

Supplementary Information

COATINGS OF HYDROXYAPATITE-BIOACTIVE GLASS MICROPARTICLES FOR ADHESION TO BIOLOGICAL TISSUES

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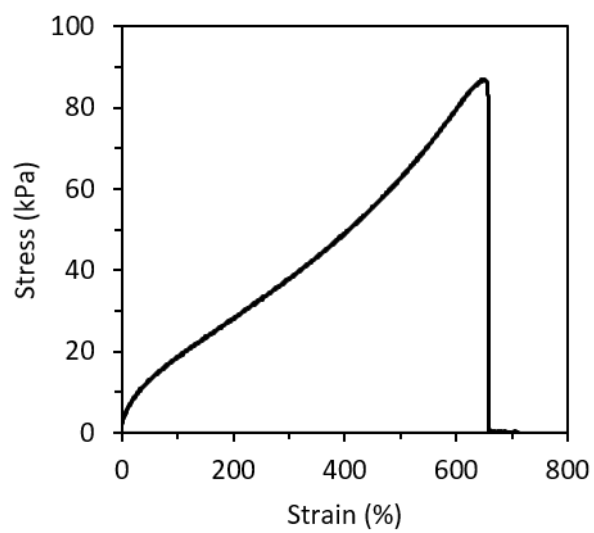


Fig. S1 Stress-strain curve during tensile test at break of PBT film at 1 mm.s^{-1}

