

Prof. GÖKHAN GÖKTÜRKLER

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: B-7787-2018

ScopusID: 8534505200

Yoksis Researcher ID: 143605

Education Information

2021 - Continues	Undergraduate, Anadolu University, International Relations, Turkey
2018 - 2020	Associate Degree, Anadolu University, Open Education Faculty, Department Of Law, Turkey
2009 - 2014	Undergraduate, Anadolu University, Open Education Faculty, Department Of Philosophy, Turkey
1997 - 2003	Doctorate, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Jeofizik Mühendisliği (Dr), Turkey
1994 - 1996	Postgraduate, The University of Utah, Geology and Geophysics, United States Of America
1988 - 1992	Undergraduate, Istanbul Technical University, Maden Fakültesi, Jeofizik Mühendisliği Bölümü, Turkey

Dissertations

2003	Three-dimensional simulation of seismic wave propagation in the metropolitan area of İzmir, Turkey, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Doctorate
1996	Seismic Imaging of the Ferron Sandstone, The University of Utah, Postgraduate

Research Areas

Geophysical Engineering, Applied Geophysics

Academic Titles / Tasks

2016 - Continues	Professor, Dokuz Eylul University, Mühendislik Fakültesi, Jeofizik Mühendisliği Bölümü
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Academic and Administrative Experience

2022 - 2023	Head of Department, Dokuz Eylul University, Mühendislik Fakültesi, Jeofizik Mühendisliği Bölümü
2019 - 2022	Head of Department, Dokuz Eylul University, Mühendislik Fakültesi, Jeofizik Mühendisliği Bölümü
2016 - 2019	Head of Department, Dokuz Eylul University, Mühendislik Fakültesi, Jeofizik Mühendisliği Bölümü

Advising Theses

2023	Göktürkler G., Doctorate, S.TURAN(Student), Yapay zeka optimizasyon algoritmalarının jeofizik verilerin ters çözümünde kullanılması
2018	KINCAL C., GÖKTÜRKLER G., Postgraduate, L.PAZARBAŞI(Student), Harmandalı (İzmir) atık depolama sahasının mühendislik jeolojisi

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Fault Structure Reconstruction From Magnetic Anomalies Using an Improved Backtracking Search Optimization Algorithm**
BALKAYA Ç., Ekinci Y. L., Ai H., Biswas A., GÖKTÜRKLER G.
Earth and Space Science, vol.11, no.5, 2024 (SCI-Expanded)
- II. **3-D gravity inversion for the basement relief reconstruction through modified success-history-based adaptive differential evolution**
Ekinci Y. L., BALKAYA Ç., GÖKTÜRKLER G., Ai H.
Geophysical Journal International, vol.235, no.1, pp.377-400, 2023 (SCI-Expanded)
- III. **Inversion of self-potential data by a hybrid DE/PSO algorithm**
Hosseinzadeh S., GÖKTÜRKLER G., Turan-Karaoglan S.
ACTA GEODAEITICA ET GEOPHYSICA, vol.58, no.2, pp.241-272, 2023 (SCI-Expanded)
- IV. **Cuckoo Search Algorithm for model parameter estimation from self-potential data**
Turan Karaođlan S., Gökürkler G.
JOURNAL OF APPLIED GEOPHYSICS, vol.194, 2021 (SCI-Expanded)
- V. **Backtracking Search Optimization: A Novel Global Optimization Algorithm for the Inversion of Gravity Anomalies**
Ekinci Y. L., Balkaya Ç., Gökürkler G.
PURE AND APPLIED GEOPHYSICS, vol.178, no.11, pp.4507-4527, 2021 (SCI-Expanded)
- VI. **Gravity data inversion for the basement relief delineation through global optimization: a case study from the Aegean Graben System, western Anatolia, Turkey**
Ekinci Y. L., Balkaya Ç., Gökürkler G., Özyalın Ş.
GEOPHYSICAL JOURNAL INTERNATIONAL, vol.224, no.2, pp.923-944, 2021 (SCI-Expanded)
- VII. **Parameter estimations from gravity and magnetic anomalies due to deep-seated faults: differential evolution versus particle swarm optimization**
EKİNCİ Y. L., BALKAYA Ç., GÖKTÜRKLER G.
TURKISH JOURNAL OF EARTH SCIENCES, vol.28, no.6, pp.860-881, 2019 (SCI-Expanded)
- VIII. **Amplitude inversion of the 2D analytic signal of magnetic anomalies through the differential evolution algorithm**
Ekinci Y. L., Özyalın Ş., Sındırgı P., Balkaya Ç., Gökürkler G.
JOURNAL OF GEOPHYSICS AND ENGINEERING, vol.14, no.6, pp.1492-1508, 2017 (SCI-Expanded)
- IX. **3D non-linear inversion of magnetic anomalies caused by prismatic bodies using differential evolution algorithm**
BALKAYA Ç., EKİNCİ Y. L., GÖKTÜRKLER G., TURAN KARAOĐLAN S.
JOURNAL OF APPLIED GEOPHYSICS, vol.136, pp.372-386, 2017 (SCI-Expanded)
- X. **Model parameter estimations from residual gravity anomalies due to simple-shaped sources using Differential Evolution Algorithm**
EKİNCİ Y. L., BALKAYA Ç., GÖKTÜRKLER G., TURAN KARAOĐLAN S.
JOURNAL OF APPLIED GEOPHYSICS, vol.129, pp.133-147, 2016 (SCI-Expanded)
- XI. **Inversion of self-potential anomalies caused by simple-geometry bodies using global optimization algorithms**
GÖKTÜRKLER G., BALKAYA Ç.
JOURNAL OF GEOPHYSICS AND ENGINEERING, vol.9, no.5, pp.498-507, 2012 (SCI-Expanded)
- XII. **Exploration for a cave by magnetic and electrical resistivity surveys: Ayvacık Sinkhole example, Bozdağ, İzmir (western Turkey)**
BALKAYA Ç., GÖKTÜRKLER G., ERHAN Z., Ekinci Y. L.
GEOPHYSICS, vol.77, no.3, 2012 (SCI-Expanded)

