materials

MDPI

Supplementary materials

Combustion Synthesis of Functionalized Carbonated Boron Nitride Nanoparticles and their Potential Application in Boron Neutron Capture Therapy

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1. XPS characterization of BN-14 and BN-17

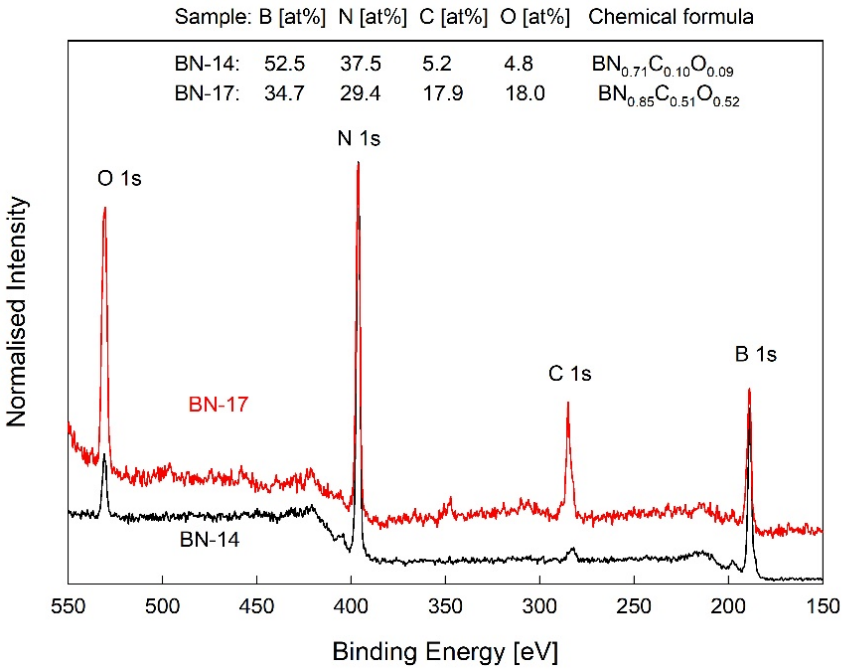

Figure S1. XPS survey spectra and elemental compositions derived from the spectra.

2. HAADF imaging of BN-14 and BN-17

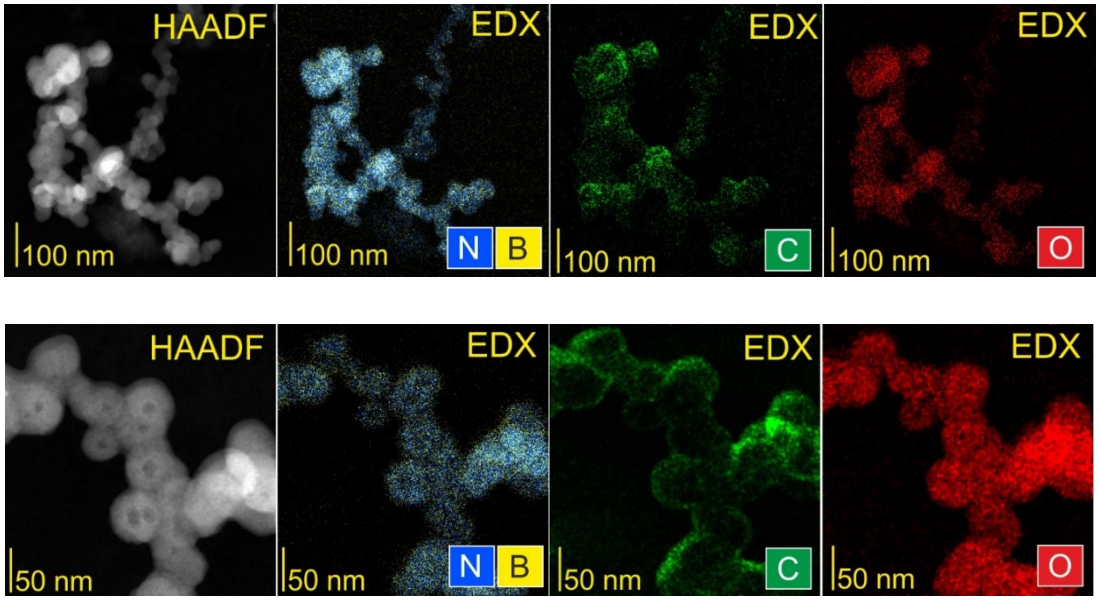

Figure S2. TEM images and elemental maps (B and N, C, O) for BN-14 (up) and BN-17 (down).

