

Supporting Information

Confined naked gold nanoparticles in ionic liquid films

Luciane Calabria,^a Jesum A. Fernandes,^{*b} Pedro Migowski,^c Fabiano Bernardi,^d Daniel L. Baptista,^d Rafael Leal,^a Thomas Grehl^e and Jairton Dupont^{*a,b}

^aInstitute of Chemistry–UFRGS–Av. Bento Gonçalves, 9500, Porto Alegre, 91501-970, RS, Brazil.

E-mail: jairton.dupont@ufrgs.br

^bGSK Carbon Neutral Laboratories for Sustainable Chemistry–NG8 2GT, University of Nottingham, UK.

E-mail: jesum.alvesfernandes@nottingham.ac.uk

^cInstitute of Chemistry–UFSC– Campus Reitor João David Ferreira Lima, Florianópolis, 88040-900, SC, Brazil.

^dInstitute of Physics–UFRGS–Av. Bento Gonçalves, 9500, Porto Alegre, 91501-970, RS, Brazil.

^eION-TOF GmbH, Heisenbergstr. 15, D-48149 Münster, Germany.

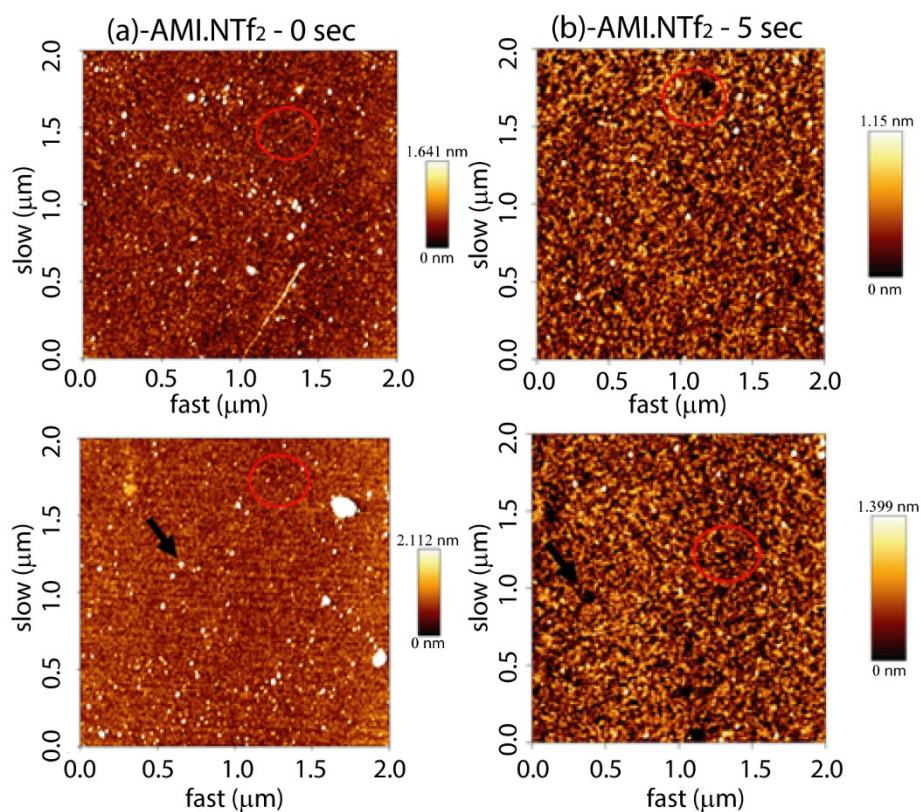


Figure S1. AFM measurements of IL/Si support (a) without NPs and (b) with Au NPs.