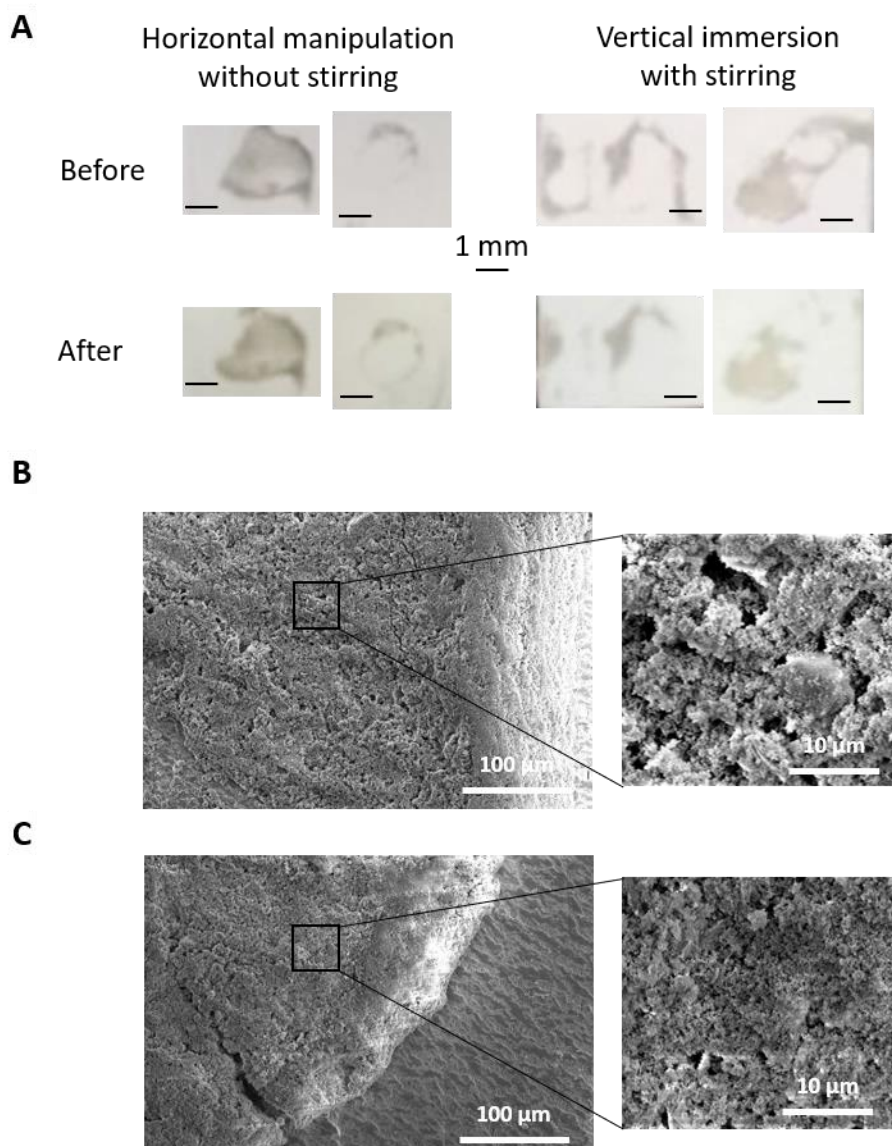


Fig. S2. Control experiment to demonstrate the stability of particles during manipulation in degradation experiments. **A.** Macrographs of HA-BG coatings on PTFE surfaces (coating density 0.2 mg.cm^{-2}) before (top) and after (bottom) immersion with the proposed protocol (left) and with severe manipulation vertical immersion with stirring (right). **B,C.** SEM observations of HA-BG coatings on PTFE before immersion (**B**) and after immersion with the proposed protocol (**C**).

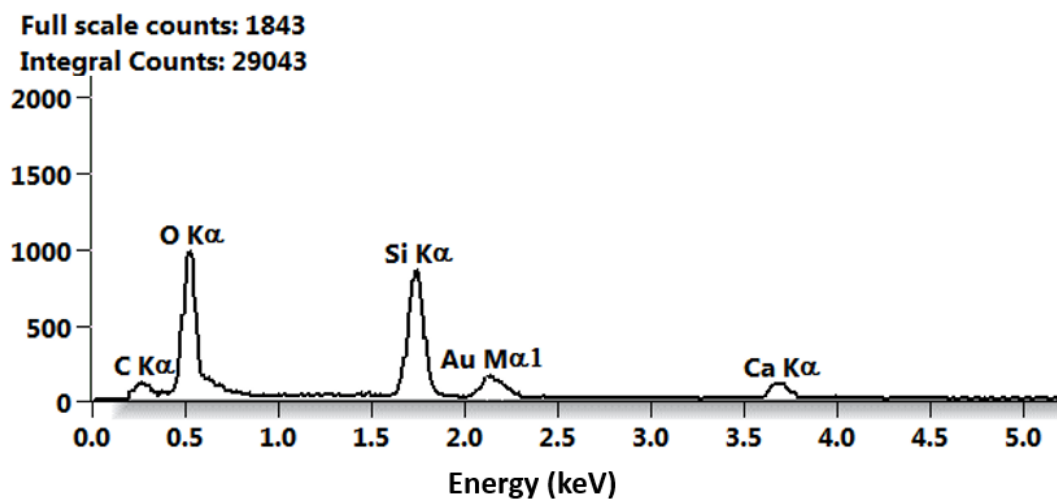


Fig. S3 EDS spectrum of bioactive glass precursor particles during the synthesis of HA-BG particles. Particles were coated with a 5 nm Au layer and experiments were performed at a voltage of 15 kV.

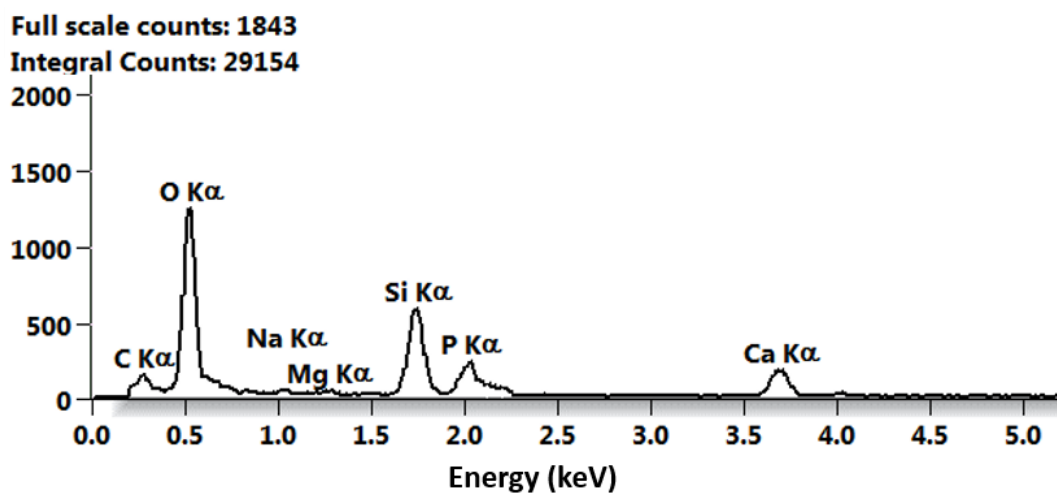


Fig. S4 EDS spectrum of HA-BG particles. Particles were coated with a 5 nm Au layer and experiments were performed at a voltage of 15 kV.