3. EDX analysis of BN-14 and BN-17

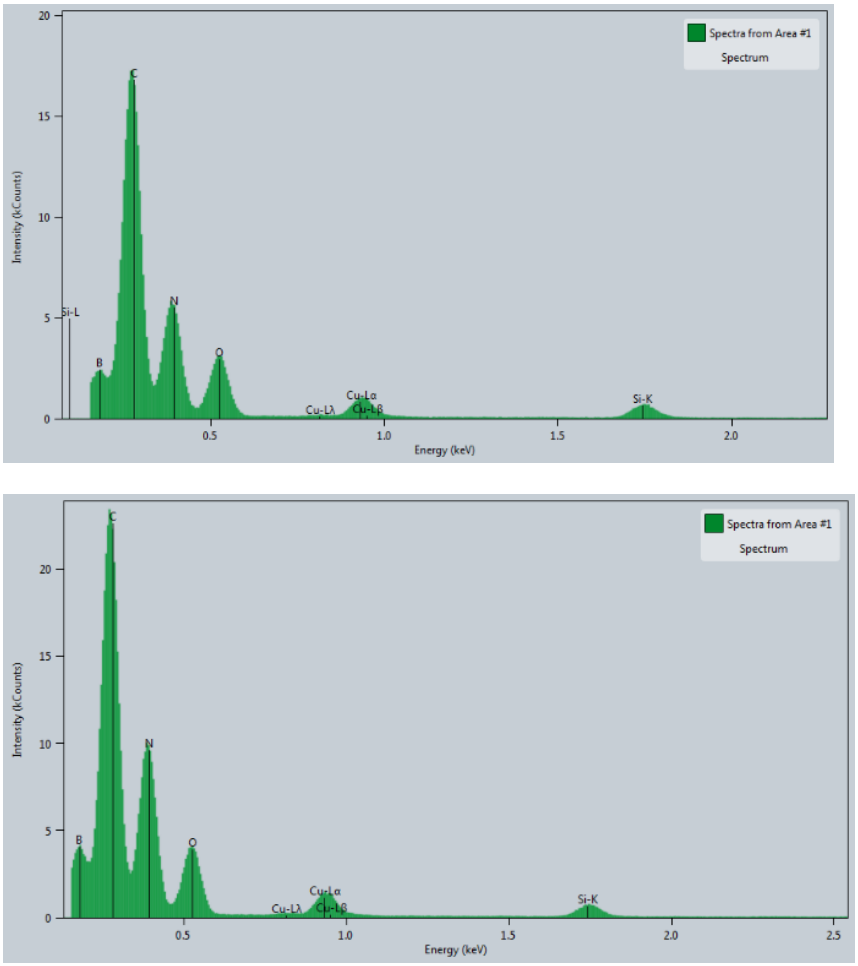

Figure S3. EDX spectra of BN-14 (up) and BN-17 (down) samples.

