Supplementary Material (ESI) for Chemical Communications

Patterning of Lactoferrin Using Functional SAMs of Iron Complexes

by

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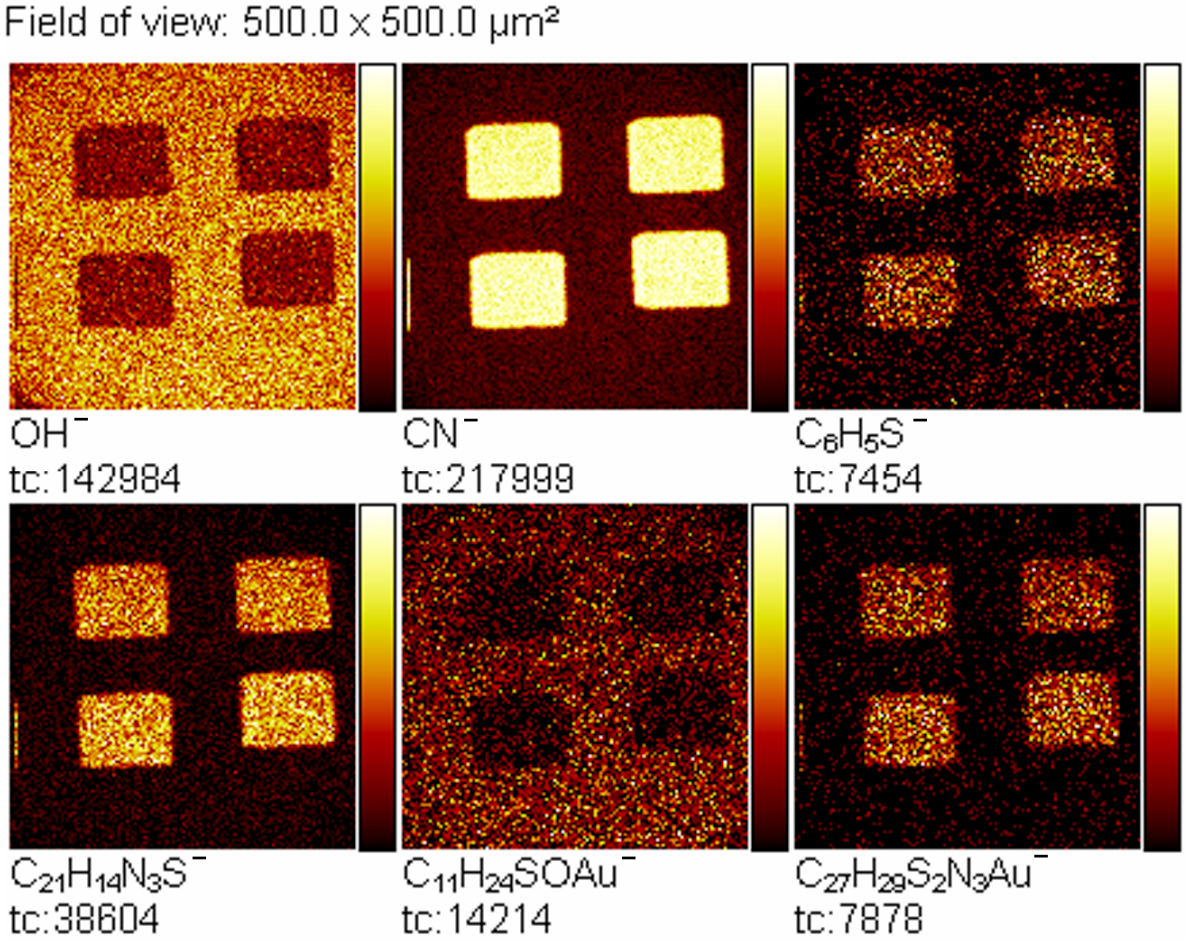

