

Supporting Information for

**Ru/g-C₃N₄ as efficient catalyst for selective hydrogenation of
aromatic diamines to alicyclic diamines**

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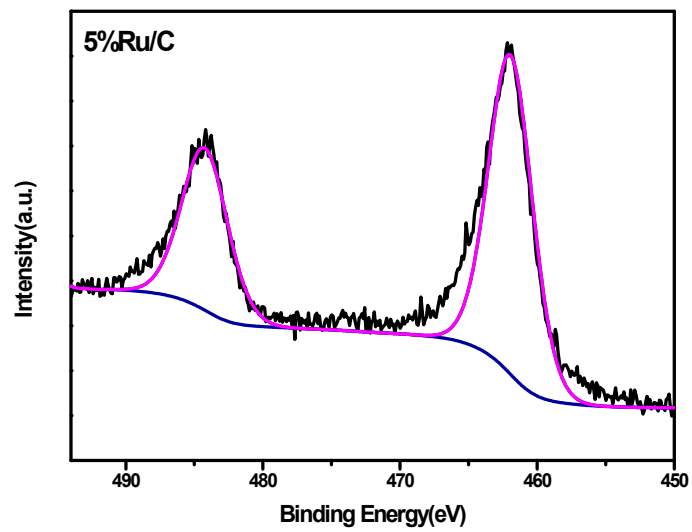
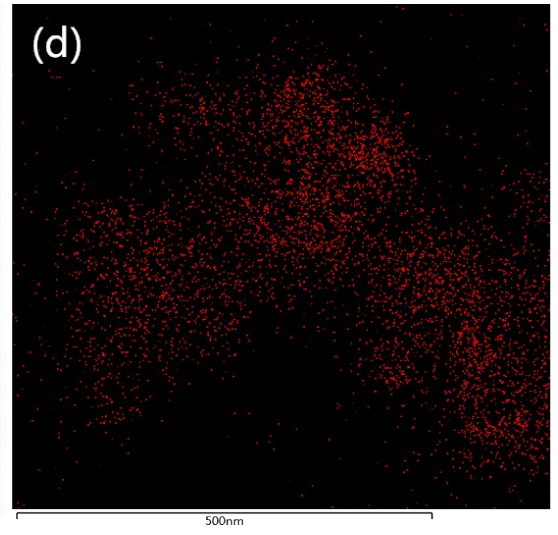
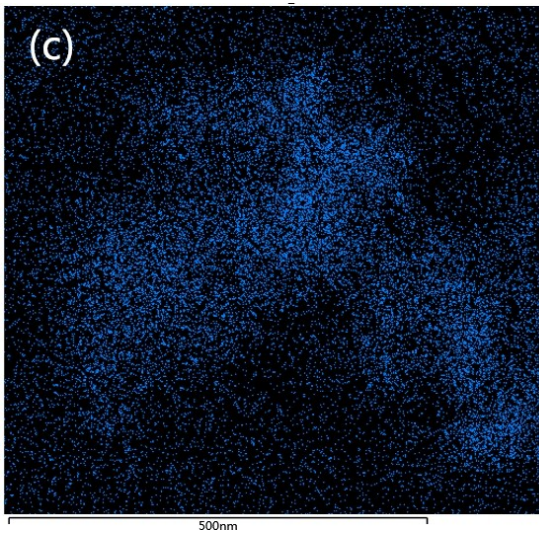
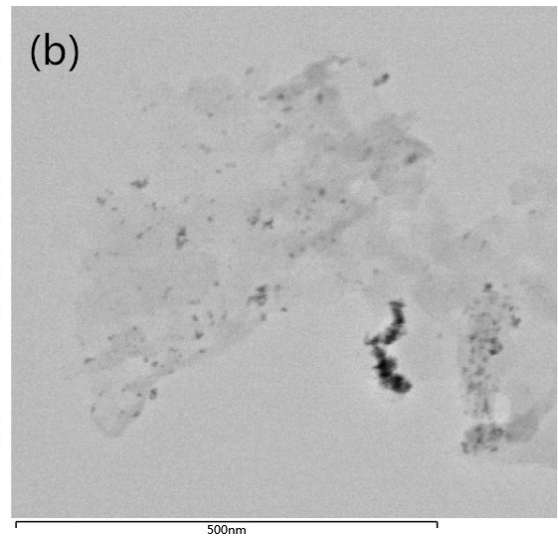
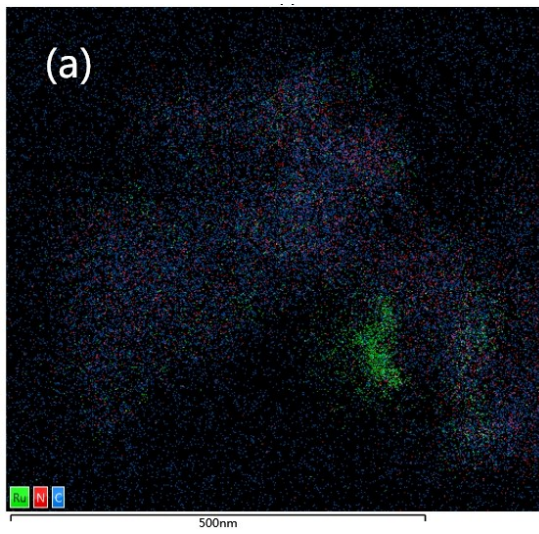
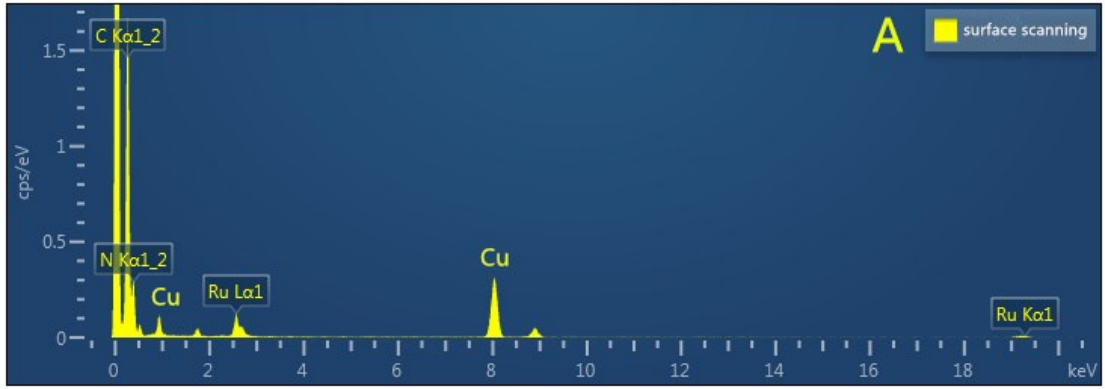


