Electronic Supplementary Information

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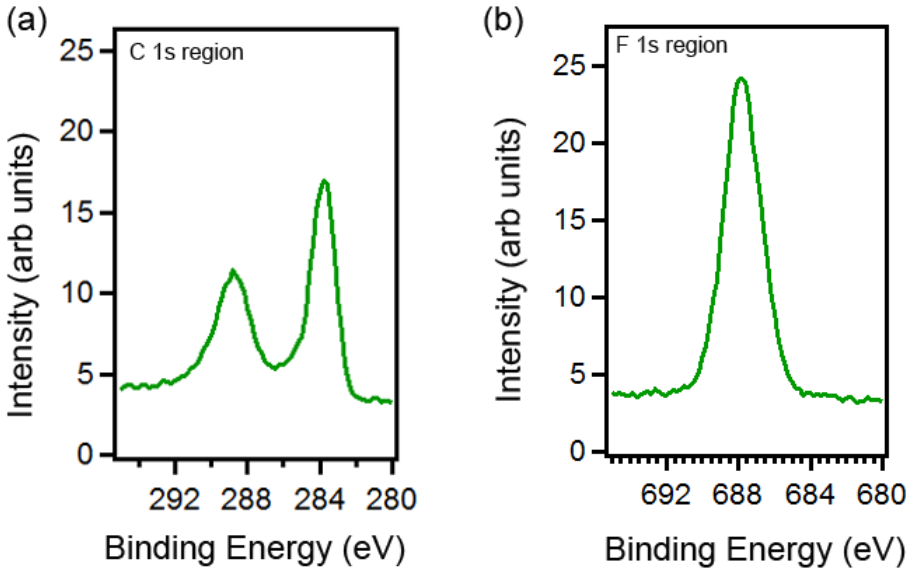
Halogenation of Epitaxial Graphene Grown on the Si-face of the SiC(0001) Substrate and its Further Reaction with Grignard Reagent

Md. Zakir Hossain[a],* Maisarah B. A. Razak[a]

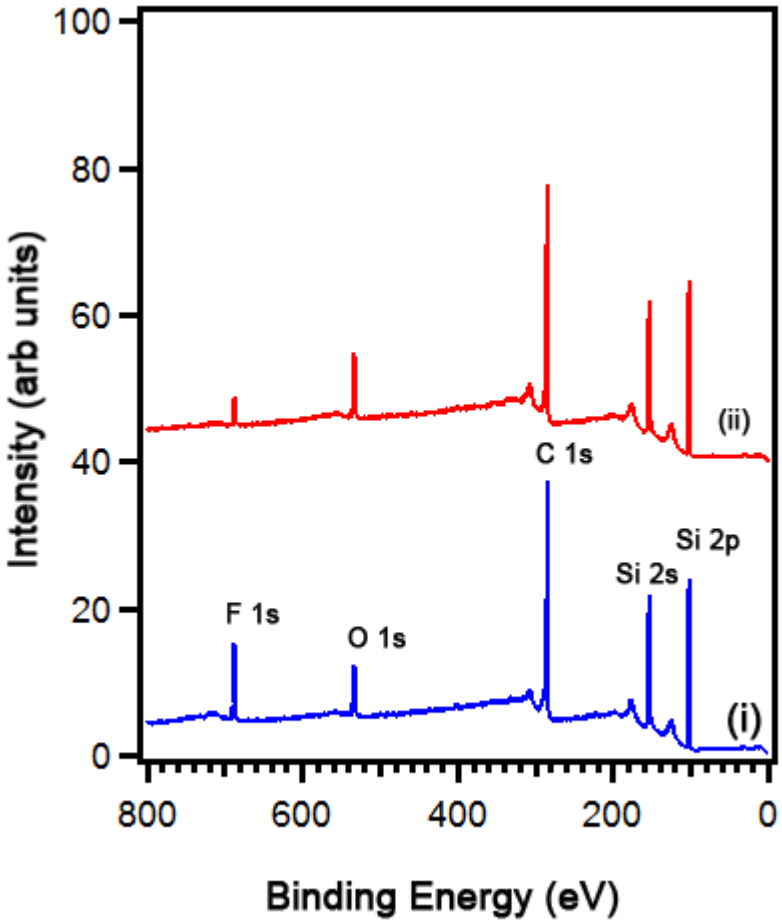


ESI Figure 1. Zoomed-in (a) C 1s and (b) F 1s regions of wide range XPS spectrum of fluorinated EG on SiC shown in figure 2(ii) of the main manuscript.

[a] *International Education and Research Center for Material Science, Graduate School of Science and Technology, Gunma University, Kiryu City, Gunma 376-8515, Japan.*

* Corresponding author: E-mail: zakir@gunma-u.ac.jp; Tel. +81-277-30-1625

ESI figure 2 shows the wide range XPS spectra of epitaxial graphene (EG) on SiC exposed to F and the same fluorinated EG on SiC after treatment with 4(N,N-dimethyl)aniline magnesium bromide [$(CH_3)_2NC_6H_4MgBr$] in THF at 60 ^oC for 2 hours. Though the F 1s intensity is reduced following the Grignard reaction and washing procedures, no peak related to N 1s is observed in SI figure 2(ii). Thus we suggest that the fluorinated EG on SiC does not undergoes effective Grignard reaction as clearly observed for chlorinated EG.



ESI Figure 2. Wide range XPS spectra of (i) EG on SiC exposed to F and (ii) the same surface after treatment with 4(N,N-dimethyl)aniline magnesium bromide [$(CH_3)_2NC_6H_4MgBr$] in THF at 60 ^oC. hν = 1486 eV.