- XIII. **Inversion of multi-channel surface wave data using a sequential hybrid approach**
ÇAYLAK Ç., GÖKTÜRKLER G., SARI C.
JOURNAL OF GEOPHYSICS AND ENGINEERING, vol.9, no.1, pp.19-28, 2012 (SCI-Expanded)
- XIV. **Upper crustal P-wave velocity structure of Kii Peninsula, SW Japan by first-arrival traveltime inversion of the Kawachinagano-Kiwa refraction profile**
BEKLER T., GÖKTÜRKLER G.
GEOPHYSICAL JOURNAL INTERNATIONAL, vol.185, no.1, pp.321-328, 2011 (SCI-Expanded)
- XV. **A hybrid approach for tomographic inversion of crosshole seismic first-arrival times**
GÖKTÜRKLER G.
JOURNAL OF GEOPHYSICS AND ENGINEERING, vol.8, no.1, pp.99-108, 2011 (SCI-Expanded)
- XVI. **Mapping aquifer geometry using electrical resistivity tomography: a case study from Sanliurfa, south-eastern Turkey**
DRAHOR M. G., BERGE M. A., GÖKTÜRKLER G., KURTULMUŞ T. Ö.
NEAR SURFACE GEOPHYSICS, vol.9, no.1, pp.55-66, 2011 (SCI-Expanded)
- XVII. **A Comparison of Two Travel-time Tomography Schemes for Crosshole Radar Data: Eikonal-equation-based Inversion Versus Ray-based Inversion**
BALKAYA Ç., Akcig Z., GÖKTÜRKLER G.
JOURNAL OF ENVIRONMENTAL AND ENGINEERING GEOPHYSICS, vol.15, no.4, pp.203-218, 2010 (SCI-Expanded)
- XVIII. **Traveltime tomography of crosshole radar data without ray tracing**
GÖKTÜRKLER G., BALKAYA Ç.
JOURNAL OF APPLIED GEOPHYSICS, vol.72, no.4, pp.213-224, 2010 (SCI-Expanded)
- XIX. **Seismic first-arrival tomography with functional description of traveltimes**
GÖKTÜRKLER G.
JOURNAL OF GEOPHYSICS AND ENGINEERING, vol.6, no.4, pp.374-385, 2009 (SCI-Expanded)
- XX. **Delineation of shallow resistivity structure in the city of Burdur, SW Turkey by vertical electrical sounding measurements**
BALKAYA Ç., Kaya M. A., Goektuerkler G.
ENVIRONMENTAL GEOLOGY, vol.57, no.3, pp.571-581, 2009 (SCI-Expanded)
- XXI. **Geophysical investigation of a landslide: The Altindag landslide site, Izmir (western Turkey)**
GÖKTÜRKLER G., BALKAYA Ç., ERHAN Z.
JOURNAL OF APPLIED GEOPHYSICS, vol.65, no.2, pp.84-96, 2008 (SCI-Expanded)
- XXII. **Investigation of a shallow alluvial aquifer using geoelectrical methods: a case from Turkey**
Göktürkler G., Balkaya Ç., Erhan Z., Yurdakul A.
ENVIRONMENTAL GEOLOGY, vol.54, no.6, pp.1283-1290, 2008 (SCI-Expanded)
- XXIII. **3D resistivity imaging from an archaeological site in south-western Anatolia, Turkey: a case study**
DRAHOR M. G., GÖKTÜRKLER G., BERGE M. A., KURTULMUŞ T. Ö., Tuna N.
NEAR SURFACE GEOPHYSICS, vol.5, no.3, pp.195-201, 2007 (SCI-Expanded)
- XXIV. **Application of electrical resistivity tomography technique for investigation of landslides: a case from Turkey**
DRAHOR M. G., GÖKTÜRKLER G., BERGE M. A., KURTULMUŞ T. Ö.
ENVIRONMENTAL GEOLOGY, vol.50, no.2, pp.147-155, 2006 (SCI-Expanded)

