

# Poly (Ethylene Imine)-Functionalized Magnetite Nanoparticles Derivatized with Folic Acid. Heating and Targeting Properties

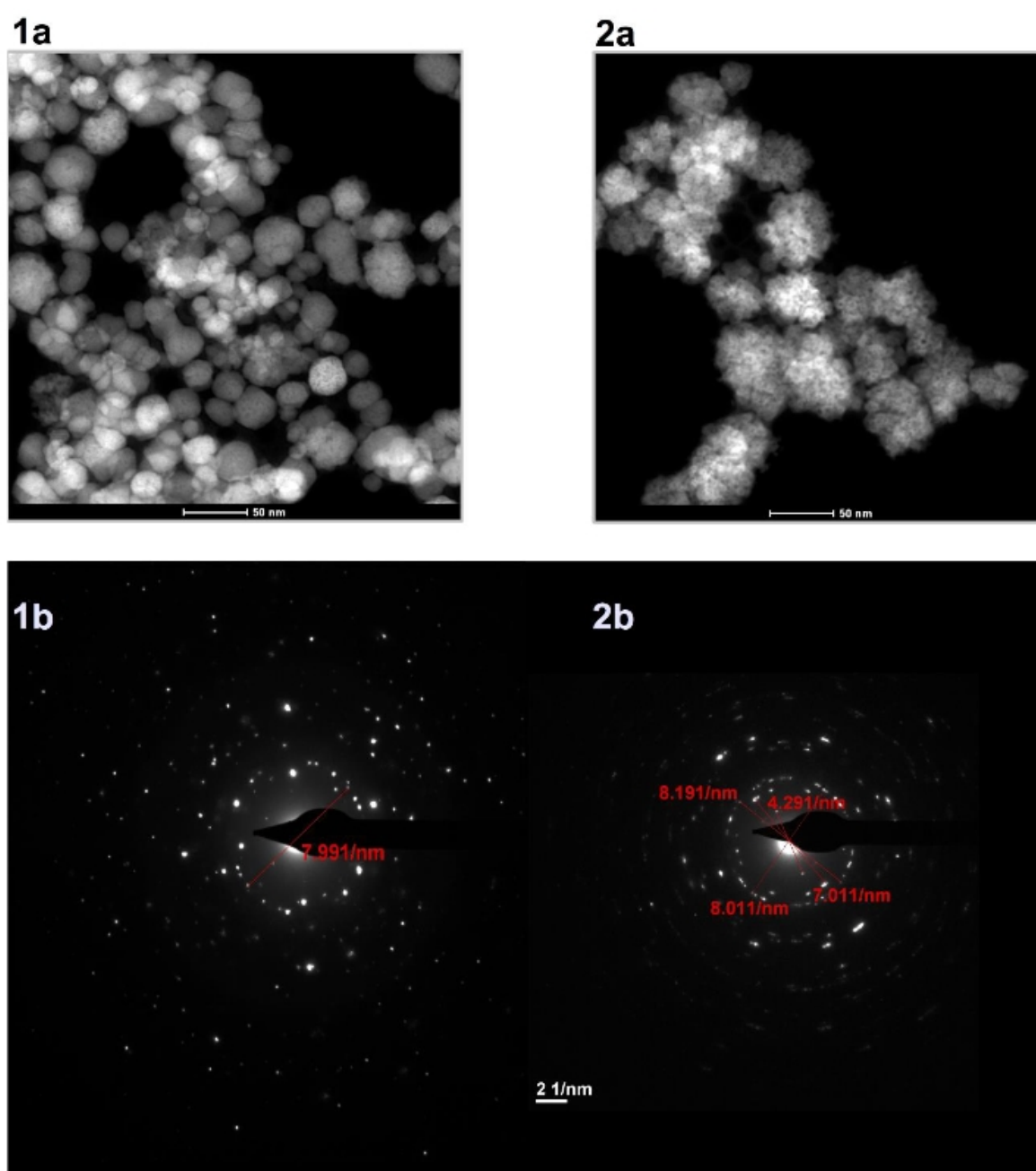
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