

Res. Asst. PhD SAMET SAKA

Personal Information

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Education Information

Doctorate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Jeoloji Mühendisliği/Mineraloji-Petrografi, Turkey
2013 - Continues

Postgraduate, Karadeniz Technical University, -, Jeoloji Mühendisliği, Turkey 2009 - 2013

Undergraduate, Karadeniz Technical University, Mühendislik Fakültesi, Jeoloji Mühendisliği, Turkey 2003 - 2009

Certificates, Courses and Trainings

Education Management and Planning, Hydro seperation, Barcelona University-Barcelona, 2015

Education Management and Planning, LA-ICP-MS (Laser Ablation ICP-MS), Goethe University-Frankfurt, 2015

Education Management and Planning, XRF (X-Ray-Fluorescence Spectrometry) sample preparation, Ludwig Maximilians University-Munich, 2014

Education Management and Planning, EPMA (Electron Probe Micro Analysis), Ludwig Maximilians University-Munich, 2011

Dissertations

Postgraduate, POZANTI-KARSANTI OFİYOLİTİNİN (ADANA, GÜNEY TÜRKİYE) PETROLOJİSİ: ÜST MANTODAKİ KISMİ ERGİME VE ERGİYİK-PERİDOTİT ETKİLEŞİM SÜREÇLERİİNİN TÜM KAYAÇ VE MİNERAL KİMYASI ÜZERİNE ETKİLERİ, Karadeniz Technical University, -, Jeoloji Mühendisliği, 2013

Research Areas

Geological Engineering, Ore Deposits-Geochemistry, Mineral Deposits, Metallic Mineral Deposits, Mineralogy-petrography, Geochronology, Mineralogy and Crystallography, Petrography and Petrology, petrogenesis, Engineering and Technology

Academic Titles / Tasks

Research Assistant, Karadeniz Technical University, Mühendislik Fakültesi, Jeoloji Mühendisliği, 2012 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

- I. Multistage evolution of the Aladağ mantle peridotites (S-Türkiye): Processes of partial melting and

