

Supporting Information

New insight into the soot nanoparticles in a candle flame

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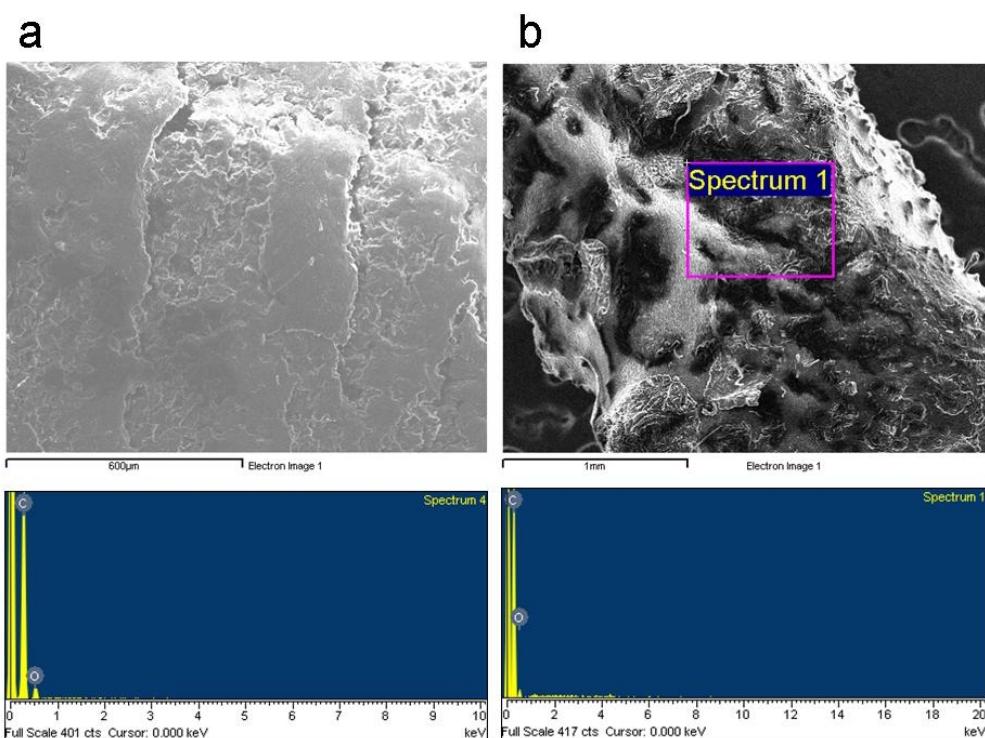


Fig. S1 EDX examination of (a) candle wax and (b) candle wick on SEM. Only oxygen and carbon were detected.

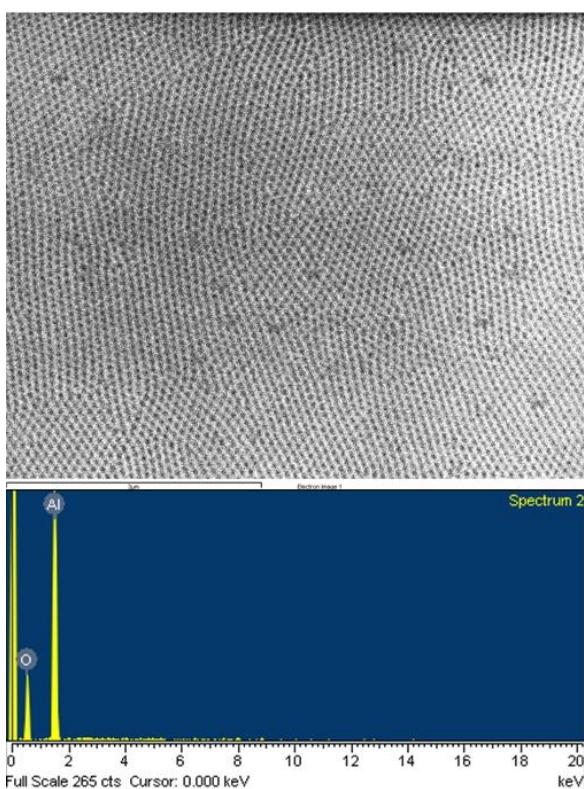


Fig. S2 EDX examination of an AAO foil before collection of carbon nanoparticles. Only two elements, oxygen and aluminium, were detected.

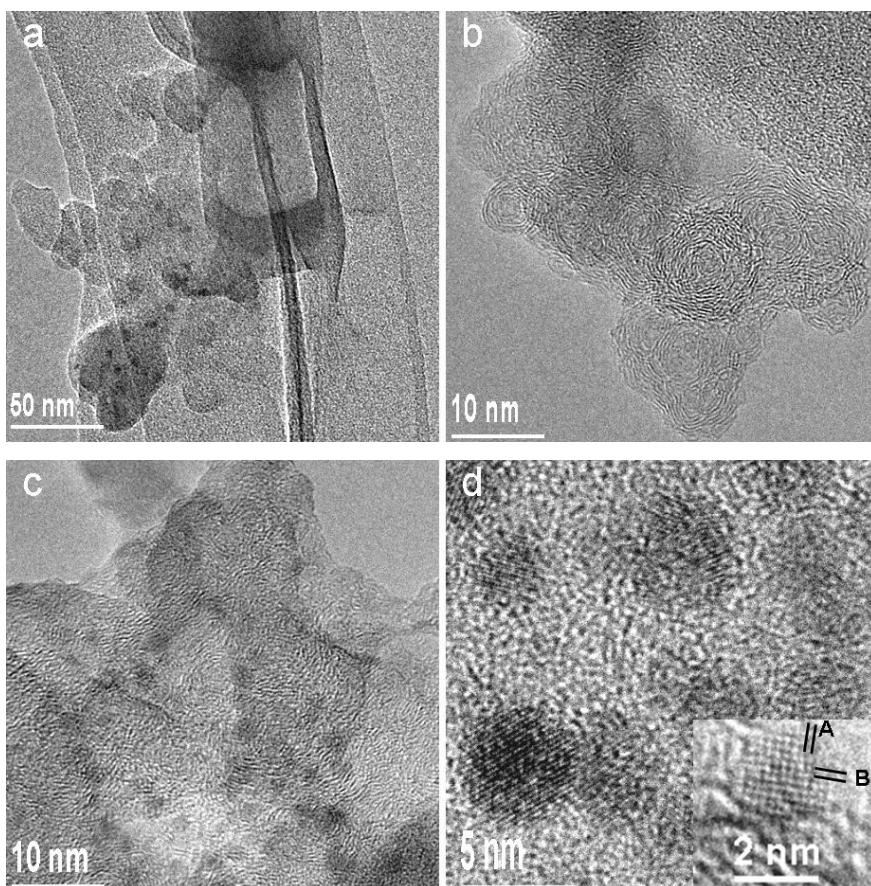


Fig. S3 TEM/HRTEM images of soot particles from centre position of a gas flame. (a) Low magnification TEM image of soot particles. (b) HRTEM image of small graphitic spheres. (c) TEM image showing many nanodiamond particles. (d) HRTEM image of nanodiamond particles. The inset is an enlarged image of nanodiamond viewed down the [001] zone axis. The d-spacings of A and B are about 0.187 and 0.185 nm respectively, and can be indexed to (200) and (020) of the unit cell of carbon. The corresponding interplane angle is 92°.