

Prof. Gültekin Topuz

Personal Information

Office Phone: [+90 212 285 6112](tel:+902122856112)

Email: topuzg@itu.edu.tr

Web: <https://avesis.itu.edu.tr/topuzg>

Address: AVRASYA YER BİLİMLERİ ENSTİTÜSÜ /MADEN A BLOK AYAZAĞA KAMPÜS İTÜ SARIYER/İSTANBUL

International Researcher IDs

ORCID: 0000-0001-8690-4614

Publons / Web Of Science ResearcherID: O-1452-2013

ScopusID: 9233496800

Yoksis Researcher ID: 13480

Education Information

Doctorate, Ruprecht-Karls-Universitaet Heidelberg, Mineraloji-Petrografi, Germany 1996 - 2000

Postgraduate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Jeoloji Mühendisliği (YL) (Tezli), Turkey 1991 - 1994

Undergraduate, Karadeniz Technical University, Mühendislik Fakültesi, Jeoloji Mühendisliği Bölümü, Turkey 1986 - 1990

Foreign Languages

English

German

Dissertations

Doctorate, Zur Petrologie der Metamorphen Gesteine Des Pulur - Massivs (Östliche Pontiden, TURKEİ) , Universitaed Heidelberg, Mineralogischen Institut, 1999

Research Areas

Technical Sciences, Geological Engineering, Mineralogy-petrography, Geochronology, Petrography and Petrology, petrogenesis

Academic Titles / Tasks

Professor, Istanbul Technical University, Avrasya Yer Bilimleri Enstitüsü, Katı Yer Bilimleri, 2013 - Continues

Assistant Professor, Istanbul Technical University, Avrasya Yer Bilimleri Enstitüsü, Katı Yer Bilimleri, 2004 - 2006

Assistant Professor, Karadeniz Technical University, Mühendislik Fakültesi, Jeoloji Mühendisliği Bölümü, 2001 - 2004

Academic and Administrative Experience

İstanbul Teknik Üniversitesi, Avrasya Yer Bilimleri Enstitüsü, 2005 - 2009

Courses

Earth System, Postgraduate, 2016 - 2017

Igneous Processes, Postgraduate, 2016 - 2017

Geodinamics, Postgraduate, 2016 - 2017

Jury Memberships

Post Graduate, Tez savunma Jurisi, İSTANBUL TEKNİK ÜNİVERSİTESİ, June, 2011

Post Graduate, Tez Savunma Jürisi, İSTANBUL TEKNİK ÜNİVERSİTESİ, October, 2009

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Terrane geodynamics: Evolution on the subduction conveyor from pre-collision to post-collision and implications on Tethyan orogeny**
Gün E., Pysklywec R. N., Göğüş O. H., Topuz G.
Gondwana Research, vol.105, pp.399-415, 2022 (SCI-Expanded)
- II. **Cadomian crustal evolution of Turkey, Iran, and environs**
Topuz G., Azizi H., Burg J.
INTERNATIONAL GEOLOGY REVIEW, vol.64, no.17, pp.2385-2388, 2022 (SCI-Expanded)
- III. **Records of latest Triassic, mid-Cretaceous and Cenozoic uplift/exhumation phases in the Istanbul zone revealed by apatite fission-track and (U-Th)/He thermochronology**
Akdogan R., Dunkl I., Okay A., Hu X., Topuz G.
INTERNATIONAL GEOLOGY REVIEW, vol.64, no.3, pp.297-310, 2022 (SCI-Expanded)
- IV. **Pre-collisional extension of microcontinental terranes by a subduction pulley**
Gun E., Pysklywec R. N., Göğüş O. H., Topuz G.
NATURE GEOSCIENCE, vol.14, no.6, pp.443-453, 2021 (SCI-Expanded)
- V. **Twin Induced Reduction of Seismic Anisotropy in Lawsonite Blueschist**
Choi S., Fabbri O., Topuz G., Okay A., Jung H.
MINERALS, vol.11, no.4, 2021 (SCI-Expanded)
- VI. **Silurian A-type metaquartz-syenite to -granite in the Eastern Anatolia: Implications for Late Ordovician-Silurian rifting at the northern margin of Gondwana**
Topuz G., CANDAN O., Wang J., Li Q., Wu F., YILMAZ A.
GONDWANA RESEARCH, vol.91, pp.1-17, 2021 (SCI-Expanded)
- VII. **Silurian anorogenic basic and acidic magmatism in Northwest Turkey: Implications for the opening of the Paleo-Tethys**
Topuz G., Candan O., Okay A., Von Quadt A., Othman M., Zack T., Wang J.
LITHOS, vol.356, 2020 (SCI-Expanded)
- VIII. **Long Wavelength Progressive Plateau Uplift in Eastern Anatolia Since 20 Ma: Implications for the Role of Slab Peel-Back and Break-Off**
Memiş C., Göğüş O. H., Şengül Ulucak E., Pysklywec R., Keskin M., Şengör A. M. C., Topuz G.
Geochemistry Geophysics Geosystems, vol.21, pp.1-24, 2020 (SCI-Expanded)
- IX. **The East Anatolia-Lesser Caucasus ophiolite: An exceptional case of large-scale obduction, synthesis of data and numerical modelling**
Rolland Y., Hassig M., Bosch D., Bruguier O., Melis R., Galoyan G., Topuz G., Sahakyan L., Avagyan A., Sosson M.
GEOSCIENCE FRONTIERS, vol.11, pp.83-108, 2020 (SCI-Expanded)

