

Assoc. Prof. MUSTAFA KOÇAK

Personal Information

Email: mukocak@metu.edu.tr

Web: <https://avesis.metu.edu.tr/mukocak>

Advising Theses

KOÇAK M., A 15-year climatology of aerosol optical and physical properties and near-real time measurements of water-soluble ions in pm2.5 and their precursor gases in the atmosphere over the eastern mediterranean., Doctorate, E.TUTSAK(Student), 2018

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

- I. **Optical and microphysical properties of the columnar Aerosol burden over the Eastern Mediterranean: Discrimination of Aerosol types**
Tutsak E., KOÇAK M.
ATMOSPHERIC ENVIRONMENT, vol.229, 2020 (Journal Indexed in SCI)
- II. **A new exposure route to trace elements in indoor particulate matter.**
Broomandi P., Amouei T., Akturk M., Ngagine S., Gorjinezhad S., Ozturk F., Kocak M., Kim J.
Indoor air, 2019 (Journal Indexed in SCI)
- III. **High time-resolved measurements of water-soluble sulfate, nitrate and ammonium in PM2.5 and their precursor gases over the Eastern Mediterranean**
Tutsak E., KOÇAK M.
SCIENCE OF THE TOTAL ENVIRONMENT, vol.672, pp.212-226, 2019 (Journal Indexed in SCI)
- IV. **Long-term measurements of aerosol optical and physical properties over the Eastern Mediterranean: Hygroscopic nature and source regions**
Tutsak E., KOÇAK M.
ATMOSPHERIC ENVIRONMENT, vol.207, pp.1-15, 2019 (Journal Indexed in SCI)
- V. **Atmospheric water-soluble organic nitrogen (WSON) in the eastern Mediterranean: origin and ramifications regarding marine productivity**
Nehir M., KOÇAK M.
ATMOSPHERIC CHEMISTRY AND PHYSICS, vol.18, no.5, pp.3603-3618, 2018 (Journal Indexed in SCI)
- VI. **Atmospheric Deposition of Macronutrients (Dissolved Inorganic Nitrogen and Phosphorous) onto the Black Sea and Implications on Marine Productivity***
KOÇAK M., Mihalopoulos N., Tutsak E., Violaki K., Theodosi C., Zarmpas P., Kalegeri P.
JOURNAL OF THE ATMOSPHERIC SCIENCES, vol.73, no.4, pp.1727-1739, 2016 (Journal Indexed in SCI)
- VII. **PM10 and PM2.5 composition over the Central Black Sea: origin and seasonal variability**
KOÇAK M., Mihalopoulos N., Tutsak E., Theodosi C., Zarmpas P., Kalegeri P.
ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH, vol.22, no.22, pp.18076-18092, 2015 (Journal Indexed in SCI)
- VIII. **Solubility of Atmospheric Nutrients over the Eastern Mediterranean: Comparison between Pure-Water and Sea-Water, Implications Regarding Marine Production**
Kocak M.
TURKISH JOURNAL OF FISHERIES AND AQUATIC SCIENCES, vol.15, no.1, pp.59-71, 2015 (Journal Indexed in SCI)
- IX. **Influence of mineral dust transport on the chemical composition and physical properties of the**

Eastern Mediterranean aerosol

KOÇAK M., Theodosi C., Zarpas P., Seguret M. J. M. , Herut B., Kallos G., Mihalopoulos N., Kubilay N., Nimmo M. ATMOSPHERIC ENVIRONMENT, vol.57, pp.266-277, 2012 (Journal Indexed in SCI)

