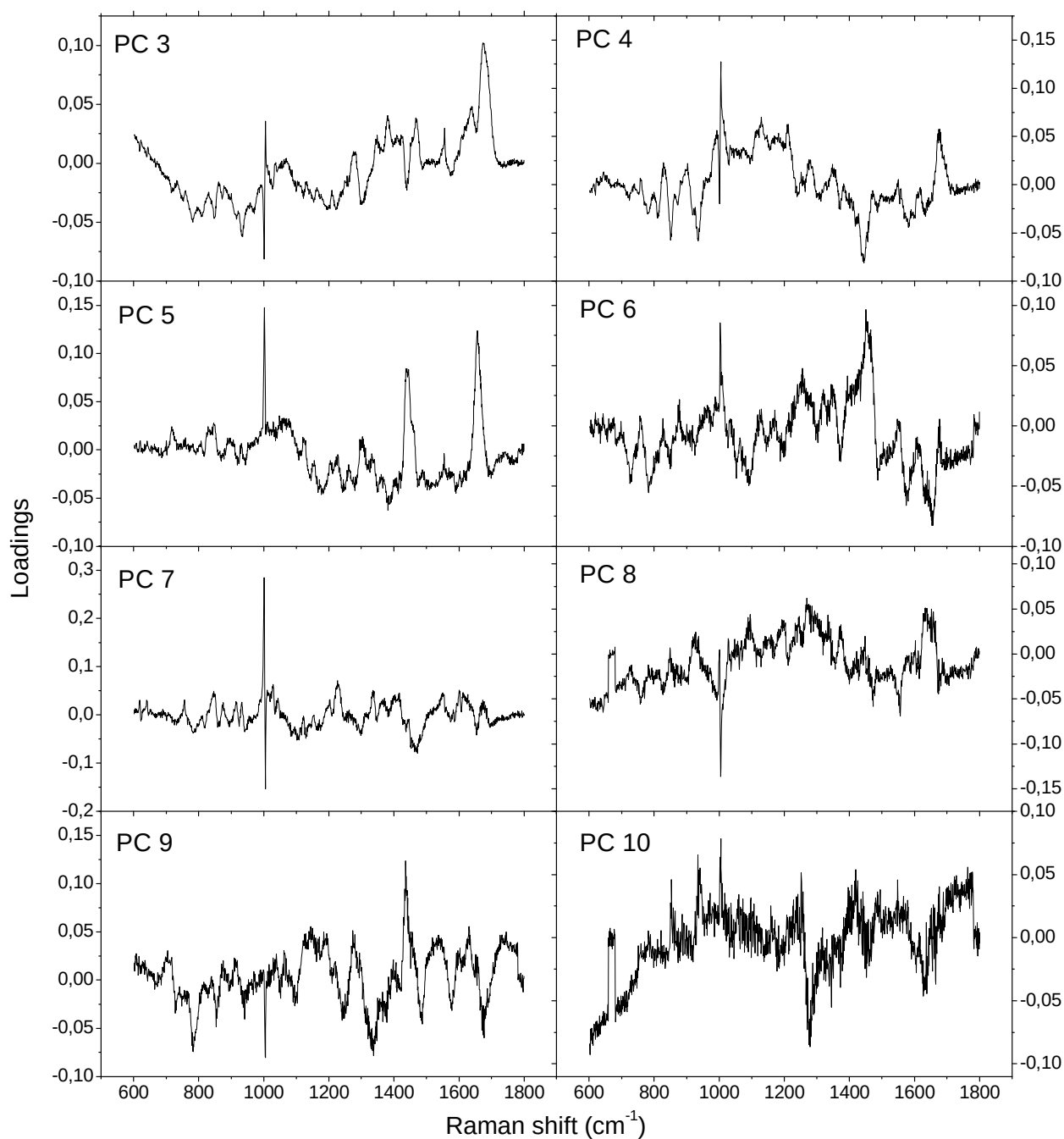


SUPPLEMENTARY MATERIAL *for*

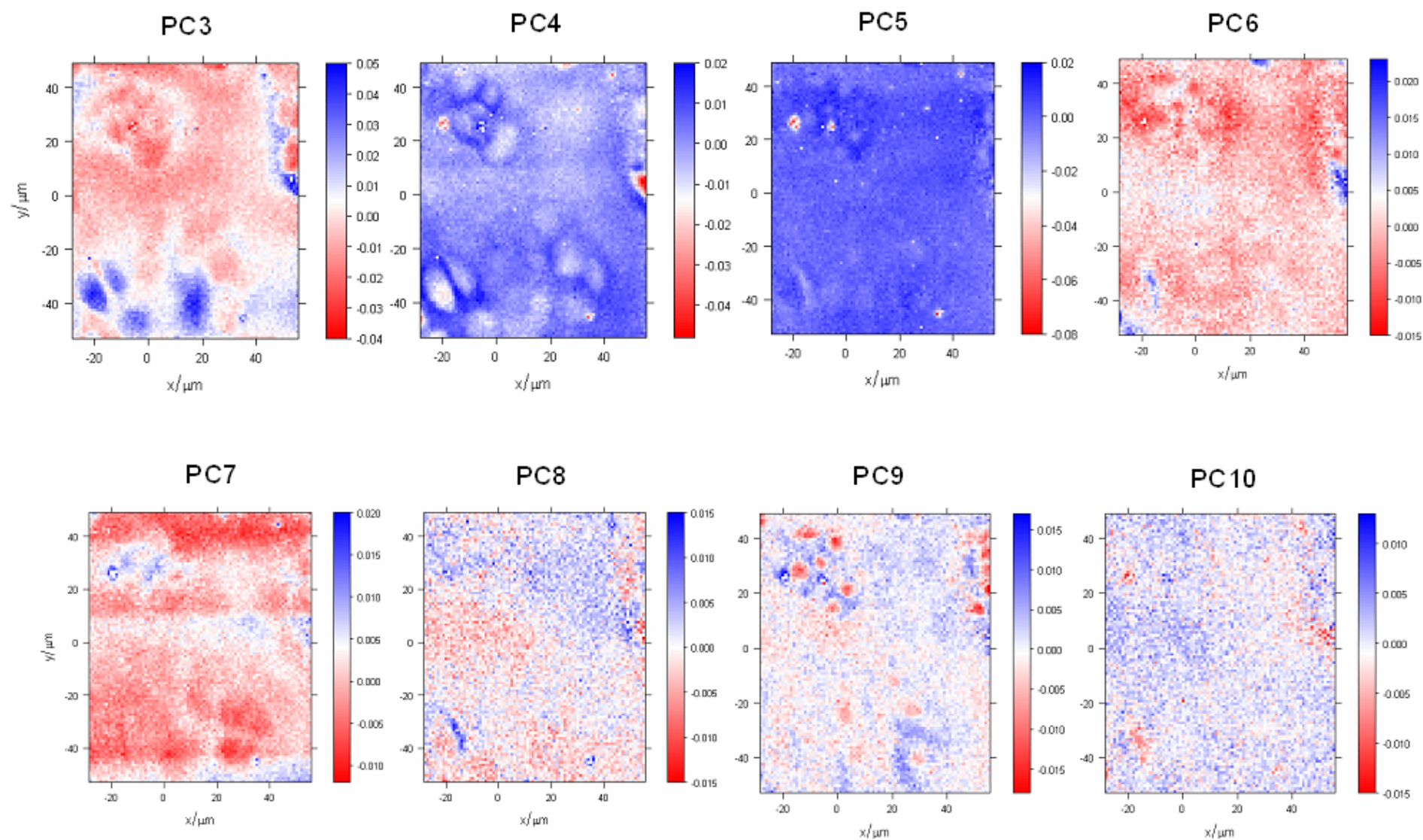
Chemical imaging of articular cartilage sections with Raman mapping, employing uni- and multi-variate methods for data analysis

