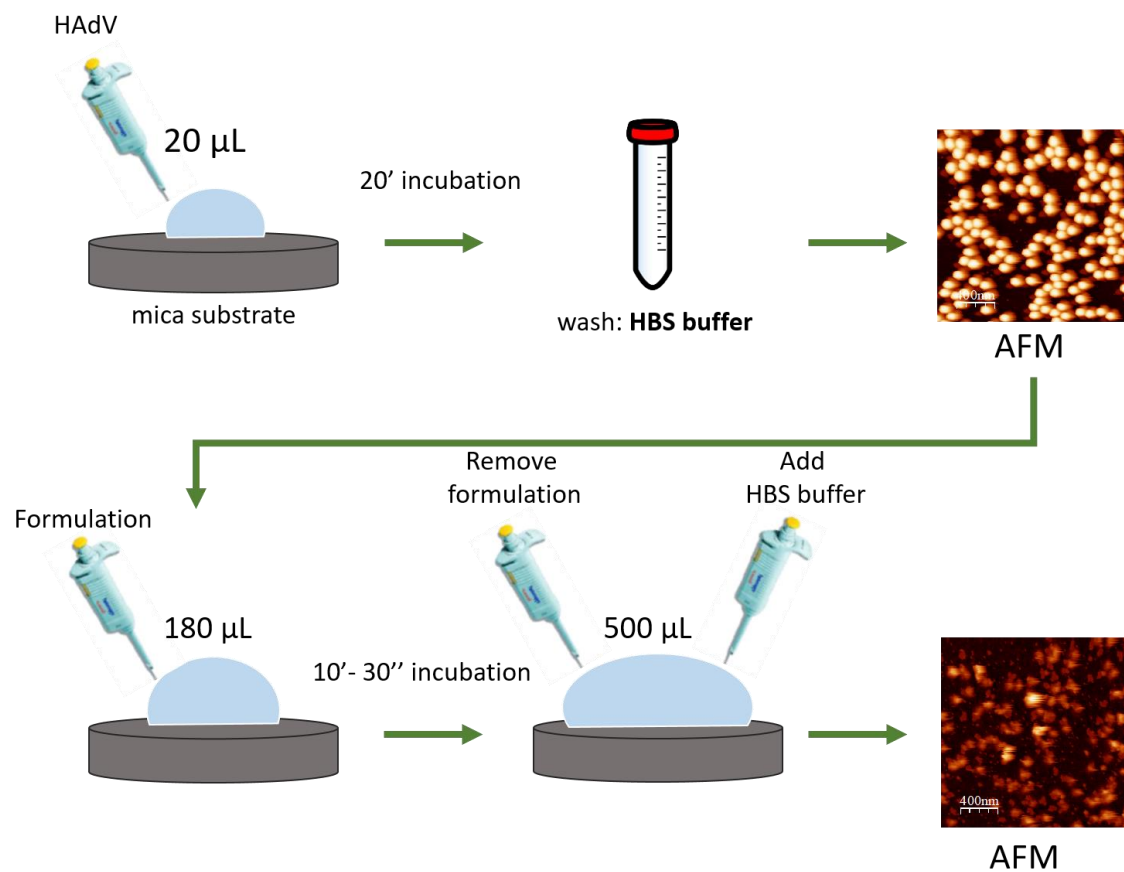


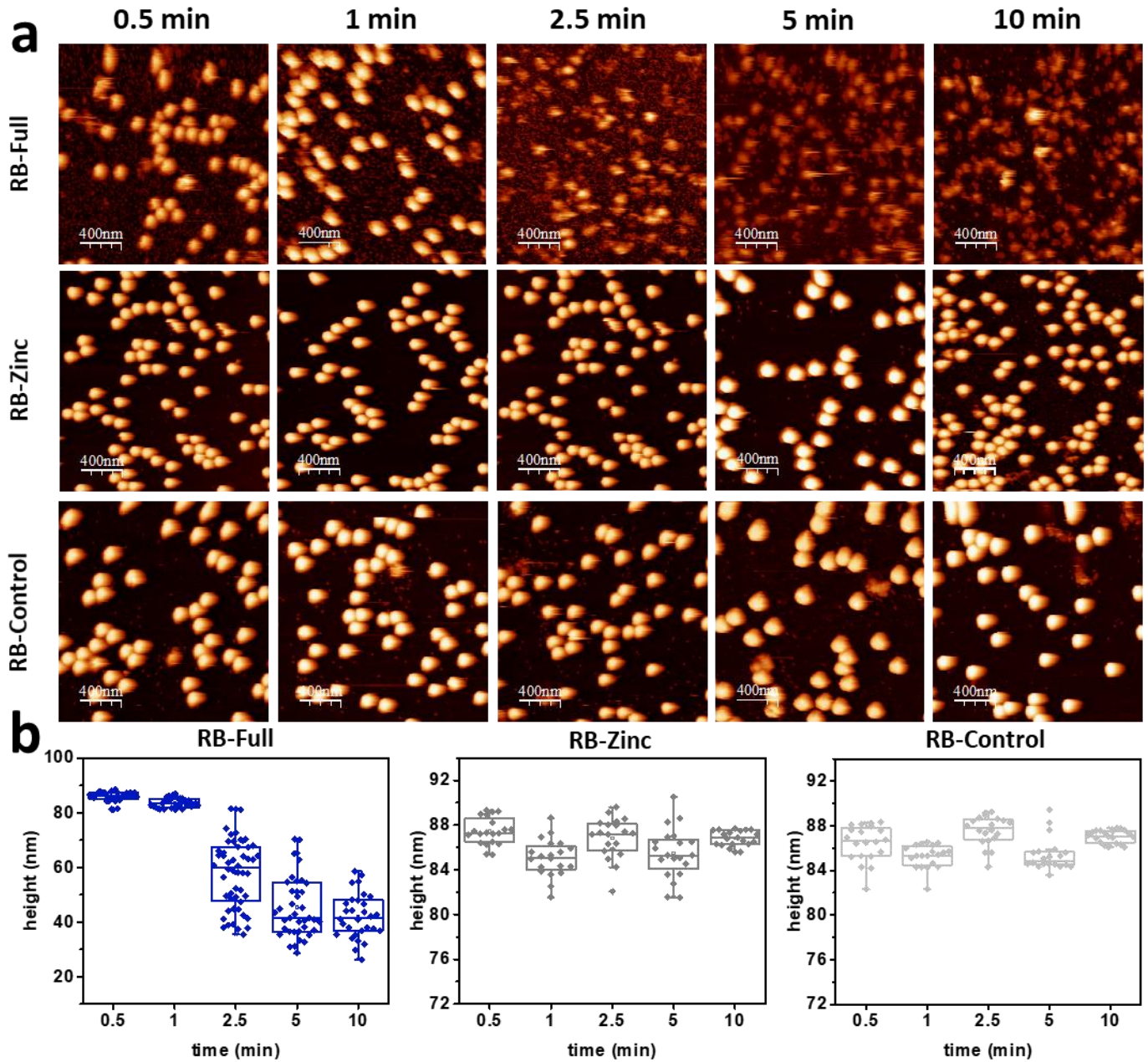
## SUPPLEMENTARY INFORMATION

### Supplementary figures

**Figure S1. Experimental procedure.** First, a HAdV drop of 20  $\mu\text{L}$  is deposited in a mica muscovita surface. After waiting 20 minutes the sample is washed with HBS buffer (HBS+5mM  $\text{NiCl}_2$ ). As a control, AFM images are taken before the formulation is added. By fixing the incubation time required the formulation is removed and a buffer drop of 500  $\mu\text{L}$  is added at the same time. Finally, AFM images are taken to perform the experiments.



**Figure S2. Morphology changes induced by all the formulations.** (a) AFM images taken before and after the virucide treatment at the five different contact times used. (b) Box plot showing the evolution of particle height as a function of treatment time with RB-Full, RB-Zinc and RB-Control.



**Figure S3.** Force curve on an adenovirus particle. (a) Topography images of a human adenovirus particle before (left) and after (right) perform an indentation. (b) Indentation curve computed from a force distance curve (FZ). The spring constant and the breaking force are obtained from this curve.

