Aerodyne GC Publications

Includes both Aerodyne & externally authored papers

(Right click on links to open them in new tabs.)

1. Isaacman-VanWertz, G., et al. Automated single-ion peak fitting as an efficient approach for analyzing complex chromatographic data. Journal of Chromatography A, 2017. https://doi.org/10.1016/j.chroma.2017.11.005
2. Anderson, D. C., et al. Characterization of ozone production in San Antonio, Texas, using measurements of total peroxy radicals. Atmos. Chem. Phys., 2019. https://doi.org/10.5194/acp-19-2845-2019
3. Claflin, M. S., et al. An in situ gas chromatograph with automatic detector switching between PTR- and EI-TOF-MS: isomer-resolved measurements of indoor air. Atmos. Meas. Tech., 2021. https://doi.org/10.5194/amt-14-133-2021
4. Finewax, Z., et al. Quantification and source characterization of volatile organic compounds from exercising and application of chlorine-based cleaning products in a university athletic center. Indoor Air, 2021. https://doi.org/10.1111/ina.12781
5. Kim, S., et al. Comprehensive detection of analytes in large chromatographic datasets by coupling factor analysis with a decision tree. Atmos. Meas. Tech., 2022. https://doi.org/10.5194/amt-15-5061-2022
6. Honeker, L. K., et al. Drought re-routes soil microbial carbon metabolism towards emission of volatile metabolites in an artificial tropical rainforest. Nature Microbiology, 2023. https://doi.org/10.1038/s41564-023-01432-9
7. Vermeuel, M. P., et al. Observations of biogenic volatile organic compounds over a mixed temperate forest during the summer to autumn transition. Atmos. Chem. Phys., 2023. https://doi.org/10.5194/acp-23-4123-2023
8. Jensen, A. R., et al. Measurements of volatile organic compounds in ambient air by gas-chromatography and real-time Vocus PTR-TOF-MS: calibrations, instrument background corrections, and introducing a PTR Data Toolkit. Atmos. Meas. Tech., 2023. https://doi.org/10.5194/amt-16-5261-2023
9. Yacovitch, T. I., et al. Mobile Laboratory Investigations of Industrial Point Source Emissions during the MOOSE Field Campaign. Atmosphere, 2023. https://doi.org/10.3390/atmos14111632
10. Wu, Y., et al. Measurement report: Production and loss of atmospheric formaldehyde at a suburban site of Shanghai in summertime. Atmos. Chem. Phys., 2023. https://doi.org/10.5194/acp-23-2997-2023
11. Kilgour, D. B., et al. Production of oxygenated volatile organic compounds from the ozonolysis of coastal seawater. Atmos. Chem. Phys., 2024. https://doi.org/10.5194/acp-24-3729-2024
12. Kilgour, D. B., et al. Contribution of Speciated Monoterpenes to Secondary Aerosol in the Eastern North Atlantic. ACS ES&T Air, 2024. https://doi.org/10.1021/acsestair.3c00112
13. Hass-Mitchell, T., et al. Increasing Contributions of Temperature-Dependent Oxygenated Organic Aerosol to Summertime Particulate Matter in New York City. ACS ES&T Air, 2024. https://doi.org/10.1021/acsestair.3c00037
14. Link, M. F., et al. Quantification of Byproduct Formation from Portable Air Cleaners Using a Proposed Standard Test Method. Environ. Sci. Technol., 2024. https://doi.org/10.1021/acs.est.3c09331

AerodyneResearch

Aerodyne GC Publications

(continued)

15. Robinson, E. S., et al. Ethylene Oxide in Southeastern Louisiana's Petrochemical Corridor: High Spatial Resolution Mobile Monitoring during HAP-MAP. Environ. Sci. Technol., 2024. https://doi.org/10.1021/acs.est.3c10579
16. Coggon, M. M., et al. Identifying and correcting interferences to PTR-ToF-MS measurements of isoprene and other urban volatile organic compounds. Atmos. Meas. Tech., 2024. https://doi.org/10.5194/amt-17-801-2024
17. Link, M. F., et al. Product ion distributions using H3O+ proton-transfer-reaction time-of-flight mass spectrometry (PTR-ToF-MS): mechanisms, transmission effects, and instrument-to-instrument variability. Atmos. Meas. Tech., 2025. https://doi.org/10.5194/amt-18-1013-2025
18. Zhang, Y., et al. Interpretation of mass spectra by a Vocus proton transfer reaction mass spectrometer (PTR-MS) at an urban site: insights from gas-chromatographic pre-separation. Atmos. Meas. Tech., 2025. https://doi.org/10.5194/egusphere-2025-757
19. Ditto, J. C., et al. Speciating volatile organic compounds in indoor air: using in situ GC to interpret real-time PTR-MS signals. Environ. Sci.: Processes Impacts, 2025. https://doi.org/10.1039/D4EM00602J
20. Chiger, A. A., et al. Improving Methodologies for Cumulative Risk Assessment: A Case Study of Noncarcinogenic Health Risks from Volatile Organic Compounds in Fenceline Communities in Southeastern Pennsylvania. Environmental Health Perspectives, 2025. https://doi.org/10.1289/EHP14696