

Supporting Information

**An effective and environment-friendly system for Cu NPs@RGO-catalyzed C-C
homocoupling of aryl halides or arylboronic acids in ionic liquids under microwave
irradiation**

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Table S1 EDXRF accurately measure the content of Cu

Samples	Intensity	Content (%)
5wt% Cu NPs@RGO	0.07576	2856.7152
10wt% Cu NPs@RGO	0.15872	6115.2753
15wt% Cu NPs@RGO	0.25166	9765.3298

Table S2 BET surface area of parent RGO as well as different Cu loaded samples

Samples	$S_{\text{BET}}/\text{m}^2\text{g}^{-1}$
reduced graphene oxide	233.4
5wt% Cu NPs@RGO	145.7
10wt% Cu NPs@RGO	128.1
15wt% Cu NPs@RGO	98.2

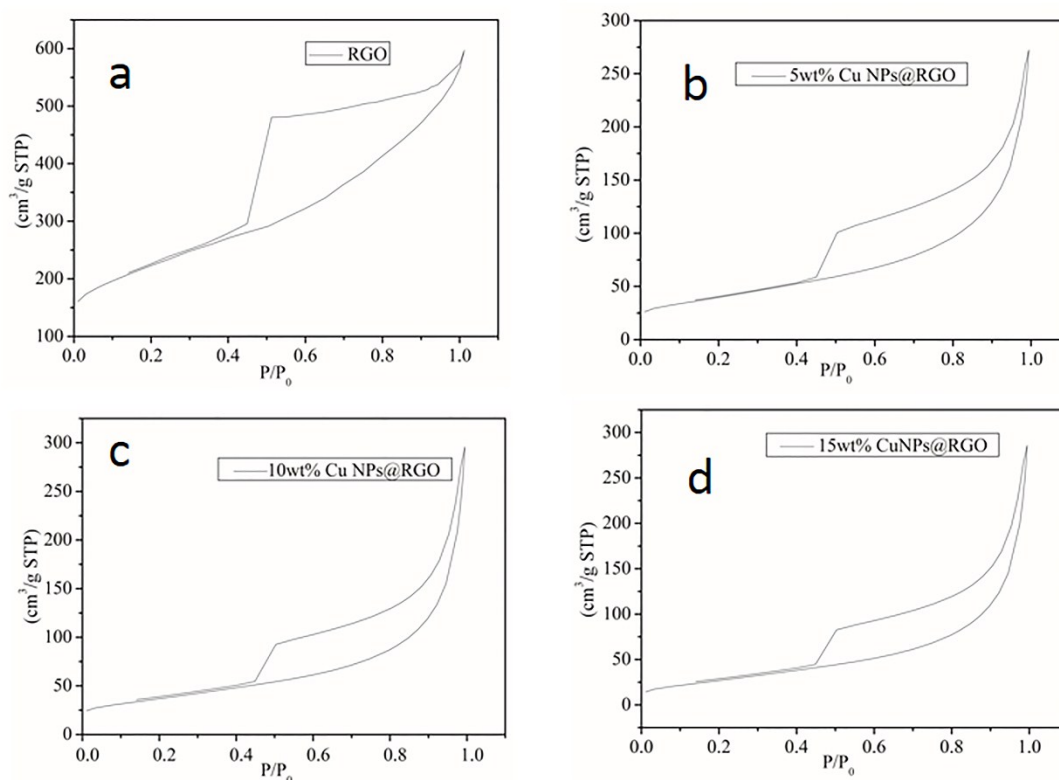
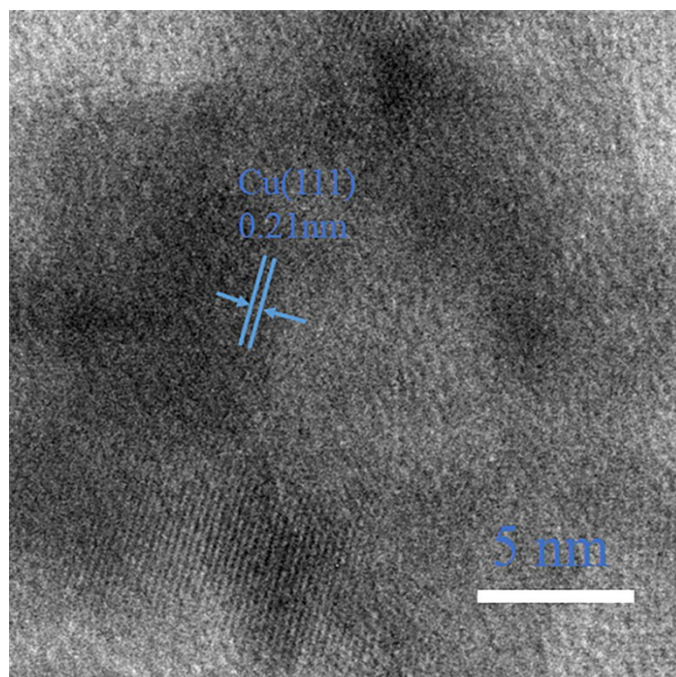
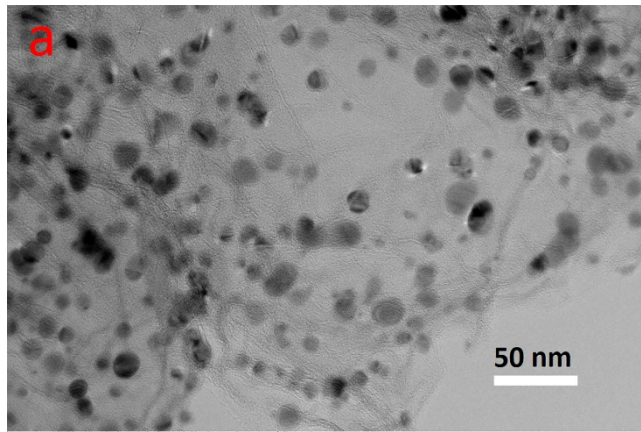