Articles Published in Other Journals

- I. **Inversion of Gravity Anomalies by a Hybrid Metaheuristic Algorithm**
Hosseinzadeh S., Göktürkler G., Turan Karaoğlan S.
Dokuz Eylül Üniversitesi Mühendislik Fakültesi Fen ve Mühendislik Dergisi, vol.26, no.78, pp.379-388, 2024 (Peer-Reviewed Journal)
- II. **Inversion of Gravity Anomalies by Cuckoo Search Algorithm**
Turan Karaoğlan S., Göktürkler G.

Dokuz Eylül Üniversitesi Mühendislik Fakültesi Fen ve Mühendislik Dergisi, vol.24, no.72, pp.799-813, 2022 (Peer-Reviewed Journal)

- III. **Modeling of crosshole ground-penetrating radar data**
BALKAYA Ç., GÖKTÜRKLER G.
PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSITESI MUHENDISLIK BILIMLERI DERGISI, vol.22, no.6, pp.581-596, 2016 (ESCI)
- IV. **Metaheuristics in applied geophysics**
GÖKTÜRKLER G., BALKAYA Ç., EKİNCİ Y. L., TURAN KARAOĞLAN S.
PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSITESI MUHENDISLIK BILIMLERI DERGISI, vol.22, no.6, pp.563-580, 2016 (ESCI)
- V. **Sığ yeraltı yapılarının özdirenç ters çözümünde güvenilirliğinirdelenmesi**
DRAHOR M. G., BERGE M. A., GÖKTÜRKLER G., KURTULMUŞ T. Ö.
Yerbilimleri, vol.26, no.3, pp.26-39, 2005 (Scopus)
- VI. **Bazı sığ yeraltı yapılarının özdirenç ters çözümü**
DRAHOR M. G., GÖKTÜRKLER G., BERGE M. A., KURTULMUŞ T. Ö.
Yerbilimleri, vol.26, no.2, pp.1-14, 2005 (Peer-Reviewed Journal)
- VII. **Dört farklı elektrot dizilimine göre bazı üç boyutlu sığ yeraltı yapılarının görünür özdirenç modellemesi**
DRAHOR M. G., GÖKTÜRKLER G., BERGE M. A., KURTULMUŞ T. Ö.
Yerbilimleri, vol.30, pp.115-128, 2004 (Scopus)
- VIII. **Numerical Modeling of the Conductive Heat Transfer in Western Anatolia**
GÖKTÜRKLER G., ŞALK M., SARI C.
Journal of the Balkan Geophysical Society, 2002 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **Global Optimization of Near-Surface Potential Field Anomalies Through Metaheuristics**
EKİNCİ Y. L., BALKAYA Ç., GÖKTÜRKLER G.
in: Advances in Modeling and Interpretation in Near Surface Geophysics, Arkoprovo Biswas, Shashi Prakash Sharma, Editor, Springer, pp.155-188, 2020

Refereed Congress / Symposium Publications in Proceedings

- I. **Investigation of Buried Petrified Woods in Manisa-Osmancalı (Türkiye) by Magnetic and Electrical Resistivity Tomography Methods**
Berge M. A., Erhan Z., Göktürkler G.
9. Yerelektrik Çalıştay, Afyonkarahisar, Turkey, 8 - 10 May 2024, pp.80-81
- II. **Detection of Buried Petrified Woods by Geophysical Methods: Case Study of Manisa-Osmancalı, Türkiye**
Erhan Z., Berge M. A., Göktürkler G.
76. Türkiye Jeoloji Kurultayı, Ankara, Turkey, 15 - 19 April 2024, pp.596
- III. **Self-Potential Inversion Through a Hybrid Algorithm**
Hosseinzadeh S., Göktürkler G., Turan Karaoğlan S.
DEU Graduate School of Natural and Applied Sciences, International Symposium Series on Graduate Research 2023, İzmir, Turkey, 7 - 08 December 2023, pp.1-2
- IV. **Global Optimization of Gravity Data of Basement Relief through Differential Evolution: A Case from the Aegean Graben System, Western Anatolia, Turkey**
EKİNCİ Y. L., BALKAYA Ç., GÖKTÜRKLER G., ÖZYALIN Ş.
7th International Earth Science Colloquium on the Aegean Region, IESCA-2019, İzmir, Turkey, 7 - 11 October 2019,

