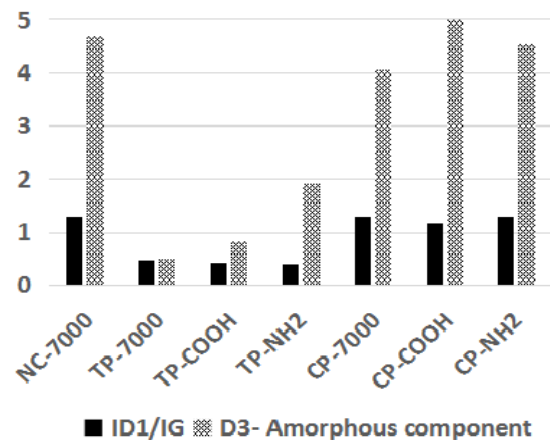
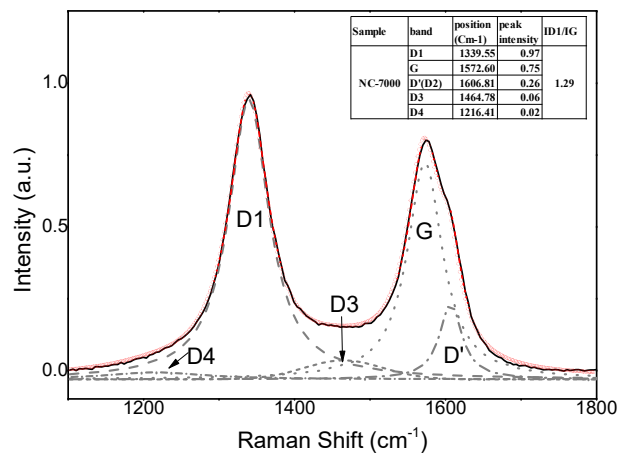




Additional File 2

Curve fitting of first ordered Raman spectra

Band	Raman shift (cm ⁻¹)	Vibration mode
G	~1580	Ideal graphitic lattice
D1	~1350	Disordered graphitic lattice (graphene layer edges),
D2(D')	~1620	Disordered graphitic lattice (surface graphene layers)
D3	~1500	Amorphous carbon
D4	~1200	Disordered graphitic lattice, polyenes, ionic impurities

