Supporting Information for

Boron Carbon Nitride Nanostructures from Salt Melts: Tunable Water Soluble Phosphors

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Figure S1. SEM picture of BG-11 sample.

Figure S2. AFM and TEM pictures of BG-15 and BG-110 samples.

Figure S3. SEM picture of a sample synthesized at 800 °C with NaBH₄:urea = 1:10.

Figure S4. XRD pattern of a sample synthesized at 800 °C with NaBH₄:urea = 1:10.

Figure S5. Evolution of the hydrodynamic radius and the zeta potential of BG-110 particles vs pH.

Figure S6. XPS spectra of BU-110, BG-110 and BG-115 samples.

Figure S7. Excitation spectrum of a BG-15 sample.

Figure S8. confocal images of BG-15 nanoparticles in the presence of giant unilamellar vesicles.
Figure S1. SEM picture of BG-11 sample.

Figure S2. AFM (a, b) and TEM (c, d) pictures of BG-15 (a, c) and BG-110 (b, d) samples.
Figure S3. SEM picture of a sample synthesized at 800 °C with NaBH₄:urea = 1:10.

Figure S4. XRD pattern of a sample synthesized at 800 °C with NaBH₄:urea = 1:10. Comparison with BU-110 sample obtained at 700 °C shows that higher temperature of synthesis yields better ordering. This result is consistent with Figure S3 exhibiting bigger particles at 800 °C.

Figure S5. Evolution of the hydrodynamic radius (filled squares) and the zeta potential (open squares) of BG-110 nanoparticles vs pH.
Figure S6. XPS spectra of BU-110, BG-110 and BG-115 samples: (a) B1s, (b) C1s, (c) N1s.

Figure S7. Excitation spectrum of a BG-15 sample.
**Figure S8.** Confocal microscopy images of giant vesicles mixed with an aqueous dispersion of **BG-15** nanoparticles. (A, C) fluorescence confocal sections, (B) phase contrast image. The green signal is emitted from **BG-15** nanoparticles and the red signal is from the fluorescent dye DiIC$_{18}$ labeling the membrane. No penetration of the nanoparticles in the vesicles and expressed adsorption of the particles to the membrane are detected, thus exemplifying the benign behavior of the nanoparticles towards lipid membranes.