Supplementary Information

Condensation of DNA using poly(amido amine) dendrimers: effect of salt concentration on aggregate morphology

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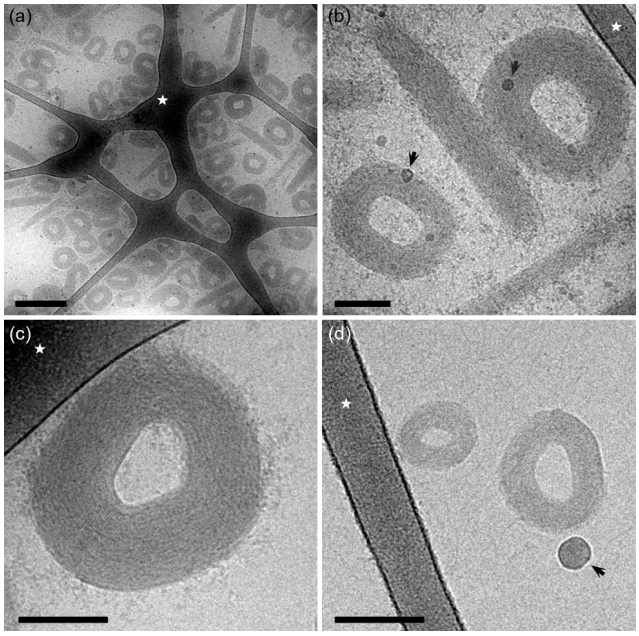

Fig.S1 Cryo- TEM micrographs of G1/DNA aggregates condensed in 150 mMNaBr (a-c) compared to 10 mM (d). Scale bars are 100 nm in all images except (a) where it is 400 nm. White stars indicate the carbon support film, and black arrows indicate examples of frost particles (artifact).

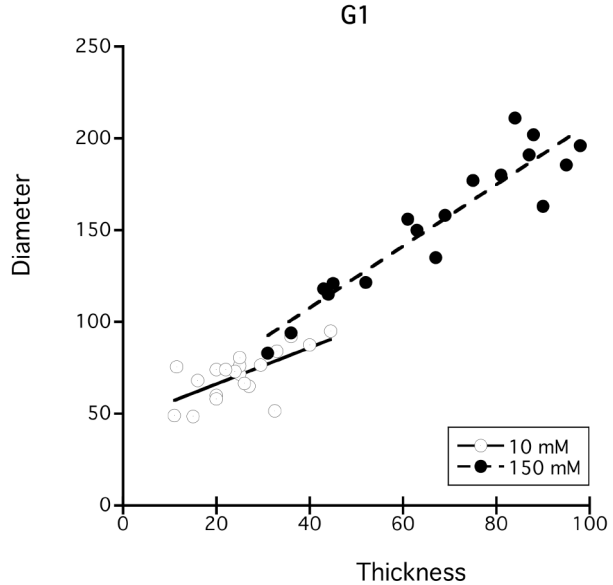

Fig. S2 Graph displaying the linear relationship between toroid diameter and thickness for G1/DNA aggregates at 10 mM and 150 mMNaBr concentration. All aggregate dimensions are reported according to the description in Fig. 4.

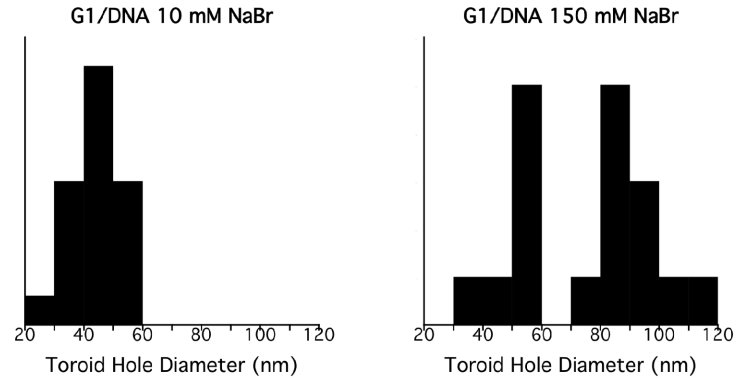

Fig. S3 Histograms of toroid hole diameters for G1/DNA aggregates in 10 mM and 150 mMNaBr. All aggregate dimensions are reported according to the description in Fig. 4.

