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Education Information

Doctorate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, İnşaat Mühendisliği, Turkey
2004 - 2010

Postgraduate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, İnşaat Mühendisliği, Turkey
2002 - 2004

Undergraduate, Yildiz Technical University, Faculty Of Civil Engineering, İnşaat Mühendisliği, Turkey 2000 - 2003

Undergraduate, Yildiz Technical University, Faculty Of Civil Engineering, Çevre Mühendisliği, Turkey 1998 - 2002

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, İstanbul Boğazı su kalitesinin modellenmesi / Water quality modelling in the Strait of Istanbul, Yıldız Teknik Üniversitesi, Graduate School of Natural and Applied Sciences, İnşaat Mühendisliği, 2010

Postgraduate, Denizaltı boru hatlarına tesir eden hidrodinamik kuvvetlerin modellenmesi / Modelling of the hydrodynamic forces acting on submarine pipelines, Yıldız Teknik Üniversitesi, Graduate School of Natural and Applied Sciences, İnşaat Mühendisliği, 2004

Research Areas

Civil Engineering, Hydraulic, Coastal Sedimentation, Coastal Zone Management, Design of Coastal Structures, Coastal Engineering, Engineering and Technology

Academic Titles / Tasks

Associate Professor, Yildiz Technical University, Faculty Of Civil Engineering, Civil Engineering Department, 2014 -
Continues

Advising Theses

Ayat Aydođan B., Long-Term Changes in the Black Sea Storminess, during 1979-2019, Postgraduate, K.TAHTACI(Student), 2021

Ayat Aydođan B., Vulnerability of the South-Western Black Sea coasts to sea level rise, Postgraduate, T.GÖRMÜŞ(Student), 2017

Ayat Aydođan B., Effect of crest modifications on overtopping discharges over composite seawalls, Postgraduate, Ö.Göller(Student), 2016

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Statistical models for extreme waves: Comparison of distributions and Monte Carlo simulation of uncertainty**
Görmüş T., Ayat B., Aydođan B.
Ocean Engineering, vol.248, 2022 (Journal Indexed in SCI)
- II. **Wave Energy Dissipation of Spilling and Plunging Breaking Waves in Spectral Models**
Saprykina Y., Aydogan B., Ayat B.
Journal of Marine Science and Engineering, vol.10, no.2, 2022 (Journal Indexed in SCI)
- III. **Long-term (1979-2019) changes in the Black Sea storminess**
Tahtacı K., Ayat Aydođan B.
Journal Of The Faculty Of Engineering And Architecture Of Gazi University, vol.37, no.4, pp.2147-2162, 2022 (Journal Indexed in SCI Expanded)
- IV. **Hydrometeorological assessments of the transport of microplastic pellets in the Eastern Mediterranean**
Gündođdu S., Ayat Aydođan B., Aydođan B., Çevik C., Karaca S.
Science Of The Total Environment, vol.823, pp.1-16, 2022 (Journal Indexed in SCI Expanded)
- V. **The Method for Evaluating Cross-Shore Migration of Sand Bar under the Influence of Nonlinear Waves Transformation**
Shtremel M., Saprykina Y., AYAT AYDOĐAN B.
WATER, vol.14, no.2, 2022 (Journal Indexed in SCI)
- VI. **Performance evaluation of SWAN ST6 physics forced by ERA5 wind fields for wave prediction in an enclosed basin**
Aydođan B., Ayat B.
Ocean Engineering, vol.240, 2021 (Journal Indexed in SCI)
- VII. **Spatial and Seasonal Variability of Long-Term Sea Surface Temperature Trends in Aegean and Levantine Basins**
SARAÇOĐLU F. A. , Aydogan B., AYAT AYDOĐAN B., Saracoglu K. E.
PURE AND APPLIED GEOPHYSICS, vol.178, no.9, pp.3769-3791, 2021 (Journal Indexed in SCI)
- VIII. **Basin scale spatiotemporal analysis of shoreline change in the Black Sea**
Gormus T., AYAT AYDOĐAN B., Aydogan B., Tatui F.
ESTUARINE COASTAL AND SHELF SCIENCE, vol.252, 2021 (Journal Indexed in SCI)
- IX. **Analysis of potential changes in the Black Sea wave power for the 21st century**
Aydođan B., Görmüş T., Ayat B., Çarpar T.
Renewable Energy, vol.169, pp.512-526, 2021 (Journal Indexed in SCI)
- X. **Spatio-Seasonal Variations in Long-Term Trends of Offshore Wind Speeds Over the Black Sea; an Inter-Comparison of Two Reanalysis Data**
Çarpar T., Ayat B., Aydođan B.
Pure and Applied Geophysics, vol.177, no.6, pp.3013-3037, 2020 (Peer-Reviewed Journal)
- XI. **Vulnerability assessment of Southwestern Black Sea**
Gormus T., AYAT AYDOĐAN B.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.35, no.2, pp.663-681,