Alois Bonifacio, Claudia Beleites, Franco Vittur, Eleonora Marsich, Sabrina Semeraro, Sergio Paoletti and Valter Sergio

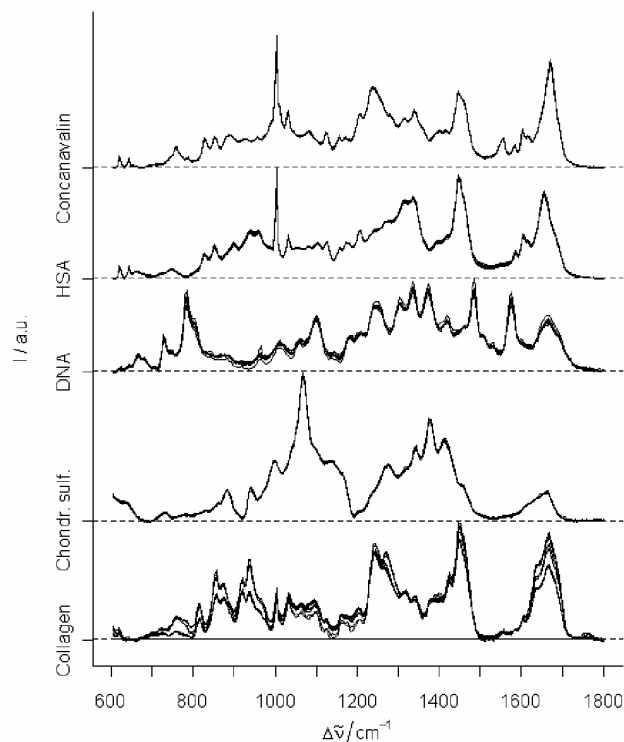
Supplementary Figure 1. Loadings for PC 3 - PC 10.



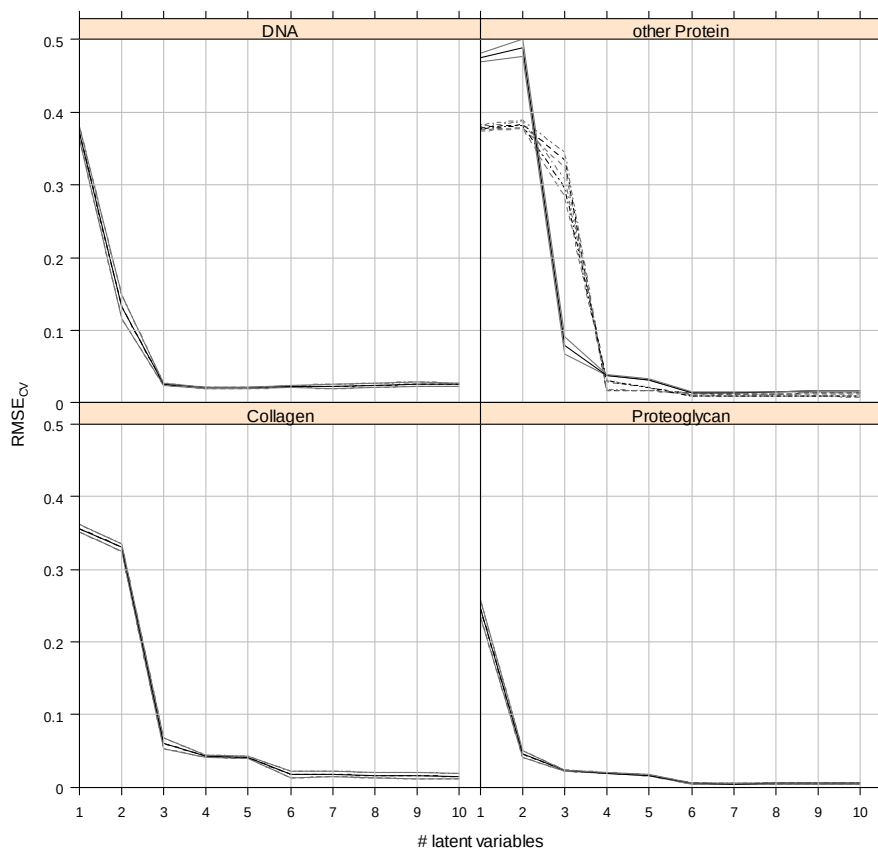
Supplementary Figure 2. Score maps for PC 3 - PC 10.