Figure S1. XPS spectra of Ru 3p for Ru/C



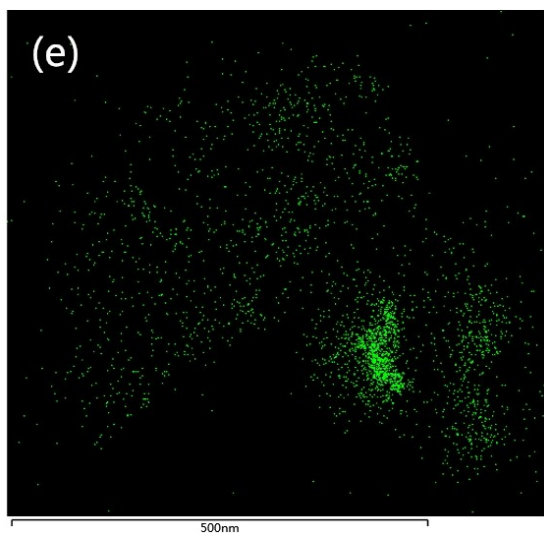


Figure S2. EDX spectra(A) ,TEM image (b) and EDX mapping of 5%Ru/g-C₃N₄-600 catalyst:(a) Overall state, (c) C-mapping, (d) N-mapping, (e) Ru-mapping