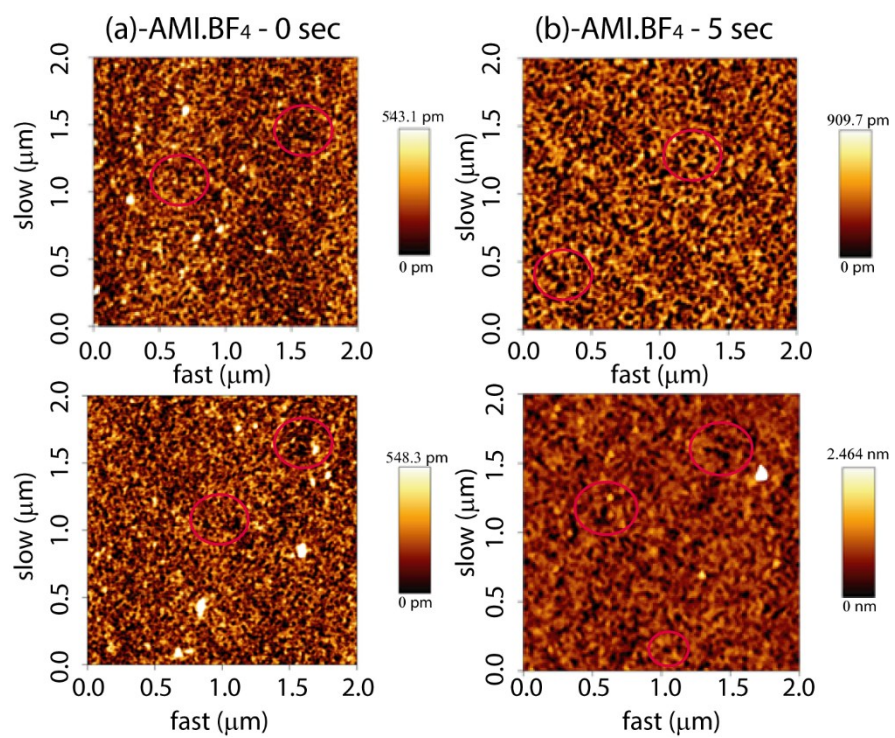


Figure S2. AFM measurements of IL/Si support (a) without NPs and (b) with Au NPs.

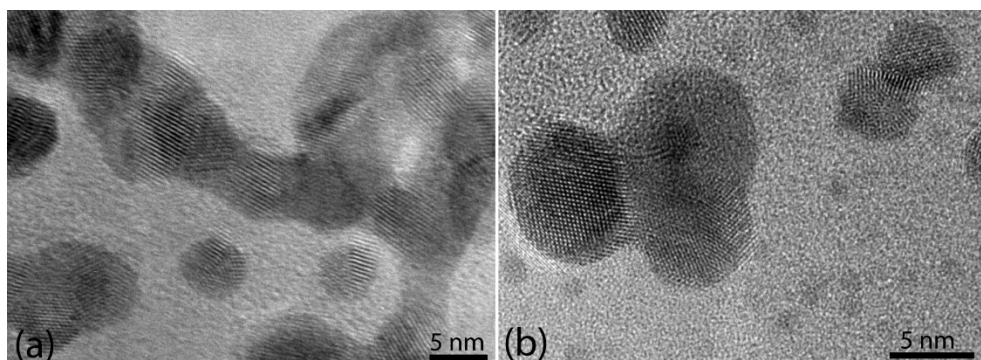


Figure S3. TEM images of Au NPs deposited for 10 s in AMIm.NTf₂ (a) and AMIm.BF₄ (b).

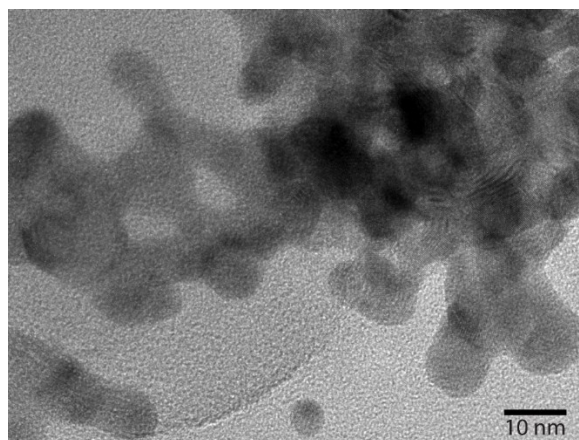


Figure S4. TEM images of Au NPs deposited for 5 s in 1-methyl-3-n-octylimidazolium bis((trifluoromethyl) sulfonyl) (OAI.NTf₂).

