

# **Oxidation stability of confined linear carbon chains, carbon nanotubes, and graphene nanoribbons as 1D nanocarbons**

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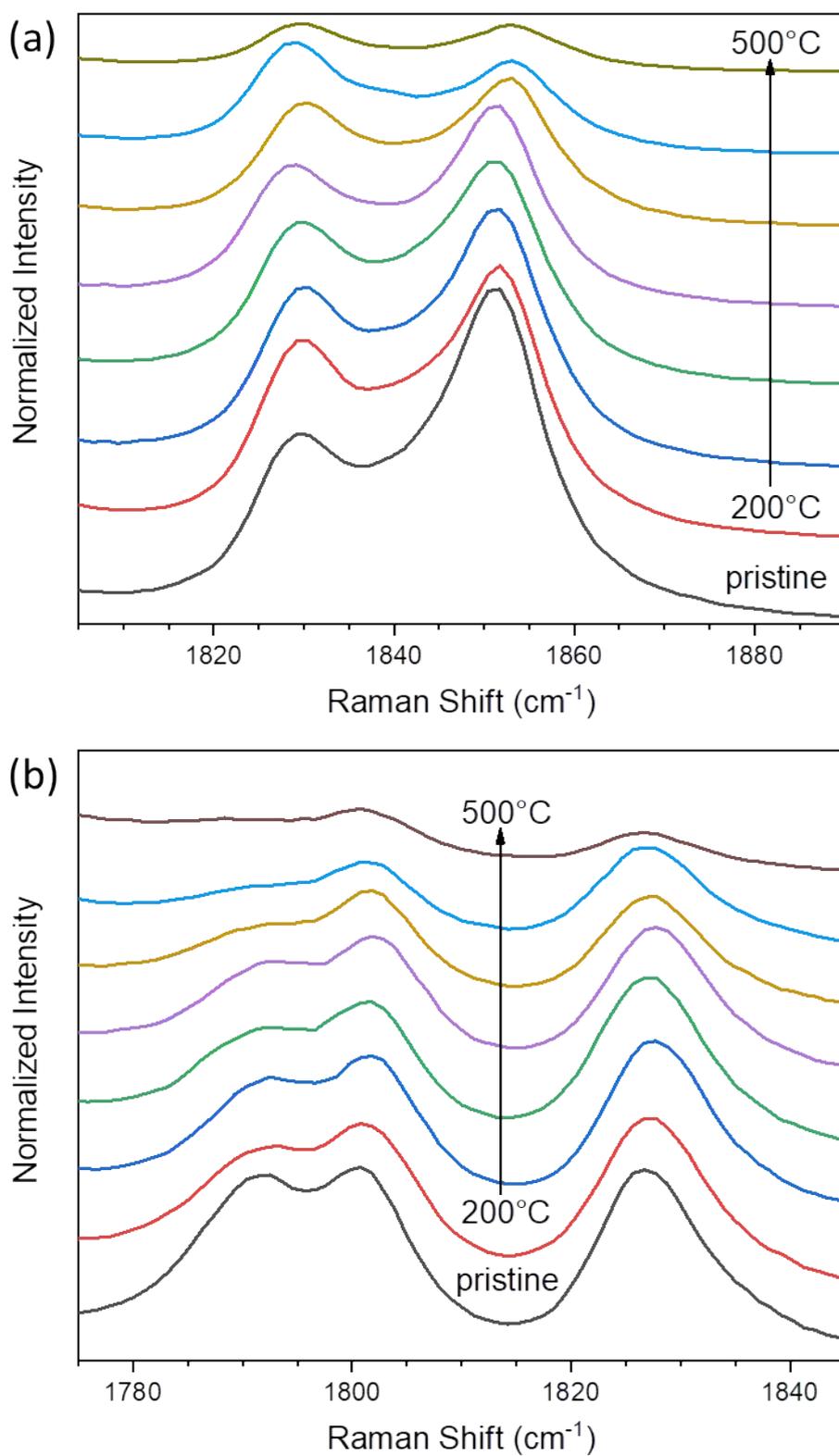


Figure S1. Raman spectra of LCCs with thermal oxidation at temperatures from 200 to 500 °C excited by (a) 568 and (b) 633 nm lasers. The corresponding contour map is shown in **Fig. 2a** and **2b**.

