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PII: S0008-6223(17)31063-1

DOI: 10.1016/j.carbon.2017.10.062

Reference: CARBON 12489

To appear in: Carbon

Received Date: 30 April 2017

Revised Date: 26 September 2017

Accepted Date: 18 October 2017

Please cite this article as: J. Baek, M. Lee, J. Kim, J. Lee, S. Jeon, Transfer-free growth of polymer-derived graphene on dielectric substrate from mobile hot-wire-assisted dual heating system, *Carbon* (2017), doi: 10.1016/j.carbon.2017.10.062.

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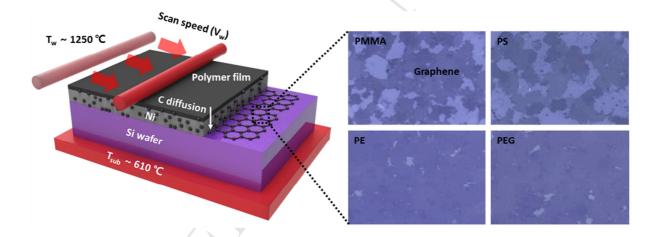
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Graphical Abstract

Transfer-Free Growth of Polymer-Derived Graphene on Dielectric Substrate from Mobile Hot-Wire-Assisted Dual Heating System

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Transfer-free growth of graphene from a dual heating system is developed. The dual heating system allows a higher amount of carbon diffusion into nickel layer, which is related to the graphene coverage, than that of the conventional hot-wall type chemical vapor deposition. Moreover, Coverage and crystallinity of as-grown graphene are enhanced when using thermally stable polymer as a carbon source.

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