- melt-peridotite interaction in Mid-Ocean Ridge and Subduction Zones**
Saka S., UYSAL İ., Seitz H., Müller D.
Geochemistry, 2024 (SCI-Expanded)
- II. **Reactive origin of mantle harzburgite: Evidence from orthopyroxene-spinel association**
JING J., Su B., Xiao Y., ZHANG H., UYSAL İ., Chen C., LIN W., CHU Y., Saka S.
LITHOS, vol.342, pp.175-186, 2019 (SCI-Expanded)
- III. **Petrological characteristics and geochemical compositions of the Neotethyan Mersin ophiolite (southern Turkey): Processes of melt depletion, refertilization, chromitite formation and oceanic crust generation**
SAKA S., UYSAL İ., Kapsiotis A., Bagci U., Ersoy E. Y., Su B., SEITZ H., HEGNER E.
JOURNAL OF ASIAN EARTH SCIENCES, vol.176, pp.281-299, 2019 (SCI-Expanded)
- IV. **The Guleman ophiolitic chromitites (SE Turkey) and their link to a compositionally evolving mantle source during subduction initiation**
UYDAL İ., Kapsiotis A., Akmaz R. M., Saka S., SEITZ H. M.
ORE GEOLOGY REVIEWS, vol.93, pp.98-113, 2018 (SCI-Expanded)
- V. **Compositional fingerprints of chromian spinel from the refractory chrome ores of Metalleion, Othris (Greece): Implications for metallogeny and deformation of chromitites within a "hot" oceanic fault zone**
Kapsiotis A., Rassios A. E., UYSAL İ., Grieco G., Akmaz R. M., Saka S., Bussolesi M.
JOURNAL OF GEOCHEMICAL EXPLORATION, vol.185, pp.14-32, 2018 (SCI-Expanded)
- VI. **Ophiolitic chromitites from the Kizilyuksek area of the Pozanti-Karsanti ophiolite (Adana, southern Turkey): Implication for crystallization from a fractionated boninitic melt**
Avci E., UYSAL İ., Akmaz R. M., Saka S.
ORE GEOLOGY REVIEWS, vol.90, pp.166-183, 2017 (SCI-Expanded)
- VII. **Petrogenesis of ultramafic rocks from the eastern Orhaneli ophiolite, NW Turkey: Hints on the initiation and evolution of melt-peridotite interaction processes within a heterogeneously depleted mantle section**
UYDAL İ., Dokuz A., Kapsiotis A., Saka S., Karsli O., Kaliwoda M., Mueller D.
JOURNAL OF ASIAN EARTH SCIENCES, vol.148, pp.51-64, 2017 (SCI-Expanded)
- VIII. **Coexistence of compositionally heterogeneous chromitites in the Antalya-Isparta ophiolitic suite, SW Turkey: A record of sequential magmatic processes in the sub-arc lithospheric mantle**
UYDAL İ., Akmaz R. M., Saka S., Kapsiotis A.
LITHOS, vol.248, pp.160-174, 2016 (SCI-Expanded)
- IX. **Genesis and geodynamic significance of chromitites from the Orhaneli and Harmancik ophiolites (Bursa, NW Turkey) as evidenced by mineralogical and compositional data**
UYDAL İ., Akmaz R. M., Kapsiotis A., Demir Y., Saka S., Avci E., Mueller D.
ORE GEOLOGY REVIEWS, vol.65, pp.26-41, 2015 (SCI-Expanded)
- X. **Depletion and refertilization of the Tethyan oceanic upper mantle as revealed by the early Jurassic Refahiye ophiolite, NE Anatolia-Turkey**
UYDAL İ., Ersoy E. Y., Dilek Y., Escayola M., SARIFAKIOGLU E., Saka S., Hirata T.
GONDWANA RESEARCH, vol.27, no.2, pp.594-611, 2015 (SCI-Expanded)
- XI. **The effects of partial melting, melt-mantle interaction and fractionation on ophiolite generation: Constraints from the late Cretaceous Pozanti-Karsanti ophiolite, southern Turkey**
Saka S., UYSAL İ., Akmaz R. M., Kaliwoda M., Hochleitner R.
LITHOS, vol.202, pp.300-316, 2014 (SCI-Expanded)
- XII. **Compositional variations of chromite and solid inclusions in ophiolitic chromitites from the southeastern Turkey: Implications for chromitite genesis**
Akmaz R. M., UYSAL İ., Saka S.
ORE GEOLOGY REVIEWS, vol.58, pp.208-224, 2014 (SCI-Expanded)
- XIII. **Geochemical make-up of oceanic peridotites from NW Turkey and the multi-stage melting history of the Tethyan upper mantle**