4. Low temperature nitrogen sorption analysis

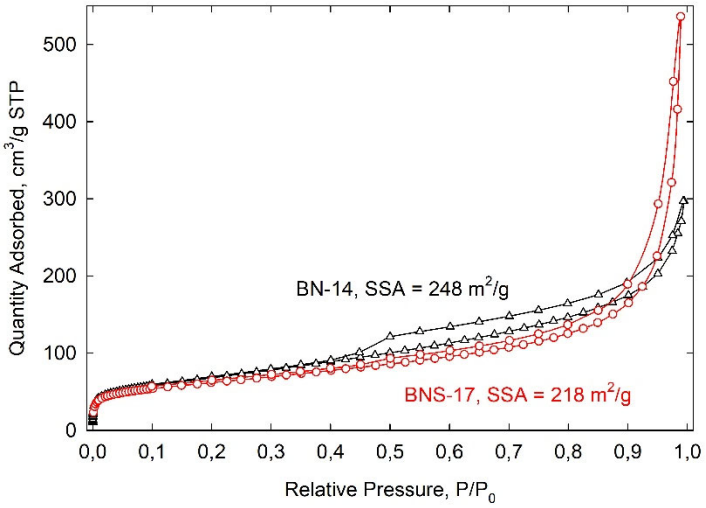

Figure S4. Nitrogen sorption-desorption isotherms for the BN-14 and BN-17 samples.

5. Flow cytometry analysis of cell size and granularity

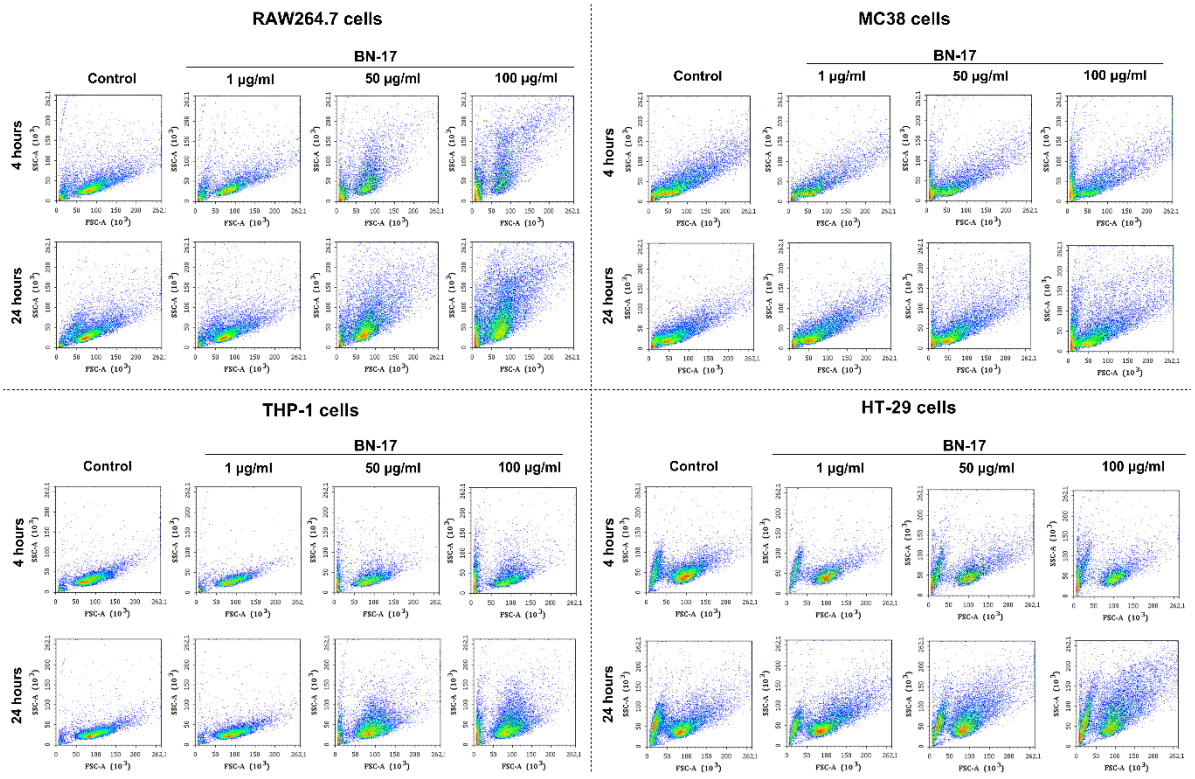

Figure S5. Flow cytometry density dot plots demonstrating changes in cell size and granularity based on forward scatter (FSC) versus side scatter (SSC) for murine RAW 264.7 and MC38, as well as human THP-1 and HT-29 cells after 4 and 24-hour exposure to CBN preparation (BN-17) at a concentration of 1, 50 and 100 μg/ml compared to control untreated cells.