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Personal Information

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Education Information

Doctorate, University Of Arizona, Department Of Geosciences, United States Of America 2001 - 2007

Postgraduate, Middle East Technical University, Faculty of Engineering, Department of Geological Engineering, Turkey
1999 - 2001

Undergraduate, Middle East Technical University, Faculty of Engineering, Department of Geological Engineering, Turkey
1995 - 1999

Dissertations

Doctorate, Complex rupture processes of large strike-slip earthquakes and receiver function analysis of crust and upper mantle in active tectonic settings, University Of Arizona, Department Of Geosciences, 2007

Postgraduate, Neotectonic characteristics of Dombayova (Dinar-Afyon) graben, Middle East Technical University, Faculty of Engineering, Department of Geological Engineering, 2001

Research Areas

Natural Sciences, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Middle East Technical University, Faculty Of Engineering, Department Of Geological Engineering,
2018 - Continues

Assistant Professor, Middle East Technical University, Faculty Of Engineering, Department Of Geological Engineering,
2010 - 2018

Lecturer, Middle East Technical University, Faculty Of Engineering, Department Of Geological Engineering, 2007 - 2009

Research Assistant, University of Arizona, Graduate College, Department Of Geosciences, 2003 - 2007

Research Assistant, Middle East Technical University, Faculty Of Engineering, Department Of Geological Engineering,
1999 - 2001

Academic and Administrative Experience

Fakülte Yönetim Kurulu Üyesi, Middle East Technical University, Faculty Of Engineering, Department Of Geological
Engineering, 2020 - Continues

Middle East Technical University, Afet Yönetimi Uygulama Ve Araştırma Merkezi, 2014 - Continues

Courses

RESEARCH METHODOLOGY AND ETHICS IN GEOLOGICAL ENGINEERING, Postgraduate, 2019 - 2020

Advising Theses

Gülerce Z., Özacar A. A. , Fault based probabilistic seismic hazard assessment at different tectonic regimes and data sampling conditions: Emphasis on sensitivity of seismic source characterization, Doctorate, S.TANVIR(Student), 2019

ÖZACAR A. A. , Analysis of crust and mantle structure across Turkey using passive seismic data, Doctorate, B.ABGARMI(Student), 2019

ÖZACAR A. A. , EARTHQUAKE FOCAL MECHANISM ANALYSIS OF CENTRAL ANATOLIA, Postgraduate, S.BİRİSOY(Student), 2018

Kaymakçı N., Özacar A. A. , Post-late cretaceous rotational evolution of neotethyan sutures around Ankara region, Doctorate, M.ÖZKAPTAN(Student), 2016

Süzen M. L. , Özacar A. A. , Morphometric analysis of active tectonic imprints at the junction of Büyük Menderes and Bozdoğan grabens, Western Anatolia, Postgraduate, S.GAMZE(Student), 2015

Karahanoglu N., Özacar A. A. , QUANTITATIVE SEISMIC INTERPRETATION AND RESERVOIR CHARACTERIZATION OF AKÇAKOCA PRODUCTION FIELD AT WESTERN BLACK SEA, TURKEY, Doctorate, S.AKTEPE(Student), 2015

Özacar A. A. , Bozkurt E., Stress tensor inversion from focal mechanism solutions and earthquake probability analysis of Western Anatolia, Turkey, Postgraduate, S.TANVIR(Student), 2015

ÖZACAR A. A. , Analysis of seismic anisotropy across Central Anatolia by shear wave splitting, Postgraduate, D.PAMİR(Student), 2014

Askan Gündoğan A., Özacar A. A. , Estimation of dynamic soil properties and soil amplification ratios with alternative techniques, Postgraduate, F.NURTEN(Student), 2013

ÖZACAR A. A. , KAYMAKCI N., Subsurface structure of the Central Thrace basin from 3D seismic reflection data, Postgraduate, Y.TAİKULAKOV(Student), 2011

KAYMAKCI N., ÖZACAR A. A. , Modeling permian petroleum system of Netherlands: hydrocarbon generation and migration, Postgraduate, E.Mert(Student), 2010

Özacar A. A. , Kaymakçı N., Earthquake focal mechanism and stress tensor analysis along the central segment of the North Anatolian fault, Postgraduate, E.KARASÖZEN(Student), 2010