Refereed Congress / Symposium Publications in Proceedings

- I. **Aladağ Ofiyoliti (G-Türkiye) Manto Peridotitlerindeki Klinopiroksenlerin Jeokimyası”, Uluslararası katılımlı Kapadokya Yerbilimleri Sempozyumu**
SAKA S., UYSAL İ., Seitz M.
Uluslararası katılımlı Kapadokya Yerbilimleri Sempozyumu, 24 - 26 October 2018
- II. **Aladağ Ofiyoliti (G-Türkiye) Manto Peridotitlerindeki Klinopiroksenlerin Jeokimyası**
SAKA S., UYSAL İ., Seitz H.
Uluslararası katılımlı Kapadokya Yerbilimleri Sempozyumu, Niğde, Turkey, 24 - 26 October 2018, pp.92-93
- III. **Platinum Group Elements (PGE)-Re Geochemistry and Re-Os Isotope signatures of the Mantle Peridotites from the Aladağ Ophiolite (S-Turkey)**
SAKA S., UYSAL İ., ERSOY E. Y., Ackerman L.
European Geosciences Union General Assembly 2018, Viyana, Austria, 8 - 13 April 2018, vol.20, pp.15068
- IV. **OPHIOLITIC CHROMITITES FROM THE KIZILYÜKSEK AREA OF THE POZANTI-KARSANTI OPHIOLITE (ADANA, SOUTHERNTURKEY): IMPLICATION FOR CRYSTALLIZATION FROM AFRACITIONATED BONINITIC MELT**
AVCI E., UYSAL İ., AKMAZ R. M., SAKA S.
Subduction Related Ore Deposits, Trabzon, Turkey, 23 - 26 September 2017, pp.16
- V. **Alteration Effects on Podiform Chromitites in Kızıldağ Ophiolite (S-Turkey): Implications for Metamorphism Processes**
AKMAZ R. M., UYSAL İ., SAKA S., Seitz M.
Subduction Related Ore Deposits, Trabzon, Turkey, 23 - 26 September 2017, pp.13
- VI. **Ophiolitic Chromitites from the Kızılıyüksekol Area of the Pozanti-Karsanti Ophiolite (Adana, Southern Turkey): Implication for crystallization from a Fractionated Boninitic Melt**
Avci E., UYSAL İ., AKMAZ R. M., SAKA S.
Subduction Related Ore Deposits, Trabzon, Turkey, 23 - 26 September 2017, pp.15
- VII. **Multistage Evolution of the Aladağ Mantle Peridotites (S-Turkey): Implications from Whole Rock and Mineral Chemistry**
SAKA S., UYSAL İ.
Goldschmidt 2017, Paris, France, 13 August - 18 September 2017, pp.3469
- VIII. **MOR vs SSZ origin of the Aladağ ophiolite (S-Turkey): implications from clinopyroxene geochemistry**
SAKA S., UYSAL İ., SEITZ M., AKMAZ R. M.
EGU General Assembly, VİYANA, Austria, 23 - 28 April 2017, vol.19
- IX. **MOR vs SSZ origin of the Aladağ ophiolite (S-Turkey): implications from clinopyroxene geochemistry**
SAKA S., UYSAL İ., Seitz M., Akmaz R. M.
European Geosciences Union General Assembly 2017, Viyana, Austria, 23 - 28 April 2017, vol.19, pp.14018
- X. **Aladağ Ofiyoliti (G-Türkiye) Manto Peridotitleri ve Kabuksal Kayaçlarının Re-Os İzotopik Evrimi**
SAKA S., UYSAL İ., Ersoy E. Y., Ackerman L.
70. Türkiye Jeoloji Kurultayı, Ankara, Turkey, 10 - 14 April 2017, pp.322-323
- XI. **Guleman ofiyoliti ile ilişkili podiform kromititlerin petrolojik ve jeokimyasal özellikleri**
AKMAZ R. M., UYSAL İ., SAKA S.
VII. Jeokimya Sempozyumu, 16 - 18 May 2016
- XII. **Guleman Ofiyoliti İle İlişkili Podiform Kromititlerin Petrolojik ve Jeokimyasal Özellikleri**
Akmaz R. M., UYSAL İ., SAKA S.
7. Jeokimya Sempozyumu, Antalya, Turkey, 16 - 18 May 2016, pp.84
- XIII. **Mersin Ofiyoliti Manto Peridotitleri (G-Türkiye): Ergime ve Ergiyik Etkileşim Süreçlerinin Tüm Kayaç ve Mineral Bileşimleri Üzerine Etkisi**

