Supplementary Materials

In situ polymerization of nylon 66/reduced graphene oxide nanocomposites

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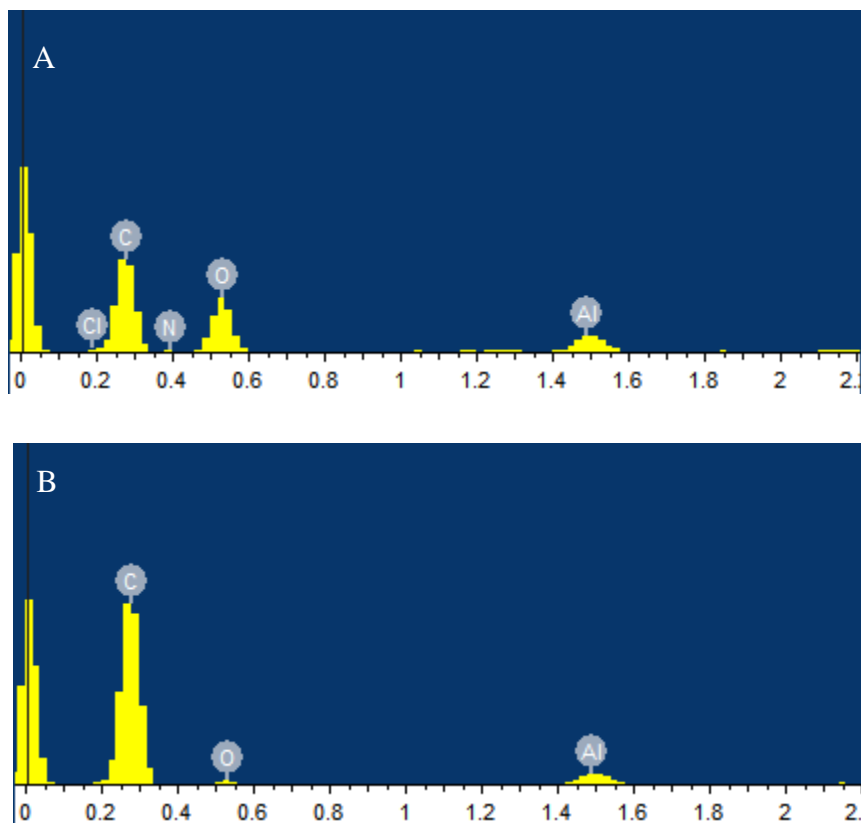
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Fig. S1. EDS of The SEM photographs of GO(A) and f-rGO-1(B).

Fig. S1 displayed the EDS measurement of the SEM photographs, this results showed that the C:O ratio of f-rGO-1rises to 17.29 compared with 1.65 for the native GO, confirming a high level of GO reduction, which was accordance with the TGA measurement (Fig.5).

Table S1 Raman data containing I_D/I_G peak ratios of graphene

Sample	GO	f-rGO-0.25	f-rGO-0.5	f-rGO-0.75	f-rGO-1
I_D/I_G Ratio	1.22	1.17	1.21	1.25	1.29

The I_D/I_G peak ratios of graphene were calculated by means of Raman-peak-differeantation-imitating and integrated that peaks through Origin software.

Table S2 Degree of crystallinity of PA66 and PA-rGO samples from XRD data **through Jade software.**

Sample	PA66	PA-rGO-0.25	PA-rGO-0.5	PA-rGO-0.75	PA-rGO-1
Crystallinity (%)	22.8	27.4	31.5	35.4	27.2