Figure S1
ToF-SIMS negative ion images of the pattern after the formation of the MB/MPTP SAM. A lighter colour in each mass resolved image indicates a higher intensity of the pertaining signal. The numbers reported below each image refer to the number of counts.
Figure clearly shows that the MPTP/MB SAM is confined in the etched regions of the pattern, as indicated by the intensity distribution of the CN^- fragment and of the (quasi)molecular ions from MB ($C_6H_5S^-$), MPTP ($C_{21}H_{14}N_3S^-$) and from the MB/MPTP gold-attached cluster ($C_{27}H_{29}S_2N_3Au^-$). For more details on ToF-SIMS of the mixed component MB/MPTP SAM, see refs. 16a and 16b in the communication.

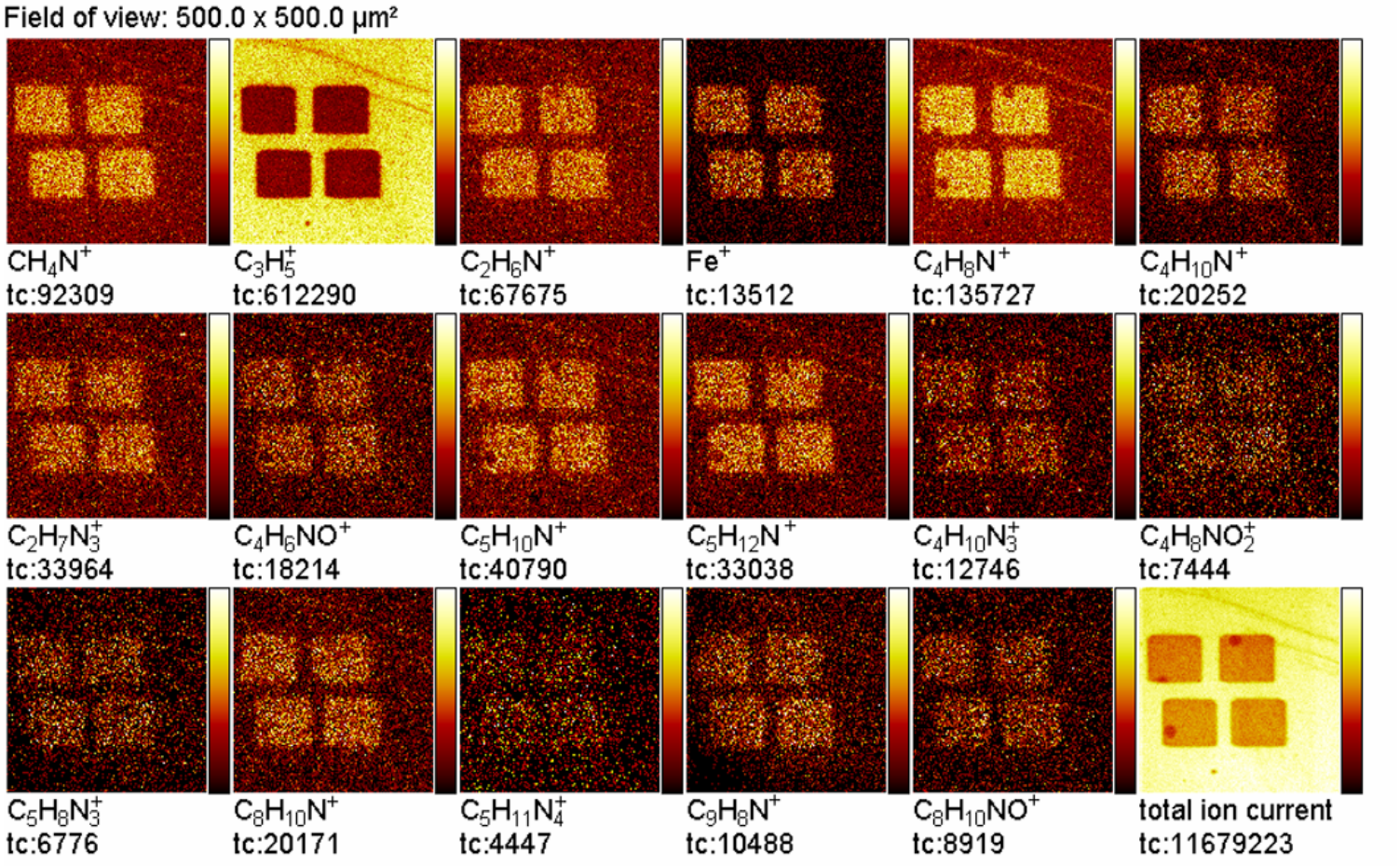

Fig.S2 Mass resolved positive ToF-SIMS imaging of the pattern after lactoferrin adsorption, reporting the intensity distribution of the most relevant peaks in the ToF-SIMS spectrum, including several fragments from lactoferrin.

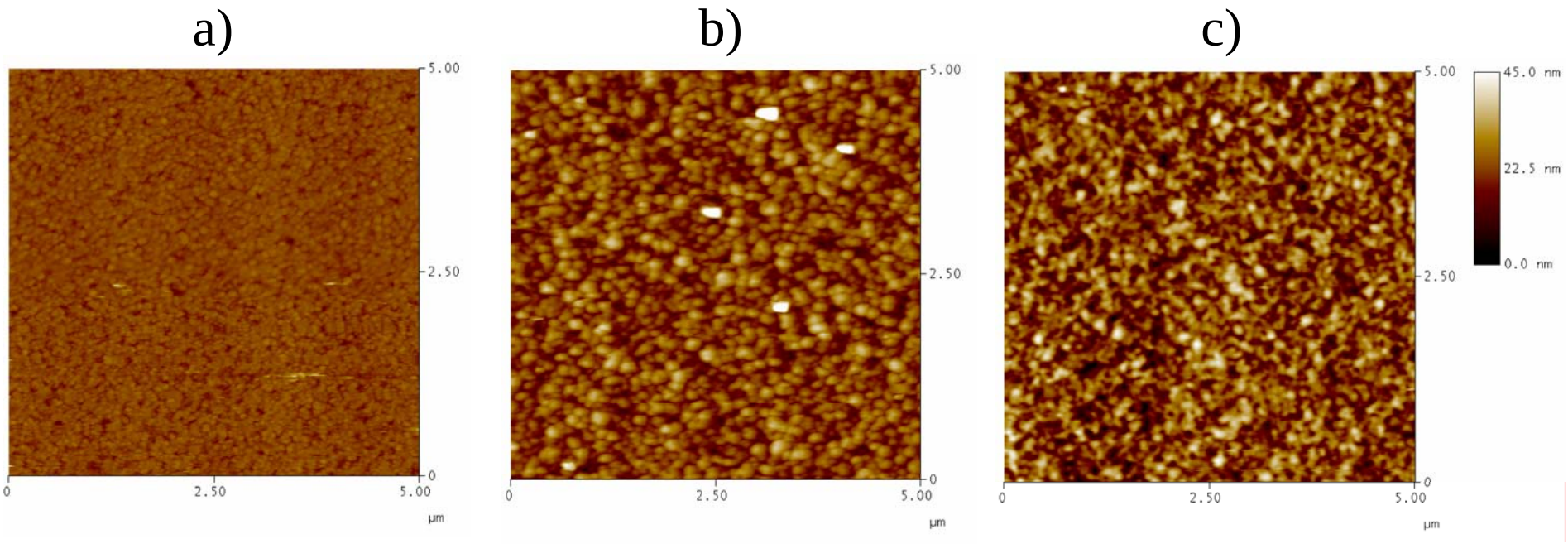

Fig. S3 AFM height images from differently treated regions: a) MUO-covered Au surface before FIB etching; b) central region of a FIB etched area; c) central region of a FIB etched area, after all the steps leading to lactoferrin adsorption.