Supplementary Information

Figure S1 (Supplementary Information)

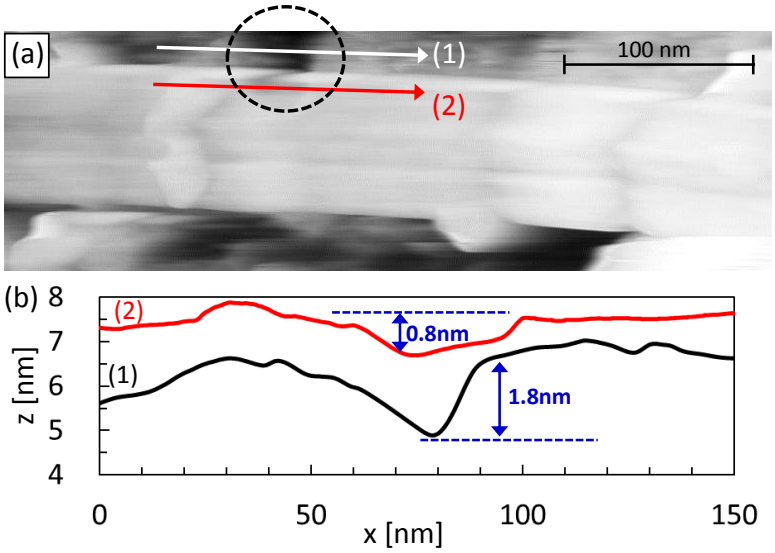

Fig. S1 (a) STM topographic image of another sGNR (V_s=−1.5 V, I=30 pA, 400×133 nm). A circled area denotes a hole on the substrate. (b) Line profiles along the arrows (1) and (2) in (a).

Figure S2 (Supplementary Information)

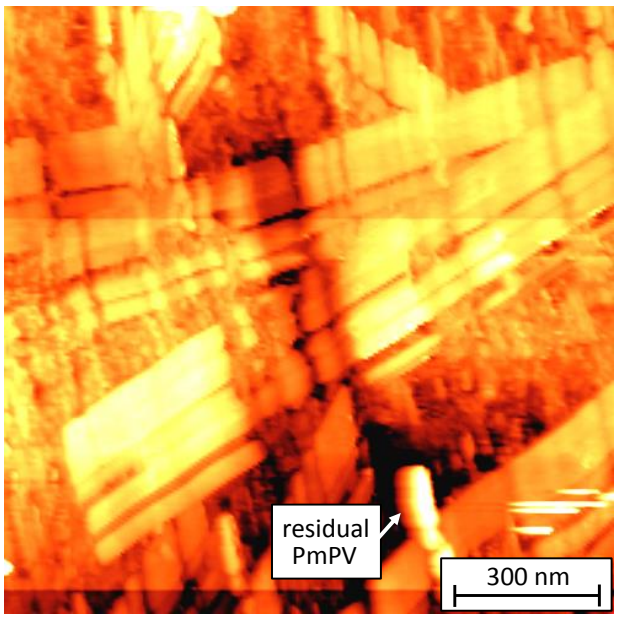

Fig. S2 STM images of 3D cross bridging structures of sGNRs, where more than 20 sGNSs are observed (V_s=−1.5 V, I=30 pA, 1200×800 nm).

Figure S3 (Supplementary Information)

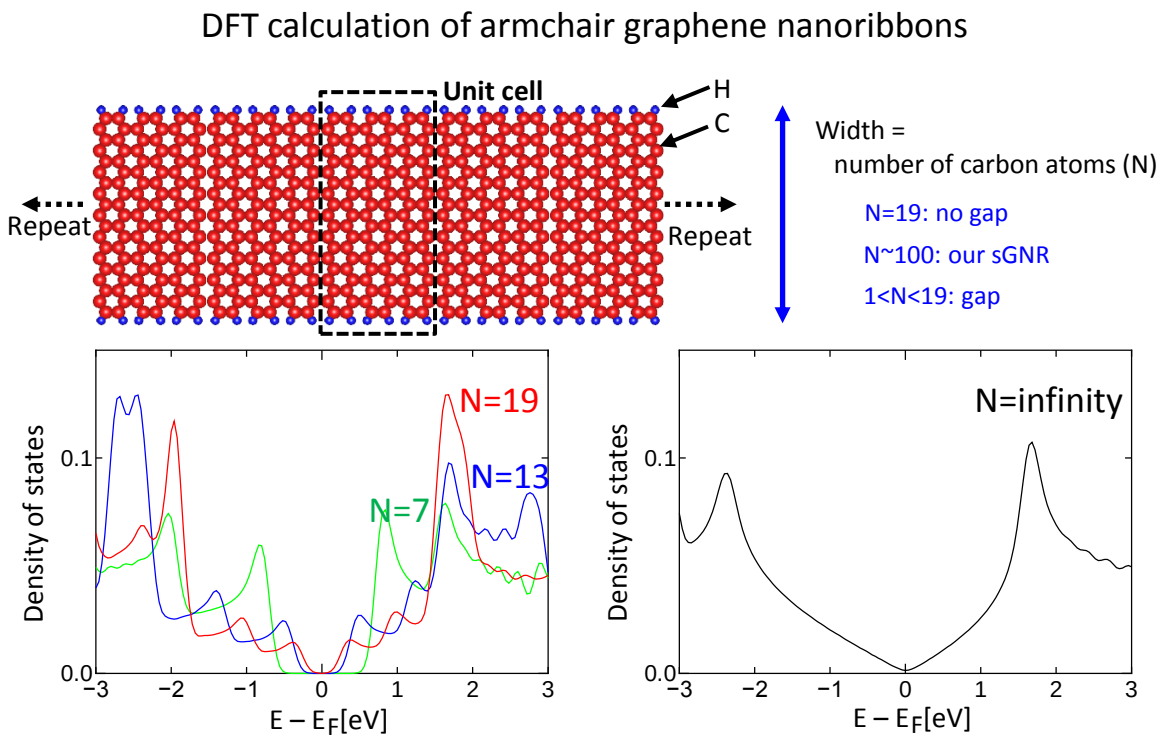

Fig. S3 Theoretical ab-initio calculations were performed for sGNR with finite widths, *N*, and for a graphene sheet (*N*=infinity). LDOS of the sGNR depends on a width of the sGNR; the sGNRs with small width exhibit an energy gap at the Fermi level while the gap tends to zero as *N* increases, as seen in that of *N*=infinity.