

Supplementary information

2,3,6,7,10,11-hexaaminotriphenylene hexahydrochloride (HATP·6HCl, 98%) is purchased from Changwei Chemical Reagent Company (Shanghai, China) and the GO is purchased from Tanfeng Graphene Technology Co. Ltd. (Suzhou, China). The NiCl₂·6H₂O (analytical grade) is obtained from Richjoint Chemical Reagents Company (Shanghai, China). All reagents and solvents in this study were obtained commercially without further purification.