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Mitigation Strategies for Airborne Transmission of SARS-CoV-2 Laden Aerosols

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Deadline for manuscript submissions: closed (30 September 2021)



Airborne transmission of the SARS-CoV-2 virus has been identified as the dominant route for spreading, resulting in the COVID-19 pandemic. Multiple research teams have confirmed that SARS-CoV-2 RNA exists in the aerosol samples collected in different indoor environments such as patient rooms, restaurants, auditoriums, and dentistry rooms. Infection controls for the airborne transmission of the SARS-CoV-2 are crucial to minimizing the infection risks for people in the same confined spaces. Therefore, the aim of this Special Issue is to provide recent advances in the development of novel and effective mitigation strategies to reduce the exposure risks to airborne SARS-CoV-2 virus, and hopefully pave the way for more effective control of the spread of COVID-19. Both experimental and numerical studies are acceptable, but quantitative analysis of the mitigation effectiveness of the strategy must be presented. Topics of interest for the Special Issue include but are not limited to:

- Smart flow controls for indoor airborne SARS-CoV-2 virus reduction;
- Air quality control apparatuses for airborne SARS-CoV-2 virus filtration;
- Novel virus elimination devices and their effectiveness.









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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!

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