2020 (Peer-Reviewed Journal)

- XII. **The Black Sea coastline erosion: Index-based sensitivity assessment and management-related issues**
Tatui F., Pirvan M., Popa M., Aydoğan B., Ayat B., Gormus T., Korzinin D., Vaidianu N., Vespremeanu-Stroe A., Zainescu F., et al.
OCEAN & COASTAL MANAGEMENT, vol.182, 2019 (Journal Indexed in SCI)
- XIII. **Variability of the Nearshore Wave Climate in the Eastern Part of the Black Sea**
Saprykina Y., Shtremel M., Aydoğan B., Ayat Aydoğan B.
Pure And Applied Geophysics, vol.176, no.8, pp.3757-3768, 2019 (Journal Indexed in SCI)
- XIV. **Spatial variability of long-term trends of significant wave heights in the Black Sea**
Aydoğan B., Ayat B.
APPLIED OCEAN RESEARCH, vol.79, pp.20-35, 2018 (Peer-Reviewed Journal)
- XV. **How microplastics quantities increase with flood events? An example from Mersin Bay NE Levantine coast of Turkey.**
GÜNDOĞDU S., ÇEVİK C., Ayat B., Aydoğan B., KARACA S.
Environmental pollution (Barking, Essex : 1987), vol.239, pp.342-350, 2018 (Journal Indexed in SCI Expanded)
- XVI. **Vertical Cylinder Density and Toppling Effects on Dune Erosion and Overwash**
Ayat B., Kobayashi N.
JOURNAL OF WATERWAY PORT COASTAL AND OCEAN ENGINEERING, vol.141, no.1, 2015 (Peer-Reviewed Journal)
- XVII. **Black Sea wave energy atlas from 13 years hindcasted wave data**
Aydoğan B., Ayat B., YÜKSEL Y.
RENEWABLE ENERGY, vol.57, pp.436-447, 2013 (Journal Indexed in SCI)
- XVIII. **Wave power atlas of Eastern Mediterranean and Aegean Seas**
Ayat B.
ENERGY, vol.54, pp.251-262, 2013 (Journal Indexed in SCI)
- XIX. **3D numerical modeling of stratified flows: Case study of the Bosphorus strait**
ÖZTÜRK M., Ayat B., Aydoğan B., YÜKSEL Y.
Journal of Waterway, Port, Coastal and Ocean Engineering, vol.138, no.5, pp.406-419, 2012 (Journal Indexed in SCI)
- XX. **Current velocity forecasting in straits with artificial neural networks, a case study: Strait of Istanbul**
Aydoğan B., Ayat B., ÖZTÜRK M., Cevik E., YÜKSEL Y.
OCEAN ENGINEERING, vol.37, pp.443-453, 2010 (Journal Indexed in SCI)
- XXI. **Responses of the stratified flows to their driving conditions-A field study**
YÜKSEL Y., Ayat B., OZTURK M., Aydoğan B., GULER I., Cevik E., YALCINER A. C.
OCEAN ENGINEERING, vol.35, no.13, pp.1304-1321, 2008 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **Modeling the Fate and Transport of Microplastics in Coastal Areas**
Ayat Aydoğan B., Aydoğan B., Gündoğdu S.
in: Microplastic Pollution Environmental Occurrence and Treatment Technologies, Muhammad Zaffar Hashmi, Editor, Springer Nature, Zug, pp.241-255, 2022
- II. **Hidrolik ve Kıyı-Liman Mühendisliği Laboratuvarı Deney Aletleri Bakım ve Kalibrasyon Talimatları**
Ağaçcıoğlu H., Çevik E. Ö., Birpınar M. E., Çelikoğlu Y., Coşar A., Bostan T., Yılmaz D., Yüksel A., Arı A., Öztürk M., et al.
Ytü Basım Yayın Merkezi, 1

