

基础研究和新技术

## 常压质谱成像法无损鉴定中国字画

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摘要

关键词

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## Non-Destructive Identification of Calligraphies by the Ambient Mass Spectrometry Imaging at Atmospheric Pressure

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**Abstract** In this study, we report a non-destructive and in-situ analytical method based on the microplasma probe mass spectrometry imaging to directly determine the seals on Chinese calligraphies under ambient conditions using a 3D automated platform without the requirement for any solvents. By using the present method, we are able to distinguish contemporary art works from the counterfeit ones. This provides the capability of mass spectrometry imaging for the organic chemicals of the pigments in Chinese calligraphies and paintings.

**Key words** [ambient](#) [mass spectrometry](#) [imaging](#) [non-destructive](#) [identification](#) [Chinese calligraphy](#)

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