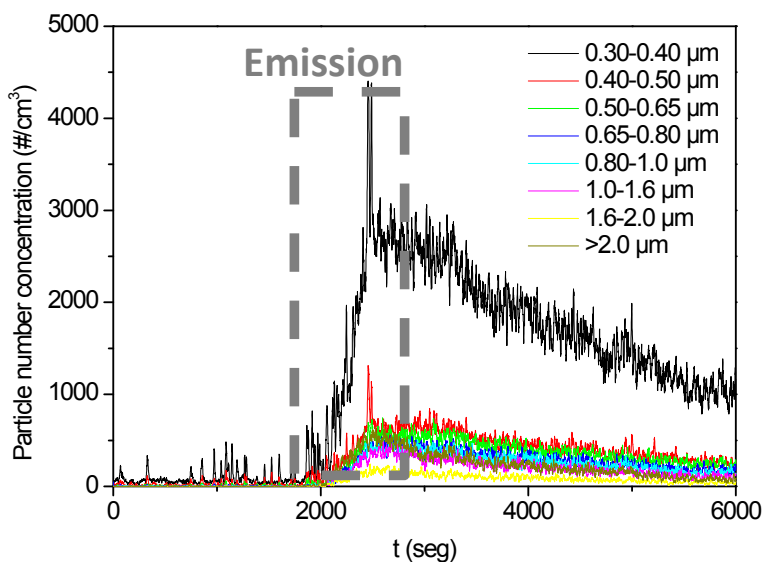
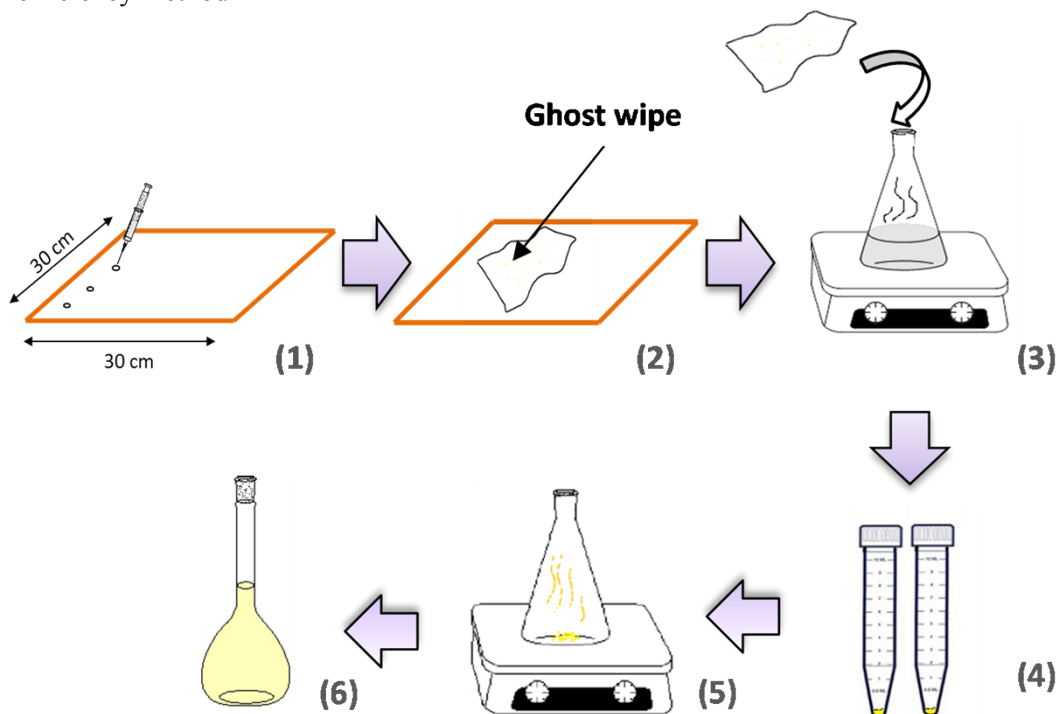


Supplementary information

Supplementary Figure 1. Particle number concentration of emissions produced during a pouring experiment using an Optical Particle Counter (OPC).