- SAKA S., UYSAL İ., Akmaz R. M.
 7. Jeokimya Sempozumu, Antalya, Turkey, 16 - 18 May 2016, pp.294
- XIV. **Türkiye ofiyolitleri ile ilişkili podiform kromititlerin Cr-PGE içeriklerine genel bir bakış**
 UYSAL İ., Akmaz R. M., SAKA S.
 7. Jeokimya Sempozumu, Antalya, Turkey, 16 - 18 May 2016, pp.52
- XV. **Melting and refertilization history of the mantle peridotites from the SSZ-type Guleman ophiolite**
 SAKA S., UYSAL İ., AKMAZ R. M.
 European Geosciences Union General Assembly 2016, Viyana, Austria, 17 - 22 April 2016, vol.18, pp.12429
- XVI. **Mersin Ofiyoliti (G-Türkiye) Re-Os İzotop Sistemikleri: Yitim Karkterli Okyanusal Kabuk ve Kromitit oluşumunda Kabuksal 1870s katkısı**
 SAKA S., UYSAL İ., AKMAZ R. M., Bağcı U., ERSOY E. Y.
 69. Türkiye Jeoloji Kurultayı, Ankara, Turkey, 11 - 15 April 2016, pp.280-281
- XVII. **Re-Os Signature of Mersin Ophiolite (S-Turkey): 1870s Contribution during the SSZ Type Oceanic Crust and Chromitite Generation**
 SAKA S., UYSAL İ., Akmaz R. M., Bağcı U., Ersoy E. Y.
 Goldschmidt 2015, Prag, Czech Republic, 16 - 21 August 2015, pp.2735
- XVIII. **Coexistence of compositionally heterogeneous podiform chromitites in the Antalya-Isparta ophiolitic suite, SW Turkey: a record of sequential magmatic processes in the sub-arc lithospheric mantle**
 UYSAL İ., Kapsiotis A., Akmaz R. M., SAKA S., Avci E., Mueller D.
 European Geosciences Union General Assembly (EGU) 2015, Vienna, Austria, 12 - 17 April 2015
- XIX. **Partial melting effects and melt-peridotite interactions in the Pozanti-Karsanti ophiolite (eastern Taurides, Turkey)**
 SAKA S., Kaliwoda M., UYSAL İ., Akmaz R. M., Hochleitner R.
 Deutsche Mineralogische Gesellschaft (DMG), Jena, Germany, 21 - 24 September 2014, pp.5
- XX. **Mineralogical and geochemical investigation on podiform chromitites from the Guleman Ophiolite**
 Akmaz R. M., UYSAL İ., SAKA S.
 European Geosciences Union General Assembly (EGU) 2014, Vienna, Austria, 27 April - 02 May 2014
- XXI. **Mineralogy and composition of solid phases in chromite grains of ophiolitic podiform chromitites from the Pozanti-Karsanti Ophiolite southern Turkey**
 Avci E., UYSAL İ., SAKA S., Akmaz R. M., Mueller D.
 European Geosciences Union General Assembly (EGU) 2014, Vienna, Austria, 27 April - 02 May 2014
- XXII. **Mantle Peridotites from the Mersin Ophiolite (S-Turkey): implications for effects of melting and subsequent melt interaction on whole-rock and mineral compositions**
 SAKA S., UYSAL İ., Akmaz R. M., Kaliwoda M., Bağcı U.
 European Geosciences Union General Assembly (EGU) 2014, Vienna, Austria, 27 April - 02 May 2014
- XXIII. **Melting history of the Pozanti-Karsanti ophiolite, Turkey: Implications from whole-rock and mineral compositions**
 SAKA S., UYSAL İ., Akmaz R. M., Kaliwoda M.
 Goldschmidt 2013, Florance, Italy, 25 - 30 August 2013, pp.2115
- XXIV. **Trace element composition of clinopyroxenes from the Kızıldag ophiolite (S-Turkey): Implication for multi-stage fractionational melting in a SSZ setting.**
 Sen A. D., UYSAL İ., Godard M., SAKA S., Akmaz R. M., Kaliwoda M., Bağcı U.
 Goldschmidt 2013, Florance, Italy, 25 - 30 August 2013, pp.2178
- XXV. **Trace element composition of clinopyroxenes and mineral chemistry of peridotites from the Kizildag ophiolite (S-Turkey): implication for melting and refertilization in SSZ environment**
 Sen A. D., UYSAL İ., Godard M., SAKA S., Akmaz R. M., Kaliwoda M., Bağcı U.
 European Geosciences Union (EGU) 2013, Viyana, Austria, 7 - 12 April 2013, pp.13005
- XXVI. **Petrogenesis of Ophiolitic Chromitites from the Southeastern Turkey: Chromite Composition and Geochemistry and Mineralogy of Platinum Group Elements**
 Akmaz R. M., UYSAL İ., SAKA S.
 European Geosciences Union (EGU) 2013, Viyana, Austria, 7 - 12 April 2013, pp.12859