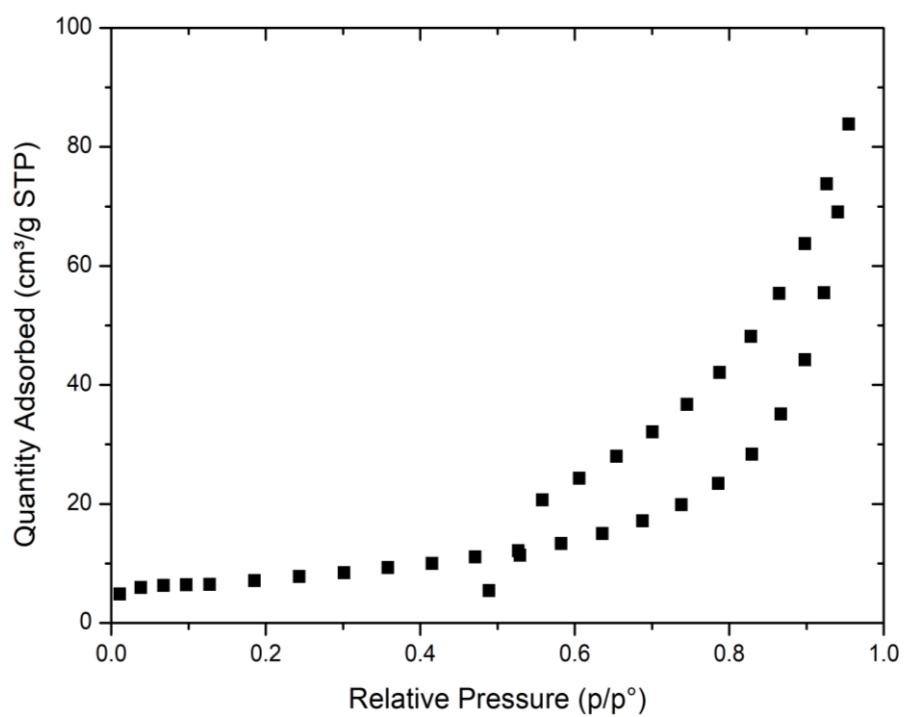


Fig. S5 *N₂* sorption isotherm of HA-BG performed at 77 K after activating the samples at 150 °C for 15 h.