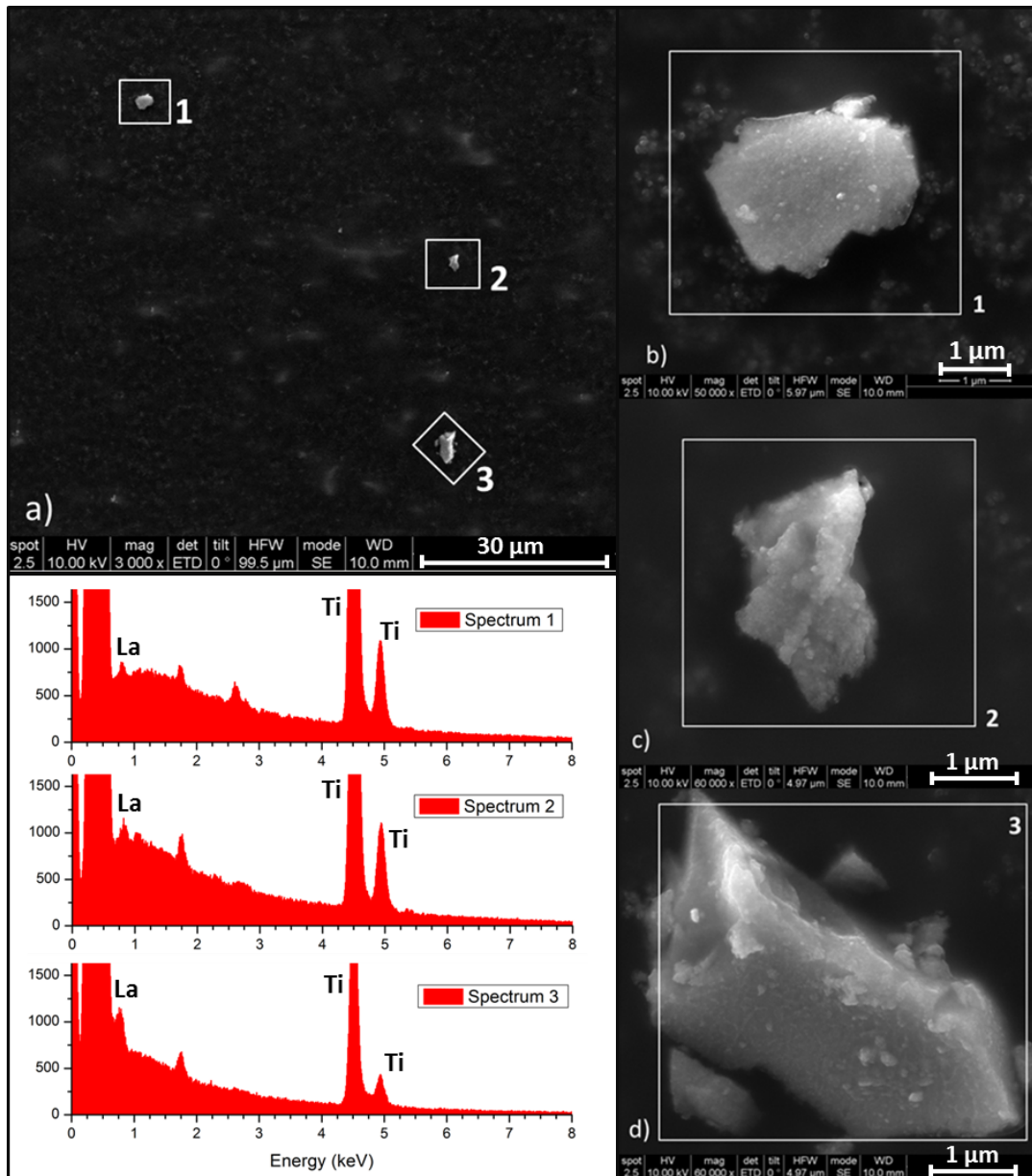


Supplementary Figure 2. Scheme of the nanoparticle surface contamination removal efficiency method



(1) Particle deposition (2) surface cleaning (3) GW in hot water (4) centrifugation (5) digestion (6) ICP-OES analysis

Supplementary Figure 3. a) SEM image of particles settled on a carbon tape placed at 10 cm away from the source during the manipulation of La/TiO₂ nanoparticulate powders; (b, c and d) Magnification of areas marked with 1 and 2 and 3 in (a); insets show the EDX spectral analysis of the areas marked with 1, 2 and 3; e) STEM of the airborne matter collected by filtering the air around the manipulation area at 0.3 L·min⁻¹ through a Cu grid during the manipulation of La-labelled TiO₂ nanoparticulate powders and EDX spectral analysis of the visualized area.



e)

