XPS STUDY OF GRAPHENE GROWN BY ATMOSPHERIC PRESSURE CVD FROM N-DECANE PRECURSOR WITH NITROGENASA CARRIER GAS

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2017

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Abstract: We present X-ray photoelectron spectroscopy study (XPS) of graphene films grown on copper foil by atmospheric pressure CVD with n-decane as a precursor, a mixture of nitrogen and hydrogen as a carrier gas, under different hydrogen flow rates. The XPS study revealed the characteristics of incorporated nitrogen, which was found to have a binding energy around 402 eV, the atomic concentration of incorporated

nitrogen is higher for the sample synthesized with higher hydrogen flow rate.

Published in:

Proceedings of International Conference “Nanomeeting – 2017” in Physics, Chemistry and Application of Nanostructures, ed. by V. E. Borisenko, S. V. Gaponenko, V. S. Gurin, 2017, p. 353 – https://doi.org/10.1142/9789813224537_0081.

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