Supplementary material:

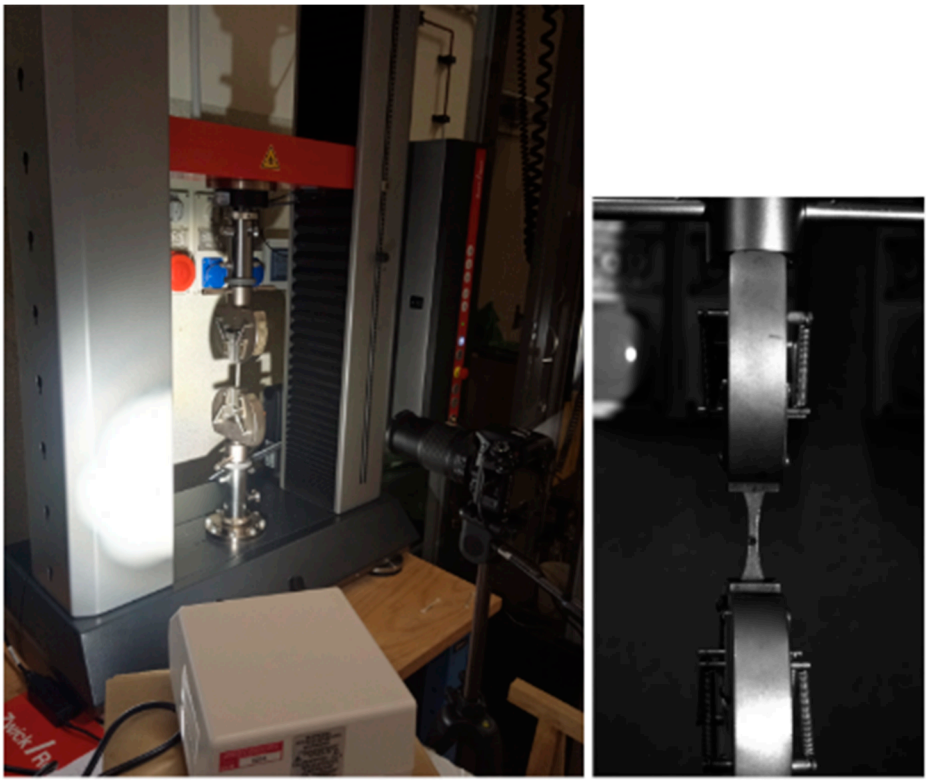


Figure S1 *Tensile test setup: UTM with wedge grips, DIC camera and light source (left), specimen area (right)*

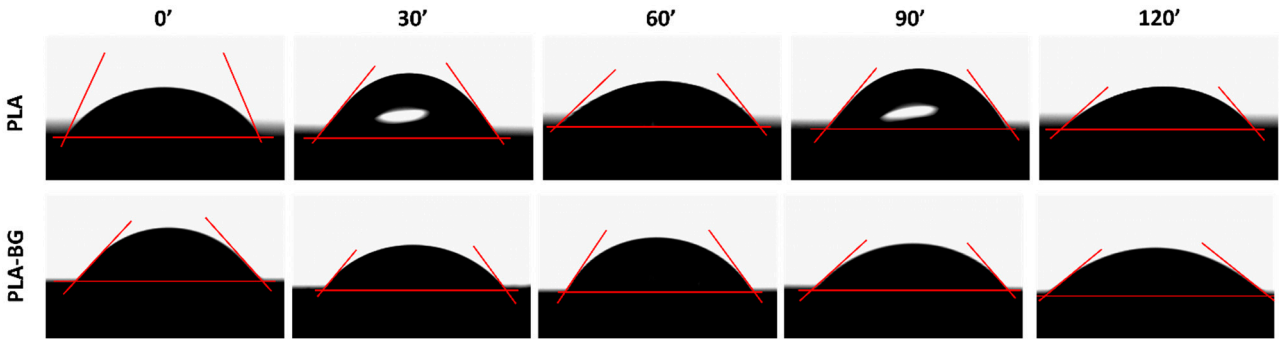


Figure S2 *Contact angle measurement on PLA and PLA-BG samples treated in NaOH 1M for 0, 30, 60, 90, 120 minutes.*

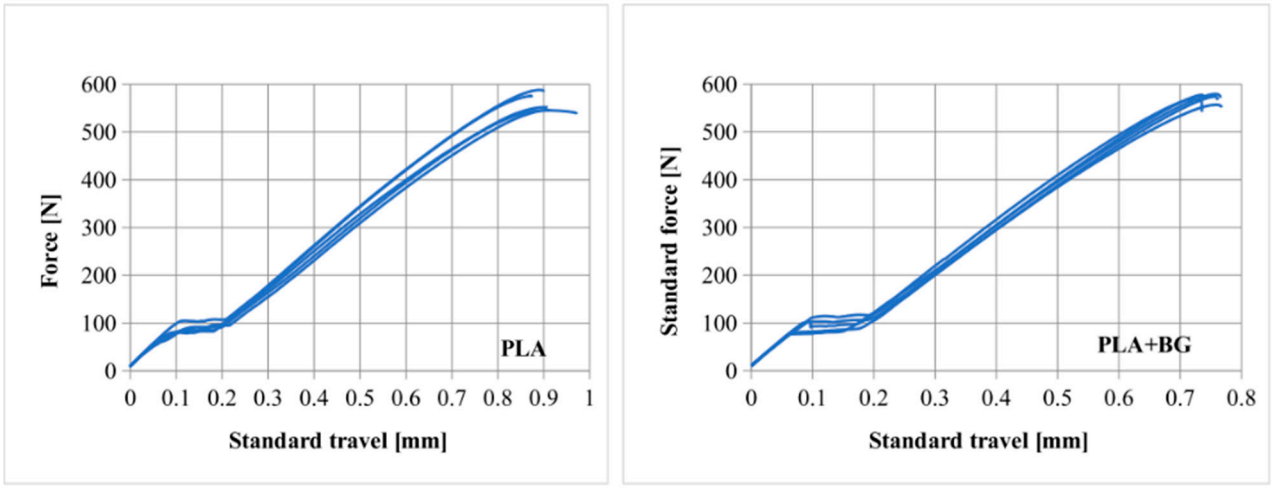


Figure S3 *Strength curves in terms of crosshead displacement (standard travel in mm) for PLA (left) and PLA+BG (right) specimens. Five repetitions are presented in each group which are well consistent. The plateau in the plots is a result of the compression that the grips produce on the specimen ends, that induces elongation at an almost constant force.*