

1 **Supplementary Information**

2

3 **Single particle ICP-MS characterization of platinum**
4 **nanoparticles uptake and bioaccumulation by *Lepidium***
5 ***sativum* and *Sinapis alba* plants**

6

7 Javier Jiménez-Lamana, ‡ *^a Justyna Wojcieszek, ‡ ^b Małgorzata Jakubiak, ^c Monika
8 Asztemborska ^c and Joanna Szpunar^a

9

10 ^aLaboratoire de Chimie Analytique Bio-inorganique et Environnement (LCABIE), UMR 5254-IPREM,
11 CNRS-UPPA, Hélioparc, Pau, France

12 ^bChair of Analytical Chemistry, Faculty of Chemistry, Warsaw University of Technology, Poland

13 ^cIsotopic Laboratory, Faculty of Biology, University of Warsaw, Warsaw, Poland

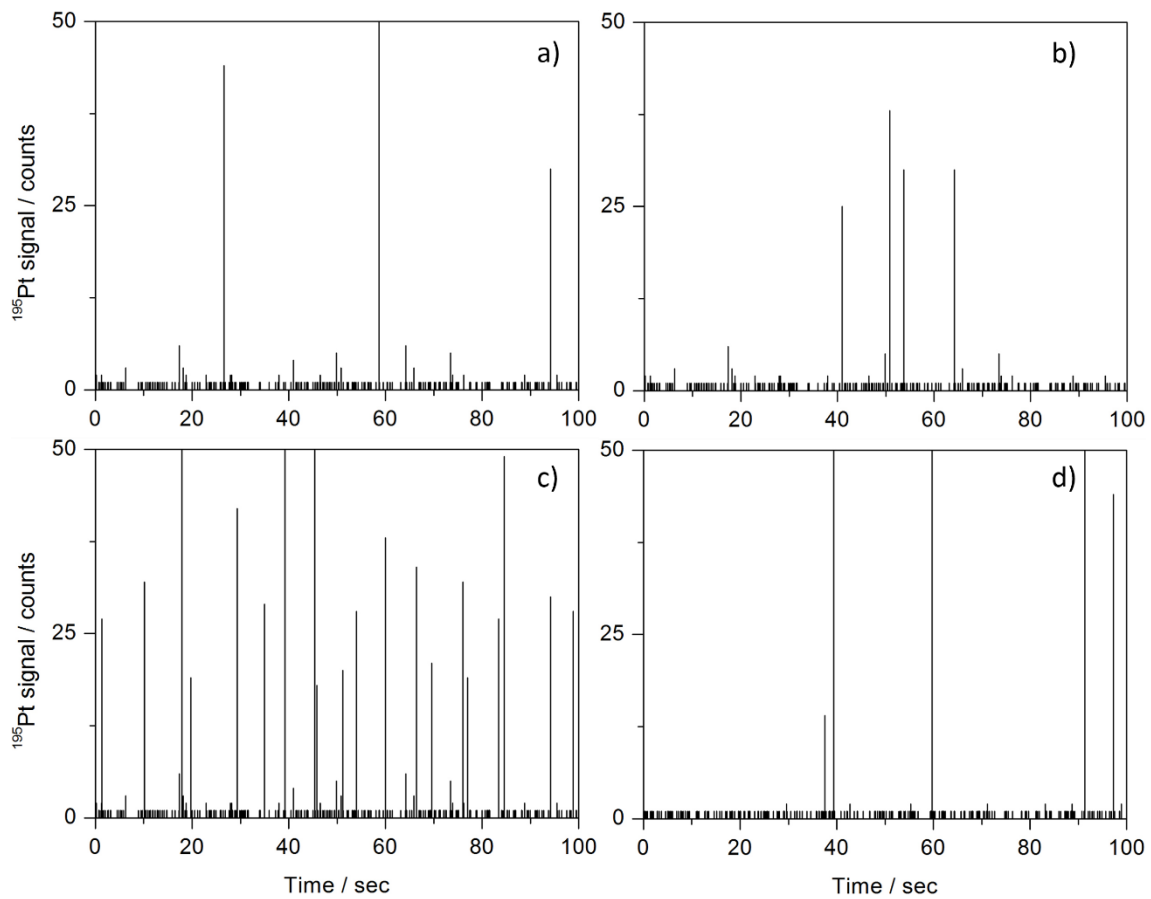
14 ‡ Both authors contributed equally to this manuscript