- X. **Origin and significance of Early Miocene high-potassium I-type granite plutonism in the East Anatolian plateau (the Taslicay intrusion)**
Topuz G., CANDAN O., Zack T., Chen F., Li Q.
LITHOS, vol.348, 2019 (SCI-Expanded)
- XI. **Late Paleocene adakitic granitoid from NW Iran and comparison with adakites in the NE Turkey: Adakitic melt generation in normal continental crust**
Azizi H., Stem R. J., Topuz G., Asahara Y., Moghadam H. S.
LITHOS, vol.346, 2019 (SCI-Expanded)
- XII. **Blueschist facies overprint of late Triassic Tethyan oceanic crust in a subduction-accretion complex in north-central Anatolia, Turkey**
ÇELİK Ö. F., Ozkan M., Chelle-Michou C., Sherlock S., Marzoli A., Ulianov A., Altintas I. E., Topuz G.
JOURNAL OF THE GEOLOGICAL SOCIETY, vol.176, no.5, pp.945-957, 2019 (SCI-Expanded)
- XIII. **Ar-40-Ar-39 dating and petrology of monzonite ejecta in tephra from Quaternary Golcuk volcano (Isparta, SW Turkey): tear-related contrasting metasomatic symptoms in extensional mantle-derived magmas**
ÇOBAN H., Topuz G., Roden M. F., Nguyen Hoang N. H., Schwarz W. H.
LITHOS, vol.330, pp.160-176, 2019 (SCI-Expanded)
- XIV. **The Early Eocene Ekmekci granodiorite porphyry in the Karacabey region (Sakarya Zone, NW Turkey)**
Sunal G., ERTURAÇ M. K., Topuz G., Okay A., Zack T.
TURKISH JOURNAL OF EARTH SCIENCES, vol.28, no.4, pp.589-602, 2019 (SCI-Expanded)
- XV. **Middle Jurassic subduction-related ophiolite fragment in Triassic accretionary complex (Mamu Dagi ophiolite, Northern Turkey)**
ÇELİK Ö. F., Topuz G., Billor Z., Ozkan M.
INTERNATIONAL GEOLOGY REVIEW, vol.61, no.16, pp.2021-2035, 2019 (SCI-Expanded)
- XVI. **A middle Permian ophiolite fragment in Late Triassic greenschist- to blueschist-facies rocks in NW Turkey: An earlier pulse of suprasubduction-zone ophiolite formation in the Tethyan belt**
Topuz G., Okay A., Schwarz W. H., Sunal G., Altherr R., Kylander-Clark A. R. C.
LITHOS, vol.300, pp.121-135, 2018 (SCI-Expanded)
- XVII. **A middle Permian ophiolite fragment in Late Triassic greenschist- to blueschist-facies rocks in NW Turkey: An earlier pulse of suprasubduction-zone ophiolite formation in the Tethyan belt**
Topuz G.
LITHOS, pp.121-135, 2018 (SCI-Expanded)
- XVIII. **East Anatolian plateau constructed over a continental basement: No evidence for the East Anatolian accretionary complex**
Topuz G., Candan O., ZACK T., Yilmaz A.
GEOLOGY, vol.45, no.9, pp.791-794, 2017 (SCI-Expanded)
- XIX. **Variscan orogeny in the Black Sea region**
Okay A., Topuz G.
INTERNATIONAL JOURNAL OF EARTH SCIENCES, vol.106, no.2, pp.569-592, 2017 (SCI-Expanded)
- XX. **Late Eocene-Early Oligocene two-mica granites in NW Turkey (the Uludag Massif): Water-fluxed melting products of a mafic metagreywacke**
Topuz G., Okay A.
LITHOS, vol.268, pp.334-350, 2017 (SCI-Expanded)
- XXI. **Rutile geochemistry and thermometry of eclogites and associated garnet-mica schists in the Biga Peninsula, NW Turkey**
ŞENGÜN F., ZACK T., Topuz G.
CHEMIE DER ERDE-GEOCHEMISTRY, vol.77, no.3, pp.503-515, 2017 (SCI-Expanded)
- XXII. **Origin and geodynamic environments of the metamorphic sole rocks from the zmir-Ankara-Erzincan suture zone (Tokat, northern Turkey)**
Cortuk R. M., Celik O. F., Ozkan M., SHERLOCK S. C., MARZOLI A., Altintas I. E., Topuz G.