KAYMAKCI N., ÖZACAR A. A. , 3D modeling of salt related structures in the friesland platform the Netherlands, Postgraduate, K.Yücel(Student), 2010

Designed Lessons

Özacar A. A. , RESEARCH METHODOLOGY AND ETHICS IN GEOLOGICAL ENGINEERING, Postgraduate, 2019 - 2020

Özacar A. A. , Seismoloji, Postgraduate, 2008 - 2009

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **Fault-based probabilistic seismic hazard assessment of the eastern Makran subduction and the Chaman transform fault, Pakistan: Emphasis on the source characterization of megathrust**
Shah S. T. , ÖZACAR A. A. , GÜLERCE Z.
Journal of Asian Earth Sciences, vol.205, 2021 (Journal Indexed in SCI)
- II. **Age and kinematics of the Burdur Basin: Inferences for the existence of the Fethiye Burdur Fault Zone in SW Anatolia (Turkey)**

- ÖZKAPTAN M., KAYMAKCI N., Langereis C. G. , Gulyuz E., ÖZACAR A. A. , UZEL B., SÖZBİLİR H.
TECTONOPHYSICS, vol.744, pp.256-274, 2018 (Journal Indexed in SCI)
- III. **Paleomagnetic evidence for upper plate response to a STEP fault, SW Anatolia**
KAYMAKCI N., Langereis C., ÖZKAPTAN M., Ozacar A. A. , Gülyüz E., UZEL B., SÖZBİLİR H.
EARTH AND PLANETARY SCIENCE LETTERS, vol.498, pp.101-115, 2018 (Journal Indexed in SCI)
- IV. **The 2017 July 20 M-w 6.6 Bodrum-Kos earthquake illuminates active faulting in the Gulf of Gokova, SW Turkey**
Karasozen E., Nissen E., Buyukakpinar P., CAMBAZ M. D. , Kahraman M., Ertan E. K. , Abgarmi B., Bergman E., Ghods A., ÖZACAR A. A.
GEOPHYSICAL JOURNAL INTERNATIONAL, vol.214, no.1, pp.185-199, 2018 (Journal Indexed in SCI)
- V. **Subduction termination through progressive slab deformation across Eastern Mediterranean subduction zones from updated P-wave tomography beneath Anatolia**
Portner D. E. , Delph J. R. , Biryol C. B. , Beck S. L. , Zandt G., ÖZACAR A. A. , Sandvol E., TÜRKELLİ N.
GEOSPHERE, vol.14, no.3, pp.907-925, 2018 (Journal Indexed in SCI)
- VI. **Structure of the crust and African slab beneath the central Anatolian plateau from receiver functions: New insights on isostatic compensation and slab dynamics**
Abgarmi B., Delph J. R. , ÖZACAR A. A. , Beck S. L. , Zandt G., Sandvol E., TÜRKELLİ N., Biryol C. B.
GEOSPHERE, vol.13, no.6, pp.1774-1787, 2017 (Journal Indexed in SCI)
- VII. **The effects of subduction termination on the continental lithosphere: Linking volcanism, deformation, surface uplift, and slab tearing in central Anatolia**
Delph J. R. , Abgarmi B., Ward K. M. , Beck S. L. , ÖZACAR A. A. , Zandt G., Sandvol E., TÜRKELLİ N., Kalafat D.
GEOSPHERE, vol.13, no.6, pp.1788-1805, 2017 (Journal Indexed in SCI)
- VIII. **Probabilistic Seismic-Hazard Assessment for East Anatolian Fault Zone Using Planar Fault Source Models**
GÜLERCE Z., SHAH S. T. , MENEKŞE A., Ozacar A. A. , Kaymakci N., ÇETİN K. Ö.
BULLETIN OF THE SEISMOLOGICAL SOCIETY OF AMERICA, vol.107, no.5, pp.2353-2366, 2017 (Journal Indexed in SCI)
- IX. **M-Split: A Graphical User Interface to Analyze Multilayered Anisotropy from Shear-Wave Splitting**
Abgarmi B., ÖZACAR A. A.
SEISMOLOGICAL RESEARCH LETTERS, vol.88, no.4, pp.1146-1155, 2017 (Journal Indexed in SCI)
- X. **Origin and interactions of fluids circulating over the Amik Basin (Hatay, Turkey) and relationships with the hydrologic, geologic and tectonic settings**
YÜCE G., Italiano F., D'Alessandro W., Yalcin T. H. , YASİN D., Gulbay A. H. , ÖZYURT N. N. , Rojay B., KARABACAK V., Bellomo S., et al.
CHEMICAL GEOLOGY, vol.388, pp.23-39, 2014 (Journal Indexed in SCI)
- XI. **Seismicity, focal mechanisms and active stress field around the central segment of the North Anatolian Fault in Turkey**
Karasozen E., ÖZACAR A. A. , Biryol C. B. , Beck S. L.
GEOPHYSICAL JOURNAL INTERNATIONAL, vol.196, no.1, pp.405-421, 2014 (Journal Indexed in SCI)
- XII. **Crustal velocity structure of Central and Eastern Turkey from ambient noise tomography**
Warren L. M. , Beck S. L. , Biryol C. B. , Zandt G., ÖZACAR A. A. , Yang Y.
GEOPHYSICAL JOURNAL INTERNATIONAL, vol.194, no.3, pp.1941-1954, 2013 (Journal Indexed in SCI)
- XIII. **3-D crustal structure along the North Anatolian Fault Zone in north-central Anatolia revealed by local earthquake tomography**
Yolsal Çevikbilen S., Biryol C. B. , Beck S., Zandt G., Taymaz T., Adiyaman H. E. , ÖZACAR A. A.
GEOPHYSICAL JOURNAL INTERNATIONAL, vol.188, no.3, pp.819-849, 2012 (Journal Indexed in SCI)
- XIV. **Segmented African lithosphere beneath the Anatolian region inferred from teleseismic P-wave tomography**
Biryol C. B. , Beck S. L. , Zandt G., ÖZACAR A. A.
GEOPHYSICAL JOURNAL INTERNATIONAL, vol.184, no.3, pp.1037-1057, 2011 (Journal Indexed in SCI)
- XV. **Shear wave splitting along a nascent plate boundary: the North Anatolian Fault Zone**