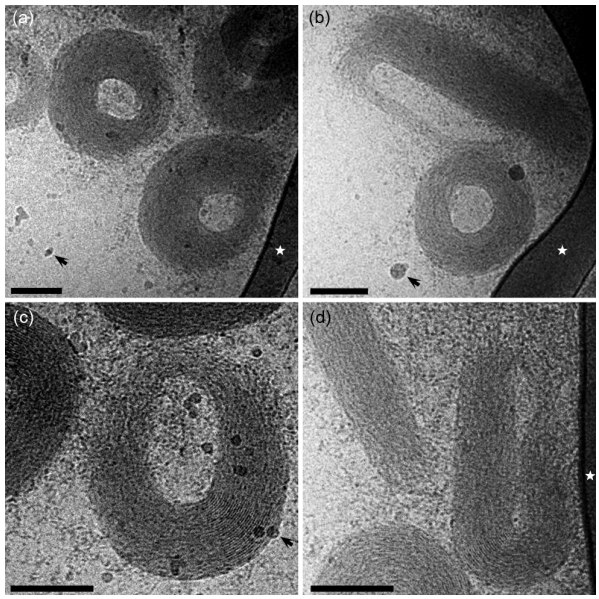

Fig. S4 Cryo-TEM micrographs of G1/DNA aggregates condensed in 150 mMNaBr showing asymmetric toroids and rods. Scale bars are 100 nm in all micrographs. White stars indicate the carbon support film, and black arrows indicate examples of frost particles (artifacts).

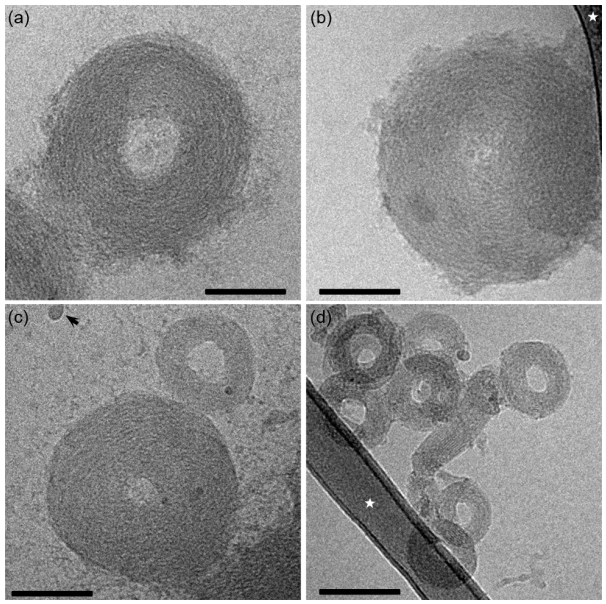

Fig.S5 Cryo- TEM micrographs of G2/DNA aggregates condensed in various concentrations of NaBr: 150 mM (a, b), 50 mM (c), and 10 mM (d). Scale bars are 100 nm in all images. White stars indicate the carbon support film, and the black arrow indicatesa frost particle (artifact).