INTERNATIONAL GEOLOGY REVIEW, vol.58, no.15, pp.1839-1855, 2016 (SCI-Expanded)

- XXIII. **Late Neoproterozoic gabbro emplacement followed by early Cambrian eclogite-facies metamorphism in the Menderes Massif (W. Turkey): Implications on the final assembly of Gondwana**
Candan O., Koralay O. E., Topuz G., OBERHAENSLI R., FRITZ H., Collins A. S., CHEN F.
GONDWANA RESEARCH, vol.34, pp.158-173, 2016 (SCI-Expanded)
- XXIV. **Jurassic metabasic rocks in the Kizilirmak accretionary complex (Kargi region, Central Pontides, Northern Turkey)**
Celik O. F., CHIARADIA M., MARZOLI A., Ozkan M., BILLOR Z., Topuz G.
TECTONOPHYSICS, vol.672, pp.34-49, 2016 (SCI-Expanded)
- XXV. **Prograde calcite to aragonite transformation in the GumuAYyenikoy micritic limestones (Tavsanlı, NW Turkey)**
Topuz G., Okay A.
INTERNATIONAL JOURNAL OF EARTH SCIENCES, vol.103, no.8, pp.2271-2272, 2014 (SCI-Expanded)
- XXVI. **Triassic warm subduction in northeast Turkey: Evidence from the Agvanis metamorphic rocks**
Topuz G., Okay A., ALTHERR R., SCHWARZ W. H., SUNAL G., ALTINKAYNAK L.
ISLAND ARC, vol.23, no.3, pp.181-205, 2014 (SCI-Expanded)
- XXVII. **JURASSIC OPHIOLITE FORMATION AND EMPLACEMENT AS BACKSTOP TO A SUBDUCTION-ACCRETION COMPLEX IN NORTHEAST TURKEY, THE REFAHIYE OPHIOLITE, AND RELATION TO THE BALKAN OPHIOLITES**
Topuz G., Celik O. F., Şengör A. M. C., ALTINTAS I. E., ZACK T., ROLLAND Y., BARTH M.
AMERICAN JOURNAL OF SCIENCE, vol.313, no.10, pp.1054-1087, 2013 (SCI-Expanded)
- XXVIII. **Jurassic accretionary complex and ophiolite from northeast Turkey: No evidence for the Cimmerian continental ribbon**
Topuz G., GOCMENGİL G., ROLLAND Y., Celik O. F., ZACK T., SCHMITT A. K.
GEOLOGY, vol.41, no.2, pp.255-258, 2013 (SCI-Expanded)
- XXIX. **Diverse tectonic settings of formation of the metaigneous rocks in the Jurassic metamorphic accretionary complexes (Refahiye, NE Turkey) and their geodynamic implications**
Gocmengil G., Altintas I. E., Topuz G., Celik O. F., Ozkan M.
GEODINAMICA ACTA, vol.26, pp.294-310, 2013 (SCI-Expanded)
- XXX. **Linking the NE Anatolian and Lesser Caucasus ophiolites: evidence for large-scale obduction of oceanic crust and implications for the formation of the Lesser Caucasus-Pontides Arc**
Haessig M., ROLLAND Y., SOSSON M., GALOYAN G., SAHAKYAN L., Topuz G., Celik O. F., AVAGYAN A., MUELLER C.
GEODINAMICA ACTA, vol.26, pp.311-330, 2013 (SCI-Expanded)
- XXXI. **The Kemer Metamorphic Complex (NW Turkey): A Subducted Continental Margin of the Sakarya Zone**
Aygul M., Topuz G., Okay A., SATIR M., MEYER H.
TURKISH JOURNAL OF EARTH SCIENCES, vol.21, no.1, pp.19-35, 2012 (SCI-Expanded)
- XXXII. **Metamorphism and diachronous cooling in a contractional orogen: the Strandja Massif, NW Turkey**
Sunal G., SATIR M., NATAL'IN B. A., Topuz G., VONDERSCHMIDT O.
GEOLOGICAL MAGAZINE, vol.148, no.4, pp.580-596, 2011 (SCI-Expanded)
- XXXIII. **Post-collisional adakite-like magmatism in the Agvanis Massif and implications for the evolution of the Eocene magmatism in the Eastern Pontides (NE Turkey)**
Topuz G., Okay A., ALTHERR R., SCHWARZ W. H., SIEBEL W., ZACK T., SATIR M., ŞEN C.
LITHOS, vol.125, pp.131-150, 2011 (SCI-Expanded)
- XXXIV. **Carboniferous high-potassium I-type granitoid magmatism in the Eastern Pontides: The Gumushane pluton (NE Turkey)**
Topuz G., ALTHERR R., SIEBEL W., SCHWARZ W. H., ZACK T., HASOZBEK A., BARTH M., SATIR M., Sen C.
LITHOS, vol.116, pp.92-110, 2010 (SCI-Expanded)
- XXXV. **GEOLOGY AND CHEMICAL VARIATIONS IN TOURMALINE FROM THE QUARTZ-TOURMALINE BRECCIAS WITHIN THE KERKENEZ GRANITE-MONZONITE MASSIF, CENTRAL ANATOLIAN CRYSTALLINE COMPLEX, TURKEY**