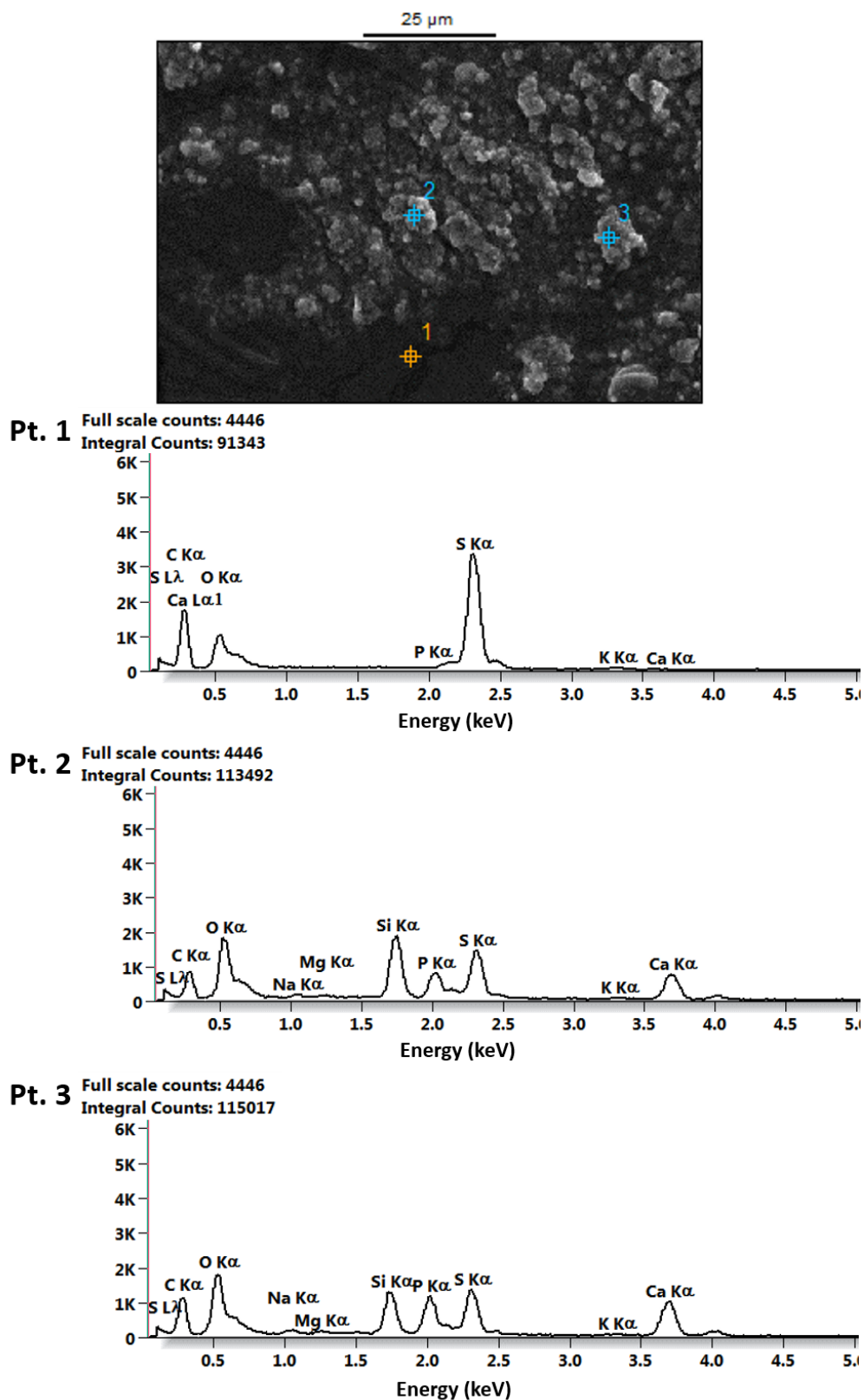


Fig. S6 EDS spectrum of HA-BG coating on cross-linked PBT film. Pt1 corresponds to a gel area not coated, as illustrated by the absence of peak corresponding to Ca, P or Si but a peak of S which is present in the gel structure. Pt2 corresponds to a coated area illustrated by the presence of Ca, P and Si peaks, and the diminution of the S peak. Films were coated with a 5 nm Au layer and experiments were performed at a voltage of 15 kV.

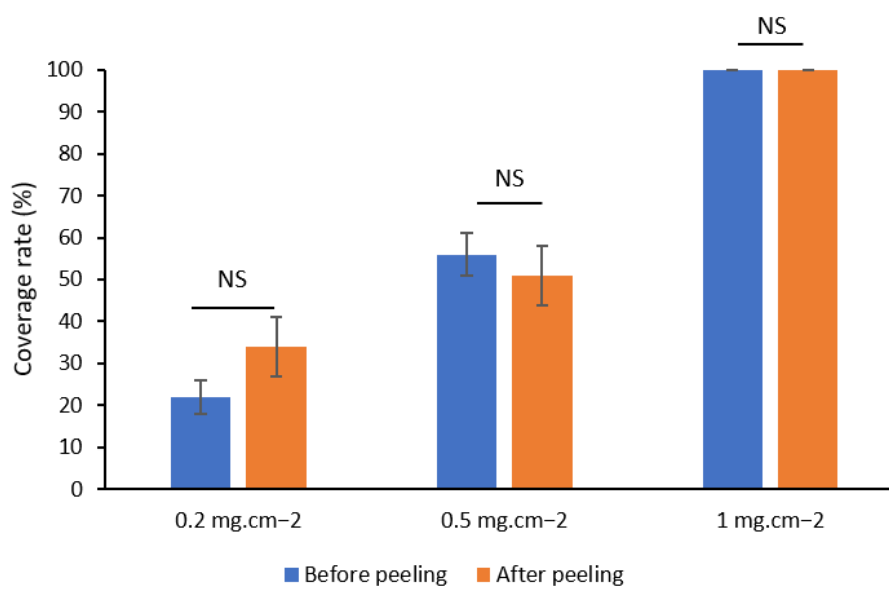


Fig. S7 Coverage rate measured by analysis of SEM images before and after peeling for HA-BG coated films with coating densities: $0.2 \text{ mg}\cdot\text{cm}^{-2}$ (V20_C10), $0.5 \text{ mg}\cdot\text{cm}^{-2}$ (V20_C25), $1.0 \text{ mg}\cdot\text{cm}^{-2}$ (V20_C50).