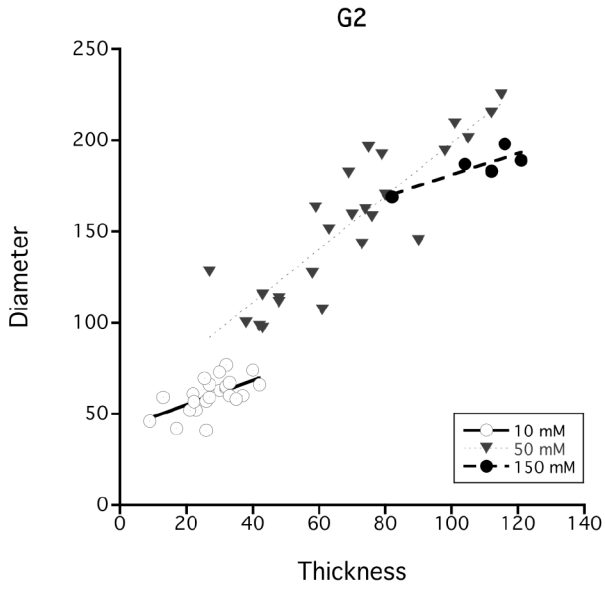

Fig. S6 Graph displaying the linear relationship between toroid diameter and thickness for G2/DNA aggregates at 10, 50 and 150 mMNaBr concentration. All aggregate dimensions are reported according to the description in Fig. 4.

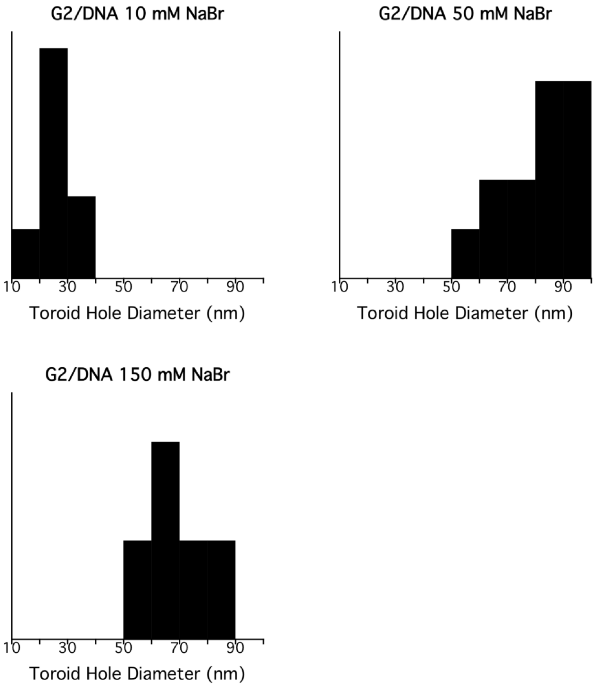

Fig. S7 Histograms of toroid hole diameters for G2/DNA aggregates in 10, 50 and 150 mMNaBr. All aggregate dimensions are reported according to the description in Fig. 4.