- Demirel S., GÖNCÜOĞLU M. C., Topuz G., Isik V.
CANADIAN MINERALOGIST, vol.47, no.4, pp.787-799, 2009 (SCI-Expanded)
- XXXVI. **Late Cretaceous blueschist facies metamorphism in southern Thrace (Turkey) and its geodynamic implications**
Topuz G., Okay A., ALTHERR R., SATIR M., SCHWARZ W. H.
JOURNAL OF METAMORPHIC GEOLOGY, vol.26, no.9, pp.895-913, 2008 (SCI-Expanded)
- XXXVII. **Geochemical and Sr-Nd-Pb isotopic characteristics of Paleocene plagioclites from the Eastern Pontides (NE Turkey)**
Altherr R., Topuz G., SIEBEL W., Sen C., MEYER H., SATIR M., LAHAYE Y.
LITHOS, vol.105, pp.149-161, 2008 (SCI-Expanded)
- XXXVIII. **An oligocene ductile strike-slip shear zone: The Uludag Massif, northwest Turkey - Implications for the westward translation of Anatolia**
Okay A., SATIR M., ZATTIN M., CAVAZZA W., Topuz G.
GEOLOGICAL SOCIETY OF AMERICA BULLETIN, vol.120, pp.893-911, 2008 (SCI-Expanded)
- XXXIX. **An Oligocene ductile strike slip shear zone Uludağ Massif northwest Turkey implications for the escape tectonics**
Okay A., SATIR M., ZATTIN M., CAVAZZA W., TOPUZ G.
GEOLOGICAL SOCIETY OF AMERICA BULLETIN, vol.120, pp.893-911, 2008 (SCI-Expanded)
- XL. **Variscan amphibolite-facies rocks from the Kurtoglu metamorphic complex (Gumushane area, Eastern Pontides, Turkey)**
Topuz G., ALTHERR R., SCHWARZ W. H., DOKUZ A., MEYER H.
INTERNATIONAL JOURNAL OF EARTH SCIENCES, vol.96, no.5, pp.861-873, 2007 (SCI-Expanded)
- XLI. **Partial high-pressure aragonitization of micritic limestones in an accretionary complex, Tavşanlı Zone, NW Turkey**
Topuz G., OKAY A., ALTHERR R., MEYER H. -, NASDALA L.
Journal of Metamorphic Geology, vol.24, no.7, pp.603-613, 2006 (SCI-Expanded)
- XLII. **Comment on Petrography and petrology of the calc alkaline Sarihan granitoid NE Turkey An example of magma mingling and mixing**
Topuz G., OKAY A.
TURKISH JOURNAL OF EARTH SCIENCES, vol.15, no.3, pp.373-377, 2006 (SCI-Expanded)
- XLIII. **Contact metamorphism around the Eocene Saraycik Granodiorite eastern Pontides Turkey**
Topuz G.
TURKISH JOURNAL OF EARTH SCIENCES, vol.15, no.1, pp.75-94, 2006 (SCI-Expanded)
- XLIV. **Post-collisional plutonism with adakite-like signatures: the Eocene Saraycik granodiorite (Eastern Pontides, Turkey)**
Topuz G., ALTHERR R., SCHWARZ W., SIEBEL W., SATIR M., DOKUZ A.
CONTRIBUTIONS TO MINERALOGY AND PETROLOGY, vol.150, no.4, pp.441-455, 2005 (SCI-Expanded)
- XLV. **Evolution of a tourmaline-bearing lawsonite eclogite from the Elekdag area (Central Pontides, N Turkey): evidence for infiltration of slab-derived B-rich fluids during exhumation**
Altherr R., Topuz G., MARSCHALL H., ZACK T., LUDWIG T.
CONTRIBUTIONS TO MINERALOGY AND PETROLOGY, vol.148, no.4, pp.409-425, 2004 (SCI-Expanded)
- XLVI. **Pervasive rehydration of granulites during exhumation - an example from the Pulur complex, Eastern Pontides, Turkey**
Topuz G., ALTHERR R.
MINERALOGY AND PETROLOGY, vol.81, pp.165-185, 2004 (SCI-Expanded)
- XLVII. **Aluminous granulites from the Pulur complex, NE Turkey: a case of partial melting, efficient melt extraction and crystallisation**
Topuz G., ALTHERR R., KALT A., SATIR M., WERNER O., SCHWARZ W.
LITHOS, vol.72, pp.183-207, 2004 (SCI-Expanded)
- XLVIII. **Low-grade metamorphic rocks from the Pulur complex, NE Turkey: implications for the pre-Liassic evolution of the Eastern Pontides**