Refereed Congress / Symposium Publications in Proceedings

- I. **The Analysis of Long-Term Sea Surface Temperature in Bozcaada and Cesme**
Saraçoğlu F. A. , Ayat Aydoğan B., Aydoğan B., Saraçoğlu K. E.
4th Eurasian Conference on Civil and Environmental Engineering (ECOCEE), İstanbul, Turkey, 17 - 18 June 2019, pp.635
- II. **Sensitivity of Black Sea Coasts to Erosion and Flooding: an Index Based Approach**
Tatui F., Pirvan M., Popa M., Aydoğan B., Ayat Aydoğan B.
EGU General Assembly 2019, Vienna, Austria, 7 - 12 April 2019, pp.1
- III. **Determination of Wave Crest Elevations for Slamming Forces on Jetty with Vertical Wall End**
ÇEVİK E., YÜKSEL Y., AYDOĞAN B., AYAT AYDOĞAN B., Yüksel Z. e. T.
ICCE 2016, 17 - 20 November 2016, vol.1
- IV. **Doğu Akdeniz in Dalga Gücü Potansiyelinin Belirlenmesi**
Ayat Aydoğan B.
8. Ulusal Kıyı Mühendisliği Sempozyumu, İstanbul, Turkey, 7 - 09 November 2014, pp.841-851
- V. **Bitkilendirilmiş Kıyı Kumullarında Erozyonun Sayısal Modellenmesi**
Ayat Aydoğan B., Kobayashi N.
8. Ulusal Kıyı Mühendisliği Sempozyumu, İstanbul, Turkey, 7 - 09 November 2014, pp.171-180
- VI. **EROSION PROGRESSION OF WOODED COASTAL DUNE**
Ayat Aydoğan B., Kobayashi N.
34th International Conference on Coastal Engineering, ICCE 2014, Seoul, South Korea, 15 - 20 June 2014, pp.1-10
- VII. **PILE FENCE TO ENHANCE DUNE RESILIENCY**
Quan R., Kobayashi N., Ayat Aydoğan B.
34th International Conference on Coastal Engineering, ICCE 2014, Seoul, South Korea, 15 - 20 June 2014, vol.34, pp.1-14
- VIII. **A Coastal Management Case Study in Karasu at Black Sea Region**
Tan İ., Ayat Aydoğan B., Güner H. A. A. , Aydoğan B., Şeker D.
23rd International Offshore and Polar Engineering Conference ISOPE 2013, Alaska, United States Of America, 30 June - 05 July 2013, pp.1-7
- IX. **Açık Tipten Rıhtımlarda Etkili Gemi Pervane Jetlerinin Hidrodinamiği**
Yüksel Y., Çelikoğlu Y., Kayhan S., Cihan K., Ayat Aydoğan B.
7. Kıyı Mühendisliği Sempozyumu, Trabzon, Turkey, 21 - 23 November 2011, pp.107-118
- X. **Yapay Sınır Ağları ile Akıntı Profilinin Modellenmesi**
Aydoğan B., Ayat Aydoğan B., Çevik E.
7. Kıyı Mühendisliği Sempozyumu, Trabzon, Turkey, 21 - 23 November 2011, pp.403-410
- XI. **Güney Karadenizin Dalga Enerjisi Potansiyeli**
Ayat Aydoğan B.
5. Ulusal Su Mühendisliği Sempozyumu, İstanbul, Turkey, 12 - 16 September 2011, pp.1-8
- XII. **Akarsu Ağızlarının Hidrodinamiğinin Modellenmesi**
YÜKSEL Y., AYDOĞAN B., AYAT B., ÖZTÜRK M., COŞAR A.
Ulusal Taşkın Sempozyumu, Turkey, 22 - 24 March 2010
- XIII. **İstanbul Bogazında Akıntı İklimi Çalışması**
YÜKSEL Y., AYAT B., ÖZTÜRK M., AYDOĞAN B., Güler I., ÇEVİK E., YALÇINER A. C.
6. Ulusal Kıyı Mühendisliği Sempozyumu, Turkey, 25 - 28 October 2007
- XIV. **Istanbul Bogazında Akıntı İklimi Çalışması**
Yüksel Y., Ayat Aydoğan B., Aydoğan B. A. , Öztürk M., Çevik E., Güler I., Yalçiner A. C.
6. Ulusal Kıyı Mühendisliği Sempozyumu, İzmir, Turkey, 25 - 28 October 2007, pp.1-8
- XV. **Istanbul Boğazı Su Seviyesi Değişimlerinin Modellenmesi**
Ayat Aydoğan B., Aydoğan B., Öztürk M., Çevik E., Yüksel Y.
6. Ulusal Kıyı Mühendisliği Sempozyumu, İzmir, Turkey, 25 - 28 October 2007, pp.1-8
- XVI. **Coastal Zone Planning and Management in Istanbul**
AYAT AYDOĞAN B., Uzmez Z., ÇEVİK E., YÜKSEL Y.
8th International Conference on the Mediterranean Coastal Environment, Alexandria, Canada, 13 - 17 November

2007, pp.161-170

XVII. Wave climate study in the southwest coast of the Black Sea

Ari H. A. , Yuksel Y., ÇEVİK E., ŞAHİN C., Ayat B.