- XXVII. **Guleman Ofiyolitik Kromititleri (Elazığ, Gd-Türkiye): Magmatik Kökene Ait Bulgular**
 UYSAL İ., Akmaz R. M., SAKA S.
 66. Türkiye Jeoloji Kurultayı, Ankara, Turkey, 1 - 05 April 2013, pp.362-363
- XXVIII. **Mineralogy and Geochemistry of Platinum Group Elements (PGE) in Ophiolitic Chromitites (Kahramanmaraş-Malatya-Gaziantep), Southeast Turkey: Implications for Primitive Melts.**
 Akmaz R. M., UYSAL İ., Zaccarini F., SAKA S.
 International Earth Science Colloquim On The Aegean Region IESCA, İzmir, Turkey, 1 - 05 October 2012
- XXIX. **GD Türkiye ofiyolitik kromititlerinde gözlenen birincil platin grubu mineral (PGM) ve silikat kapanımları: Magmatik kökene ait bulgular Primary platinum group mineral (Pgm) and silicate inclusions in ophiolitic chromitites from the Southeastern Turkey: Implications for magmatic origin.**
 Akmaz R. M., UYSAL İ., SAKA S., Zaccarini F.
 V. Jeokimya Sempozyumu, Denizli, Turkey, 23 - 25 May 2012, pp.39-40
- XXX. **Application of electric pulse disaggregation and hydro-separation techniques and chemical investigation of platinum group minerals (PGM) from the concentrate of İslahiye (Gaziantep, SE Turkey) chromitite.**
 UYSAL İ., Akmaz R. M., Aiglsperger T., Azimzadeh, A., Zaccarini F., SAKA S., Garuti G., Proenza , Thalhammer .
 Field Workshop Ophiolites and Related Ore and Industrial Minerals, Trabzon, Turkey, 16 - 22 May 2012, pp.21
- XXXI. **Zaccarini, F., Saka, S., Ottley, C.J., Meisel, T., 2012. Petrogenesis and Re-Os Geochronology of the Refahiye (Erzincan) Ophiolites: Implications for Depletion and refertilization Processes and opening of the Paleotethyan Ocean**
 UYSAL İ., Ersoy E. Y., Dilek Y., Sarifakioglu E., Aydin F., Zaccarini F., SAKA S., Ottley C. J., Meisel T.
 Field Workshop Ophiolites and Related Ore and Industrial Minerals, Trabzon, Turkey, 16 - 22 May 2012, pp.22
- XXXII. **Petrogenesis and Re-Os Geochronology of the Refahiye (Erzincan) Ophiolites: Implications for Depletion and Refertilization Processes and Opening of the Paleotethyan Ocean**
 UYSAL İ., ERSOY Y., DİLEK Y., SARIFAKIOĞLU E., AYDİN F., ZACCARINI F., SAKA S., OTTLEY J., MEISEL T.
 Workshop: Ophiolites and Related Ore and Industrial Minerals, Trabzon, Turkey, 16 - 22 May 2012, pp.22
- XXXIII. **GD Türkiye Ofiyolitik Kromititleri: Kromit Kimyası, Platin Grubu Element (PGE) Jeokimyası ve Mineralojisi/Ophiolitic Chromites from the Southeastern Turkey: Chromite Composition and Geochemistry and Mineralogy of Their Platinum Group Elements (PGE)**
 Akmaz R. M., UYSAL İ., SAKA S., Zaccarini F., Hochleitner R., Bağcı U., Fehr T., Rızaoğlu T., Köprübaşı N.
 65. Türkiye Jeoloji Kurultayı, Ankara, Turkey, 2 - 06 April 2012, pp.350-351
- XXXIV. **Pozanti-Karsantı Ofiyoliti Manto Peridotitleri (G-Türkiye): Mineral ve Kayaç Kimyası (Mantle Peridotites of Pozanti-Karsantı Ophiolite (S-Turkey): Mineral and Rock Geochemistry)**
 SAKA S., UYSAL İ., Ersoy E. Y., Akmaz R. M., Bağcı U., Kaliwoda M., Ottley C. J.
 65. Türkiye Jeoloji Kurultayı, Ankara, Turkey, 2 - 06 April 2012, pp.352-353
- XXXV. **Kızıldağ Ofiyoliti (G-Türkiye): Ergime ve Etkileşim Süreçleri ve Re-Os Jeokronolojisi (Kızıldağ Ophiolite (S-Turkey): Melting and Interaction Processes, and Re-Os Geochronology)**
 UYSAL İ., SAKA S., Ersoy E. Y., Bağcı U., Kaliwoda M., Ottley C. J., Brauns M., Sen A. D., Köprübaşı N., Rızaoğlu T.
 65. Türkiye Jeoloji Kurultayı, Ankara, Turkey, 2 - 06 April 2012, pp.344-347
- XXXVI. **Podiform Chromitites from the Turkish Ophiolites: An Overview to the Mineralogy of Platinum**
 UYSAL İ., Zaccarini F., Garuti G., Kaliwoda M., Hochleitner R., Akmaz R. M., SAKA S.
 Goldschmidt 2011, Prag, Czech Republic, 14 - 19 August 2011, pp.2055