pp.187-190

- V. **Investigation of a landslide: a case study from Egridere, İzmir, Turkey**
TUNÇEL A., KINCAL C., BERGE M. A., ONGAR A., GÖKTÜRKLER G., KOCA M. Y.
7. International Earth Science Colloquium on the Aegean Region-IESCA2019, 7 - 11 October 2019
- VI. **DEUNET: Dokuz Eylül Üniversitesi Sismolojik Gözlem Ağı Projesi**
GÖK E., KURTULMUŞ T. Ö., POLAT O. D., ERHAN Z., KAFTAN İ., Kalkar B., TURAN S., GÖKTÜRKLER G., ŞALK M.
5. International Conference on Earthquake Engineering and Seismology, Ankara, Turkey, 8 - 11 October 2019
- VII. **Comparison of Pseudo-Random and Quasi-Random Number Generators in the Perturbation-Based Evolutionary Algorithm**
TURAN S., GÖKTÜRKLER G.
4th International Conference on Engineering and Natural Sciences, 2 - 06 May 2018
- VIII. **Determination of Gravity Model Parameters by Using Bat Algorithm**
TURAN S., GÖKTÜRKLER G., BALKAYA Ç.
4th International Conference on Engineering and Natural Sciences, 2 - 06 May 2018
- IX. **Cuckoo Arama Algoritmasının Potansiyel Alan Verilerinin Ters Çözümünde Kullanılması: Doğal Potansiyel ve Gravite Örneği**
TURAN S., GÖKTÜRKLER G., BALKAYA Ç.
7. Yer elektrik Çalıştayı, Turkey, 7 - 09 May 2018
- X. **Inversion of Analytic Signal Amplitude of Magnetic Data using Differential Evolution Algorithm**
EKİNCİ Y. L., ÖZYALIN Ş., SINDIRGI P., BALKAYA Ç., GÖKTÜRKLER G.
2nd International Conference on Civil and Environmental Engineering (ICOCEE – CAPPADOCIA 2017), Nevşehir, Turkey, 8 - 10 May 2017
- XI. **Perturbation based evolutionary algorithm a new metaheuristic optimization approach for inversion of geophysical data**
TURAN S., BALKAYA Ç., EKİNCİ Y. L., GÖKTÜRKLER G.
4th International Symposium on Engineering, Artificial Intelligence and Applications, Girne, Cyprus (Kktc), 2 - 04 November 2016, pp.25-29
- XII. **Doğal Uçlaşma Belirtilerinin Pertürbasyon Temelli Yeni Bir Evrimsel Algoritmayla Ters Çözümü**
TURAN S., BALKAYA Ç., EKİNCİ Y. L., GÖKTÜRKLER G.
6. Yer Elektrik Çalıştayı, Turkey, 23 - 25 May 2016
- XIII. **Application of particle swarm optimization to inversion of multiple self potential anomalies**
TURAN S., ACAR A., GÖKTÜRKLER G.
International Conference on Engineering and Natural Sciences, Sarajevo, Bosnia And Herzegovina, 24 - 28 May 2016
- XIV. **Metaheuristic in Applied Geophysics**
BALKAYA Ç., GÖKTÜRKLER G., EKİNCİ Y. L., TURAN S.
15th Workshop of the EURO Working Group EU/ME: The Metaheuristic Community, 24 - 25 March 2014
- XV. **An Integration of Geophysical Geological and Paleoseismological Trench Studies on Seferihisar Yelki Fault Zone in Güzelbahçe İzmir Turkey**
DRAHOR M. G., BERGE M. A., KURTULMUŞ T. Ö., GÜNGÖR T., GÖKTÜRKLER G., UTKU M.
Yüzeve Yakın Yapıların Belirlenmesinde Jeofizik ve Uzaktan Algılama Sempozyumu, İzmir, Turkey, 30 April - 02 May 2008, pp.48-51
- XVI. **İzmir Güzelbahçe de Yapılan Tümleşik Jeofizik Araştırmalar ve Paleosismolojik Hendek Çalışmalarının Sonuçları**
DRAHOR M. G., BERGE M. A., KURTULMUŞ T. Ö., GÜNGÖR T., UTKU M., GÖKTÜRKLER G.
Aktif Tektonik Araştırma Grubu 11. Çalıştayı, Kocaeli, Turkey, 8 - 09 November 2007
- XVII. **Arkeolojik Prospeksiyonda Elektrik Özdirenç Ters Çözüm Çalışmaları ve Önemi**
DRAHOR M. G., GÖKTÜRKLER G., BERGE M. A., KURTULMUŞ T. Ö.
Jeoarkeoloji ve Arkeojeofizik Sempozyumu, İstanbul, Turkey, 23 - 25 November 2005
- XVIII. **Arkeolojide Geniş Ölçekli Jeofizik Prospeksiyon ve Önemi**
DRAHOR M. G., GÖKTÜRKLER G., BERGE M. A., KURTULMUŞ T. Ö.