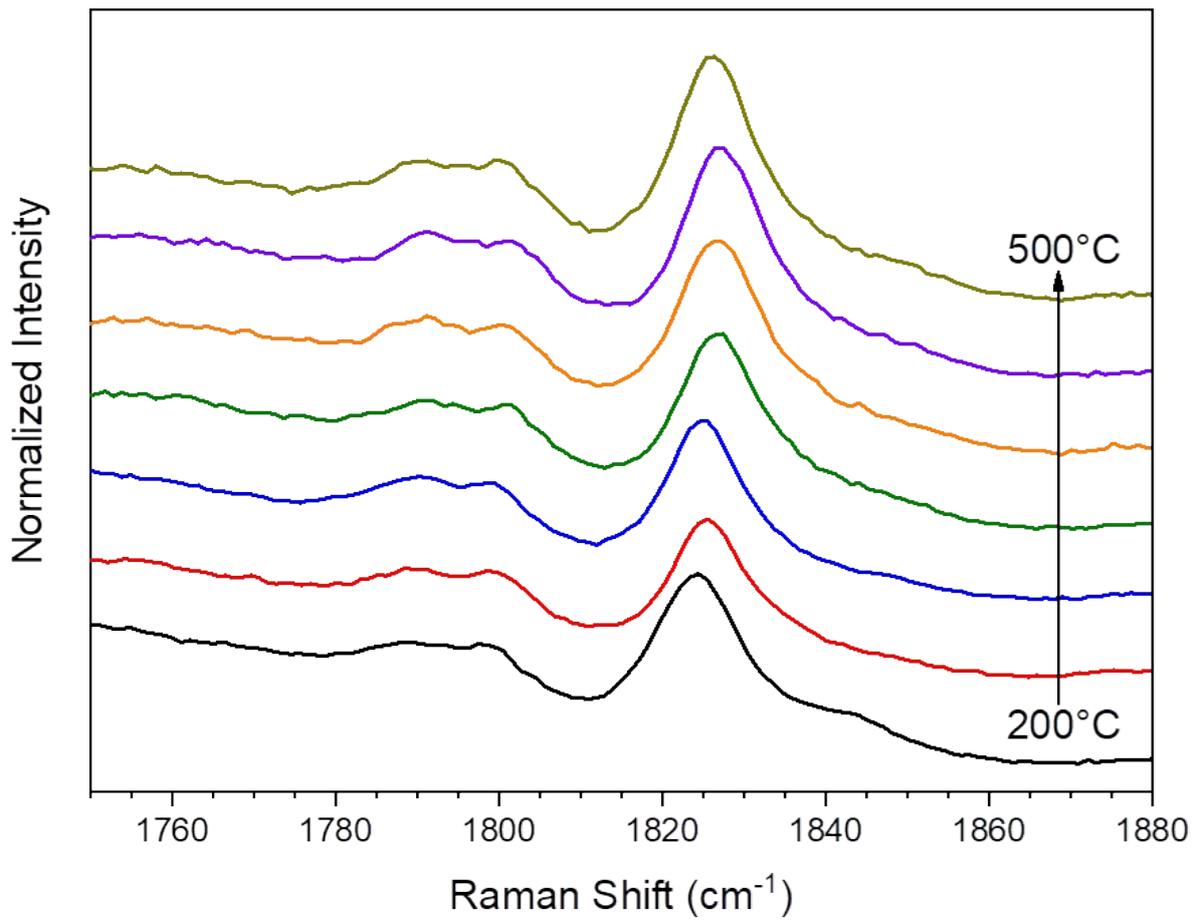


Figure S2. Raman spectra of LCCs before and after annealing in vacuum at temperatures from 200 to 500 °C excited by a 633 nm laser.