- Biryol C. B., Zandt G., Beck S. L., ÖZACAR A. A., Adiyaman H. E., Gans C. R.
GEOPHYSICAL JOURNAL INTERNATIONAL, vol.181, no.3, pp.1201-1213, 2010 (Journal Indexed in SCI)
- XVI. **Detecting the limit of slab break-off in central Turkey: new high-resolution Pn tomography results**
Gans C. R., Beck S. L., Zandt G., Biryol C. B., ÖZACAR A. A.
GEOPHYSICAL JOURNAL INTERNATIONAL, vol.179, no.3, pp.1566-1572, 2009 (Journal Indexed in SCI)
- XVII. **Crustal structure and seismic anisotropy near the San Andreas Fault at Parkfield, California**
ÖZACAR A. A., Zandt G.
GEOPHYSICAL JOURNAL INTERNATIONAL, vol.178, no.2, pp.1098-1104, 2009 (Journal Indexed in SCI)
- XVIII. **Upper mantle discontinuity structure beneath East Anatolian Plateau (Turkey) from receiver functions**
ÖZACAR A. A., Gilbert H., Zandt G.
EARTH AND PLANETARY SCIENCE LETTERS, vol.269, pp.426-434, 2008 (Journal Indexed in SCI)
- XIX. **Crustal seismic anisotropy in central Tibet: Implications for deformational style and flow in the crust**
Ozacar A., Zandt G.
GEOPHYSICAL RESEARCH LETTERS, vol.31, no.23, 2004 (Journal Indexed in SCI)
- XX. **The 2002 Denali fault and 2001 Kunlun fault earthquakes: Complex rupture processes of two large strike-slip events**
Ozacar A. A., Beck S.
BULLETIN OF THE SEISMOLOGICAL SOCIETY OF AMERICA, vol.94, no.6, 2004 (Journal Indexed in SCI)
- XXI. **Source process of the 3 November 2002 Denali fault earthquake (central Alaska) from teleseismic observations**
Ozacar A. A., Beck S., Christensen D.
GEOPHYSICAL RESEARCH LETTERS, vol.30, no.12, 2003 (Journal Indexed in SCI)
- XXII. **Extensional Neotectonic Regime through the NE Edge of the Outer Isparta Angle, SW Turkey: New Field and Seismic Data**
Koçyiğit A., Özacar A. A.
Turkish Journal Of Earth Sciences, vol.12, pp.67-90, 2003 (Journal Indexed in SCI Expanded)
- XXIII. **The June 6 2000 Orta Çankırı Turkey Earthquake Sourced from a New Antithetic Sinistral Strike slip Structure of the North Anatolian Fault System the Dodurga Fault Zone**
Koçyiğit A., ROJAY F. B., Cihan M., ÖZACAR A. A.
Turkish Journal of Earth Sciences, vol.10, no.2, pp.69-82, 2001 (Journal Indexed in SCI Expanded)