15

16 **Corresponding author**

17 *Telephone: +33540175037. E-mail: j.jimenez-lamana@univ-pau.fr

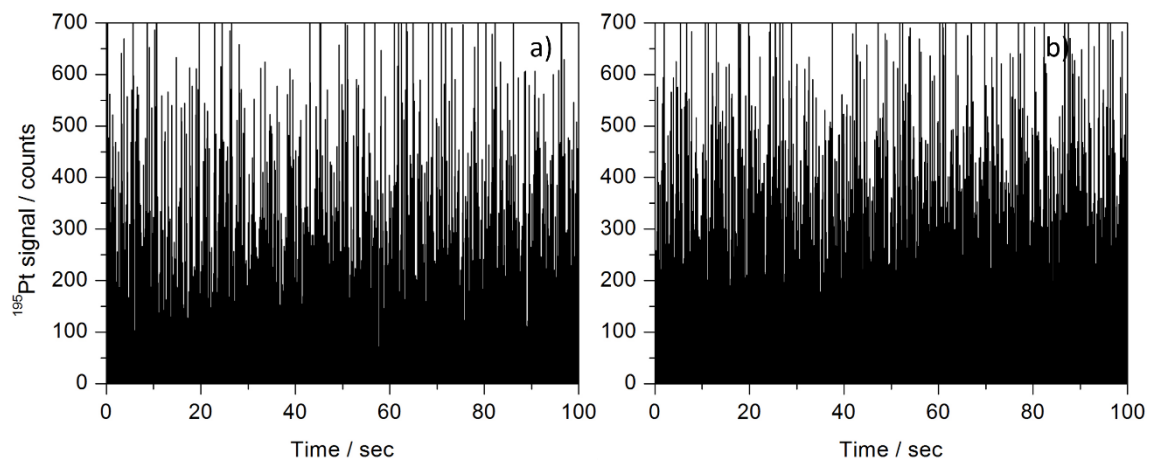
18



19

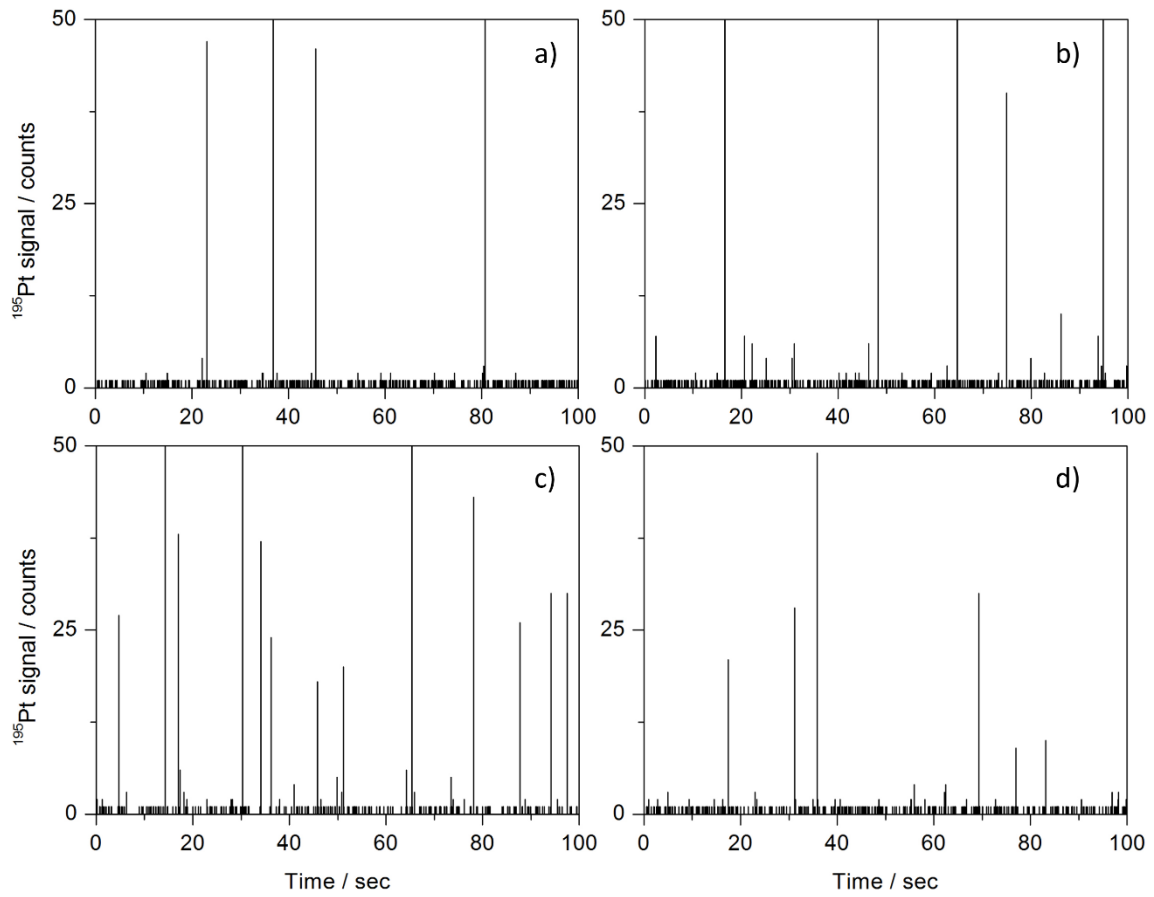
20 **Fig. S1** Time scans obtained for a) 2 mM citrate buffer pH 4.5, b) 50 mg of enzyme in 2 mM
 21 citrate buffer pH 4.5, and control samples of c) shoots and d) roots of *Lepidium*
 22 *sativum*.