Topuz G., ALTHERR R., SATIR M., SCHWARZ W.

INTERNATIONAL JOURNAL OF EARTH SCIENCES, vol.93, no.1, pp.72-91, 2004 (SCI-Expanded)

Supported Projects

Topuz G., Atlı E. N., Project Supported by Higher Education Institutions, TOKAT MASİFİ KUZEYİNİN (TAŞOVA) TEKTONO - METAMORFİK EVRİMİ, 2017 - 2019

Topuz G., Project Supported by Higher Education Institutions, Petrogenesis of the Sarıcakaya granitic rocks (N. Eskişehir, Turkey) and their implication for the pre-Liassic evolution of the Sakarya zone, 2015 - 2018

Topuz G., Project Supported by Higher Education Institutions, EAST ANATOLIAN PLATEAU UNDERLAIN LARGELY BY A CONTINENTAL CRUST RATHER THAN OCEANIC ACCRETIONARY COMPLEX, 2015 - 2018

Topuz G., Project Supported by Higher Education Institutions, Kırşehir Masifi'nin Basınç-Sıcaklık-Zaman-Bileşim (P-T-t-X) Gelişimi ve Mikrodoku Gelişiminde Kimyasal Difüzyonun Etkisi, 2015 - 2018

Topuz G., Project Supported by Higher Education Institutions, EARLY TO LATE CARBONIFEROUS GRANITIC AND GABBROIC INTRUSIONS IN THE EASTERN PONTIDES AND THEIR RELATIONS WITH THE VARISCAN OROGENY IN THE CENTRAL EUROPE, 2015 - 2018

Topuz G., Project Supported by Higher Education Institutions, Jurassic Ophiolite Formation and Emplacement As Backstop to a Subduction Accretion Complex in The Northeast Turkey The Refahiye Ophiolite and Relation to The Bakan Ophiolites, 2013 - 2018

Topuz G., Project Supported by Higher Education Institutions, İstanbul Çavuşbaşı Granodiyoritinin Petrojenezi, 2013 - 2018

Topuz G., Project Supported by Higher Education Institutions, KURTOĞLU-MAVIŞİST-FASİYESLİ KAYAÇLARININ (GÜMÜŞHANE DOĞU PONTİDLER) JEOLJİK EVRİMİ VE JEODİNAMİK ÖNEMLERİ, 2011 - 2015

Topuz G., Project Supported by Higher Education Institutions, KEMER METAMORFİTLERİNİN (BİGA, ÇANAKKALE) JEOLJİK EVRİMİ VE JEODİNAMİK ÖNEMLERİ, 2009 - 2009

Metrics

Publication: 91

Citation (WoS): 1685

Citation (Scopus): 1758

H-Index (WoS): 19

H-Index (Scopus): 20

Non Academic Experience

TUBİTAK, TÜBİTAK, CAYDAG

İstanbul Teknik Üniversitesi

Çin Bilimler Akademisi

İstanbul Teknik Üniversitesi

Karadeniz teknik Üniversitesi

Karadeniz teknik Üniversitesi