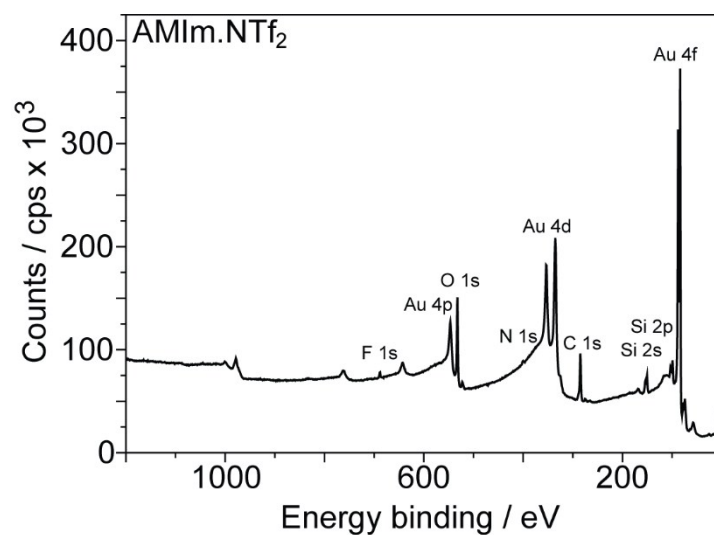


Figure S5. XPS long scan of Au NPs deposited on IL/Si support (AMIm.NTf₂).

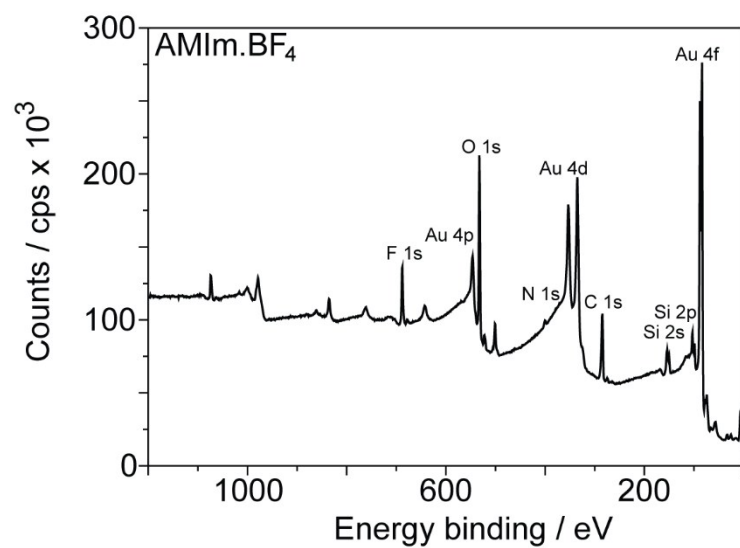


Figure S6. XPS long scan of Au NPs deposited on IL/Si support (AMIm.BF₄).

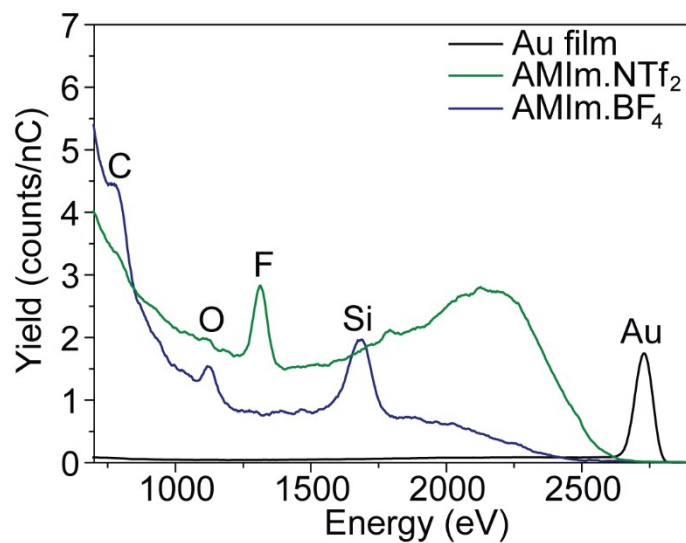


Figure S7. HS-LEIS spectra comparison of the samples synthesized and measured with a 3 keV 4He⁺ ion beam. The Au film was scaled by a factor of 0.03.