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Towards a foodomics approach for food chemical safety assessment

Grégoire Delaporte, Mathieu Cladière, Delphine Jouan-Rimbaud Bouveresse,
Valérie Camel

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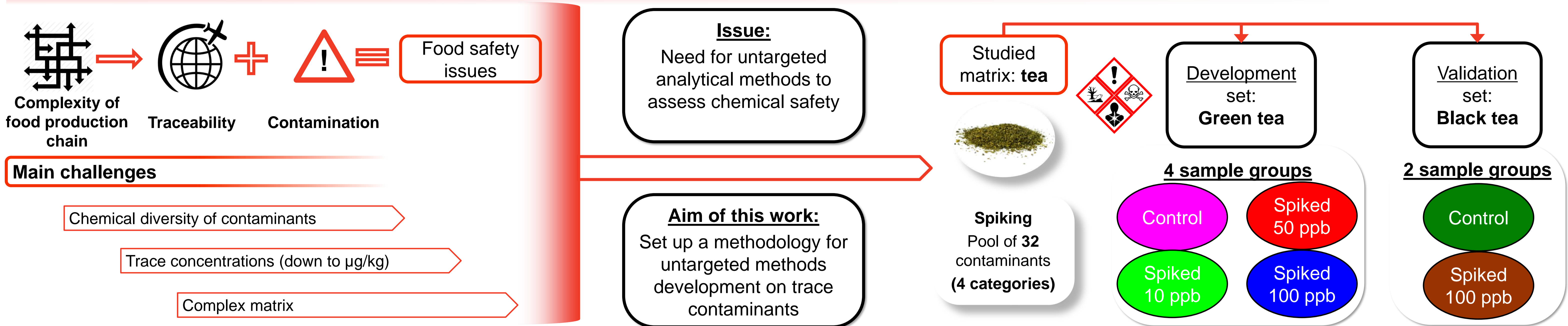
<https://hal.science/hal-01765434v1>

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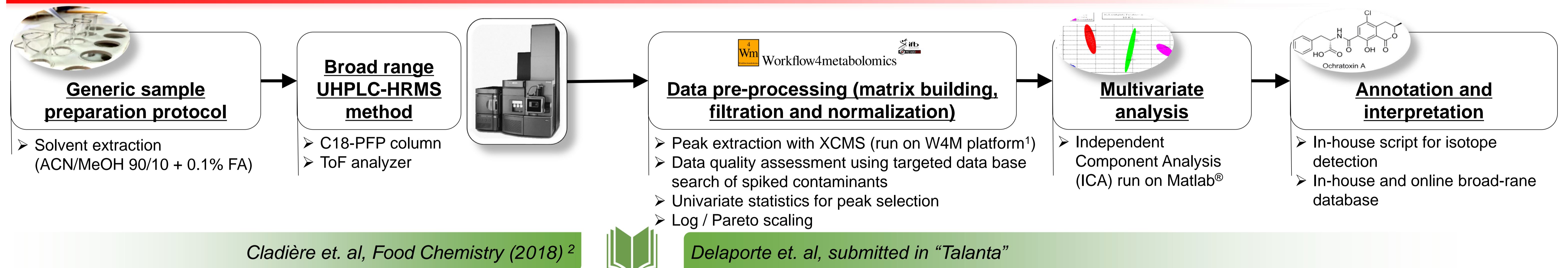
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Context