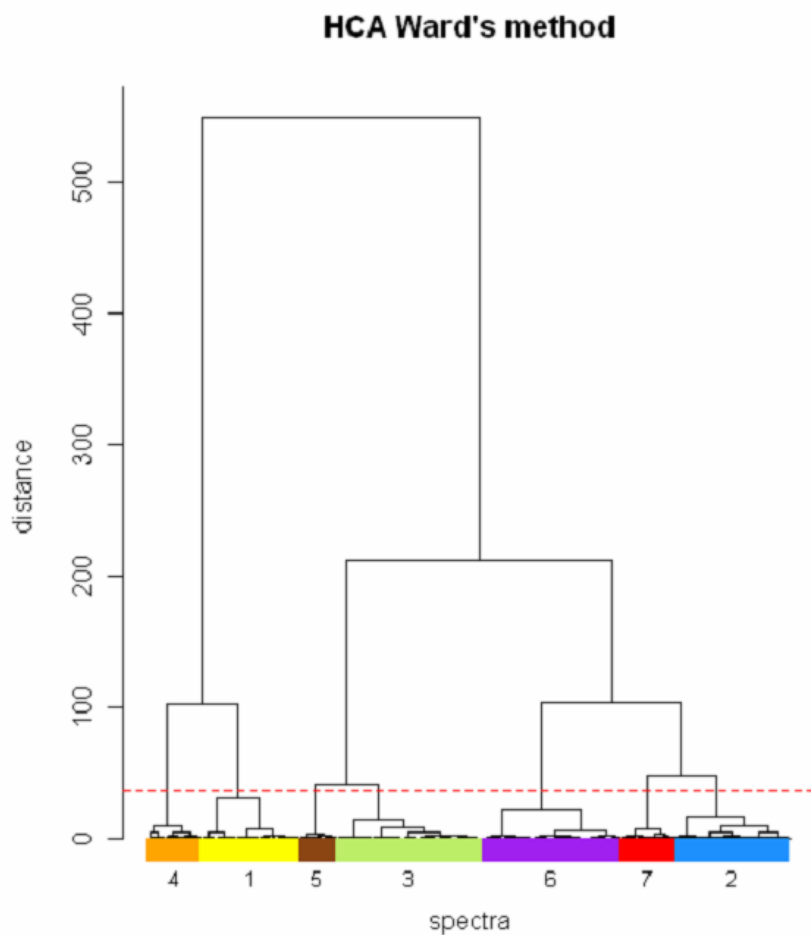
Supplementary Figure 3. Spectra of pure components used for the PLSR model