- X. **Summertime aerosol chemical composition in the Eastern Mediterranean and its sensitivity to temperature**
Im U., Markakis K., KOÇAK M., Gerasopoulos E., Daskalakis N., Mihalopoulos N., Poupkou A., Kindap T., Ünal A., Kanakidou M.
ATMOSPHERIC ENVIRONMENT, vol.50, pp.164-173, 2012 (Journal Indexed in SCI)
- XI. **Particulate matter (PM₁₀) in Istanbul: Origin, source areas and potential impact on surrounding regions**
Kocak M., Theodosi C., Zarpas P., Im U., Bougiatioti A., Yenigun O., Mihalopoulos N.
ATMOSPHERIC ENVIRONMENT, vol.45, no.38, pp.6891-6900, 2011 (Journal Indexed in SCI)
- XII. **Iron solubility in crustal and anthropogenic aerosols: The Eastern Mediterranean as a case study**
Seguret M. J. M. , KOÇAK M., Theodosi C., Ussher S. J. , Worsfold P. J. , Herut B., Mihalopoulos N., Kubilay N., Nimmo M.
MARINE CHEMISTRY, vol.126, pp.229-238, 2011 (Journal Indexed in SCI)
- XIII. **Megacities as hot spots of air pollution in the East Mediterranean**
Kanakidou M., Mihalopoulos N., Kindap T., Im U., Vrekoussis M., Gerasopoulos E., Dermitzaki E., Ünal A., Kocak M., Markakis K., et al.
ATMOSPHERIC ENVIRONMENT, vol.45, no.6, pp.1223-1235, 2011 (Journal Indexed in SCI)
- XIV. **Long term atmospheric nutrient inputs to the Eastern Mediterranean sources solubility and comparison with riverine inputs**
KOÇAK M., KUBILAY N., TUĞRUL S., Nikos M.
Biogeosciences Discussions, vol.7, pp.5081-5117, 2010 (Journal Indexed in SCI Expanded)
- XV. **Atmospheric nutrient inputs to the northern levantine basin from a long-term observation: sources and comparison with riverine inputs**
Koçak M., Kubilay N., TUĞRUL S., Mihalopoulos N.
BIOGEOSCIENCES, vol.7, no.12, pp.4037-4050, 2010 (Journal Indexed in SCI)
- XVI. **Origin and source regions of PM₁₀ in the Eastern Mediterranean atmosphere**
KOÇAK M., Mihalopoulos N., Kubilay N.
ATMOSPHERIC RESEARCH, vol.92, no.4, pp.464-474, 2009 (Journal Indexed in SCI)
- XVII. **Variability in regional background aerosols within the Mediterranean**
Querol X., Alastuey A., Pey J., Cusack M., Perez N., Mihalopoulos N., Theodosi C., Gerasopoulos E., Kubilay N., KOÇAK M.
ATMOSPHERIC CHEMISTRY AND PHYSICS, vol.9, no.14, pp.4575-4591, 2009 (Journal Indexed in SCI)
- XVIII. **Chemical composition of the fine and coarse fraction of aerosols in the northeastern Mediterranean**
Kocak M., Mihalopoulos N., Kubilay N.
ATMOSPHERIC ENVIRONMENT, vol.41, no.34, pp.7351-7368, 2007 (Journal Indexed in SCI)
- XIX. **Airborne desert dust and aeromicrobiology over the Turkish Mediterranean coastline**
Griffin D. W. , Kubilay N., Kocak M., Gray M. A. , Borden T. C. , Shinn E. A.
ATMOSPHERIC ENVIRONMENT, vol.41, no.19, pp.4050-4062, 2007 (Journal Indexed in SCI)
- XX. **Contributions of natural sources to high PM₁₀ and PM_{2.5} events in the eastern Mediterranean**
Kocak M., Mihalopoulos N., Kubilay N.
ATMOSPHERIC ENVIRONMENT, vol.41, no.18, pp.3806-3818, 2007 (Journal Indexed in SCI)
- XXI. **Trace metal solid state speciation in aerosols of the Northern Levantine basin, East Mediterranean**
Kocak M., Kubilay N., Herut B., Nimmo M.
JOURNAL OF ATMOSPHERIC CHEMISTRY, vol.56, no.3, pp.239-257, 2007 (Journal Indexed in SCI)
- XXII. **Seasonal variability of optical properties of aerosols in the Eastern Mediterranean**
Vrekoussis M., Liakakou E., Kocak M., Kubilay N., Oikonomou K., Sciare J., Mihalopoulos N.
ATMOSPHERIC ENVIRONMENT, vol.39, no.37, pp.7083-7094, 2005 (Journal Indexed in SCI)
- XXIII. **Dry atmospheric fluxes of trace metals (Al, Fe, Mn, Pb, Cd, Zn, Cu) over the Levantine Basin: A**

refined assessment

Kocak M., Kubilay N., Herut B., Nimmo M.

