Electronic Supplementary Material (ESI) for RSC Advances.

Real time and *in situ* observation of graphene growth on liquid metal surfaces via carbon segregation method using high-temperature confocal laser scanning microscope

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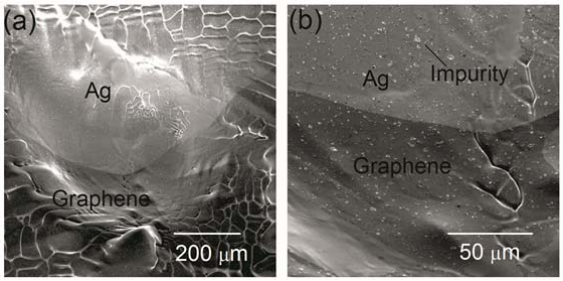

Fig. S1. (a-b) High-resolution SEM images show graphene on liquid silver after 5 min of carbon dissolution at T_4 = 1200 °C followed by 5 min of growth at T_3 = 970 °C.

Movie S1. Indication of SLG formation and growth from the motion of oxide particles on liquid copper surface during cooling from T_4 = 1300 °C to T_3 = 1130 °C captured with a high-temperature CLSM.

Movie S2. Formation and growth of MLG islands on liquid copper surface at T_3 = 1130 °C observed *in situ* with a high-temperature CLSM.