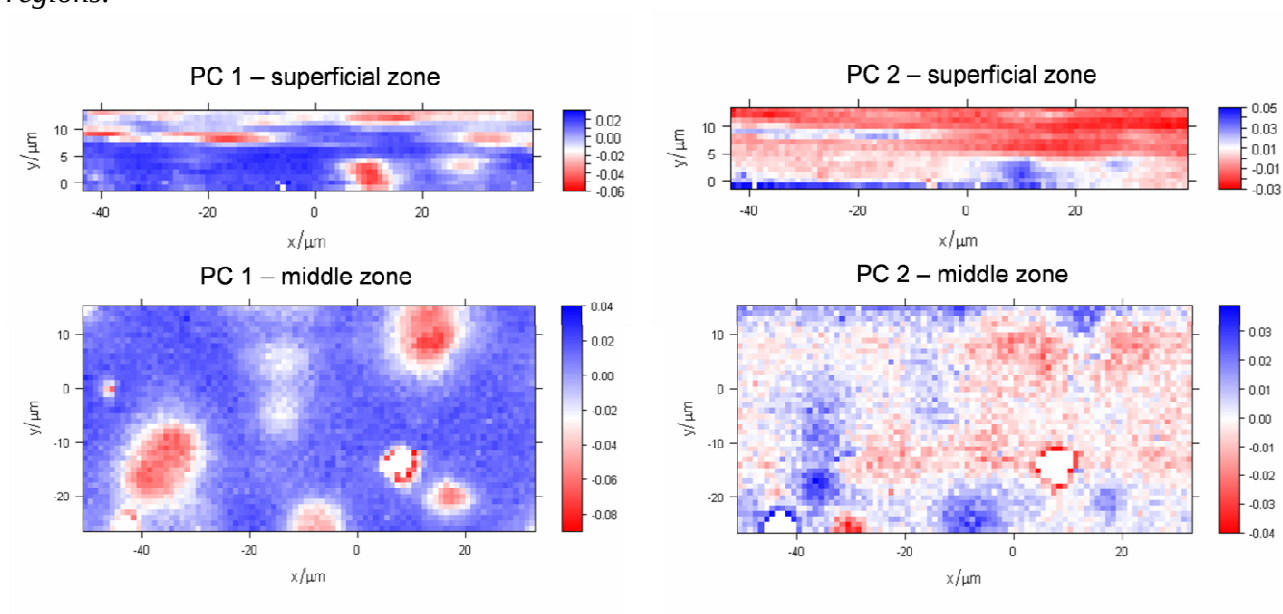
Supplementary Figure 4. Cross validation plots (mean $\pm$ st.dev) for the different groups of substances of the PLSR model. In the non-collagenous proteins quadrant (“other Protein”), the dashed lines correspond to albumin and concanavalin considered separately.



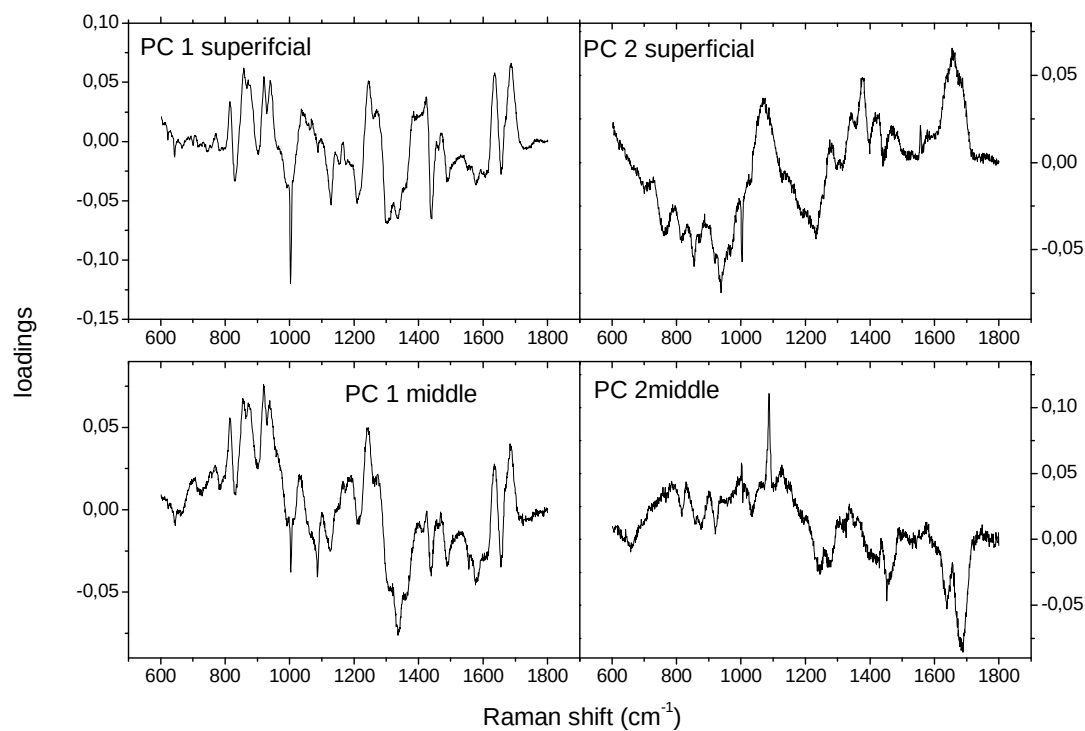
Supplementary Figure 5. Dendrogram of the HCA analysis of the deep zone map. The bottom segments corresponding to spectra are colored according to the separation into 7 clusters, and correspond to the cluster map in Fig.9 of the paper. The dashed red line shows where the dendrogram is cut into 7 clusters.



