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**SYNTHESIS OF LARGE-AREA HYBRID GRAPHENE FILMS ON TRANSITION METAL SUBSTRATES
BY CHEMICAL VAPOR DEPOSITION (CVD)**

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Graphene is a wondrous material that recently attracted a great interest in the material science field because of its exceptional properties. But while graphene has been obtained through diverse techniques, the development of the chemical vapor deposition (CVD) synthesis pathway opened up the possibility of a viable way for large-scale production of graphene

In this work, we have developed a method for controlling the growth of hybrid graphene films composed of both carbon and non-carbonaceous atoms in the same framework. These graphene films are obtained by the decomposition of carbon and selected nitrogen, boron or silicon precursors on a thin layer of transition metals. This thin film catalyst is prepared using either an electron-beam evaporator or a sputtering system.