

Supplemental material

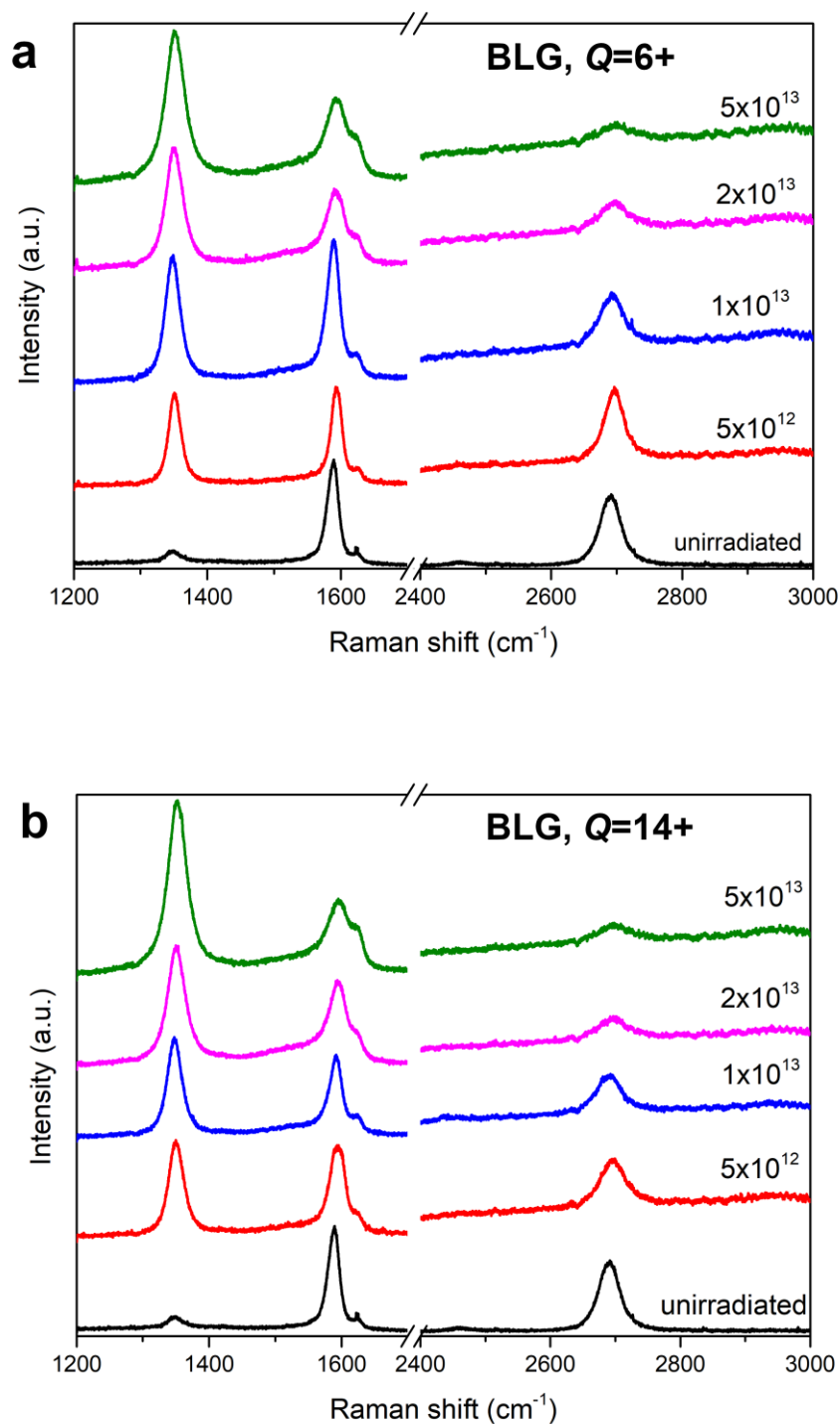


Figure S1. Raman spectra of bilayer graphene (BLG) irradiated with 23 MeV I using (a) charge state $Q=6+$, (b) equilibrium charge state $Q=14+$.

