

# Consolidation of Fir wood by Poly(vinyl butyral-co-vinyl alcohol-co-vinyl acetate) treatment: Study of surface and mechanical characteristics

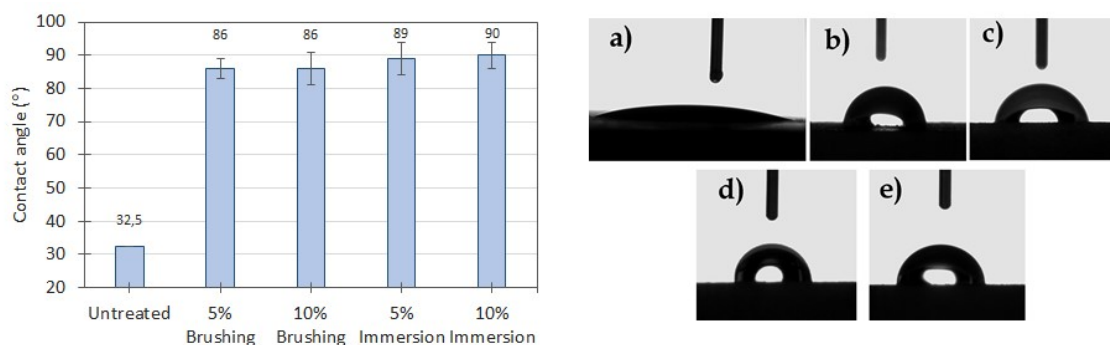
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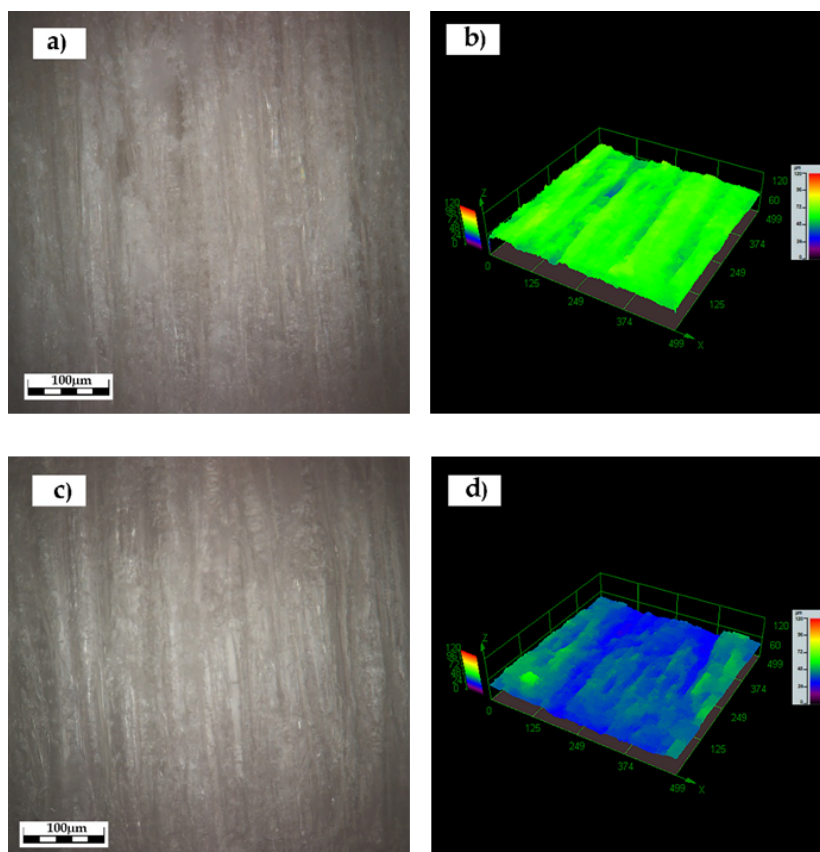
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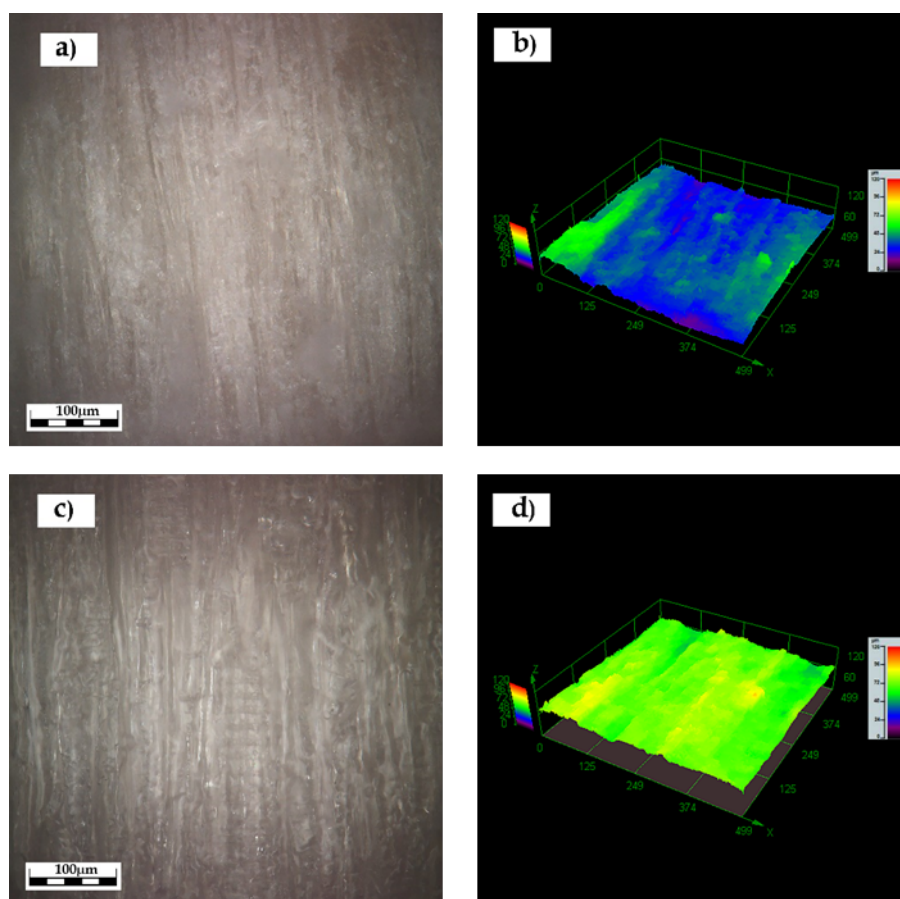
