Special Issue

Ultrafine Particulate Matter in the Atmosphere and Indoor Environment

Message from the Guest Editor

Ultrafine particles (UFPs) are aerosols with an aerodynamic diameter of 0.1µm and below. Despite their modest mass and size, they dominate in terms of the number of particles in ambient air. Identifying and quantifying the source and clarifying the impacts of UFPs in the environment are important for particle pollution control, the estimation of adverse health effects, and our understanding of UFP–climate interactions. Within the scope of this Special Issue, contributions on all aspects of UFPs are welcome. This includes, e.g.: Basics of UFP formation/generation and their fate in the atmopshere due to coagulation, change in chemical composition, etc.;Impacts of UFPs on human health as evident from toxicological and epidemiological studies;Role of UFP with respect to global climate change and local/regional weather conditions;Identifying natural and anthropogenic sources of ambient UFP considering primary emissions and secondary aerosol formation;Indoor UFP sources, distribution within rooms and mitigation possibilities;Methods for determining important UFP metrics, i.e., particle number, size distribution, surface area and chemical composition.

Guest Editor

Prof. Dr. Wolfgang Frenzel

Environmental Chemistry and Air Research, Institute of Environmental Technology, Technische Universität Berlin, D-10623 Berlin, Germany

Deadline for manuscript submissions

30 April 2025

Atmosphere

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 4.6

mdpi.com/si/219766

Atmosphere
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
atmosphere@mdpi.com

mdpi.com/journal/atmosphere

Atmosphere

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 4.6

mdpi.com/journal/atmosphere

About the Journal

Message from the Editor-in-Chief

Continued developments in instrumentation and modeling have driven atmospheric science to become increasingly more complex with a deeper understanding of concepts, mechanisms, and interactions. This is the field that innovation built and it has led to a better appreciation for the complexity with atmosphere. Human life is intertwined in this complexity as we strive to better understand our atmosphere. Climate change is constantly stretching the limits of our thinking and forcing new ideas and concepts to be played out. Welcome to the Anthropocene!

Editor-in-Chief

Dr. Daniele Contini
Institute of Atmospheric Sciences and Climate (ISAC), National Research Council (CNR), Str. Prv. Lecce-Monteroni km 1.2, 73100 Lecce, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, GEOBASE, GeoRef, Inspec, CAPlus / SciFinder, Astrophysics Data System, and other databases.

Journal Rank:

CiteScore - Q2 (Environmental Science (miscellaneous))

MDPI