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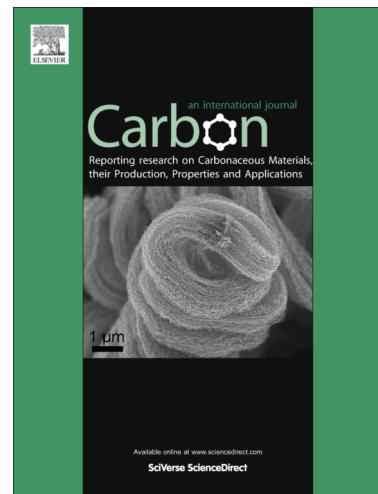
Bilayer graphene synthesis by plasma treatment of copper foils without using a carbon-containing gas

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**Bilayer graphene synthesis by plasma treatment of copper foils without using a  
carbon-containing gas**

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## **ABSTRACT**

Bilayer graphene has been synthesized by using hydrogen plasma treatment of copper foils for 30 seconds at the temperature of 850 °C together with joule-heating treatment of the foils without using a carbon-containing gas such as methane in order to suppress the nucleation density of graphene. The effect of plasma provides active species of carbon atoms on copper substrate and a selective bilayer graphene formation of AB-stacking in a very short time. Carbon to be precipitated is delivered from the copper

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