

Supplementary Materials

Synthesis and Characterization of 1, 3-diamino-graphene as a Heterogeneous Ligand for CuI-catalyzed C-N Coupling Reaction

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List of contents

- (a) FT-IR analysis of $\text{NH}_2\text{-G-NH}_2$ and $\text{NH}_2\text{-G-NH}_2\text{-200}^\circ\text{C}$.
- (b) EDS images and analysis of $\text{CuI/NH}_2\text{-G-NH}_2$ catalyst.

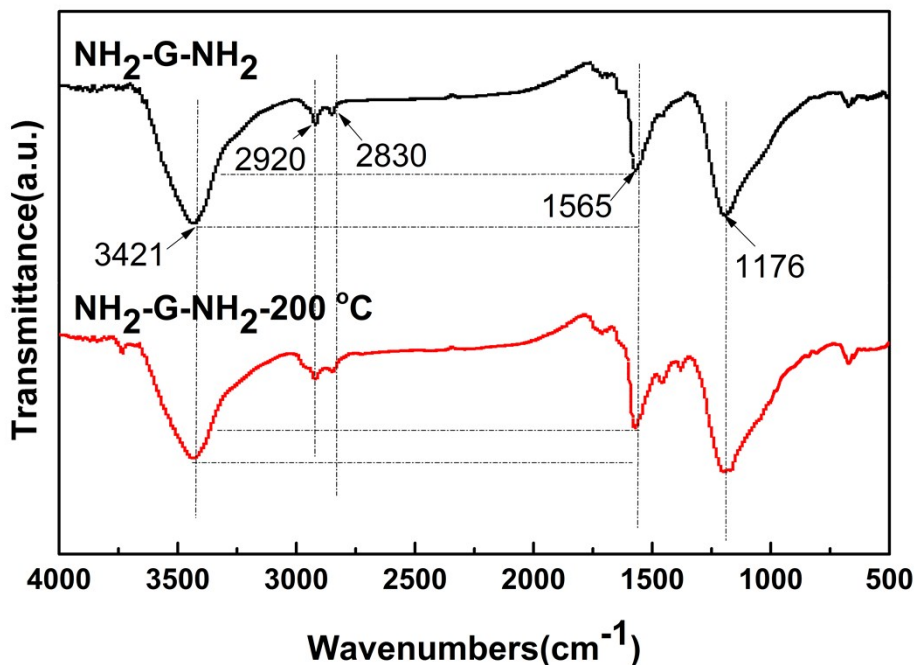
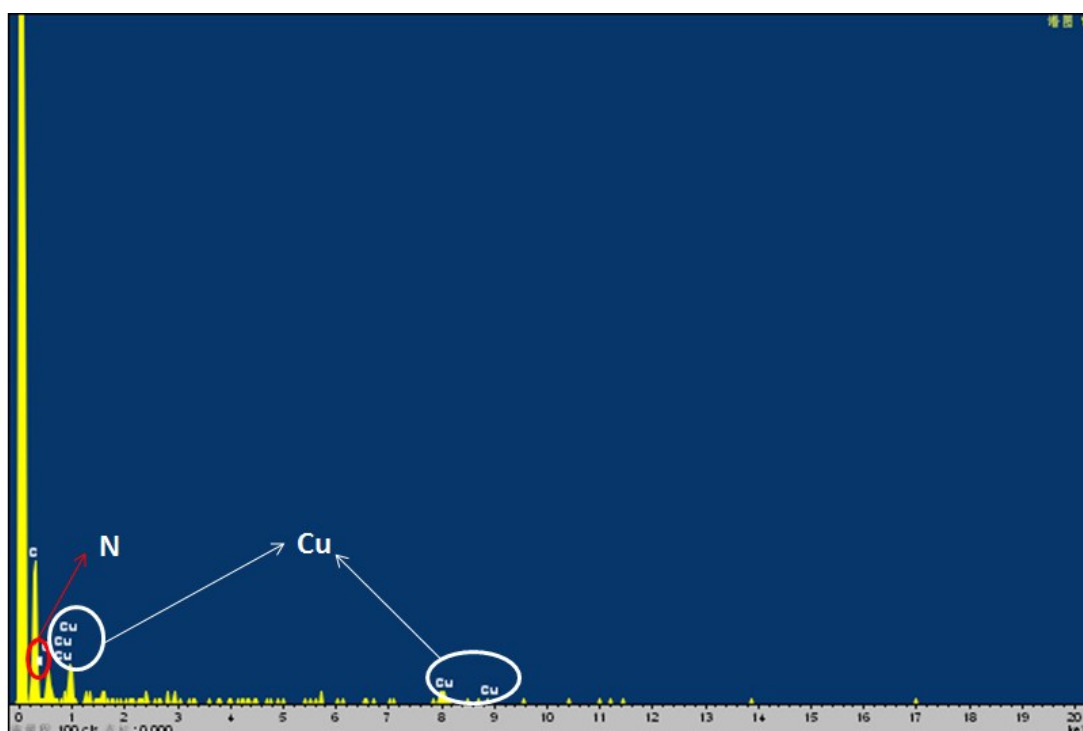
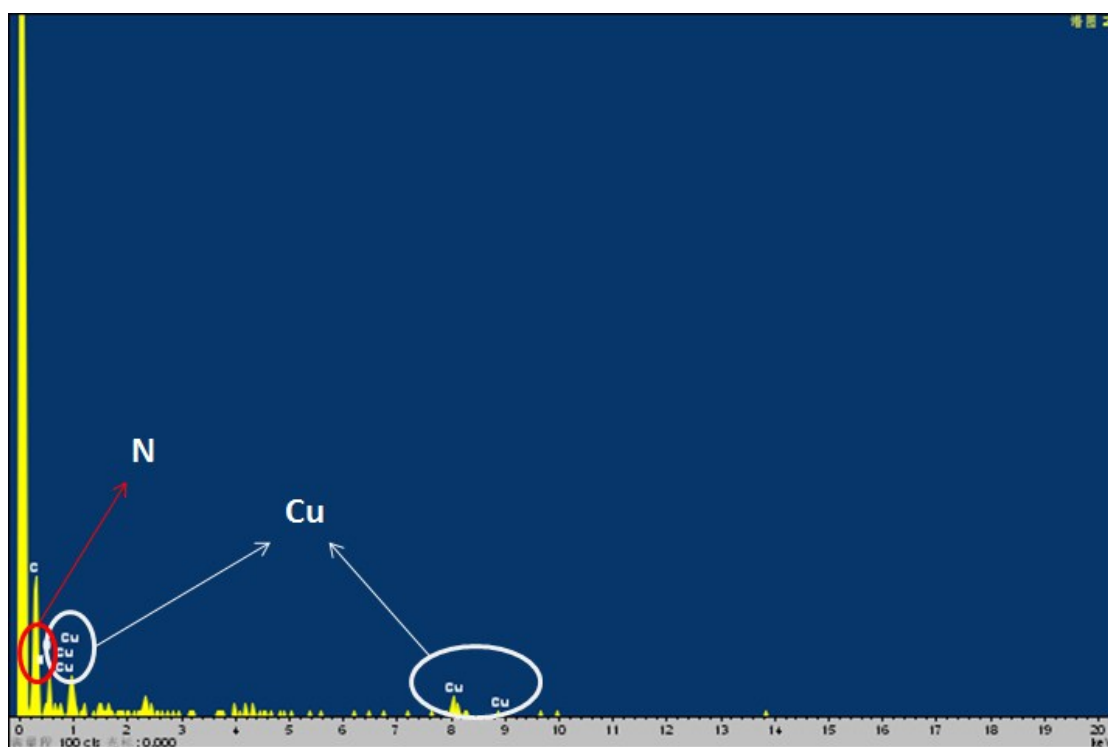