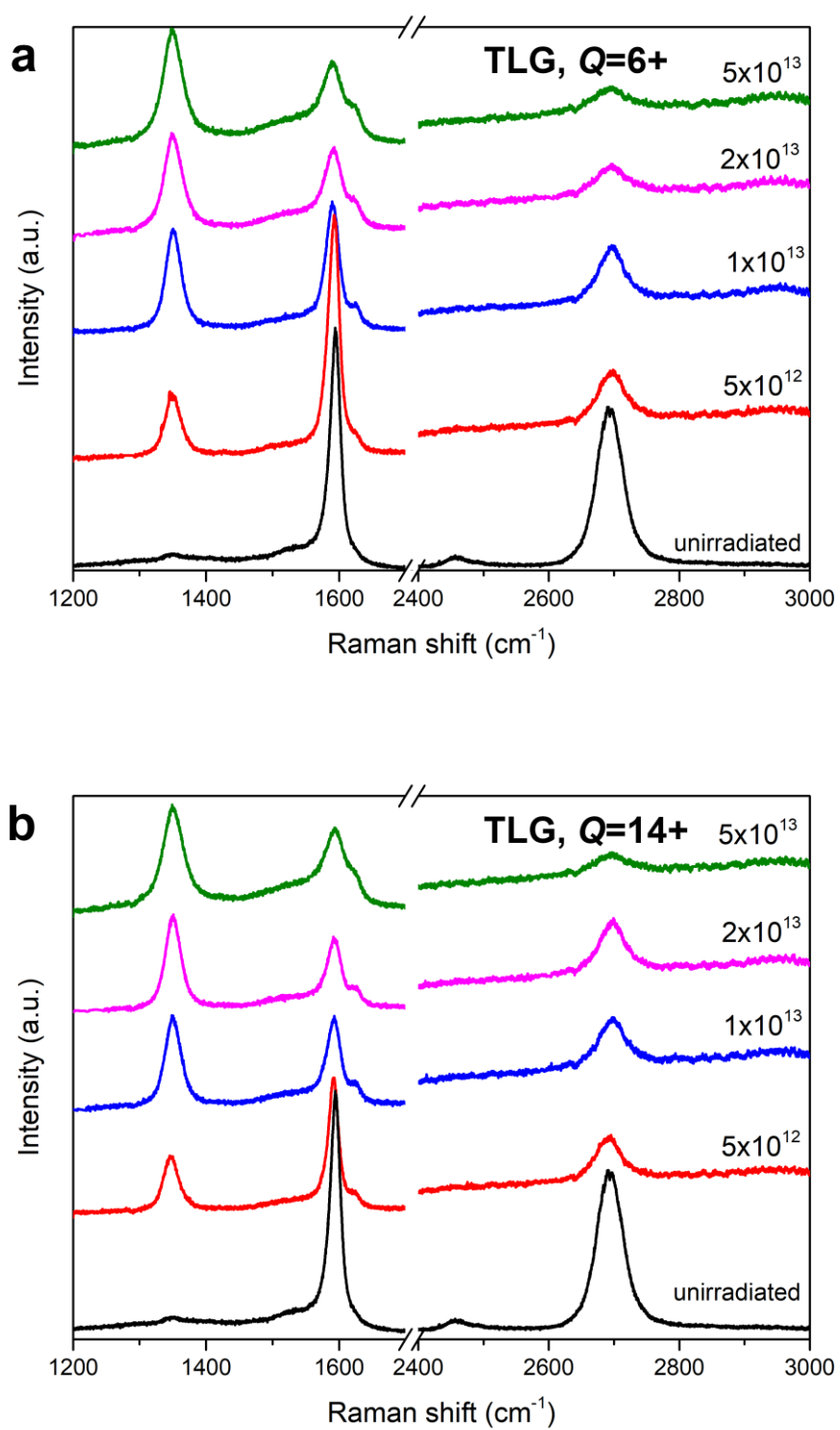


Figure S2. Raman spectra of trilayer graphene (TLG) irradiated with 23 MeV I using (a) charge state $Q=6+$, (b) equilibrium charge state $Q=14+$.