Analytical workflow

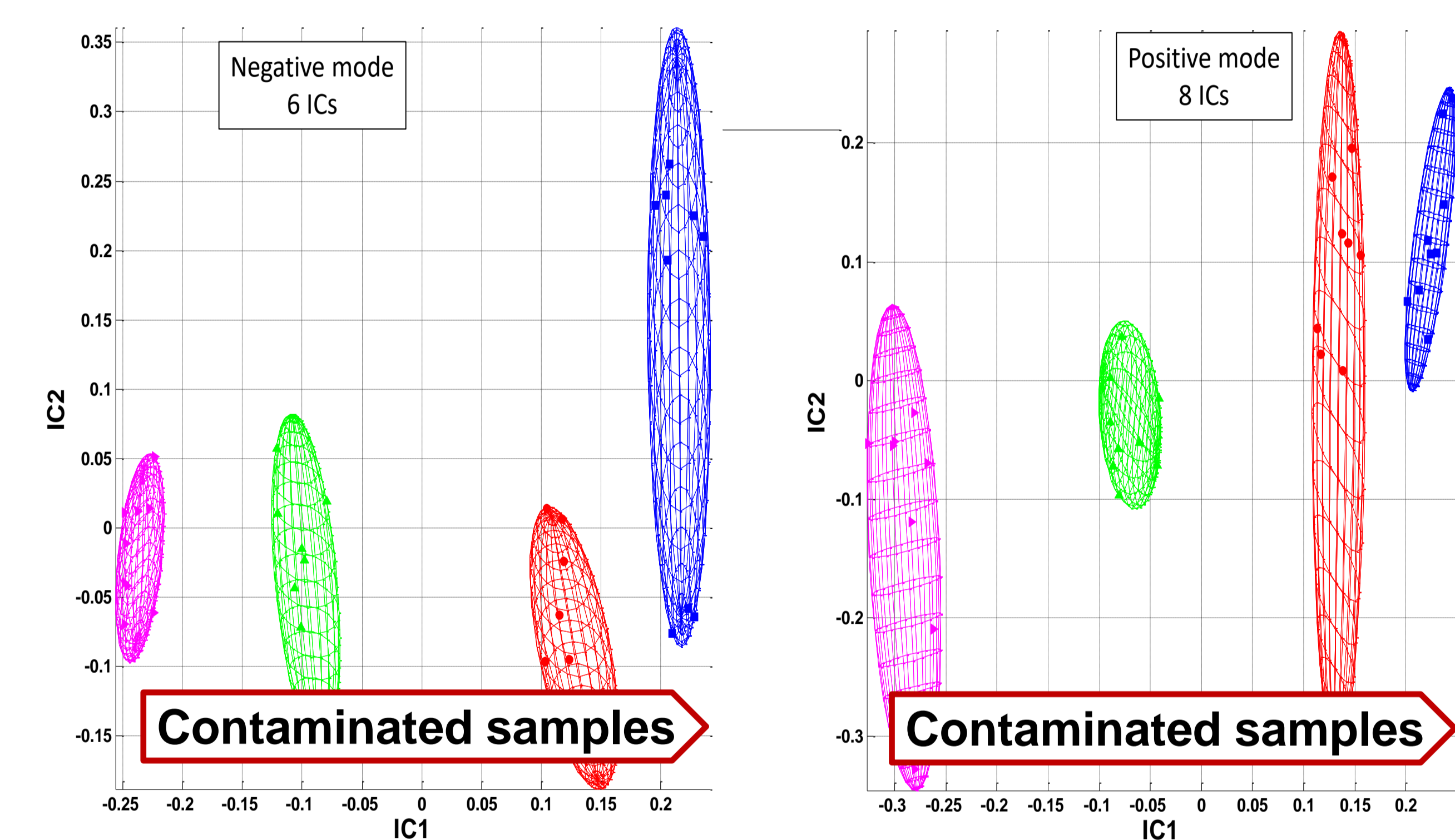


Cladière et. al, Food Chemistry (2018) ²

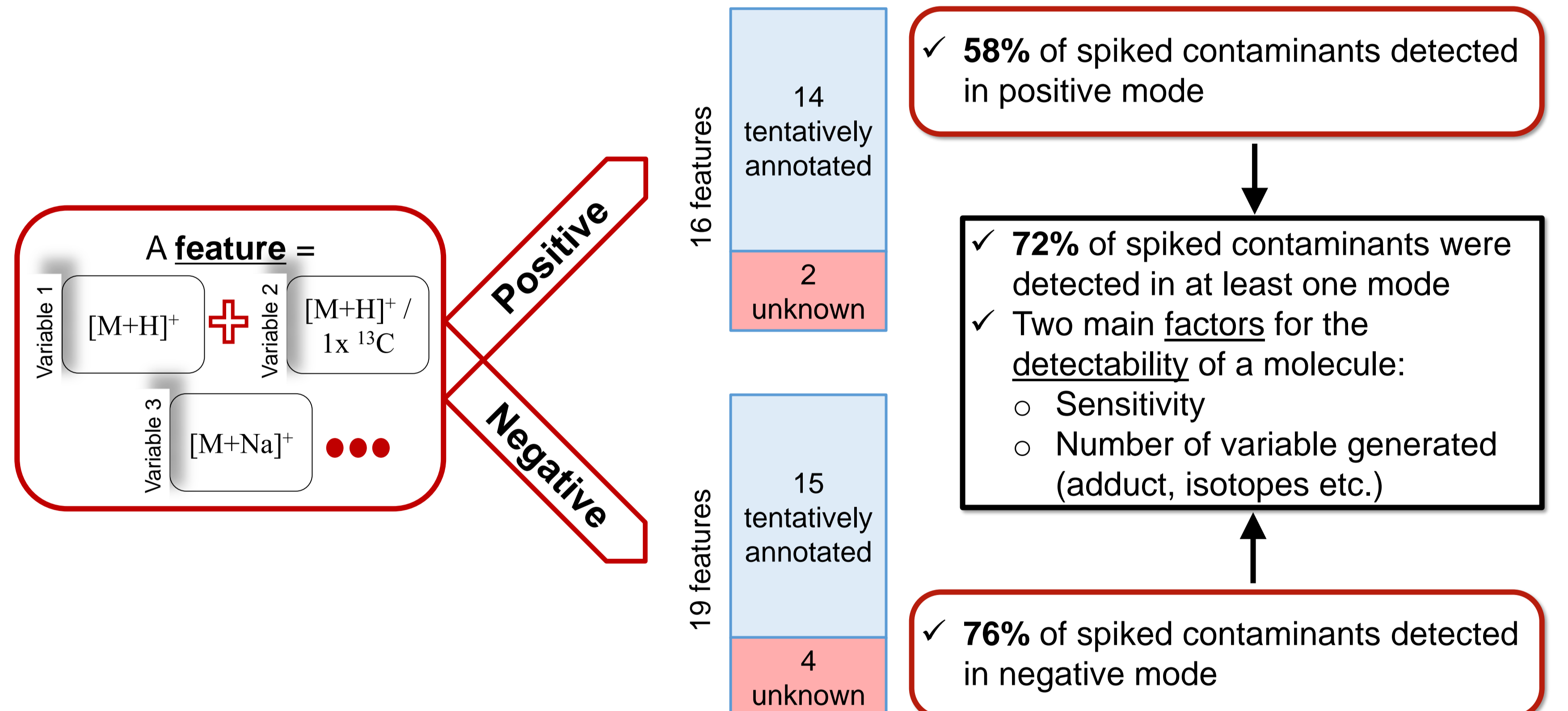
Delaporte et. al, submitted in "Talanta"