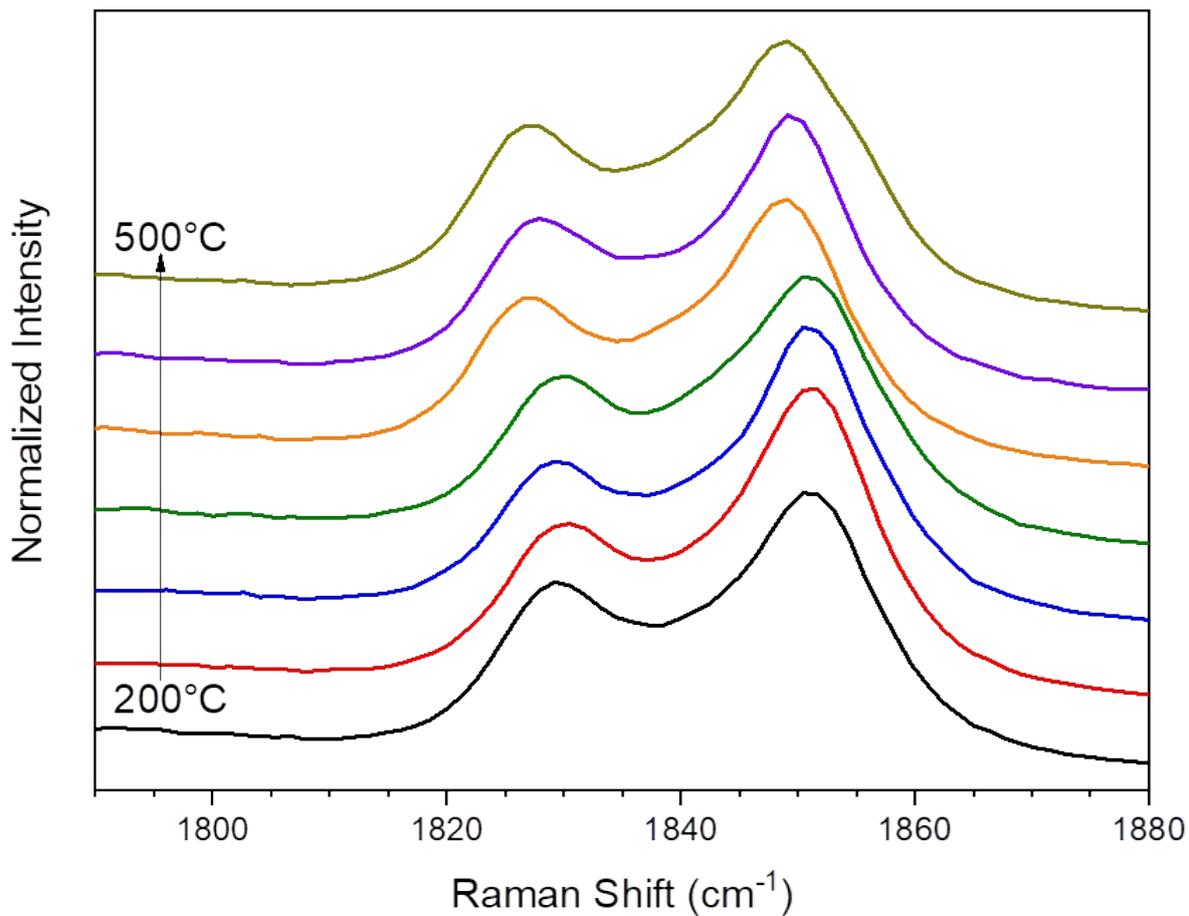


Figure S3. Raman spectra of LCCs before and after annealing in vacuum at temperatures from 200 to 500 °C excited by a 568 nm laser.

