

Recent publications

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This is a list of all publications from the group in the past few years. Some journals do not allow links directly to articles (even just the abstract), so in those cases the link takes you as close as possible.

Published articles

2022

- Golnaz Roudsari, Olli H. Pakarinen, Bernhard Reischl and Hanna Vehkamäki: Atomistic and coarse-grained simulations reveal increased ice nucleation activity on silver iodide surfaces in slit and wedge geometries, *Atmospheric Chemistry and Physics*, Vol. 22, 10099-10114, <https://doi.org/10.5194/acp-22-10099-2022>, 2022.
- Valtteri Tikkanen, Bernhard Reischl, Hanna Vehkamäki and Roope Halonen: Nonisothermal nucleation in the gas phase is driven by cool subcritical clusters, *PNAS*, Vol. 119, No. 28, <https://doi.org/10.1073/pnas.2201955119>, 2022.
- Juha Kangasluoma, Angelica Bianco, Ivo Neeffes, Dina Alfaouri, Hanna Vehkamäki, Theo Kurtén, Lauri Ahonen and Monica Passananti: Separation of isomers using a Differential Mobility Analyser (DMA): comparison of experimental vs modelled ion mobility. *Talanta*, Vol 243, pp. 123339, 2022.
- Alfaouri, D., Passananti, M., Zanca, T., Ahonen, L., Kangasluoma, J., Kubeka, J., Myllys, N., and Vehkamäki, H.: A study on the fragmentation of sulfuric acid and dimethylamine clusters inside an atmospheric pressure interface time-of-flight mass spectrometer, *Atmos. Meas. Tech.*, 15, 11–19, <https://doi.org/10.5194/amt-15-11-2022>, 2022.

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- Shahzad Gani, Lukas Kohl, Rima Baalbaki, Federico Bianchi, Taina M. Ruuskanen, Olli-Pekka Siira, Pauli Paasonen, and Hanna Vehkamäki: Clear, transparent, and timely communication for fair authorship decisions: A practical guide. *Geoscience Communication*, Vol 4, pp. 507-516, 2021.
- Kayane K. Dingilian, Martina Lippe, Jakub Kubeka, Jan Krohn, Chenxi Li, Roope Halonen, Fatemeh Keshavarz, Bernhard Reischl, Theo Kurtén, Hanna Vehkamäki, Ruth Signorell and Barbara E. Wyslouzil: New Particle Formation from the Vapor Phase: From Barrier Controlled Nucleation to the Collisional Limit. *Journal of Physical Chemistry Letters*, Vol. 12(19), pp. 4593–4599, 2021.
- Golnaz Roudsari, Farshad G. Veshki, Bernhard Reischl, and Olli H. Pakarinen: Liquid Water and Interfacial, Cubic, and Hexagonal Ice Classification through Eclipsed and Staggered Conformation Template Matching. *The Journal of Physical Chemistry B*, 2021 125 (15), 3909-3917
- Antti Toropainen, Juha Kangasluoma, Theo Kurtén, Hanna Vehkamäki, Fatemeh Keshavarz, and Jakub Kubeka : Heterogeneous Nucleation of Butanol on NaCl: Computational Study of Temperature, Humidity, Seed Charge, and Seed Size Effects. *The Journal of Physical Chemistry A*, 2021. 125(14), 3025-3036
- Roope Halonen, Valtteri Tikkanen, Bernhard Reischl, Kayane Dingilian, Barbara E Wyslouzil and Hanna Vehkamäki: Homogeneous nucleation of carbon dioxide in supersonic nozzles II: molecular dynamics simulations and properties of nucleating clusters *Physical Chemistry Chemical Physics*, Vol 23, pp. 4517-4529, 2021.
- Fatemeh Keshavarz, Joel Thornton, Hanna Vehkamäki, and Theo Kurtén: Reaction Mechanisms Underlying Unfunctionalized Alkyl Nitrate Hydrolysis in Aqueous Aerosols. *ACS Earth and Space Chemistry*, Vol 5(2), pp. 210–225, 2021.

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- Fatemeh Keshavarz, Jakub Kubeka, Michel Attoui, Hanna Vehkamäki, Theo Kurtén and Juha Kangasluoma: Molecular Origin of the Sign Preference of Ion- Induced Heterogeneous Nucleation in a Complex Ionic Liquid-Diethylene Glycol System. *Journal of Physical Chemistry C*, Vol 124(49), pp. 26944–26952, 2020.
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