Results

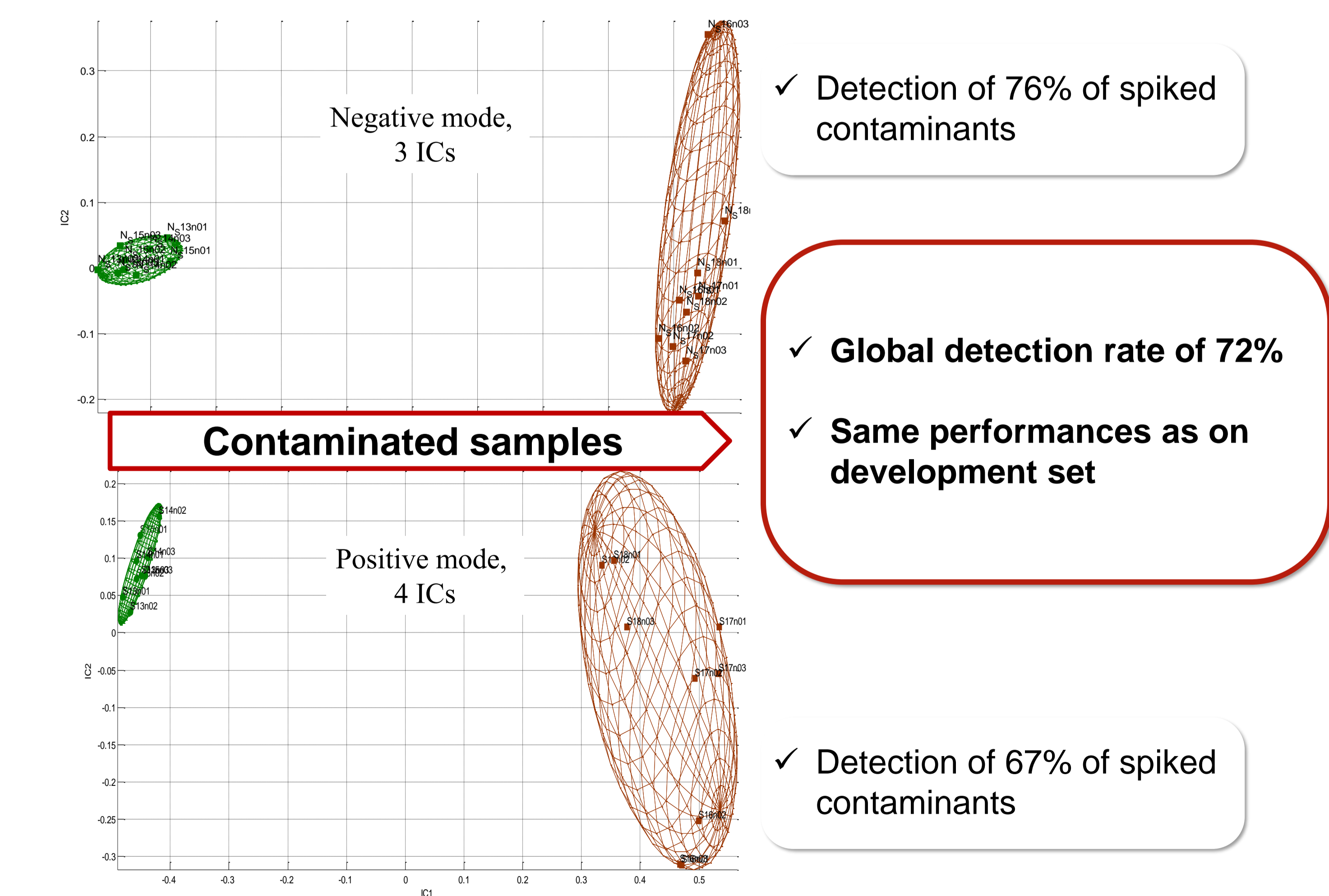
Discrimination of sample groups in the test set



Annotation of discriminating variables in the development set



Analysis of the validation set



Discussion / Perspectives

Achievements

- Big methodological step towards untargeted food safety assessment
- Blind detection of food contamination as low as 10 µg/kg in a complex matrix
- Methodology validated on another type of tea
- Data mining tools successfully make annotation of discriminating compounds easier

Further work

- Assess the capacity of the methodology to discriminate single contamination
- Performance assessment on several batches of tea samples