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### Synthesis of large-Area few-layer graphene by open-flame deposition (Article)

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#### Abstract

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Various production methods have been developed for graphene production, but each of them falls short in either the economic or quality aspect. In this paper, we present the flame deposition method, a modified chemical vapor deposition (CVD) that uses an open-flame. In this method, resulting carbon deposits were found to be graphitic in nature, thereby suggesting multilayer graphene growth in a very short reaction time of 5 min. Furthermore, the deposits were transferred onto a cyanoacrylate plastic substrate and its sheet resistance was measured to be 81 ohm/square. The results showed that open-flame deposition exhibits high potential for low-cost, low-energy and high-quality production of graphene.

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