## Supplementary Materials:



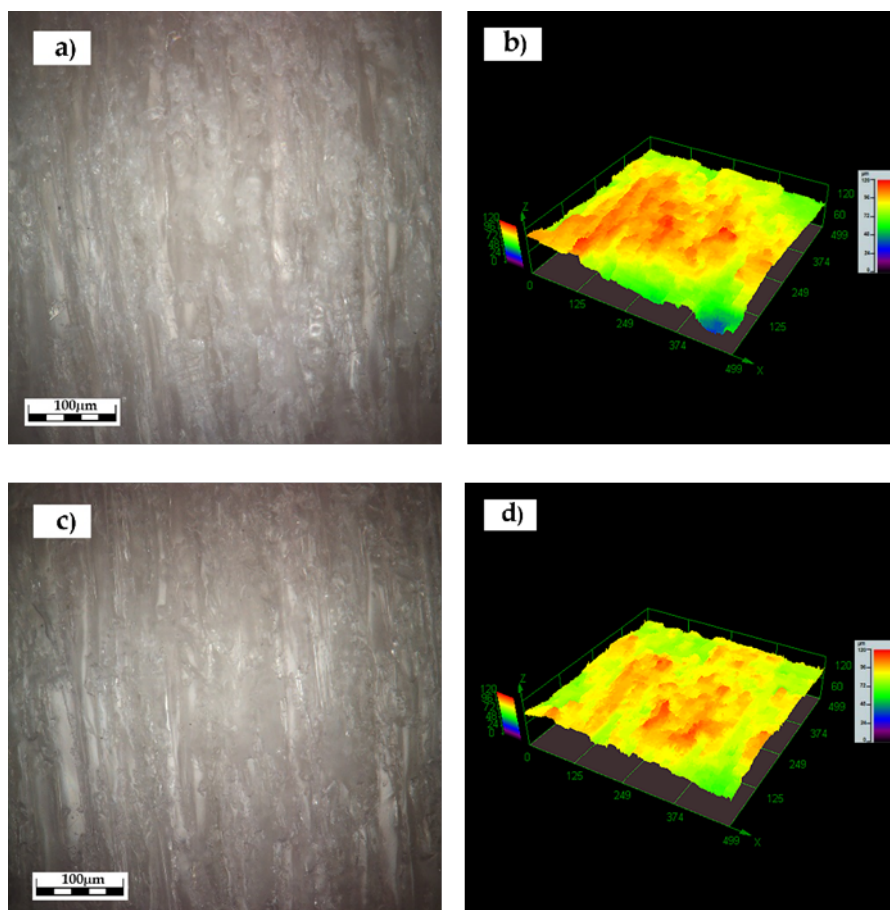
**Figure S1.** Water contact angle (left) and representative images of water drops on the surface of different samples (right). Images correspond to: (a) Untreated; b) 5%-Brushing; (c) 10%-Brushing; (d) 5%-Immersion and (e) 10%-Immersion wood samples.



