

# **Hair Dye distribution in human hair by ToF-SIMS**

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摘要.

## **Abstract**

A single hair sample preparation protocol modified from reported method was developed and used to prepare longitudinally sectioned hair for ToF-SIMS analysis. Preliminary results demonstrate that ToF-SIMS is capable of providing molecular distribution of fragment ions from intrinsic constituents as well as external chemicals like the hair dye ingredients used in this study. The observation of pPDA and  $\text{H}_2\text{PO}_4^-$  penetrating into the internal region of hair might initiate a renewed interest in exposure study. (c) 2006 Published by Elsevier B.V.