

Supporting Information

Scattering Based Hyperspectral Imaging of Plasmonic Nanoplate Clusters Towards Biomedical Applications

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Abundance maps of the endmembers: The abundance maps corresponding to each endmember from a hyperspectral data cube obtained from PESNs deposited on a glass coverslip are shown in Figures S1 and S2. The endmembers were extracted from the SMACC analysis. The abundance maps were calculated by a spectral angle mapper algorithm. The abundance maps represent the pixels in the data cube that are similar to a particular endmember presented next to it, where each spectrum corresponds to a stacking configuration of the Ag nanoplates. Figure S3 shows the RGB overlay of the different abundance maps, confirming non-overlapping pixels with the different endmembers, indicative of different types of PESNs containing Ag nanoplates in different configurations.

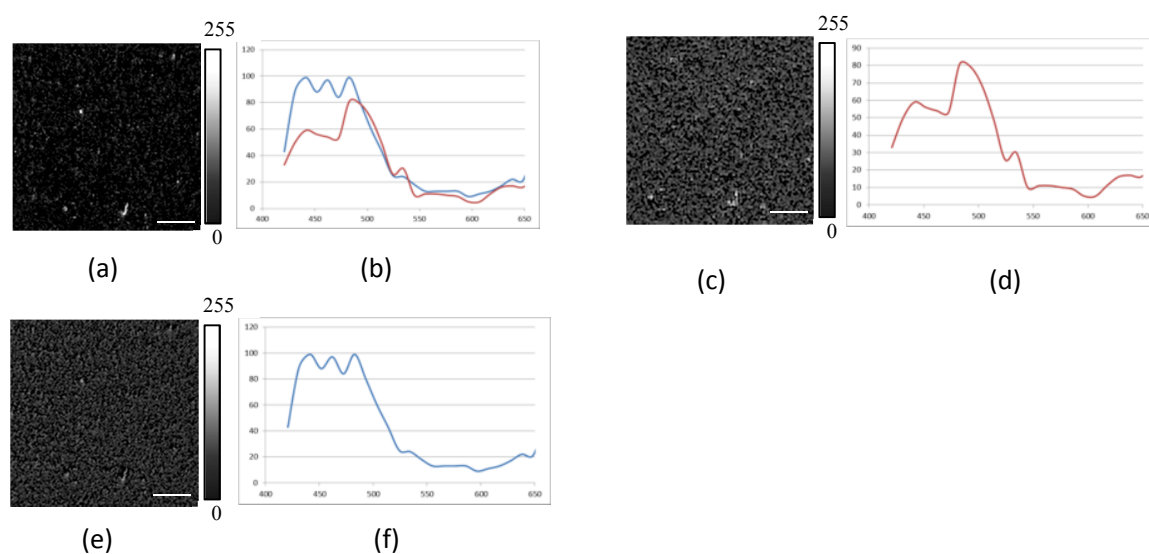


Figure S1. (a) The dark-field image of the nanoparticles with individual silver nanoplates (PAA-NP2). (b) The two different endmembers. (c-f) The abundance maps corresponding to each of the endmembers. (Scale: 6 μm). The grey scale bars are pixel intensities from 0 (black) to 255 (white), corresponding to the largest spectral angle (1.0) and the smallest spectral angle (0.0).

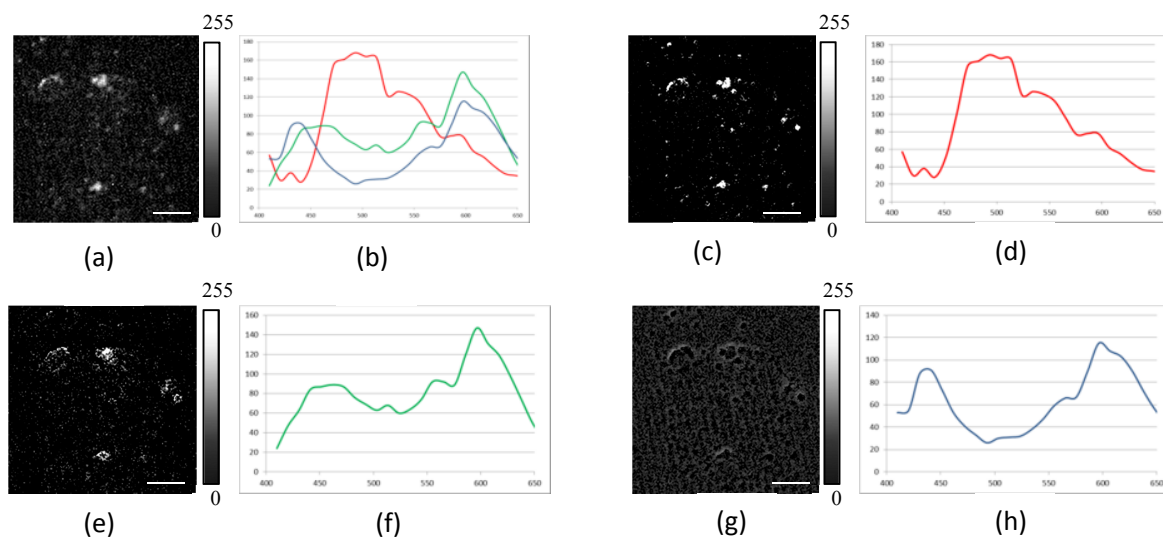


Figure S2. (a) The dark-field image of nanoparticles containing silver nanoclusters (PAA-NP1). (b) The three different endmembers. (c-h) The abundance maps corresponding to each of the endmembers. (Scale: 6 μm) The grey scale bars are pixel intensities from 0 (black) to 255 (white).

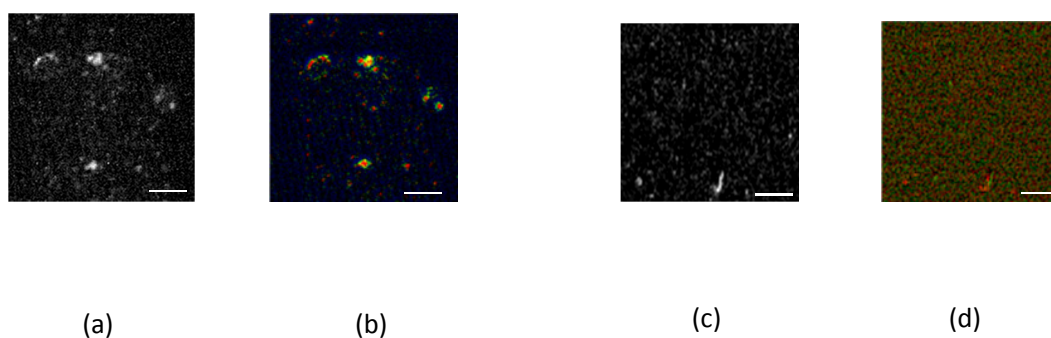


Figure S3. The dark-field image of the nanoparticles (a & c) and the RGB overlay of the different abundance maps (b & d). (Scale: 6 μm)