Jeoarkeoloji ve Arkeojeofizik Sempozyumu, İstanbul, Turkey, 23 - 25 November 2005

XIX. Resistivity Inversion Method in Archaeological Prospection and Its Importance

DRAHOR M. G., GÖKTÜRKLER G., BERGE M. A., KURTULMUŞ T. Ö.

6th International Conference on Archaeological Prospection, ROMA, Italy, 14 - 17 September 2005, pp.112-115

XX. Large scale Geophysical Studies at the some Roman Legionary Camp Sites in Turkey

DRAHOR M. G., GÖKTÜRKLER G., BERGE M. A., KURTULMUŞ T. Ö.

6th International Conference on Archaeological Prospection, Roma, Italy, 14 - 17 September 2005, pp.341-345

XXI. Geophysical studies in two landslide sites in Turkey

DRAHOR M. G., GÖKTÜRKLER G., BERGE M. A., KURTULMUŞ T. Ö.

11th European Meeting of Environmental and Engineering Geophysics of the Near Surface Geoscience Division of the EAGE, Near Surface 2005, Palermo, Italy, 4 - 07 September 2005

XXII. Large-scale resistivity and magnetic explorations at the Burgaz archaeological site, Turkey

DRAHOR M. G., BERGE M. A., KURTULMUŞ T. Ö., GÖKTÜRKLER G.

11th European Meeting of Environmental and Engineering Geophysics of the Near Surface Geoscience Division of the EAGE, Near Surface 2005, Palermo, Italy, 4 - 07 September 2005

XXIII. İzmir ve Çevresinin Depremselliğinin ve Deprem Tehlikesinin İncelenmesi

Akıncı A., Eyidoğan H., Göktürkler G., Akyol N., Ankaya O.

Batı Anadolu Depremselliği Sempozyumu, İzmir, Turkey, 15 May 2000, pp.231-238

XXIV. Crustal Temperature Distribution in the western Turkey

ŞALK M., GÖKTÜRKLER G., SARI C.

Second Balkan Geophysical Congress and Exhibittion, İstanbul, Turkey, 05 July 1999, pp.174-175

Supported Projects

2023 - 2023	İSKENDERUN VE ANTAKYA'DA ZEMİN ÖZELLİKLERİNİN BELİRLENMESİNE YÖNELİK JEOFİZİK ÇALIŞMALAR, Project Supported by Higher Education Institutions
2004 - 2007	İzmir Fayının Jeofizik Jeolojik Sismolojik Arkeolojik ve Tarihsel Veriler Yardımıyla İncelenmesi ve Yorumlanması, TUBITAK Project
2002 - 2005	Burgaz Arkeolojik Alanının Elektrik Özdirenç Ters Çözüm Yöntemiyle Görüntülenmesi, TUBITAK Project
1999 - 2001	Batı Anadolu'nun Depremselliği, Project Supported by Higher Education Institutions
1998 - 2001	İzmir ve Çevresi Deprem Etkinliğinin ve Sismotektonik Yapısının İncelenmesi, Project Supported by Higher Education Institutions

Metrics

Publication: 57

Citation (WoS): 565

Citation (Scopus): 590

H-Index (WoS): 13

H-Index (Scopus): 14

Non Academic Experience

2009 - Continues	Dokuz Eylül Üniversitesi Mühendislik Fakültesi Jeofizik Mühendisliği Bölümü
2004 - Continues	Dokuz Eylül Üniversitesi Mühendislik Fakültesi Jeofizik Mühendisliği Bölümü
2000 - 2004	Dokuz Eylül Üniversitesi Mühendislik Fakültesi Jeofizik Mühendisliği Bölümü
1996 - 2000	Dokuz Eylül Üniversitesi Mühendislik Fakültesi Makina Mühendisliği Bölümü