

Supporting Information

Ferromagnetism of three-dimensional graphene framework

Sai Qin¹, Pingping Sun¹, Qitao Di², Shuang Zhou¹, Caiping Yang¹, and Qingyu Xu^{1,3,4*}

¹ Department of Physics & Key Laboratory of MEMS of the Ministry of Education, Southeast University, Nanjing 211189, China

² Department of Materials Science and Engineering, Nanjing University, Nanjing 210008, China

³ National Laboratory of Solid State Microstructures, Nanjing University, Nanjing 210093, China

⁴ Collaborative Innovation Center of Suzhou Nano Science and Technology, Soochow University, Suzhou 215123, China

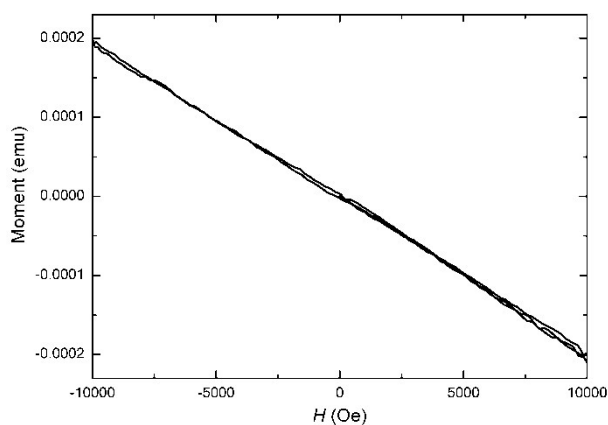


Figure S1 *M-H* curves for the VSM rod and sample holder measured at 300 K, shows the pure diamagnetic background.

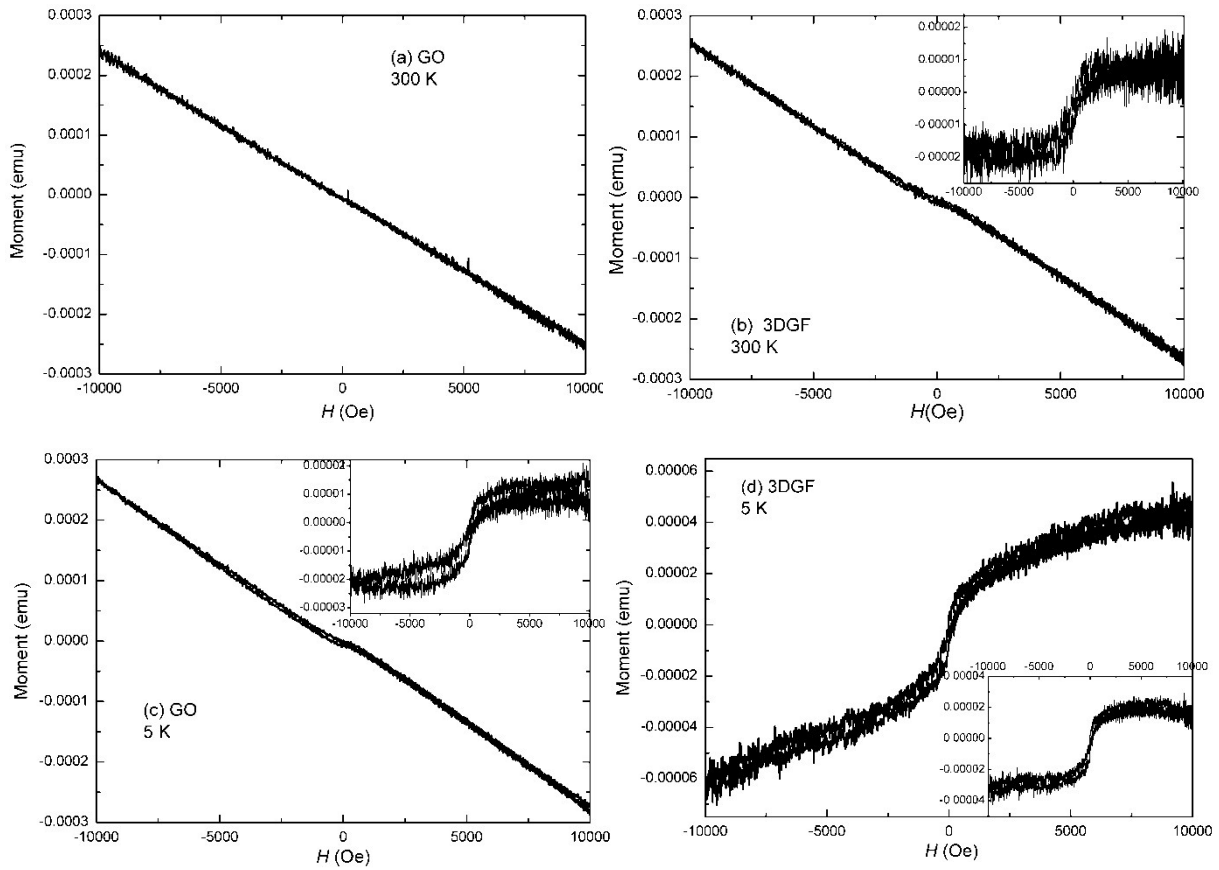


Figure S2 The raw data of the M - H curves for GO ((a) 300 K and (c) 5 K) and 3DGF ((b) 300 K and (d) 5 K) measured at 300 K. The M - H curve of GO shows a straight line with negative slope, while S shape can be observed in the M - H curves of GO at 5 K and 3DGF at 300 K and 5 K. The insets show the ferromagnetic signal after subtracting the high field linear background. The ferromagnetic signals are in the order of 10^{-5} emu, which are large enough for the sensitivity of VSM integrated in PPMS (1×10^{-6} emu).

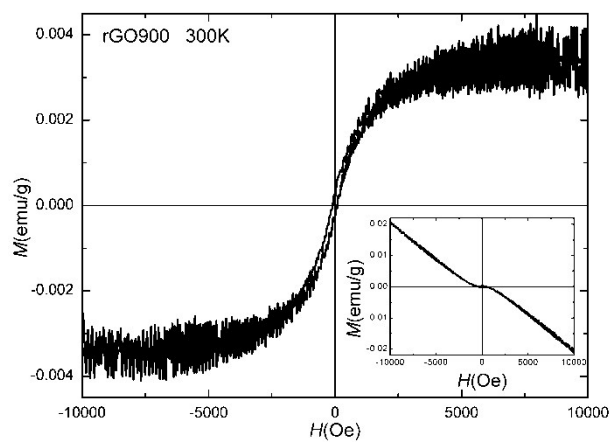


Figure S3 M - H curves for the rGO900 (GO annealed in Ar atmosphere at 900 °C) at 300 K.