22



23

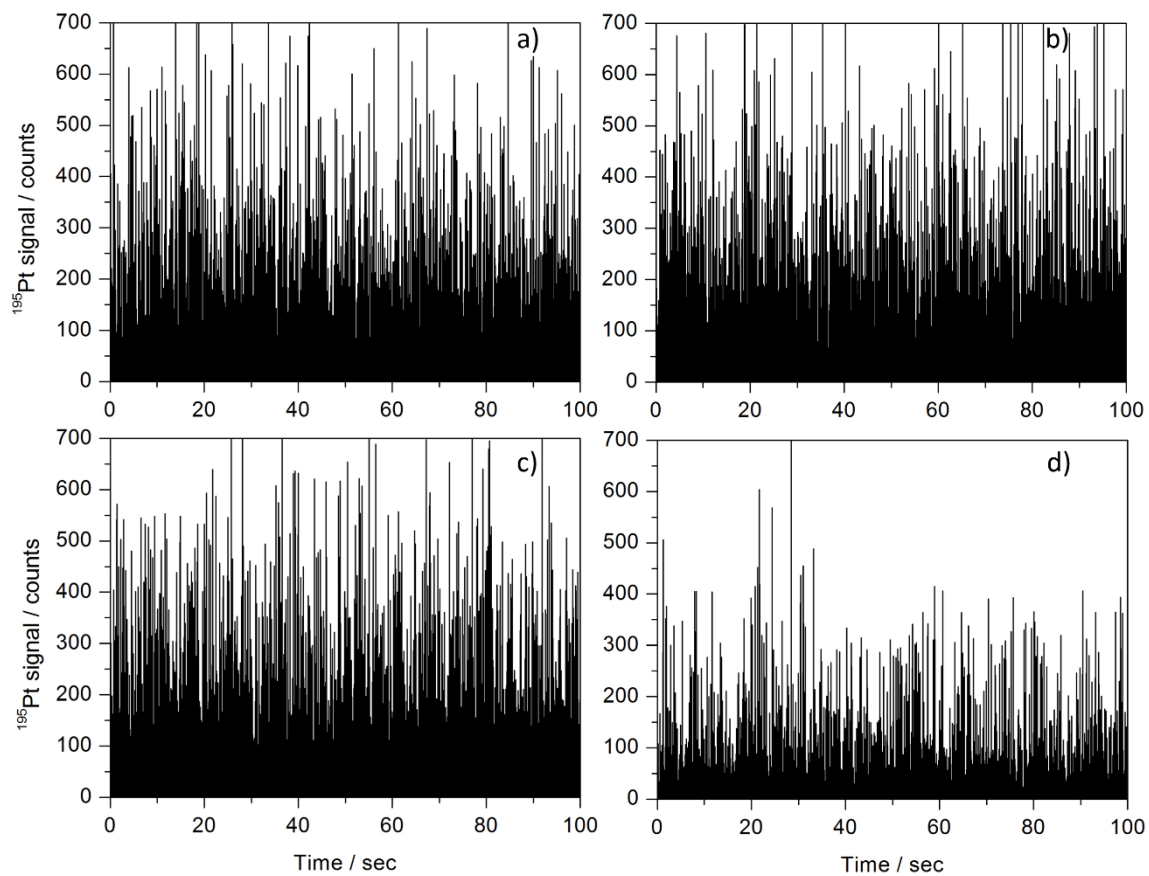
24 **Fig. S2** Time scans obtained for PtNPs treated sample of a) shoots, b) roots of *Lepidium*
 25 *sativum*.



26

27 **Fig. S3** Time scans obtained for control sample of a) roots, b) stems, c) leaves, d) cotyledons
 28 of *Sinapis alba*.

29



30

31 **Fig. S4** Time scans obtained for PtNPs treated sample of a) roots, b) stems, c) leaves, d)
32 cotyledons of *Sinapis alba*.

33

34