTUNÇ G., ATALAY F.

International Journal of Scientific Research in Information Systems and Engineering, 2017 (Peer-Reviewed Journal)

IV. SPATIAL ESTIMATION OF A COAL RESOURCE USING ARTIFICIAL NEURAL NETWORKS ATALAY F., ERTUNÇ G.

International Journal of Scientific Research in Information Systems and Engineering, 2017 (Peer-Reviewed Journal)

V. Soma Eynez kömür sahası için farklı bir üretim yöntemi önerisi

ÜNVER B., HİNDİSTAN M. A., TERCAN A. E., ERTUNÇ G., ÜNAL M. S., KILLIOĞLU S. Y., ATALAY F.

Bilimsel Madencilik Dergisi, vol.56, pp.5-12, 2017 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

I. ESTIMATION OF IRON CONTENT OF A DEPOSIT USING DEEP NEURAL NETWORKS

ATALAY F., ERTUNÇ G.

7th Balkan Mining Congress, 11 - 13 October 2017

II. IMPLICIT 3D SOLID MODELLING WITH SUPPORT MACHINES

ERTUNÇ G., ATALAY F.

7th Balkan Mining Congress, 11 - 13 October 2017

III. Geostatistical estimation of iron content distribution of an ore body using kriging and lognormal kriging techniques – A comparative study

ATALAY F., ERTUNÇ G.

IRSYSC 2017, 24 - 26 May 2017

IV. Estimation of Spatial Components by Covariance Matching Kriging Under the Linear Model of Regionalization

ERTUNÇ G., ATALAY F.

IRSYSC 2017, 24 - 26 May 2017

V. Destek Vektör Makinaları ile Jeolojik Zonların Kesti Yorumları

ERTUNÇ G., ATALAY F.

IMCET 2017, 11 - 14 April 2017

VI. Modeling Spatial Uncertainty of Soil Erodibility in Different Land Uses Using Direct Sequential Simulation DSIM

MADENOĞLU S., ERPUL G., ATALAY F., TERCAN A. E.

Conference On Desertification and Land Degradation, 16 - 17 June 2015

VII. Soma eynez kömür sahası için alternatif bir üretim yöntemi önerisi

ÜNVER B., HİNDİSTAN M. A., TERCAN A. E., ERTUNÇ G., ÜNAL M. S., KILLIOĞLU S. Y., ATALAY F.

Türkiye 24. uluslararası madencilik kongresi, 14 - 17 April 2015

VIII. A New Production Method Proposal for Soma Eynez Coal Field

ÜNVER B., HİNDİSTAN M. A., TERCAN A. E., ERTUNÇ G., ÜNAL M. S., KILLIOĞLU S. Y., ATALAY F.

24th International Mining Congress and Exhibition of Turkey, 14 - 17 April 2015

IX. An Alternative Multivariate Kriging Technique: Covariance Matching Constrained CoKriging

ERTUNÇ G., TERCAN A. E., ATALAY F.

24th INTERNATIONAL MINING CONGRESS OF TURKEY, Antalya, Turkey, 14 - 17 April 2015, pp.250-256

X. Geostatistics As a Tool to Estimate Undiscovered Deposits of Coal

ATALAY F., TERCAN A. E., ERTUNÇ G.

24th INTERNATIONAL MINING CONGRESS OF TURKEY, Antalya, Turkey, 14 - 17 April 2015, pp.322-326

XI. A Geostatistical Study of Tertiary Coal Fields in Turkey

ATALAY F., TERCAN A. E., ÜNVER B., HİNDİSTAN M. A., ERTUNÇ G.

15th Annual Conference of the International-Association-for-Mathematical-Geosciences (IAMG), Madrid, Spain, 2 - 06 September 2013, pp.723-726

Supported Projects

ÜNVER B., TERCAN A. E., HİNDİSTAN M. A., ATALAY F., ÜNAL M. S., KILLIOĞLU S. Y., TEMEL A., Eti Maden İşletmeleri Genel Müdürlüğü Bor Tuzu Sahalarında, Lityum Potansiyelinin Araştırılması Ar-Ge Projesi, 2022 - 2023

Atalay F., Ünver B., Tercan A. E., Hindistan M. A., Ünal M. S., Killoğlu S. Y., Technopark, Cevher Modelleme ve 3B Duraylılık Analizlerinde Yazılım Kaynaklı Sorunların Giderilmesi, 2020 - 2022

Atalay F., Energy and Natural Resources Ministry, Orta ve Doğu Anadolu Nadir Yer Element Aramaları, 2018 - 2018

ATALAY F., Project Supported by Higher Education Institutions, Maden Kaynak Kestiriminde Krigleme ve Kopula Yöntemlerinin Karşılaştırılması, 2017 - 2018

ATALAY F., ERTUNÇ G., Project Supported by Higher Education Institutions, ESTIMATION OF IRON CONTENT OF A DEPOSIT USING DEEP NEURAL NETWORKS (BİR DEMİR YATAĞININDA DEMİR İÇERİĞİNİN DERİN SINIR AĞLARI KULLANILARAK KONUMSAL KESTİRİMİ), 2017 - 2017

ATALAY F., Project Supported by Other Private Institutions, İVRİNDİ ALTIN GÜMÜŞ MADENİ PASA DURAYLILIĞI ANALİZİ, 2016 - 2016

ATALAY F., TERCAN A. E., Project Supported by Other Private Institutions, Çayırhan D ve G Sektörleri Tavan Formasyonlarının Fiziksel ve Mekanik Özellikleri, 2016 - 2016

TERCAN A. E., ATALAY F., Project Supported by Higher Education Institutions, KOPULALARLA MADEN KAYNAK KESTİRİMİ, 2015 - 2015

Activities in Scientific Journals

Bilimsel Madencilik Dergisi, Editor, 2017 - 2019

Scientific Refereeing

ARABIAN JOURNAL OF GEOSCIENCES, Journal Indexed in SCI-E, August 2020

Arabian Journal Of Geosciences, Journal Indexed in SCI-E, July 2020

Arabian Journal Of Geosciences, Journal Indexed in SCI-E, July 2020

Arabian Journal Of Geosciences, Journal Indexed in SCI-E, June 2020

ARABIAN JOURNAL OF GEOSCIENCES, Journal Indexed in SCI-E, January 2020

European Journal of Pure and Applied Mathematics, Other Indexed Journal, November 2018

TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES , SCI Journal, October 2018

Karaelmas Science and Engineering Journal, National Scientific Refreed Journal, July 2018

Bulletin of the Mineral Research and Exploration, Other Indexed Journal, February 2018

Metrics

Publication: 23

Citation (WoS): 49

Citation (Scopus): 67

H-Index (WoS): 4

H-Index (Scopus): 4

Awards

Atalay F., Maden Mühendisliği Bölümü Bölüm 1.ligi, Hacettepe Üniversitesi, July 2008

Atalay F., İhsan Doğramacı Supreme Success Award, Hacettepe Üniversitesi, July 2008