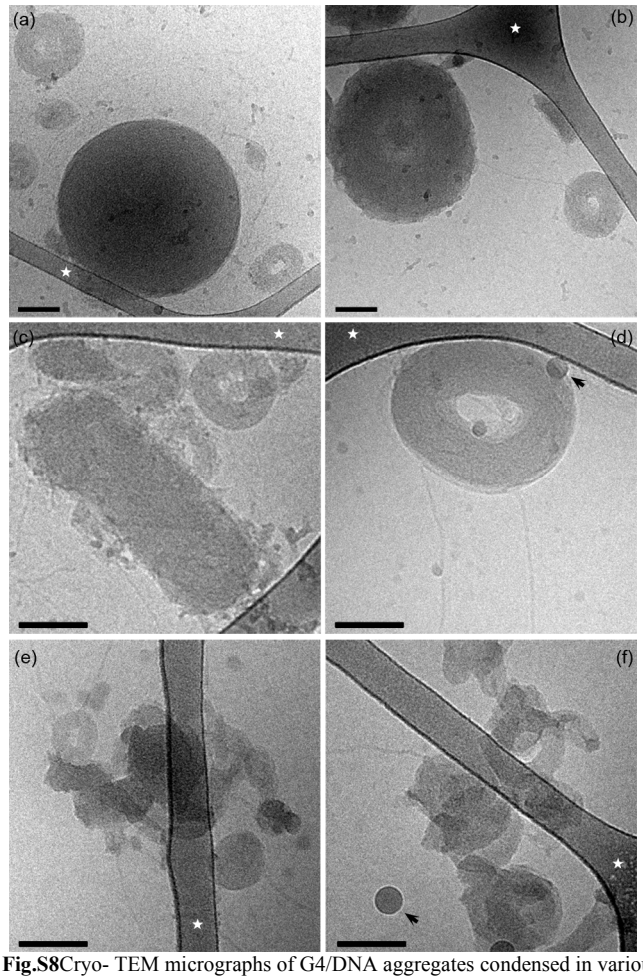

Fig.S8 Cryo- TEM micrographs of G4/DNA aggregates condensed in various concentrations of NaBr: 150 mM (a, b), 50 mM (c, d) and 10 mM (e, f). Scale bars are 100 nm in all images. White stars indicate the carbon support film, and black arrows indicate examples of frost particles (artifacts).

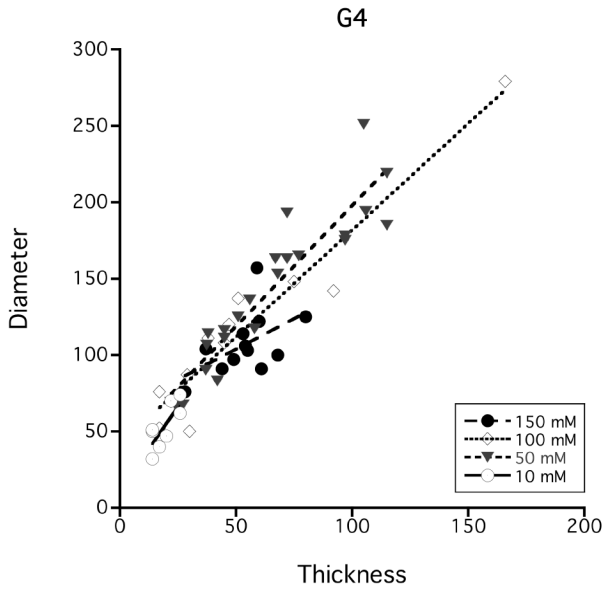

Fig. S9 Graph displaying the linear relationship between toroid diameter and thickness for G4/DNA aggregates at 10, 50, 100 and 150 mMNaBr concentration. All aggregate dimensions are reported according to the description in Fig. 4.

