

Metallic nanoparticles: A useful prompt gamma emitter for range monitoring in proton therapy?

Sébastien Penninckx, Félicien Hespeels, Julien Smeets, Julien L. Colaax, Stéphane Lucas and Anne-Catherine Heuskin

Supplemental data

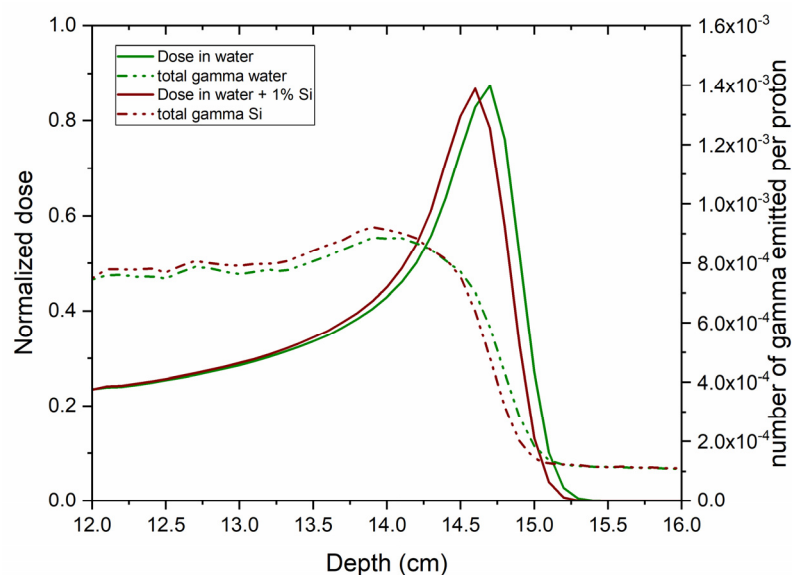


Figure S1. Normalized dose distribution after 150 MeV proton irradiation (left axis) and longitudinal distribution of all gamma rays emitted with energies higher than 1 MeV (right axis) (zoom on the “Tumor area”).

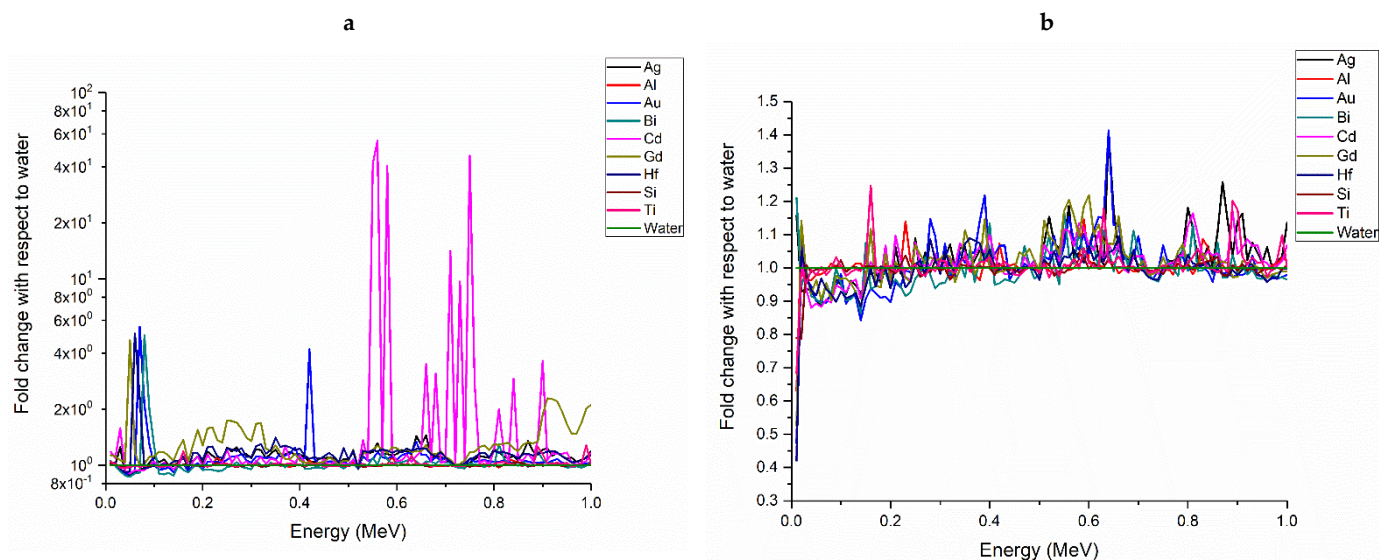


Figure S2. Energy spectra ratio to water of gamma rays generated after 150 MeV proton irradiation, limited to the 0-1 MeV range for (a) all gammas or (b) only primary PG.

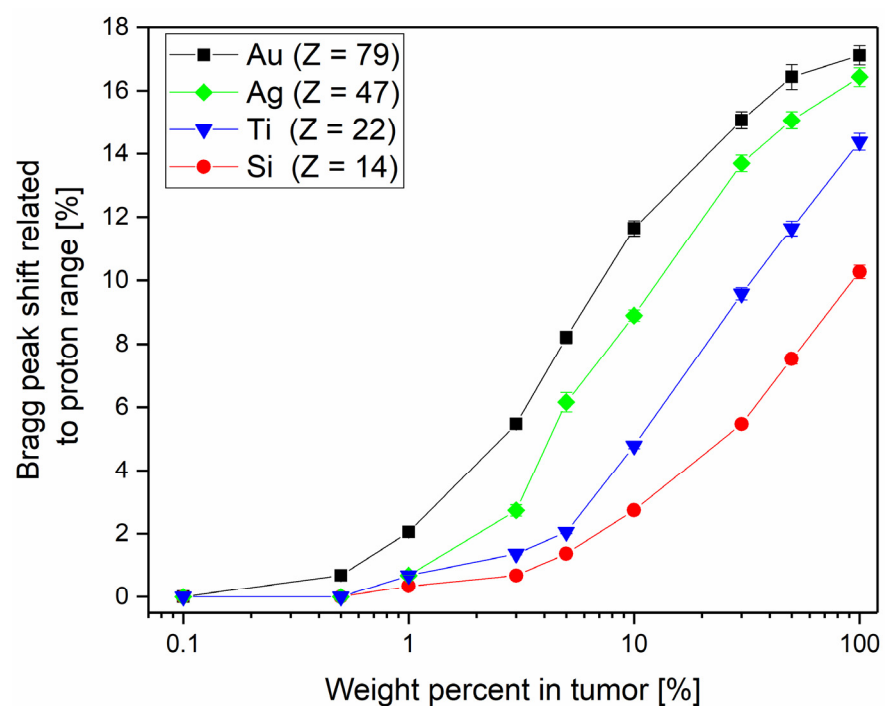


Figure S3. Bragg peak shift according to NP weight percent in tumor and NP atomic number.