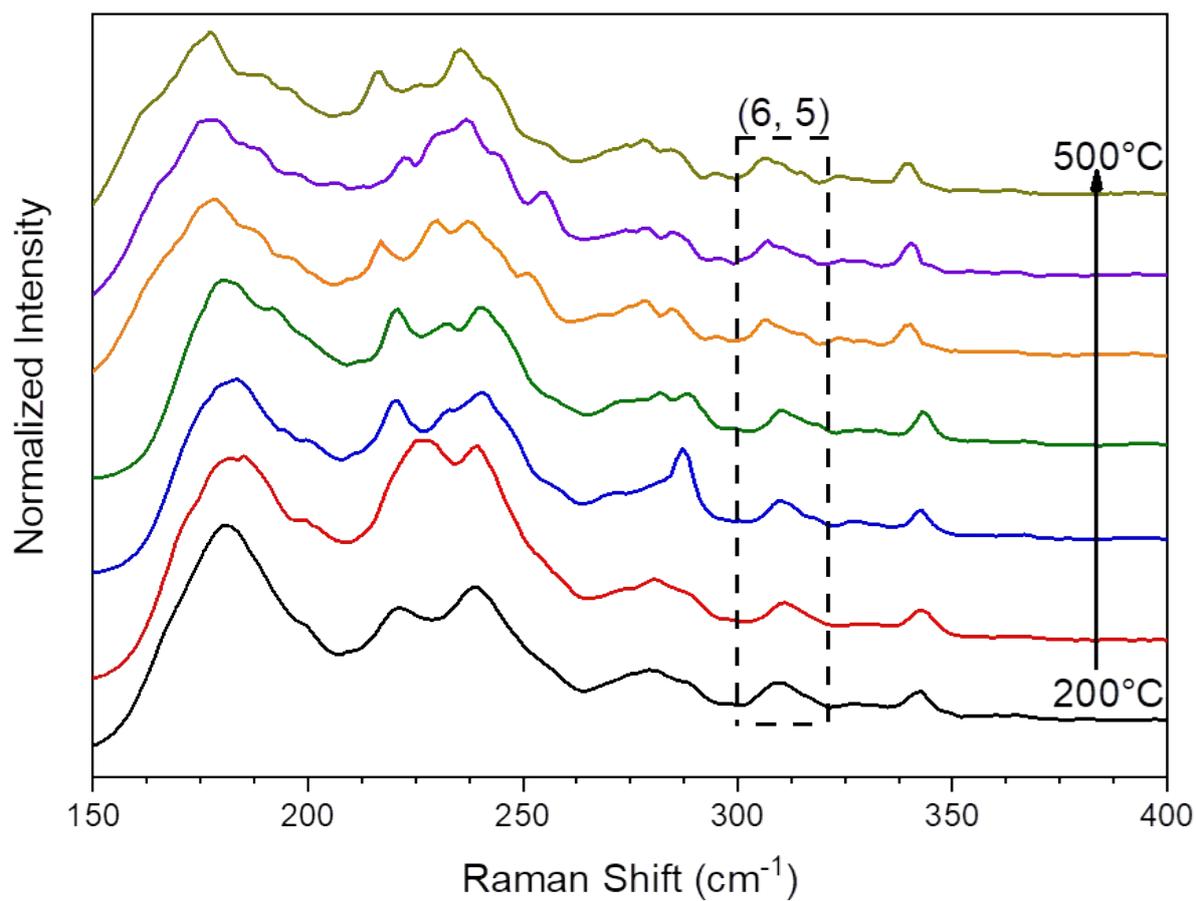


Figure S4. Raman spectra of (6,5) before and after annealing in vacuum at temperatures from 200 to 500 °C excited by a 568 nm laser.