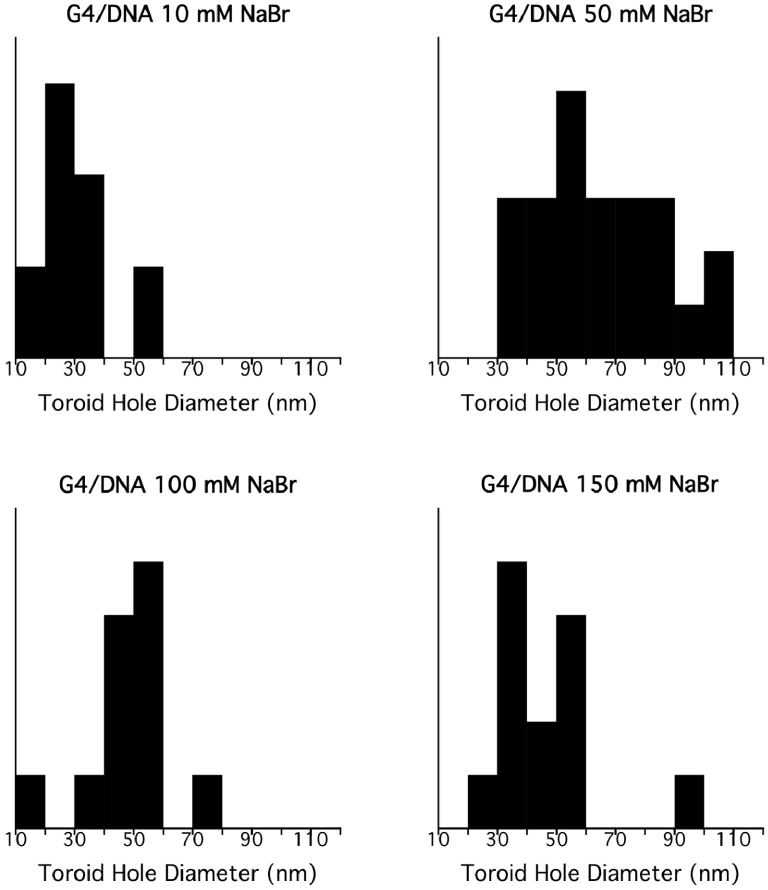

Fig. S10 Histograms of toroid hole diameters for G4/DNA aggregates in 10, 50, 100 and 150 mMNaBr. All aggregate dimensions are reported according to the description in Fig. 4.

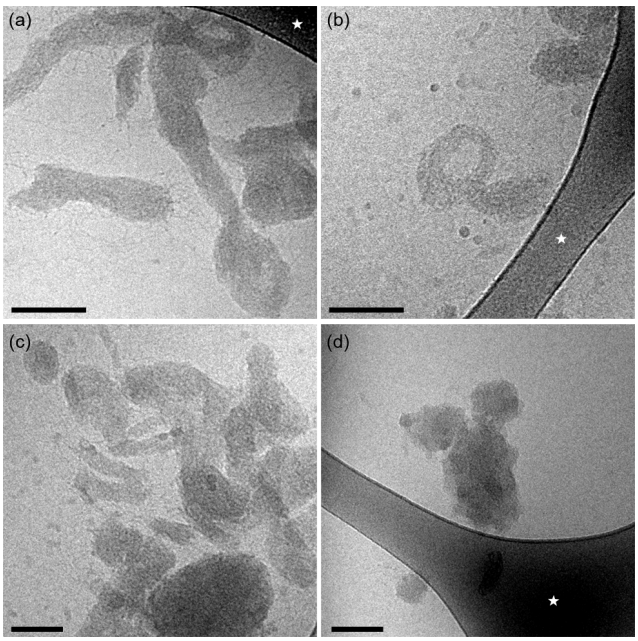

Fig.S11 Cryo-TEM micrographs of complexes of G6/DNA condensed in 150 mMNaBr (a-c) compared to 10 mMNaBr (d). Scale bars are 100 nm in all images. White stars indicate the carbon support film.

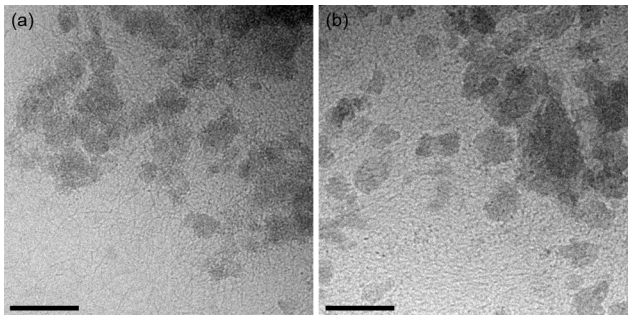

Fig.S12 Cryo-TEM micrographs of G8/DNA aggregates condensed in 150 mM (a) and 10 mM (b). All scale bars are 100 nm.