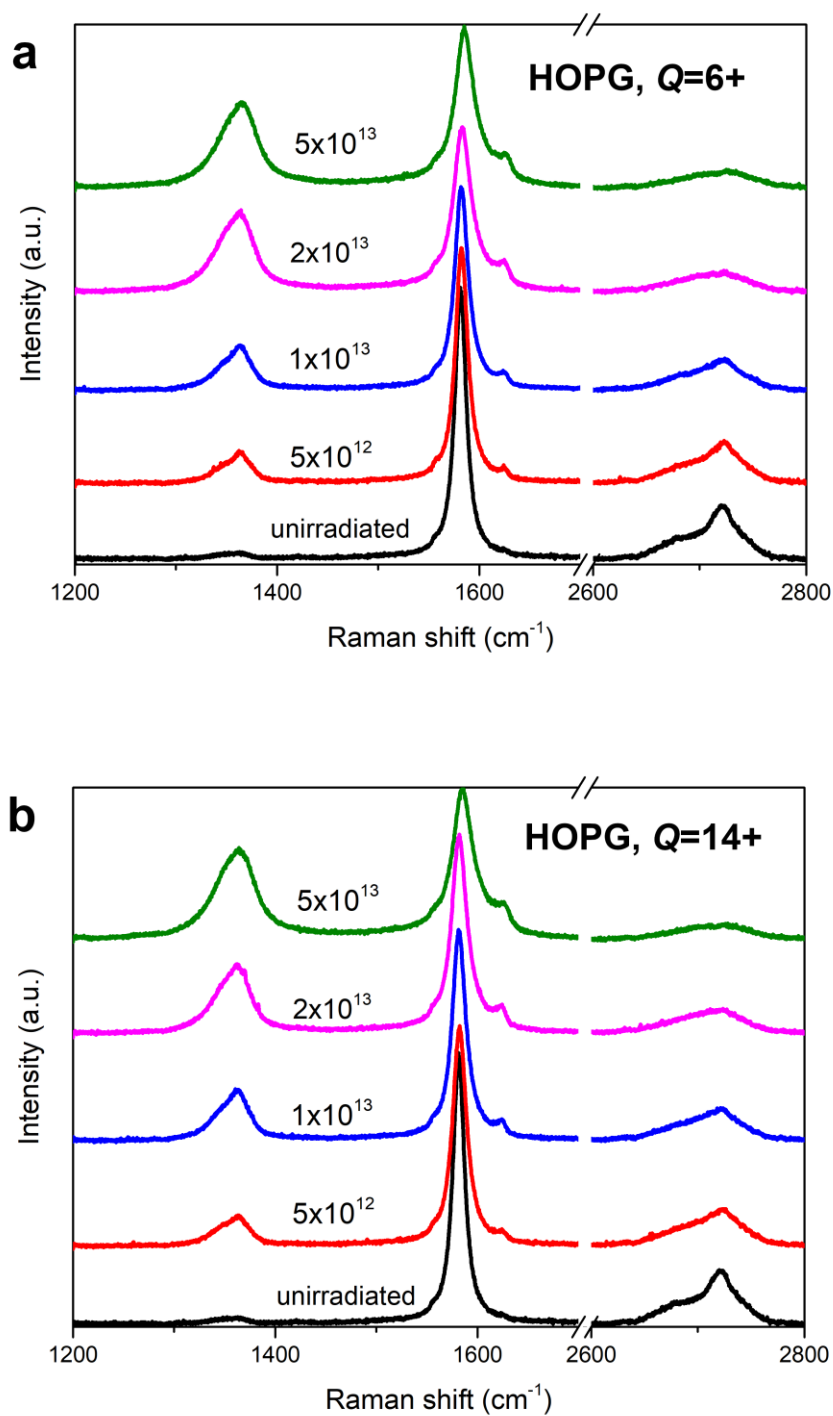


Figure S3. Raman spectra of graphite (HOPG) irradiated with 23 MeV I using (a) charge state $Q=6+$ (reprinted with permission from ref. [27]), (b) equilibrium charge state $Q=14+$.