Articles Published in Other Journals

- I. **Seismic images of crustal variations beneath the East Anatolian Plateau (Turkey) from teleseismic receiver functions**
ÖZACAR A. A., Zandt G., Gilbert H., Beck S. L.
Geological Society Special Publication, vol.340, pp.485-496, 2010 (Refereed Journals of Other Institutions)

Refereed Congress / Symposium Publications in Proceedings

- I. **Investigation of Dynamic and Static Effects on Earthquake Triggering Using Different Rate and State Friction Laws and Marmara Simulation**
Sopacı E., ÖZACAR A. A.
EGU2020, Austria, 4 - 08 May 2020
- II. **Fault-based Probabilistic Seismic Hazard Assessment of the Makran Subduction Zone and the Chaman Transform Fault in Pakistan: Emphasis on the Effect of Source Characterization of Megathrust**
Shah S. T., ÖZACAR A. A., GÜLERCE Z.

EGU General Assembly 2019, 7 - 12 April 2019

- III. **Evidence for dynamic relationship between faulting and Neogene-Quaternary volcanism in post-collisional Central Anatolia (Turkey): Implications for shallow slab subduction and rollback**
Schleiffarth W., Umhoefer P., Cosca M., Reid M., Delph J., Portner D., Beck S., Abgarmı B., Özacar A. A.
American Geophysical Union (AGU) 2018 Fall Meeting, Washington, United States Of America, 10 - 14 December 2018, pp.4302
- IV. **Yeni Paleomanyetizma ve Paleostres Verileri Işığında Güney Batı Anadolu'xxnun GeçSenozoyik Evrimi**
KAYMAKCI N., ÖZACAR A. A. , LANGEREIS C., UZEL B., ÖZKAPTAN M., TOSUN L., GÜLYÜZ E., SÖZBİLİR H.
22. Aktif Tektonik Araştırma Grubu Çalıştayı, Çanakkale, Turkey, 1 - 03 November 2018, vol.1
- V. **MAGNETOSTRATIGRAPHY AND KINEMATICS OF THE BURDUR BASIN:INFERENCES FOR THE FETHİYE BURDUR FAULT ZONE, SW ANATOLIA(TURKEY)**
KAYMAKCI N., LANGEREIS C., ÖZKAPTAN M., UZEL B., KOÇ A., GÜLYÜZ E., SÖZBİLİR H., ÖZACAR A. A.
71th Geological Congress of Turkey, Ankara, Turkey, 23 - 27 April 2018, vol.1, pp.25
- VI. **THE MYTH OF FETHİYE BURDUR FAULT ZONE, SW ANATOLIA (TURKEY)**
KAYMAKCI N., LANGEREIS C., ÖZKAPTAN M., UZEL B., KOÇ A., GÜLYÜZ E., SÖZBİLİR H., ÖZACAR A. A.
71th Geological Congress of Turkey, Ankara, Turkey, 23 - 27 April 2018, vol.1, pp.42
- VII. **SPATIAL VARIATIONS OF ACTIVE STRESS PATTERNS AND FREQUENCYMAGNITUDE DISTRIBUTION OF EARTHQUAKES IN WESTERN ANATOLIA, TURKEY**
Shah S. T. , ÖZACAR A. A.
71th Geological Congress of Turkey, 23 - 27 April 2018
- VIII. **Procedure for fault-based PSHA in complex tectonic regimes (eg Western Anatolia): Implications of activity rate characterization**
Shah S. T. , ÖZACAR A. A. , GÜLERCE Z.
European Geosciences Union General Assembly 2018, 8 - 13 April 2018
- IX. **Extensional Tectonics of SW Anatolia In relation to Slab Edge Processes in the Eastern Mediterranean**
KAYMAKCI N., LANGEREIS C., ÖZKAPTAN M., ÖZACAR A. A. , KOÇ A., UZEL B., GÜLYÜZ E., SÖZBİLİR H.
AGU FALL MEETING 2017, 10 - 14 December 2017
- X. **Subsurface signature of North Anatolian Fault Zone and its relation with old sutures: New insight from receiver function analysis.**
ÖZACAR A. A. , Abgarmı B.
European Geophysical Union, 23 - 28 April 2017
- XI. **Aksu-Dinar Fault System: Its bearing on the evolution of the Isparta Angle (SW Turkey)**
KAYMAKCI N., ÖZACAR A. A. , LANGEREIS C., ÖZKAPTAN M., GÜLYÜZ E., HINSBERGEN D., UZEL B., MCPHEE P., SÖZBİLİR H.
EGU 2017, VİYENA, Austria, 23 - 28 April 2017
- XII. **M-Split: A Graphical User Interface to Analyze Multilayered Anisotropy from Shear Wave Splitting**
Abgarmı B., ÖZACAR A. A.
European Geophysical Union, 23 - 28 April 2017
- XIII. **Fethiye-Burdur Fault Zone (SW Turkey): a myth**
KAYMAKCI N., LANGEREIS C., ÖZKAPTAN M., ÖZACAR A. A. , GÜLYÜZ E., UZEL B., SÖZBİLİR H.
EGU-2017, VİYANA, Austria, 23 - 28 April 2017
- XIV. **The effects of subduction termination on the continental lithosphere: Linking volcanism, deformation, surface uplift, and slab tearing in central Anatolia**
Delph J. R. , Abgarmı B., Ward K. M. , Beck S. L. , ÖZACAR A. A. , Zandt G., Sandvol E., Turkelli N., Kalafat D.
European Geophysical Union, 23 - 28 April 2017
- XV. **Detection and Classification of Volcanic Earthquakes/Tremors in Central Anatolian Volcanic Province**
Kahraman M., ÖZACAR A. A. , TANK S. B. , USLULAR G., KUŞCU G., Türkelli N.
European Geosciences UnionGeneral Assembly 2017, Viyana, Austria, 23 - 28 April 2017