16th International Offshore and Polar Engineering Conference (ISOPE 2006), San-Francisco, Costa Rica, 28 May - 02 June 2006, pp.102-106

XVIII. Modelling of Submarine Pipeline Stability for Various Wave Theories

AYAT AYDOĞAN B., Yüksel Y.

MWWD 3rd International Conference on Marine Waste Water Discharges and Marine Environment, 01 November 2004

Supported Projects

UCUN L., YAŞAR C. F. , ENGİN G., TACAL B., ETEMADİ A., AYAT AYDOĞAN B., Project Supported by Higher Education Institutions, Frekans Tabanlı Sistem Tanıma Yaklaşımı ile Açık Su Kanal Sistemlerinde Verimliliği Arttırmaya Yönelik Su Seviyesi Kontrolü, 2022 - Continues

Engin G., Sarı Erkan H., Ayat Aydoğan B., Aydoğan B., Ayrıl Çınar D., Çelen M., Öncel M. S. , Tutak B., TUBITAK Project, Numerical and Spatial Investigations of Microplastic Pollution in Antarctic Marine Ecosystem: Horseshoe Island Case Study , 2022 - 2024

Ayat Aydoğan B., Aydoğan B., Görmüş T., TUBITAK Project, Spatial, Temporal and Seasonal Characteristics of the Climate Change Induced Variability in the Wind and Wave Energy Potential of the Mediterranean and the Black Sea based on CMIP6 Climate Projections, 2022 - 2024

Saprykina Y., Aydoğan B., Ayat Aydoğan B., TÜBİTAK International Bilateral Joint Cooperation Program Project, Nonlinear and dissipative transformation processes of breaking WAVes in Deep and Shallow water, 2020 - 2023

Börekeçi M., Aydoğan B., Ayat Aydoğan B., Selçuk M. E. , Kırmızıdağ F., Project Supported by Higher Education Institutions, Betonarme Kazıklı İskelelerin Deprem Performanslarının TKLYDY2020ye göre İncelenmesi ve HasarGörmeOlasılıklarının Belirlenmesi, 2021 - 2022

Sarı Erkan H., Engin G., Albay M., Ayat Aydoğan B., Aydoğan B., Köker Demo L., Kahraman C., Sunlu U., Gündoğdu S., TUBITAK Project, Endüstriyel Ve Sosyal Aktivitelerin İstanbul Boğazı'nda Oluşturduğu Mikroplastik Kirliliğinin Tespiti Ve Karakterizasyonu, 2020 - 2022

ÖZÇİMEN D., ÇELEBİ U. B. , SARI ERKAN H., BOZKURT K., BİLGİLİ M. S. , AYAT AYDOĞAN B., CİVELEK YÖRÜKLÜ H., DEMİR Ö., VARDAR N., Project Supported by Higher Education Institutions, Marmara Denizinde Ortaya Çıkan Müsilaj İçeriğinin Örnekleme Karakterizasyonu ve Tanımlanması ile Geniş Perspektifli Çözüm Üretmek İçin Üniversite Araştırma Altyapısının Değerlendirilmesi, 2021 - 2021

Ayat Aydoğan B., Aydoğan B., EU Supported Other Project, Changes in storminess and coastal erosion induced by climate variability along the Black Sea Coast. Management and adaptation – BSSTEMA, 2016 - 2018

Ayat Aydoğan B., Bayram B., Aydoğan B., Project Supported by Higher Education Institutions, Alaçatı Örneğinde Sürdürülebilir Kıyı Alanı İzleme Modeli, 2008 - 2010

Ayat Aydoğan B., Çelikoğlu Y., Aydoğan B., Project Supported by Higher Education Institutions, Tetrapod dalgakıranların düzensiz dalga şartlarında stabilitelerinin incelenmesi, 2007 - 2010

Yüksel Y., Ertürk F., Ayat Aydoğan B., Aydoğan B., Project Supported by Higher Education Institutions, İstanbul Boğazı Hidrodinamiğinin Su Kalitesine Etkisinin Modellenmesi, 2005 - 2007

Metrics

Publication: 67

Citation (WoS): 267

Citation (Scopus): 291

H-Index (WoS): 9

H-Index (Scopus): 9