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## **Supplementary Material**

The 8-bit grey-scale images of red and green individual channels (red = SHG, and green = TPEF) show the contribution of SHG and TPEF signals as the intensity of light at each pixel in the dynamic range 0-255.

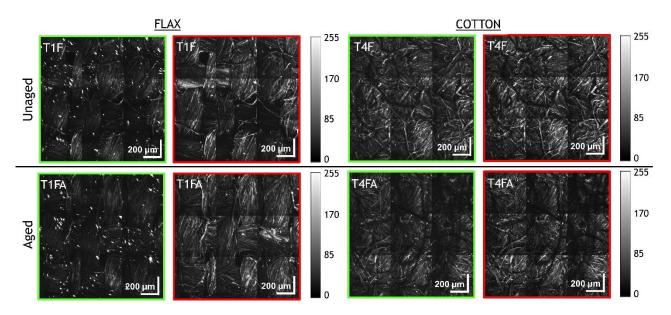


Fig. SM1. SHG and TPEF signal intensity measured on flax and cotton samples before (T1F, T4F) and after (T1FA, T4FA) the photo-induced ageing.

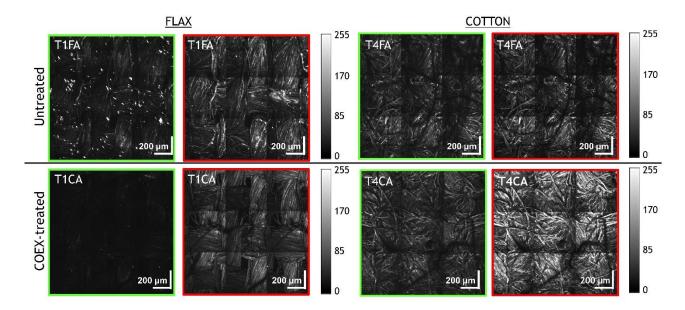


Fig. SM2. SHG and TPEF signal intensity measured on flax and cotton aged samples before (T1FA, T4FA) and after (T1CA, T4CA) flame-retardant treatment.