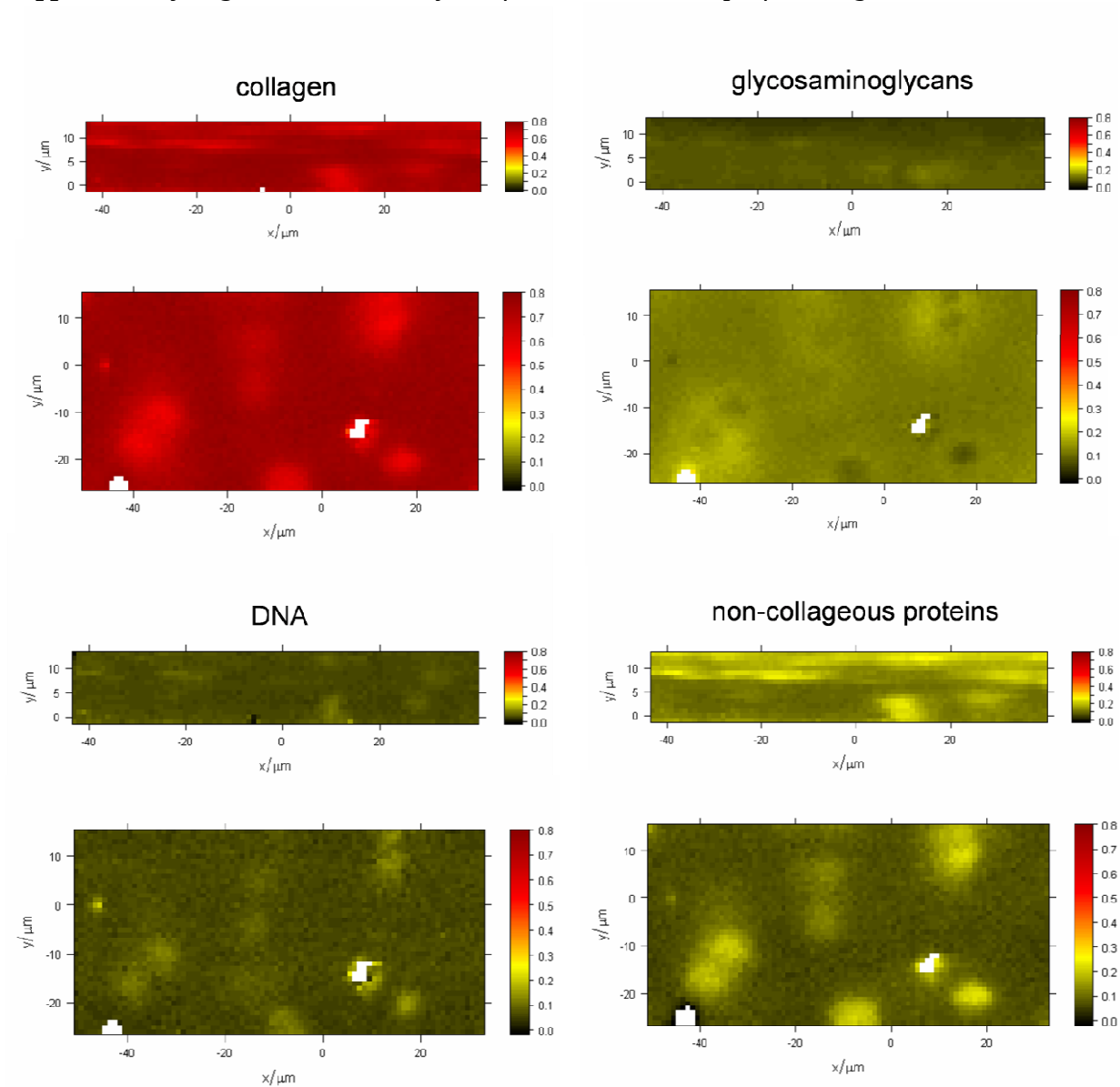
Supplementary Figure 6. PC 1 and PC 2 score maps of the middle (below) and superficial (above) regions.