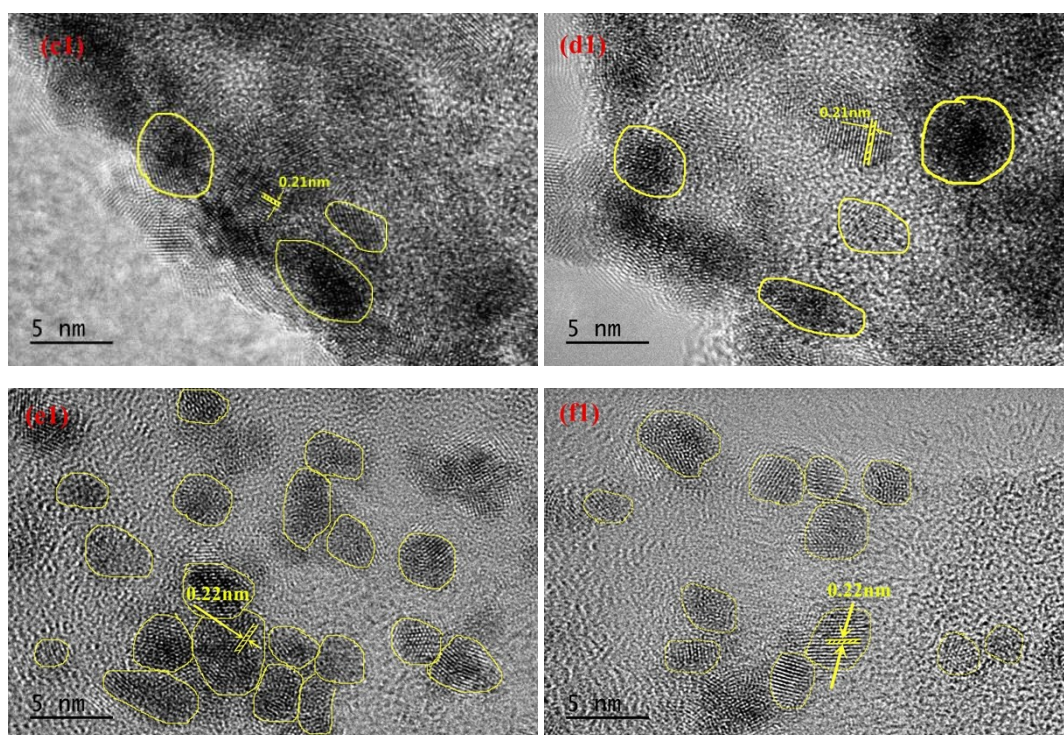


Figure S3. HR-TEM images of 5%Ru/g-C₃N₄-T catalysts , (c1) T = 450, (d1) T =500, (e1) T= 550, (f1) T = 600

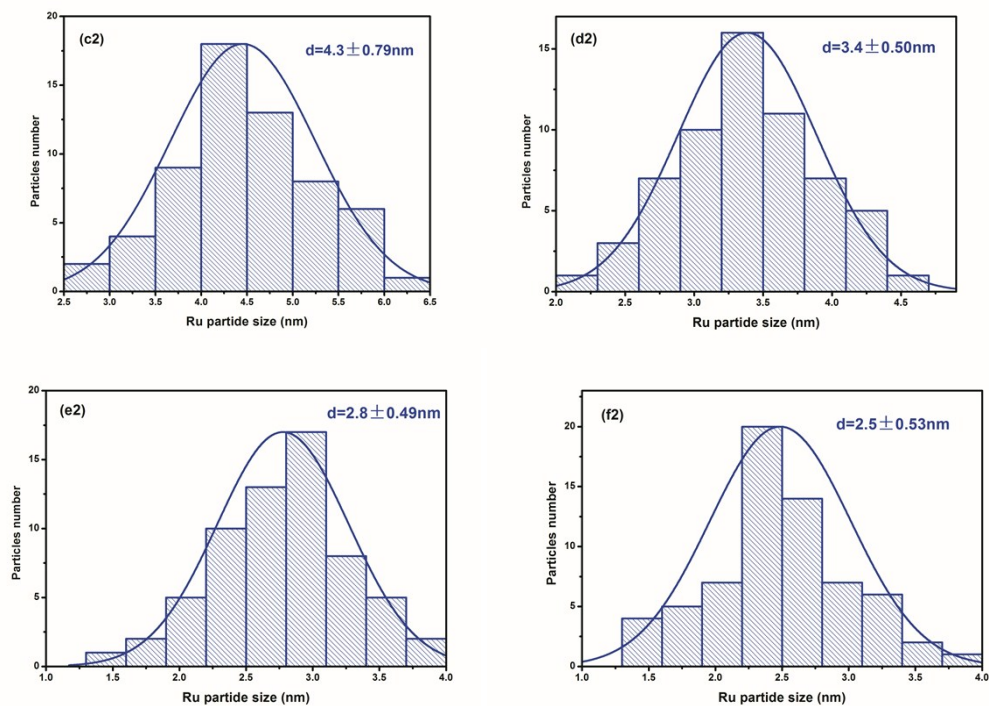
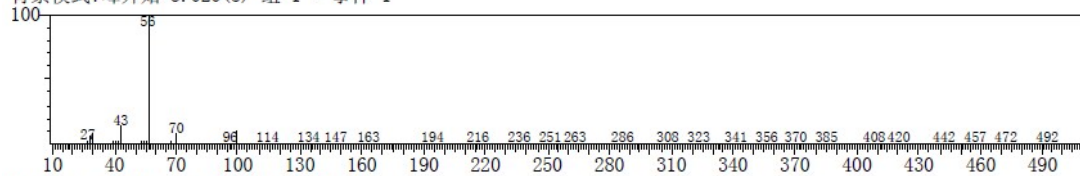


