The surface energy and wettability of metal graphite intercalation compounds

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For the development of nanotechnology, it is important to find ways to improve the wetting of carbon materials with liquid metals [1]. We have considered the possibility of reducing the edge contact angle between the metal and the substrate due to the intercalation of layered carbon materials with metal atoms. The intercalation of highly oriented pyrolytic graphite was carried out by the two-zone method. The intercalation stage was controlled from KC_{72} to KC_8. The conduction electron concentration was determined by measuring the Hall constant.

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[1] Xu M, Liang T, Shi M, Chen H and et al 2013 *Chem. Rev.* **113** 3766–98