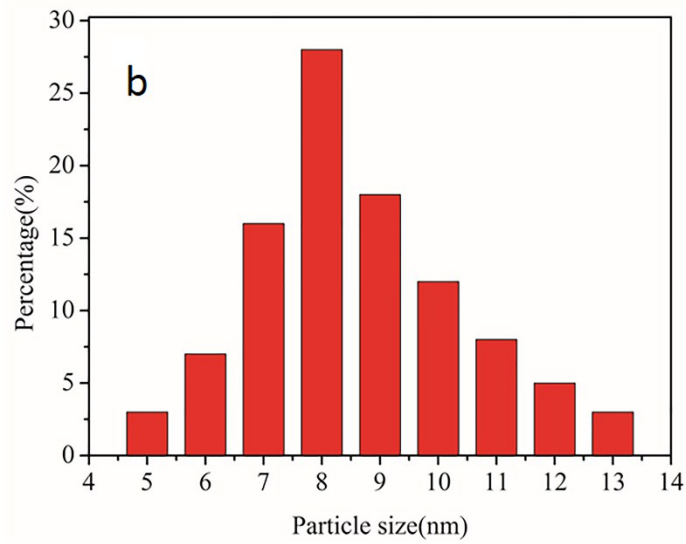
Figure S1 Nitrogen sorption isotherms of RGO and different catalyst



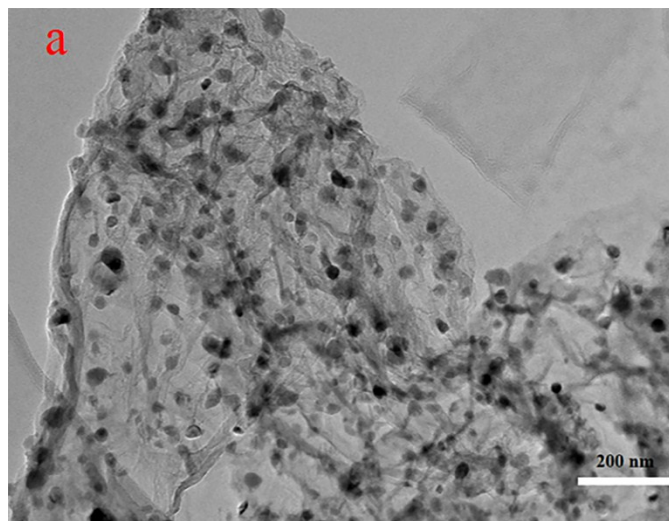
FigureS2 HRTEM image



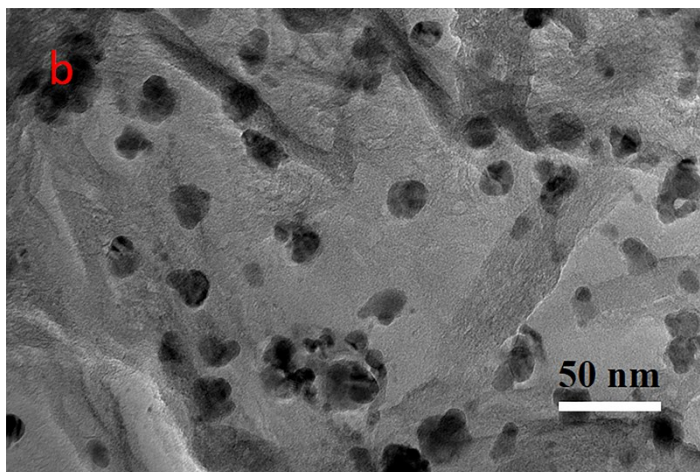
FigureS3 TEM images of the Cu nanoparticles on RGO nanosheets.



FigureS4 Particle size distribution of Cu NPs@RGO catalyst.



FigureS5 TEM image of the catalyst and the size distribution of nanoparticles after 5-round(a).



FigureS6 TEM image of the catalyst and the size distribution of nanoparticles after 5-round(b)