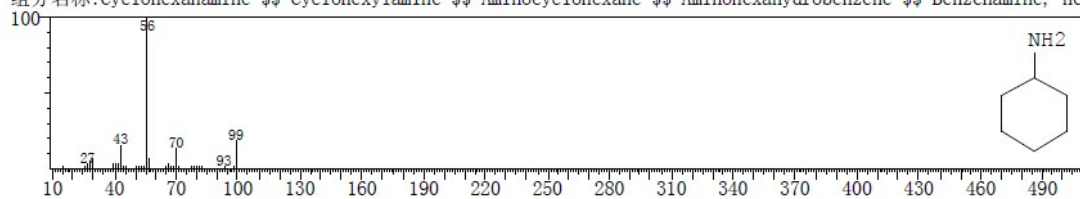
Figure S4. Particle identification of 5%Ru/g-C₃N₄-T catalysts obtained by TEM, (c2) T = 450, (d2) T = 500, (e2) T = 550, (f2) T = 600

<< 目标组分 >>

行号#:1 保留时间:3.125(扫描数#:26) 质量峰:288
 原始模式:平均 3.120-3.130(25-27) 基峰:56.15(2806430)
 背景模式:峰开始 3.020(5) 组 1 - 事件 1

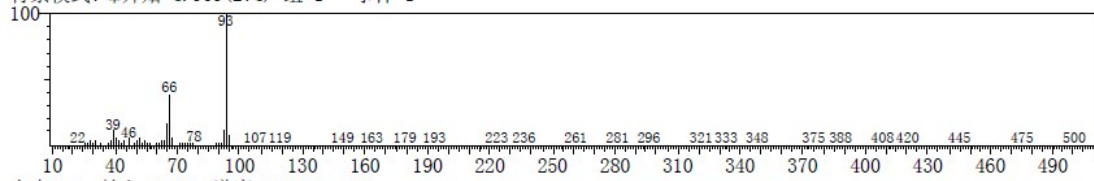


命中#:1 输入:1674 谱库:NIST08s.LIB
 SI:97 分子式:C6H13N CAS:108-91-8 摩尔质量:99 保留指数:924
 组分名称:Cyclohexanamine \$\$ Cyclohexylamine \$\$ Aminocyclohexane \$\$ Aminohexahydrobenzene \$\$ Benzenamine, he



<< 目标组分 >>

行号#:2 保留时间:4.600(扫描数#:321) 质量峰:242
原始模式:平均 4.595-4.605(320-322) 基峰:93.15(1030877)
背景模式:峰开始 4.365(274) 组 1 - 事件 1



命中#:1 输入:1253 谱库:NIST08s.LIB
SI:95 分子式:C6H7N CAS:62-53-3 摩尔质量:93 保留指数:992
组分名称:Aniline \$\$ Benzenamine \$\$ Aminobenzene \$\$ Aminophen \$\$ Anyvim \$\$ Benzene, amino- \$\$ Blue Oil \$\$ C.:

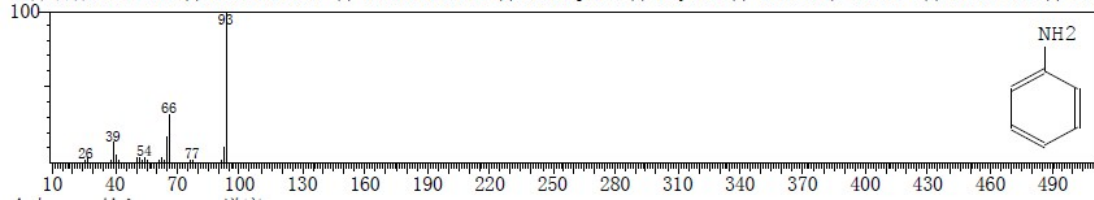


Figure S5. By-products in the liquid phase obtained by GC-MS