

Innovations in ambient mass spectrometry imaging

Citation for published version (APA):

Kooijman, P. (2022). *Innovations in ambient mass spectrometry imaging: from ionization to detection*. [Doctoral Thesis, Maastricht University]. Maastricht University. <https://doi.org/10.26481/dis.20220913pk>

Document status and date:

Published: 01/01/2022

DOI:

[10.26481/dis.20220913pk](https://doi.org/10.26481/dis.20220913pk)

Document Version:

Publisher's PDF, also known as Version of record

Please check the document version of this publication:

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Propositions accompanying the dissertation

INNOVATIONS IN AMBIENT MASS SPECTROMETRY IMAGING

FROM IONIZATION TO DETECTION

By Petrus (Pieter) Christian Kooijman

1. Ionization reproducibility is the single most important aspect the ambient MSI field needs to improve to qualify for large-scale application. - *This dissertation*
2. Sequential desorption and ionization in ambient MSI can only effectively work if the surrounding atmosphere is fully controlled. - *This dissertation*
3. High mass resolving power and broad molecular coverage are both essential for exploratory MSI approaches, of which the latter is the most troublesome. - *This dissertation*
4. High sensitivity is useless in untargeted MSI approaches if the mass resolving power is low. - *This dissertation*
5. The end-user perspective should be central in early-stage instrument development. - *This dissertation, impact chapter*
6. Separation on a single dimension can never resolve all molecular species.
7. "Things are only impossible until they are not." - *Jean-Luc Picard*
8. Instrument development should be a playground, rather than a project.
9. Data do not equal information.
10. At the foot of the mountain I always say: 'Wow, what an immensely beautiful mountain you are.' - *Bram Tankink*