Ultra-efficient, widely tunable gold nanoparticles-based fiducial markers for X-ray imaging

G. Maiorano[a,b], E. Mele[c,d], M.C. Frassanito[e], E. Restini[e], A. Athanassiou[c], and P.P. Pompa[a,b*]

a) *Nanobiointeractions&Nanodiagnostics, Istituto Italiano di Tecnologia (IIT), Via Morego 30, 16163, Genoa (Italy).*

b) *Center for Bio-Molecular Nanotechnologies, Istituto Italiano di Tecnologia, Via Barsanti – 73010 Arnesano (Lecce), Italy.*

c) *Smart Materials, Nanophysics Department, Istituto Italiano di Tecnologia (IIT), Via Morego 30, 16163, Genoa (Italy).*

d) *Department of Materials, Loughborough University, Leicestershire LE11 3TU, United Kingdom.*

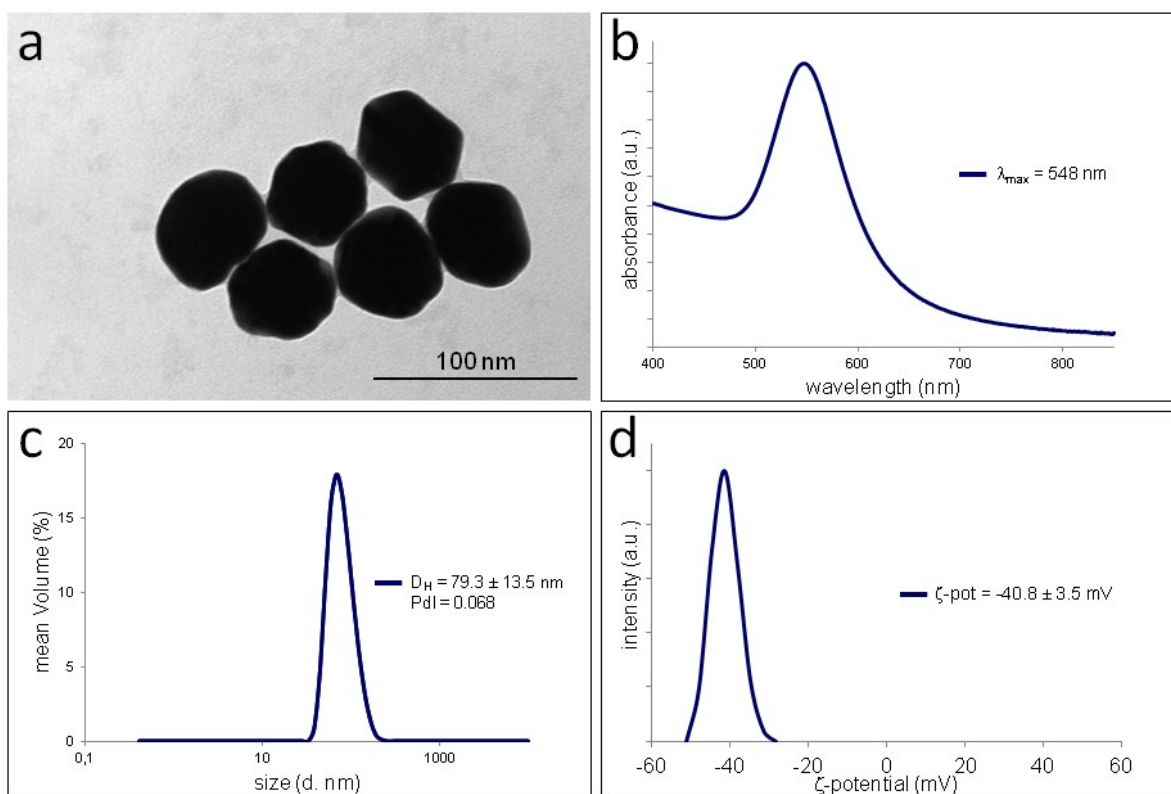e) *Mater Dei Hospital, C.B.H. Città di Bari Hospital s.p.a., Via Hahnemann 10, 70126 Bari, Italy.*

Fig. S1. Physico-chemical characterization of 70 nm HEPES-cappedAuNPs in H_2O/glycerol solution, pH 7.4. (a) TEM image and size distribution; (b) UV-vis absorption spectroscopy; (c) Dynamic Light Scattering; (d) Z-potential analysis. Values are given as mean ± standard deviation. D=diameter, D_H=hydrodynamic diameter, PdI = polydispersion index.