

CORRIGENDUM

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Growth of graphene from solid carbon sources

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In this Letter, the assigned values for melamine XPS signals of 284.5 eV (C 1s) and 395.8 eV (N 1s) were incorrect (Supplementary Fig. 7). Repeating the melamine spectrum with a graphite additive standard (C 1s = 284.5 eV) showed that the assignments for melamine should be 286.8 eV (C1s) with N 1s in the ring at 397.8 eV and N 1s external to the ring at 398.7 eV. Therefore, the monolayer N-doped graphene on SiO₂ substrates having signals of 284.5 eV (C 1s) and 399.8 eV (N 1s) remains clearly distinguished from the melamine starting material. Furthermore, the Li *et al.*¹ (ref. 29 in this Letter) assignment for quaternary N was misquoted. Although high-temperature (1,000 °C) growth favours quaternary N in the N-doped graphene film (this is supported by ref. 1), our assignment of 399.8 eV (N 1s) for monolayer N-doped graphene is different from the Li *et al.*¹ assignment, because their assignment of 401 eV (N 1s) is for thick N-doped graphene films. In our experiments, when we used poly(ethylene imine) as a growth source, multilayer N-doped graphene was attained and similarly gave 401.2 eV (N 1s) as the assignment. Therefore, either there is a difference between the thick film assignments of Li *et al.*¹ and our assignment of monolayer N-doped graphene on SiO₂ substrates, or the N signals in our material are more pyridinic and/or pyrrolic in content². We thank T. Susi for bringing this to our attention.

1. Li, X. *et al.* Simultaneous nitrogen doping and reduction of graphene oxide. *J. Am. Chem. Soc.* **131**, 15939–15944 (2009).
2. Pels, J. R., Kapteijn, F., Moulijn, J. A., Zhu, Q. & Thomas, K. M. Evolution of nitrogen functionalities in carbonaceous materials during pyrolysis. *Carbon* **33**, 1641–1653 (1995).