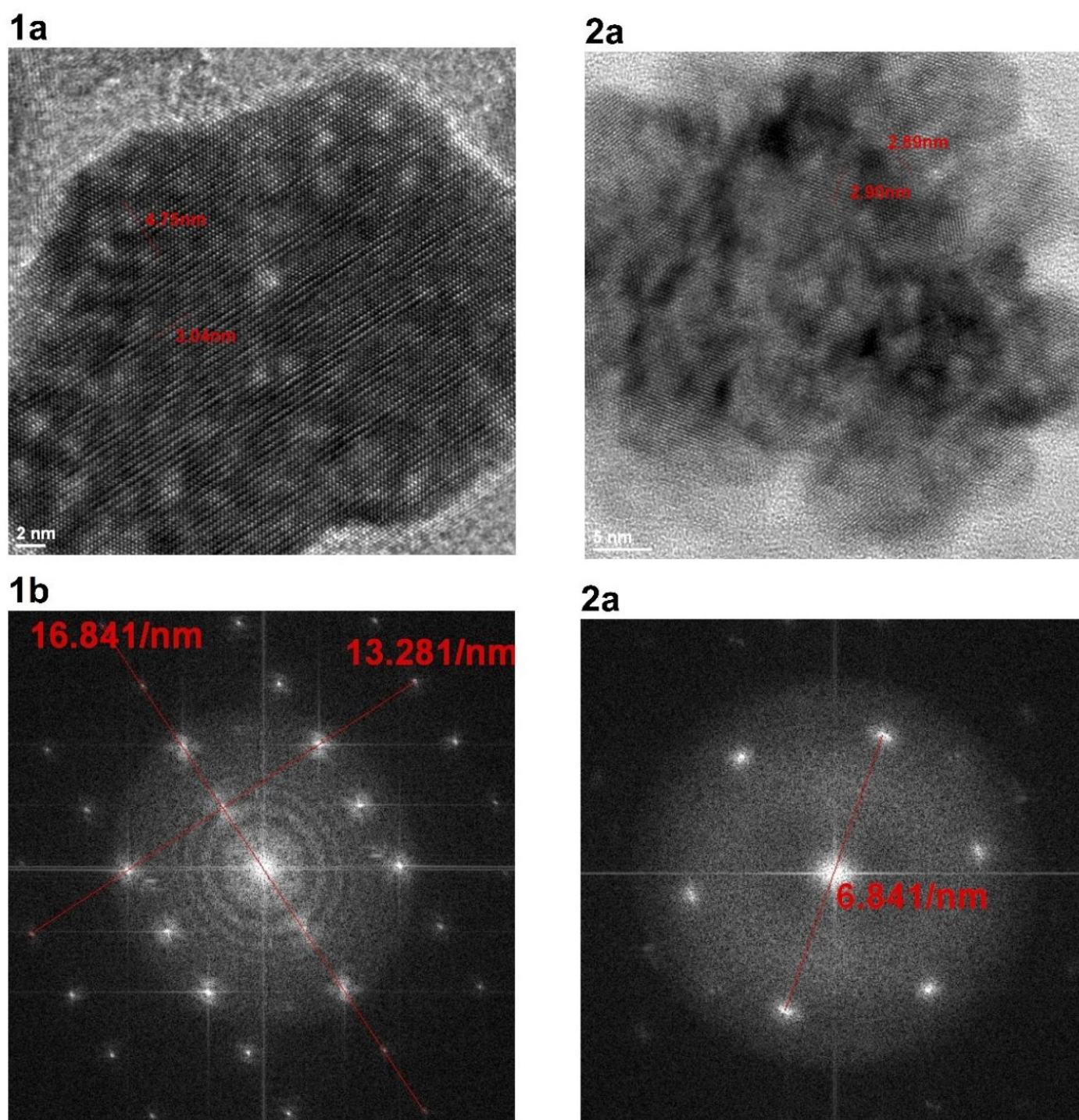
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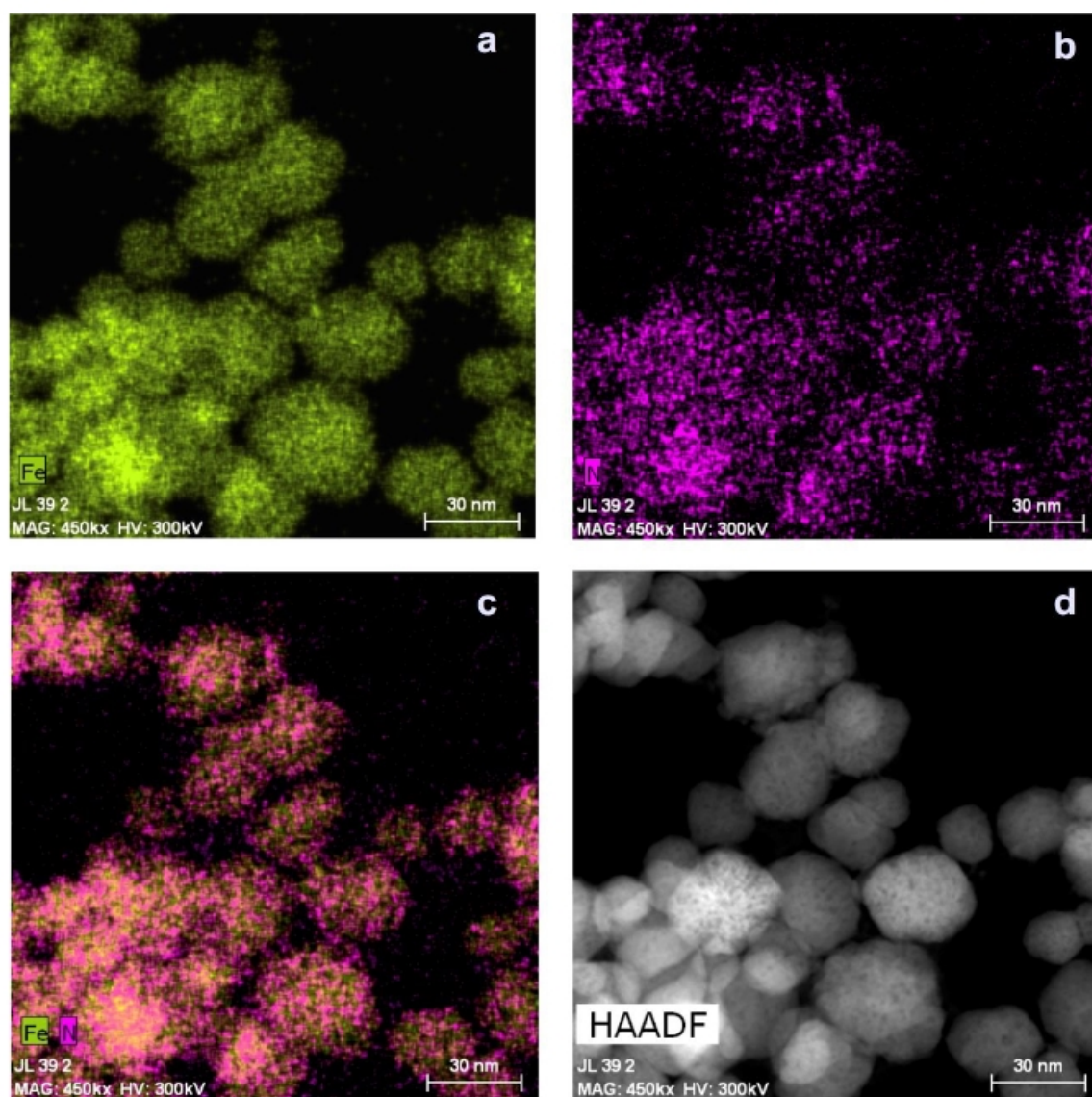


