Single step synthesis of metallic nanoparticles using dihydroxyl functionalized ionic liquids as reductive agent

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2,000

(a) - 180 - 140 - 140 - 100 - 100 - 80 - 60 - 40 - 20 0

Figure S1: FT-IR spectra of suspension of CuNPs in C1C1(EG)ImNTf2 (a) and pure C1C1(EG)ImNTf2 (b).

1,400

1,200

1,000

1,600

1,800

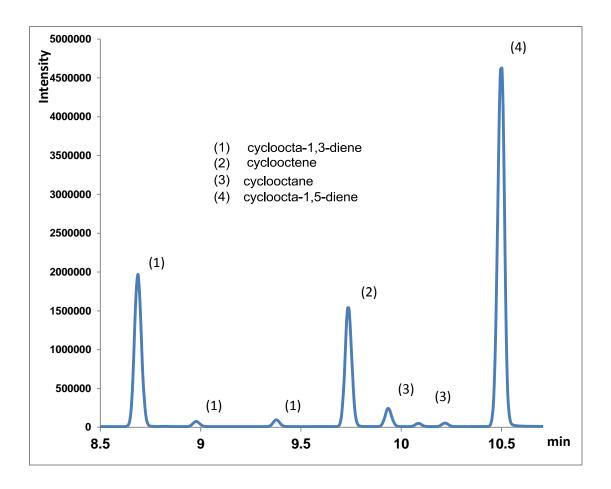


Figure S2; Gas Chromatogram of the Ni NPs suspension in C₁C₁(EG)ImNTf₂

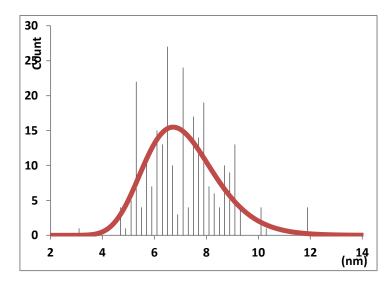


Figure S3: TEM images and particle size distribution of the synthesized ruthenium nanoparticles.

Scheme S1: Proposed mechanism of the formation RuNPs in imidazolium NTf₂ ILs as reported.¹

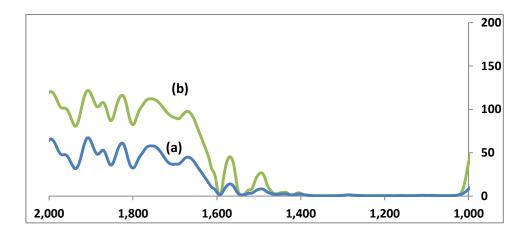


Figure S4: FT-IR spectra of suspension of RuNPs in C1C1(EG)ImNTf2 (a) and pure C1C1(EG)ImNTf2 (b).

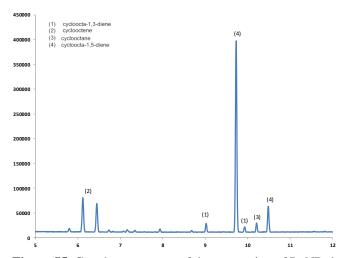


Figure S5 Gas chromatogram of the suspension of RuNPs in C₁C₁(EG)ImNTf₂

1. M. H. G. Prechtl, P. S. Campbell, J. D. Scholten, G. B. Fraser, G. Machado, C. C. Santini, J. Dupont and Y. Chauvin, *Nanoscale*, 2010, **2**, 2601-2606.