- XVI. **New Finite Frequency Teleseismic P wave Tomography of the Anatolian Sub continent and the Fate of the SubductedCyprean Slab**
Portner D. E. , Biryol C. B. , Delph J. R. , Beck S. L. , Zandt G., ÖZACAR A. A. , Eric A S, Türkelli N.
American Geophysical Union, 12 - 16 December 2016
- XVII. **The Nature of Central Anatolian Crust and Uppermost Mantle from Teleseismic Receiver Functions The Role of SlabDynamics on Rapid Uplift**
Abgarmi B., Delph J. R. , ÖZACAR A. A. , Beck S. L. , George Z., Sandvol E. A. , Türkelli N., Biryol C. B.
American Geophysical Union, 12 - 16 December 2016
- XVIII. **Probabilistic Seismic Hazard Assessment for East Anatolian Fault Zone Using Planar Source Models**
GÜLERCE Z., Menekşe A., ÖZACAR A. A. , ÇETİN K. Ö. , Kaymakçı N.
2016 Annual Meeting of Seismological Society of America, 19 - 21 April 2016
- XIX. **Kuzey Anadolu ve Doğu Anadolu Fay Zonu için Deprem Tekrarlanma Parametrelerinin Belirlenmesi**
Güner B., Menekşe A., ÖZACAR A. A. , GÜLERCE Z.
3. Türkiye Deprem Mühendisliği ve Sismoloji Konferansı, Turkey, 14 - 16 October 2015
- XX. **Central Anatolian Seismic Network Initial Analysis of the Seismicity and Earth Structure**
ÖZACAR A. A. , Abgarmi B., Delph J., Beck S. L. , Sandvol E., Türkelli N., Kalafat D., Kahraman M., Teoman U.
European Geophysical Union General Assembly 2015, 12 - 17 April 2015
- XXI. **Kinematics of SW Anatolia implications on crustal deformation above slab tear**
ÖZKAPTAN M., KOÇ A., GÜLYÜZ E., UZEL B., KAYMAKCI N., Cor L., ÖZACAR A. A.
EGU General Assembly Conference Abstracts, viyana, Austria, 27 - 29 April 2014

Activities in Scientific Journals

Journal Of Geodynamics, Committee Member, 2011 - Continues

Citations

Total Citations (WOS):940

h-index (WOS):17