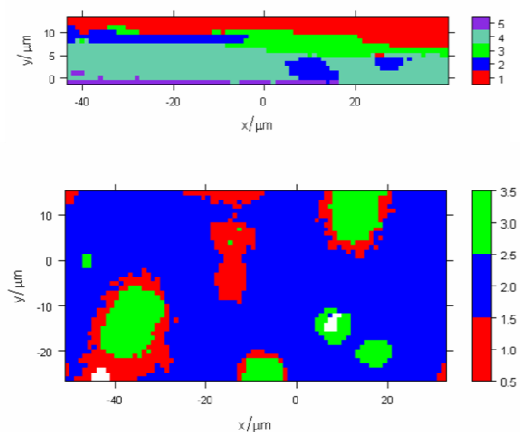
Supplementary Figure 7. PC 1 and PC 2 loadings of the middle and superficial regions.



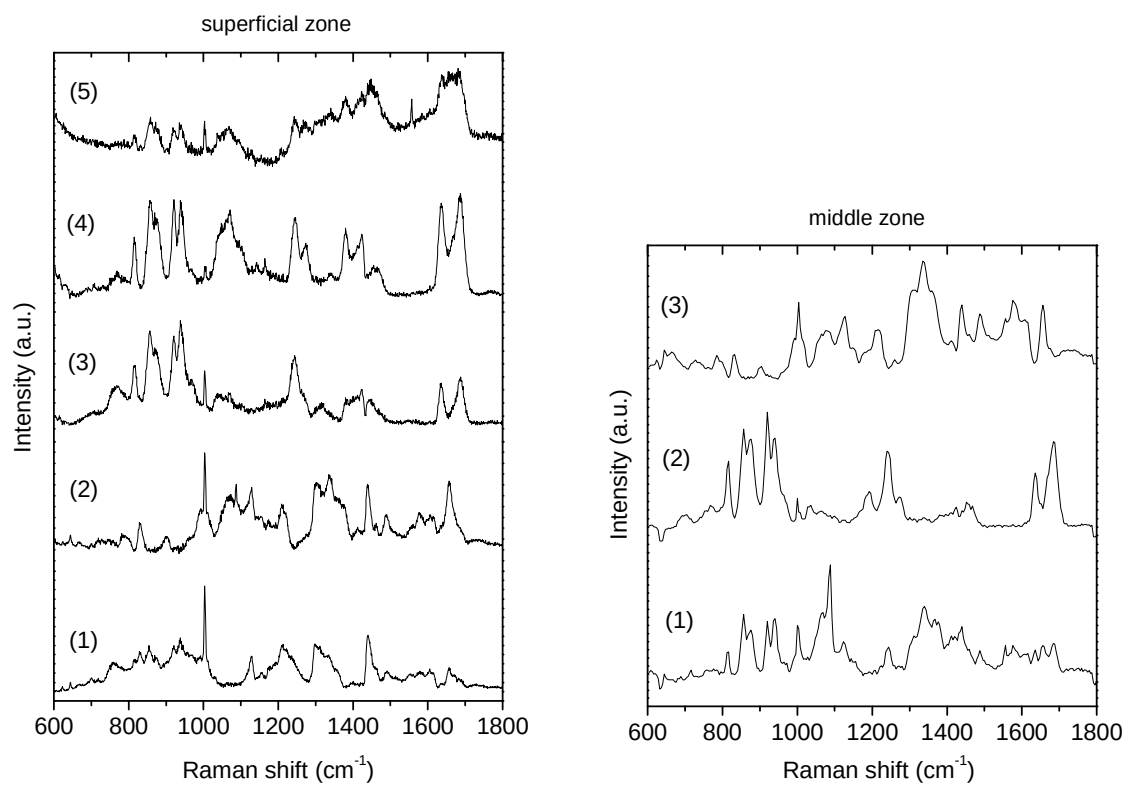
Supplementary Figure 8. PLSR analysis of the middle and superficial regions.



