Electronic Supplementary Information

Controlling the Self-Assembly of Cationic Bolaamphiphiles: Counterion-Directed

Transitions from 0D/1D to Exclusively 2D Planar Structures

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Figure S1. (a) AFM image of the 2D planar assemblies of 5,5-B2NTs8 drop-casted on mica, of which the analyzed thickness is ca. 6 nm as shown by section analysis. (b) Wide-angle X-ray diffraction (WAXD) shows a lamellar d-spacing of 13.22 Å for 5,5-B2NTs8 drop-casted on a glass substrate.



Figure S2. Addition of an excess of BaBr2 into an aqueous solution of 5,5-B2NTs8 shows (a) 1D fibers again, observed by TEM. The 2D assemblies are hardly found, but sometimes one can observe the semi-fiberized 2D assemblies.



Figure S3. ¹H-NMR for 5,5-B2NTs8 in DMSO- D6.



Figure S4. ¹³C-NMR for 5,5-B2NTs8 in DMSO- D6.



Figure S5. ESI-Mass for 5,5-B2NTs8.