Supported Projects

AKGÜN A., SAKA S., Project Supported by Higher Education Institutions, Subduction Related Ore Deposits, 2017 - 2018
 UYSAL İ., SAKA S., OĞUZ S., YAĞCIOĞLU U. C., Project Supported by Higher Education Institutions, Doğu Karadeniz Bölgesi kayaç ve cevher örneklerinin petrografik ve mineralojik özelliklerinin belirlenmesi, 2017 - 2018

Metrics

Publication: 49
Citation (WoS): 400
Citation (Scopus): 452
H-Index (WoS): 10
H-Index (Scopus): 11

Congress and Symposium Activities

Kapadokya Yerbilimleri Sempozyumu, Attendee, Niğde, Turkey, 2018
8. Geochemistry Symposium, Attendee, Antalya, Turkey, 2018
European Geosciences Union General Assembly (EGU) 2018, Attendee, Vienna, Austria, 2018
International Workshop on Subduction Related Ore Deposits, Attendee, Trabzon, Turkey, 2017
Goldschmidt 2017, Attendee, Paris, France, 2017
European Geosciences Union General Assembly (EGU) 2017, Attendee, Wien, Austria, 2017
70. Türkiye Jeoloji Kurultayı, Attendee, Ankara, Turkey, 2017
7. Jeokimya Sempozyumu, Attendee, Ankara, Turkey, 2016
69. Türkiye Jeoloji Kurultayı, Attendee, Ankara, Turkey, 2016
European Geosciences Union General Assembly (EGU) 2016, Attendee, Wien, Austria, 2016
Goldschmidt 2015, Attendee, Prag, Czech Republic, 2015
European Geosciences Union General Assembly (EGU) 2015, Attendee, Austria, 2015
Deutsche Mineralogische Gesellschaft (DMG), Attendee, JENA, Germany, 2014
European Geosciences Union General Assembly (EGU) 2014, Attendee, Viyana, Austria, 2014
Goldschmidt 2013, Attendee, Floransa, Italy, 2013
European Geosciences Union (EGU) 2013, Attendee, Viyana, Austria, 2013
66. Türkiye Jeoloji Kurultayı, Attendee, Ankara, Turkey, 2013
International Earth Science Colloquim On The Aegean Region IESCA-2012, Attendee, İzmir, Turkey, 2012
Field Workshop Ophiolites and Related Ore and Industrial Minerals, Attendee, Trabzon, Turkey, 2012
V. Jeokimya Sempozyumu, Attendee, Denizli, Turkey, 2012
65. Türkiye Jeoloji Kurultayı, Attendee, Ankara, Turkey, 2012
Goldschmidt 2011, Attendee, Prag, Czech Republic, 2011

Awards

SAKA S., Genç Bilim ve Sanat İnsanı Ödülü, Karadeniz Teknik Üniversitesi, May 2019