**Figure S1.** Dark field transmission electron microscopy image (a) and selected area electron diffraction (b) of MNP-1(1) and MNP-3(2).

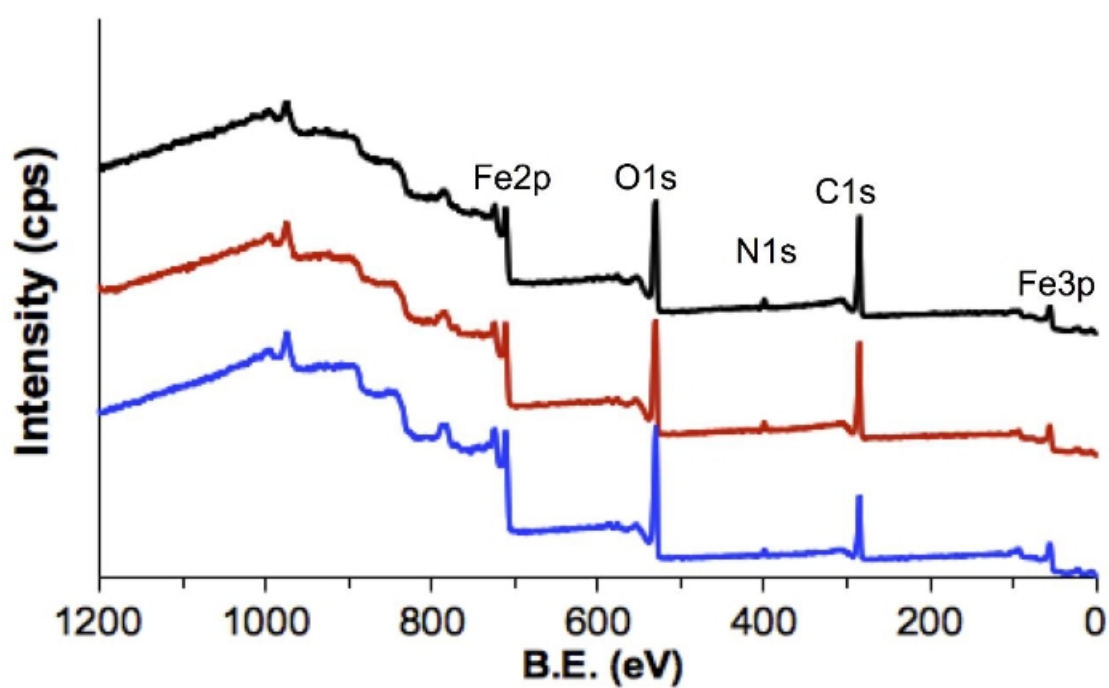


**Figure S2.** High resolution transmission electron microscopy image (a) and selected area electron diffraction (b) of MNP-1 (1) and MNP-3 (2).