Fig. S1 FT-IR analysis of $\text{NH}_2\text{-G-NH}_2$ and $\text{NH}_2\text{-G-NH}_2\text{-200}^\circ\text{C}$.



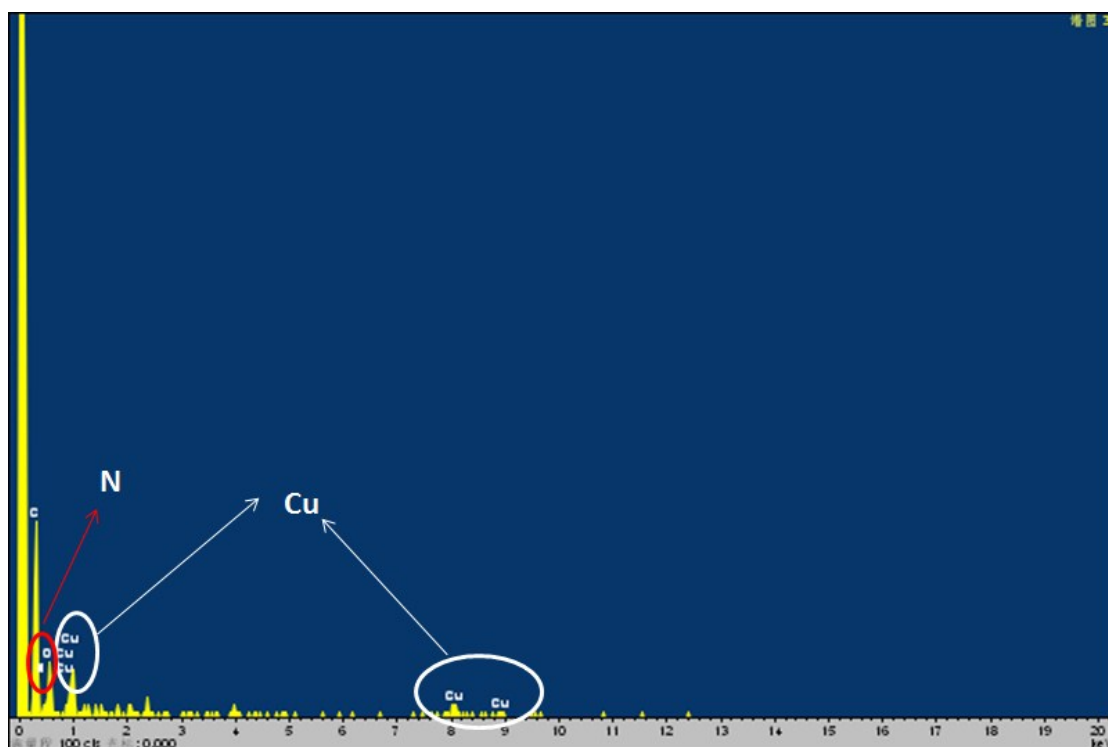
Element	Weight percentage	Atom percentage
C K	55.78	61.61
N K	24.41	23.12
O K	17.96	14.89
Cu K	1.85	0.39
Total mass	100.00	