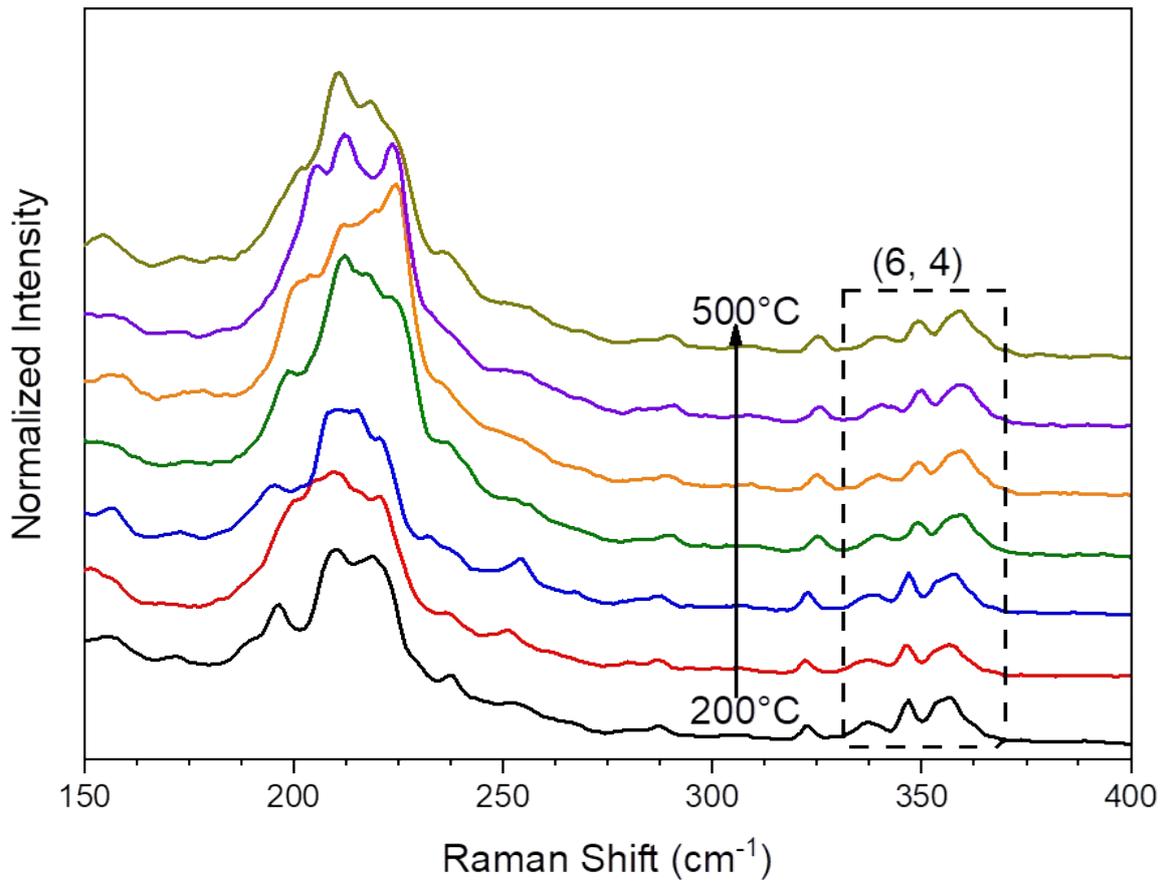


Figure S5. Raman spectra of (6,4) before and after annealing in vacuum at temperatures from 200 to 500 °C excited by a 633 nm laser.

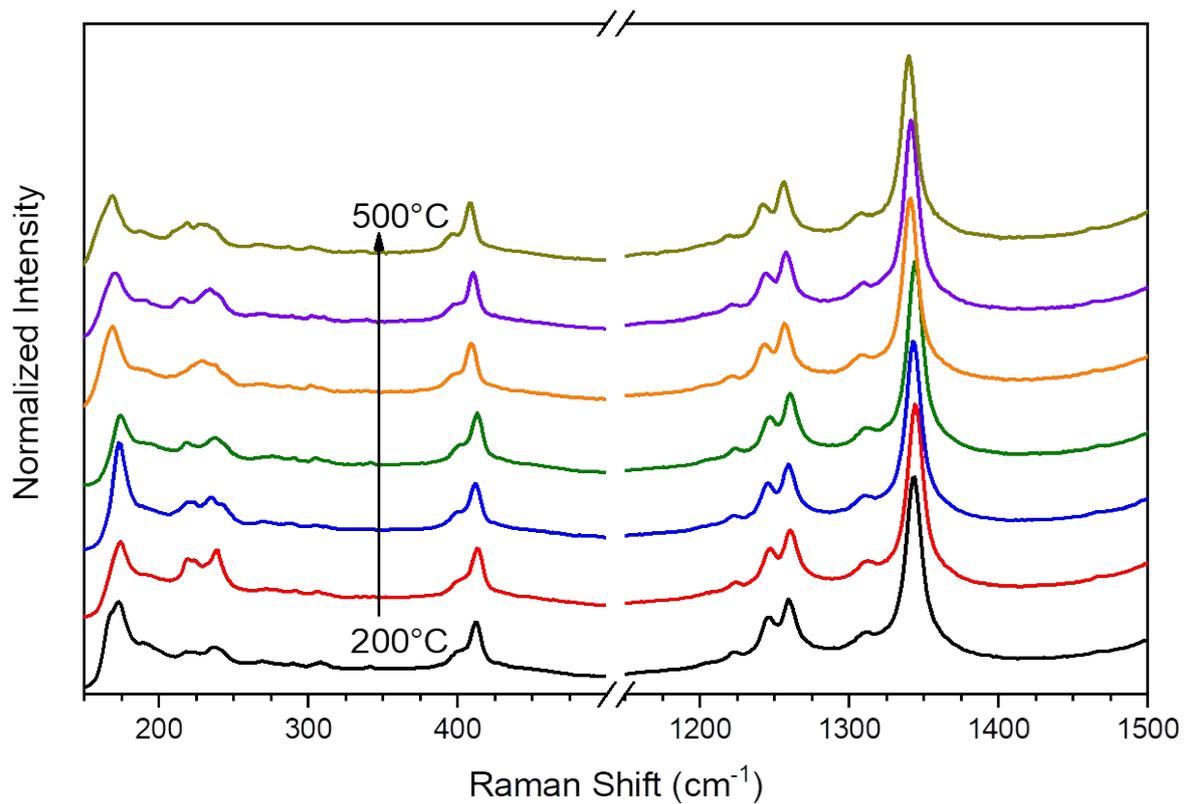


Figure S6. Raman spectra of graphene nanoribbons before and after annealing in vacuum at temperatures from 200 to 500 °C excited by a 568 nm laser.