Supporting Information

Manifestation of High-Temperature Ferromagnetism in Fluorinated Graphitic Carbon Nitride Nanosheets

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Figure S1: The N 1s and C 1s XPS spectrum for sample CNF-0.

Figure S2: Primitive *M-H* curve for un-fluorinated g-C_3N_4 nanosheets.

Figure S3: The ESR spectrums for the sample CNF-0 and CNF-3.3 %.

Figure S4: Primitive *M-H* curves for sample CNF-3.3 % measured at different temperature.

Table S1. n_C/n_N based on the element analysis of sample CNF-x.
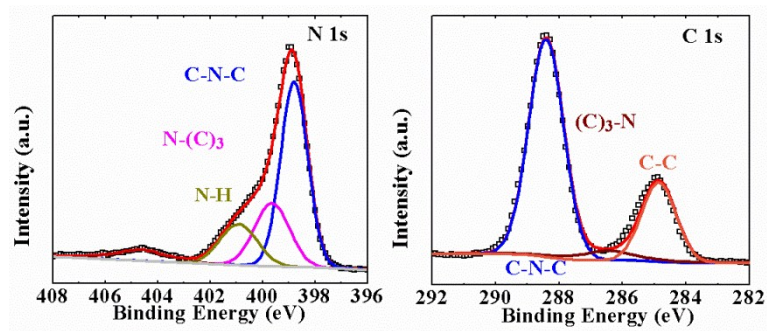
Table S2. ICP results for the sample CNF-3.3 %.

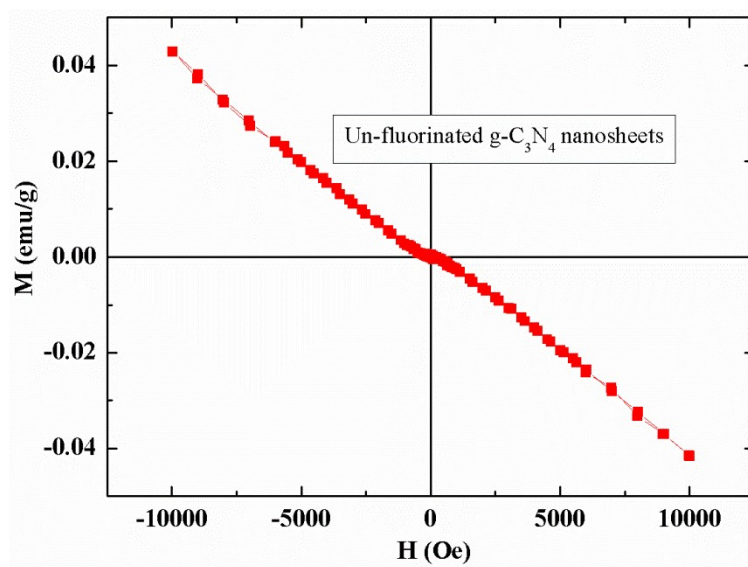**Figure S1**: The N 1s and C 1s XPS spectrum for sample CNF-0.

Figure S2: Primitive M-H curve for un-fluorinated g-C_3N_4 nanosheets.
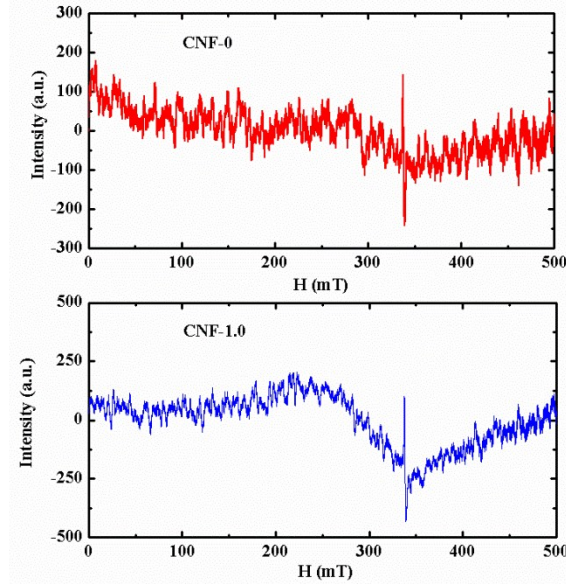
Figure S3: The ESR spectrums for the sample CNF-0 and CNF-3.3 %.

ESR results give further evidence for the ferromagnetism of the sample CNF-1.0 as shown in Fig. S5. It can be seen that sample CNF-0 shows the center magnetic fields (H_{center}) at 321 mT, which is corresponding to the paramagnetic resonance. However, for the sample CNF-1.0, besides the paramagnetic resonance, there is a new H_{center} at 290 mT appeared, indicating the obvious ferromagnetism of the sample.[1,2]

1. S. Lee, Y. Shon, D. Y. Kim, T. W. Kang, and C. S. Yoon, Appl. Phys. Lett. 96, (2010), 042115.

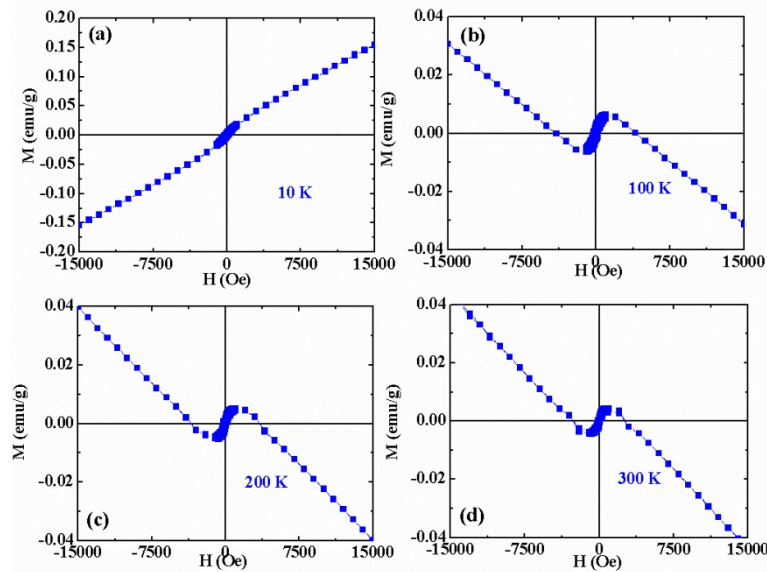*2. D. Q. Gao, G. J. Yang, J. Zhang, Z. H. Zhu, M. S. Si, and D. S. Xue, Appl. Phys. Lett. 99, (2011), 052502.*

Figure S4: Primitive M-H curves for sample CNF-3.3 % measured at different temperature.

Table S1. n_C/n_N based on the element analysis of CNF-x.

Sample	CNF-0	CNF-1.2%	CNF-3.3%	CNF-6.5%
n_C/n_N (First)	0.74	0.75	0.75	0.74
n_C/n_N (Second)	0.74	0.74	0.75	0.75

Table S2. ICP results for the sample CNF-3.3 %.

Element content (ppm)	Fe	Co	Ni	Mn	Cr
First	2.8	1.8	0.1	0.0	0.5
Second	2.5	1.8	0.1	0.0	0.6