

Abstract Submitted
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Molecular Beam Deposition and Raman Characterization of Large Area Graphitic layers¹ JORGE M. GARCIA, IMM-CNM-CSIC, MASON P. JIANG, JUN YAN, Columbia University, YURI ZUEV, KEUN S. KIM, PHILIP KIM, ARON PINCZUK, Columbia University, KENNETH W. WEST, KIRK W. BALDWIN, LOREN PFEIFFER, Princeton University — We report on the use of a carbon Molecular Beam Deposition (MBD) method in an ultra high vacuum system for the fabrication of large area graphitic layers on nickel films. Elongated substrates are used for the growth of samples with a gradient in carbon thickness. After carbon deposition, the samples are annealed at temperatures from 800C to 1000C for 30 min and cooled down to RT. The graphitic film has been successfully transferred onto a transparent glass by wet etching of the Ni. Raman measurements of the graphitic layers on Ni and on glass show very similar spectra with clear G and D* resonances associated with high quality thin graphitic layers.

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