## **Supplementary Information**

## Effect of defects controlled by preparation condition and heat treatment on the ferromagnetic properties of few-layer graphene

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Fig. S1 SEM of M2C1-G (a) and M4C1-G (b), EDX of M2C1-G (c) and M4C1-G (d)







Fig. S3 XPS C 1s spectra of M2C1at different heat treatment temperatures



Fig. S4 XPS C 1s spectra of M4C1 at different heat treatment temperatures



**Fig. S5** The ratio of  $I_{2D}/I_G$  (a) and the FWHM of 2D peak (b) for M2C1 and M4C1 at

different treated temperature