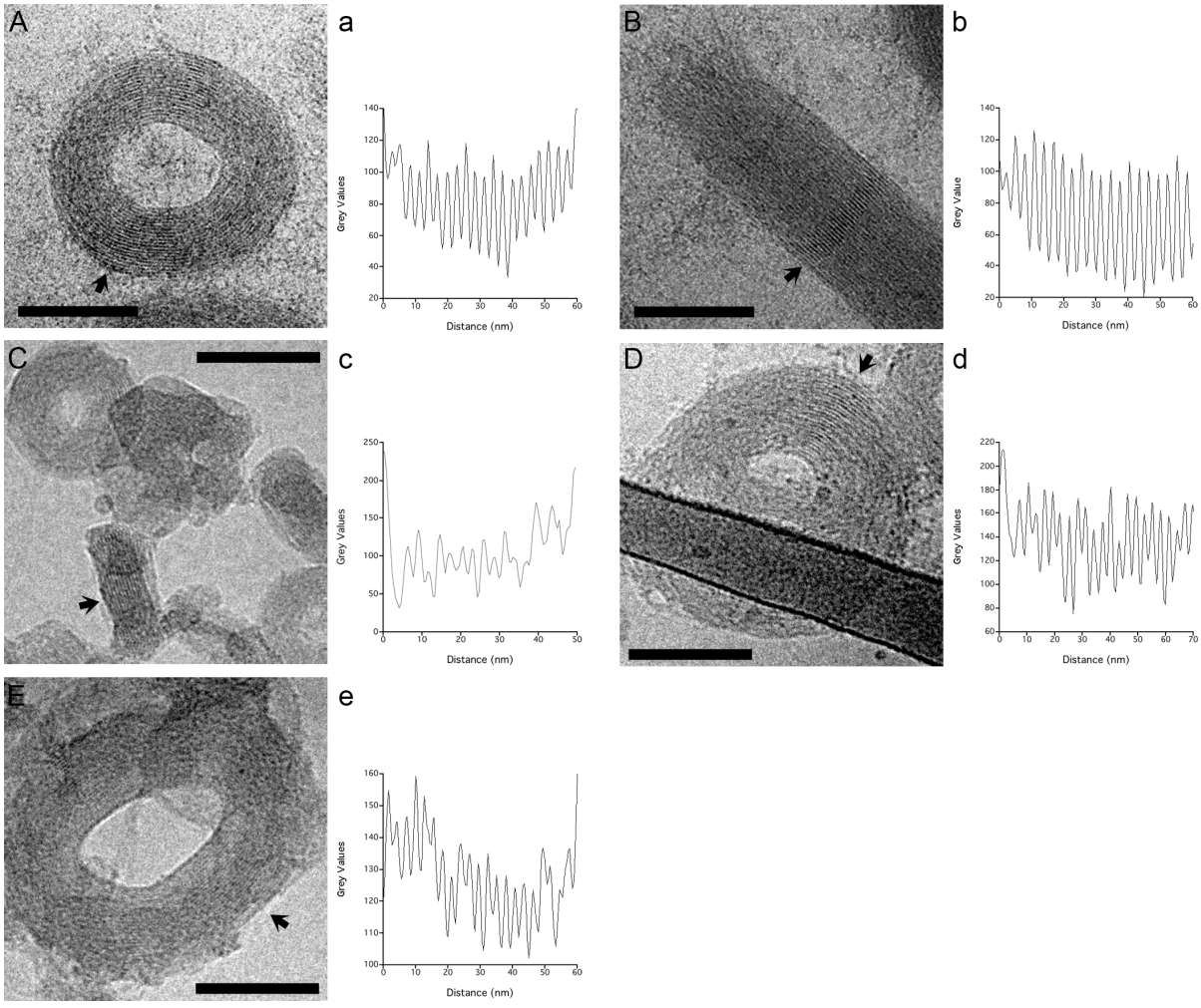

Fig. S13 Cryo-TEM micrographs showing visible fringes in toroidal and rod-like aggregates (black arrows) prepared using different Gx and NaBr concentration: G1 150 mM (A, B), G2 10 mM (C), G2 50 mM (D), and G4 50 mM. Also shown are the corresponding line profiles across the ordered regions indicated by the black arrows (a-e). All scale bars are 100 nm.