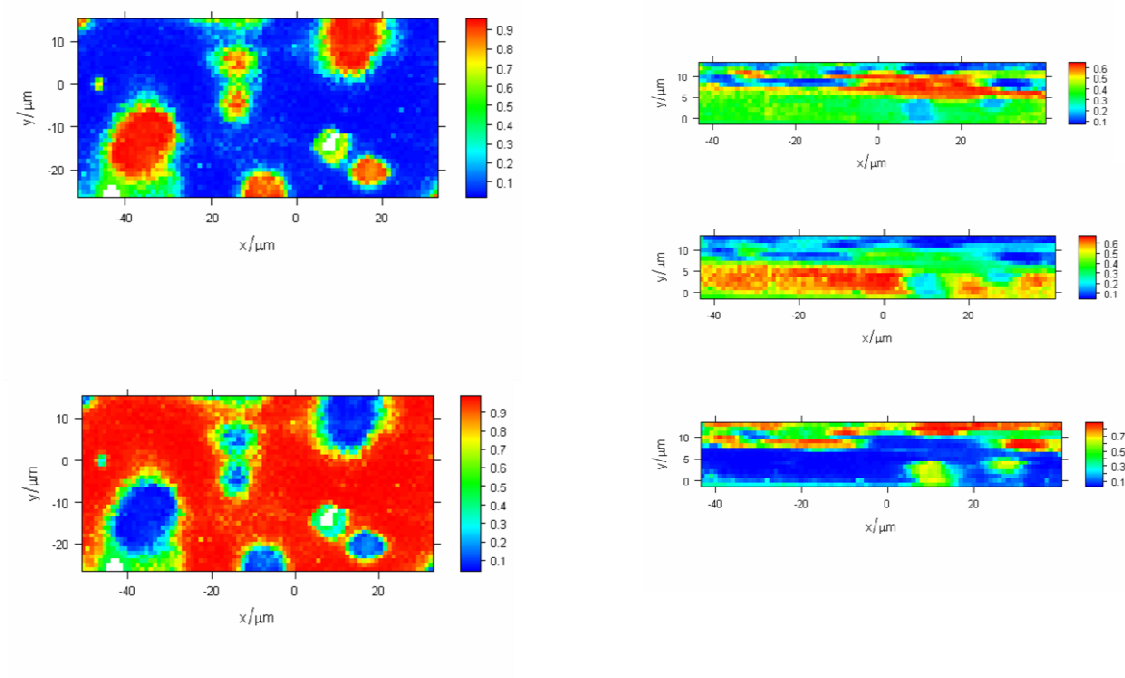
Supplementary Figure 9. HCA maps of the middle (3 clusters) and superficial (5 clusters) regions.



Supplementary Figure 10. HCA centroids of the middle and superficial regions.



Supplementary Figure 11. FCA maps of the middle and superficial regions.



Supplementary Figure 12. FCA centroids of the middle and superficial regions.