ATMOSPHERIC ENVIRONMENT, vol.39, no.38, pp.7330-7341, 2005 (Journal Indexed in SCI)

- XXIV. **Ground-based assessment of Total Ozone Mapping Spectrometer (TOMS) data for dust transport over the northeastern Mediterranean**
Kubilay N., Oguz T., Kocak M., Torres O.
GLOBAL BIOGEOCHEMICAL CYCLES, vol.19, no.1, 2005 (Journal Indexed in SCI)
- XXV. **Spatio-temporal aerosol trace metal concentrations and sources in the Levantine Basin of the Eastern Mediterranean**
Kocak M., Nimmo M., Kubilay N., Herut B.
ATMOSPHERIC ENVIRONMENT, vol.38, no.14, pp.2133-2144, 2004 (Journal Indexed in SCI)
- XXVI. **Ionic composition of lower tropospheric aerosols at a Northeastern Mediterranean site: implications regarding sources and long-range transport**
Kocak M., Kubilay N., Mihalopoulos N.
ATMOSPHERIC ENVIRONMENT, vol.38, no.14, pp.2067-2077, 2004 (Journal Indexed in SCI)
- XXVII. **Atmospheric deposition of inorganic phosphorus in the Levantine Basin, eastern Mediterranean: Spatial and temporal variability and its role in seawater productivity**
Markaki Z., Oikonomou K., Kocak M., Kouvarakis G., Chaniotaki A., Kubilay N., Mihalopoulos N.
LIMNOLOGY AND OCEANOGRAPHY, vol.48, no.4, pp.1557-1568, 2003 (Journal Indexed in SCI)
- XXVIII. **Influence of Black Sea and local biogenic activity on the seasonal variation of aerosol sulfur species in the eastern Mediterranean atmosphere**
Kubilay N., Kocak M., Cokacar T., Oguz T., Kouvarakis G., Mihalopoulos N.
GLOBAL BIOGEOCHEMICAL CYCLES, vol.16, no.4, 2002 (Journal Indexed in SCI)

Books & Book Chapters

- I. **Atmospheric Input of Inorganic Macro-Nutrients in the EasternMediterranean: Ramifications Regarding Marine Productivity**
KOÇAK M.
in: The Turkish Part of the Mediterranean Sea Marine Biodiversity Fisheries Conservation and Governance, Turan, C., Salihoglu, B., Özgür Özbek, E., Öztürk, B., Editor, Turkish Marine Research Foundation, pp.30-38, 2016

Refereed Congress / Symposium Publications in Proceedings

- I. **ATMOSPHERIC WATER-SOLUBLE ORGANIC NITROGEN (WSON) IN THE EASTERN MEDITERRANEAN: ORIGIN AND IMPLICATIONS CONSIDERING MARINE PRODUCTIVITY**
KOÇAK M.
INTERNATIONAL İSKENDERUN BAY SYMPOSIUM, 11 - 13 October 2017
- II. **Doğu Akdeniz de Atmosferik Azot Denizsel Üretime Etkisi**
Nehir M., KOÇAK M.
Türkiye Deniz Bilimleri Konferansı, Turkey, 31 May - 03 June 2016
- III. **Hava Kütleri Geri Yörüngelerinin Kümeleme Analiz Metotlarının Doğruluğunun Değerlendirilmesi ve Doğu Akdeniz Atmosferinde Aerosol Kimyasal Kompozisyonu ve Optik Özellikleri Üzerine Etkisi**
Tutsak E., KOÇAK M.
Türkiye Deniz Bilimleri Konferansı, Turkey, 31 May - 03 June 2016
- IV. **Doğu Akdeniz Atmosferik Aerosollerinde İz Metaller Türleştirme ve Deniz Üretimi Üzerine Etkileri**
Gültekin Y., KOÇAK M.
Türkiye Deniz Bilimleri Konferansı, Turkey, 31 May - 03 June 2016
- V. **Interactions of cholesterol reducing agent simvastatin with neutral DPPC and DMPC multilamellar**

liposomes

Kocak M., Severcan F.

51st Annual Meeting of the Biophysical-Society, Maryland, United States Of America, 3 - 07 March 2007

VI. Concentration and chemical composition of PM2.5 and PM10-2.5 in the Northeastern Mediterranean

Kubilay N., KOÇAK M., Mihalopoulos N.

NATO Advanced Research Workshop on Regional Climate Variability and its Impacts in the Mediterranean Area, Marrakech, Morocco, 01 September 2006, vol.79, pp.167-169

Supported Projects

SALİHOĞLU B., ÖZHAN K., AKÇAY İ., KARAHAN A., UYSAL Z., AKOĞLU E., TUĞRUL S., GÜCÜ A. C. , KIDEYŞ A. E. , YÜCEL M., et al., Project Supported by Higher Education Institutions, Erdemli Zaman Serisi Deniz Araştırmaları 2018, 2018 - 2019

Citations

Total Citations (WOS):1460

h-index (WOS):19