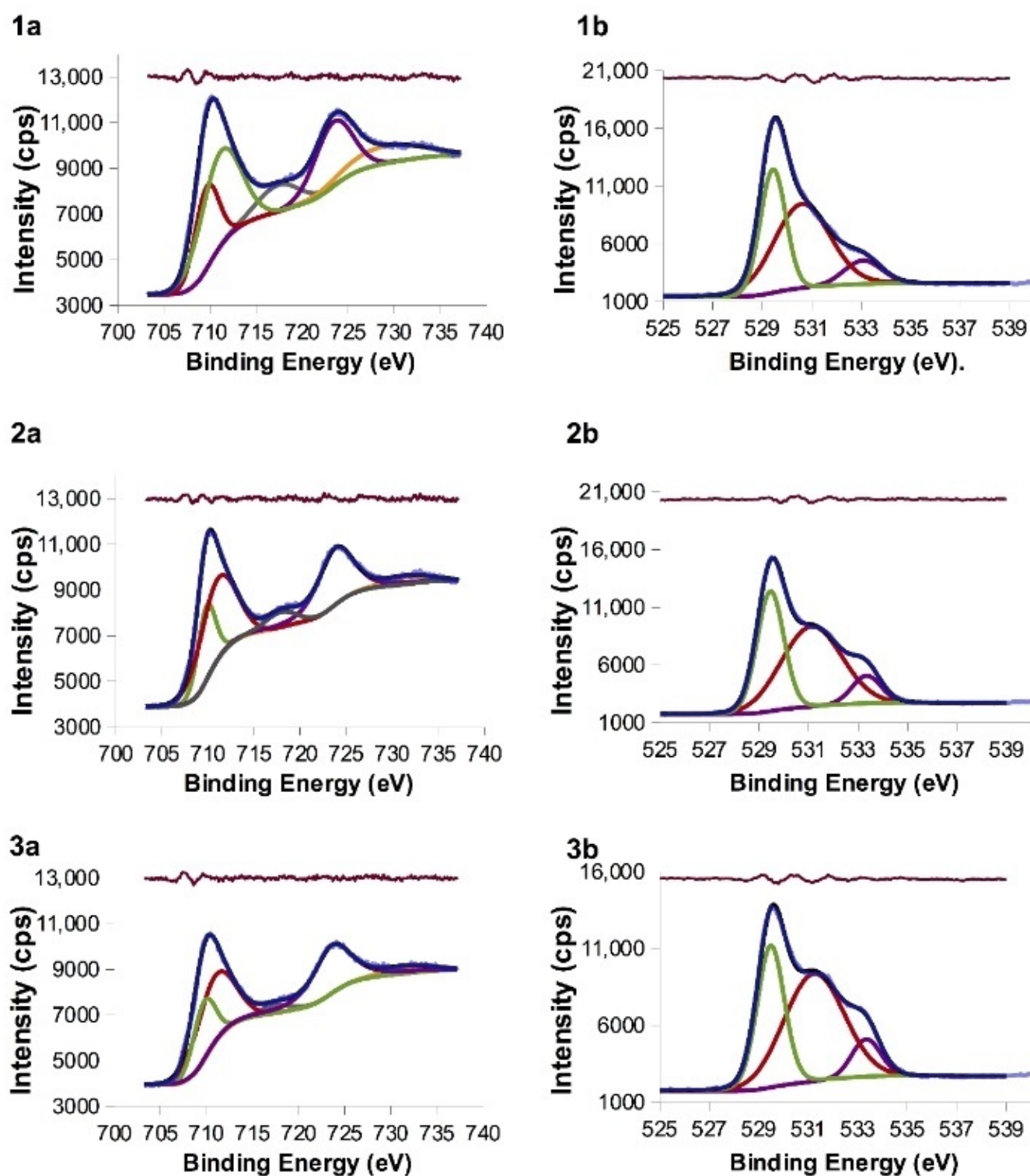




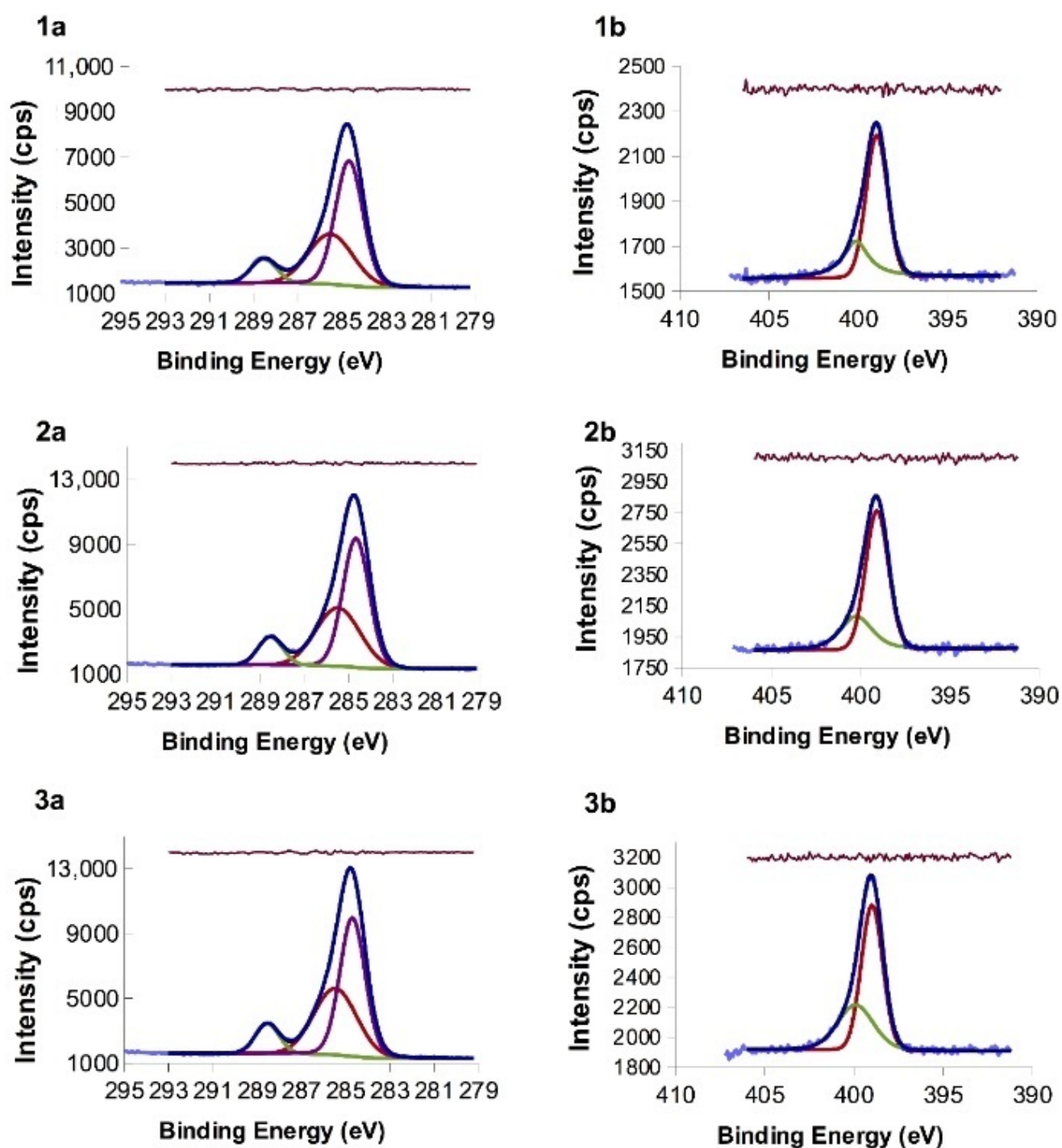
**Figure S3.** High-angle annular dark-field (HAADF) images of MNP-1 showing the distribution of Fe (a), N (b), Fe and N (c), and H (d) atoms.



**Figure S4.** XPS spectra of samples (from bottom to top) MNP-1(blue), MNP-2(red), and MNP-3(black).



**Figure S5.** High-resolution XPS spectra of Fe2p (a) and O1s (b) of MPN-1 (1), MNP-2 (2) and MNP-3 (3). Experimental data are shown in light blue, envelope in blue, and residuals (on top) in brown.



**Figure S6.** High-resolution XPS spectra of C1s (a) and N1s1s (b) of MNP-1 (1), MNP-2 (2) and MNP-3 (3). Experimental data are shown in light blue, envelope in blue, and residuals (on top) in dark red.

**Table S1.** Quantification (%atomic concentration) by XPS of the most significant peaks detected in MNP-1, MNP-2 and MNP-3.

	MNP-1	MNP-2	MNP-3
%C1s	44.9	56.7	58.8
%O1s	38.6	31.8	30.8
%Fe2p	13.5	8.4	7.4
%N1s	2.1	2.5	2.3