Fig. S2 The EDS image and analysis of CuI/NH₂-G-NH₂ catalyst (agglomeration 1).



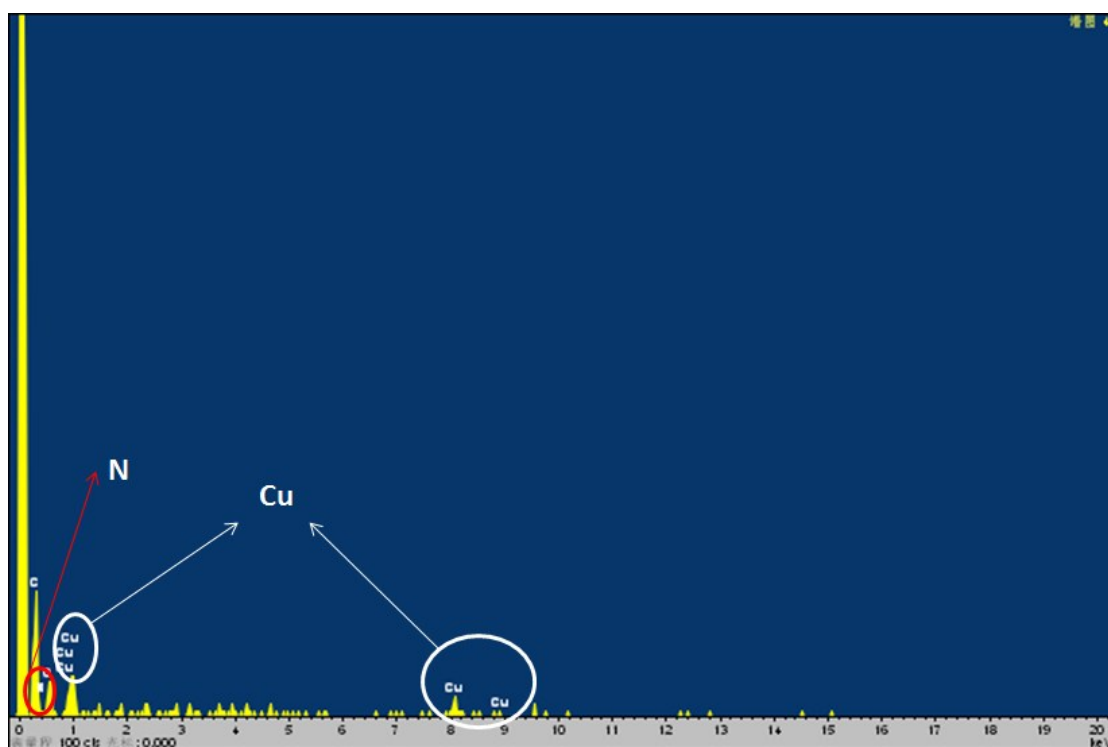
Element	Weight percentage	Atom percentage
C K	71.97	79.33
N K	-7.12	-6.72
O K	32.43	26.83
Cu K	2.71	0.57
Total mass	100.00	

Fig. S3 The EDS image and analysis of CuI/NH₂-G-NH₂ catalyst (agglomeration 2).



Element	Weight percentage	Atom percentage
C K	56.38	63.63
N K	7.46	7.22
O K	33.82	28.65
Cu K	2.33	0.50
Total mass	100	

Fig. S4 The EDS image and analysis of CuI/NH₂-G-NH₂ catalyst (agglomeration 3).



Element	Weight percentage	Atom percentage
C K	43.38	49.84
N K	20.85	20.54
O K	33.86	29.21
Cu K	1.90	0.41
Total mass	100	

Fig. S5 The EDS image and analysis of CuI/NH₂-G-NH₂ catalyst (agglomeration 4).