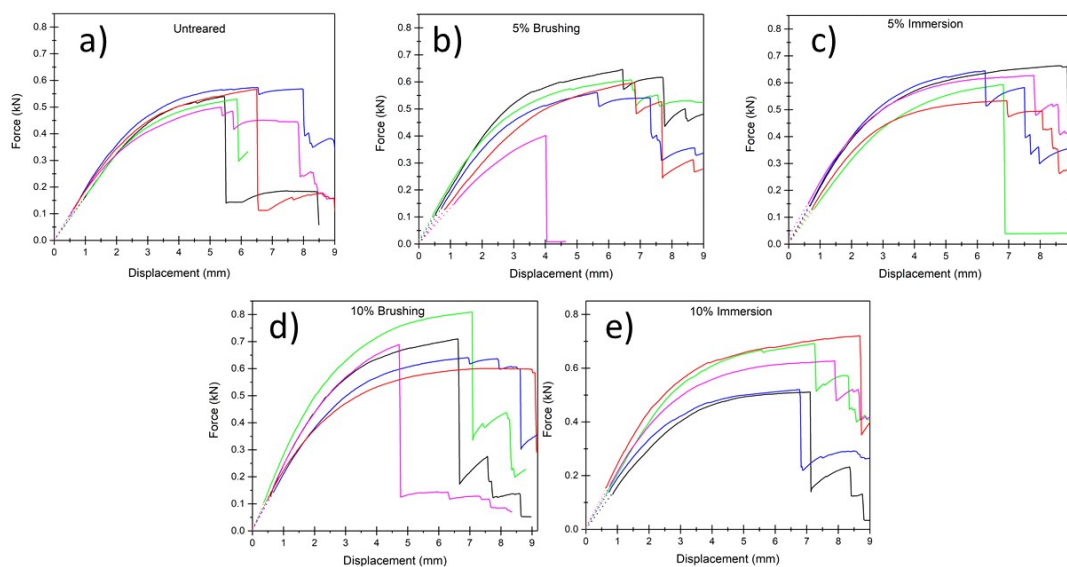
**Figure S2:** Optical profilometry images corresponding to the sample treated with 5%-Brushing PVBVA. (a) and (b) show the 2D and 3D images of the sample before treatment and (c) and (d) the corresponding ones upon the treatment with the 5% PVBVA solution at 555x.



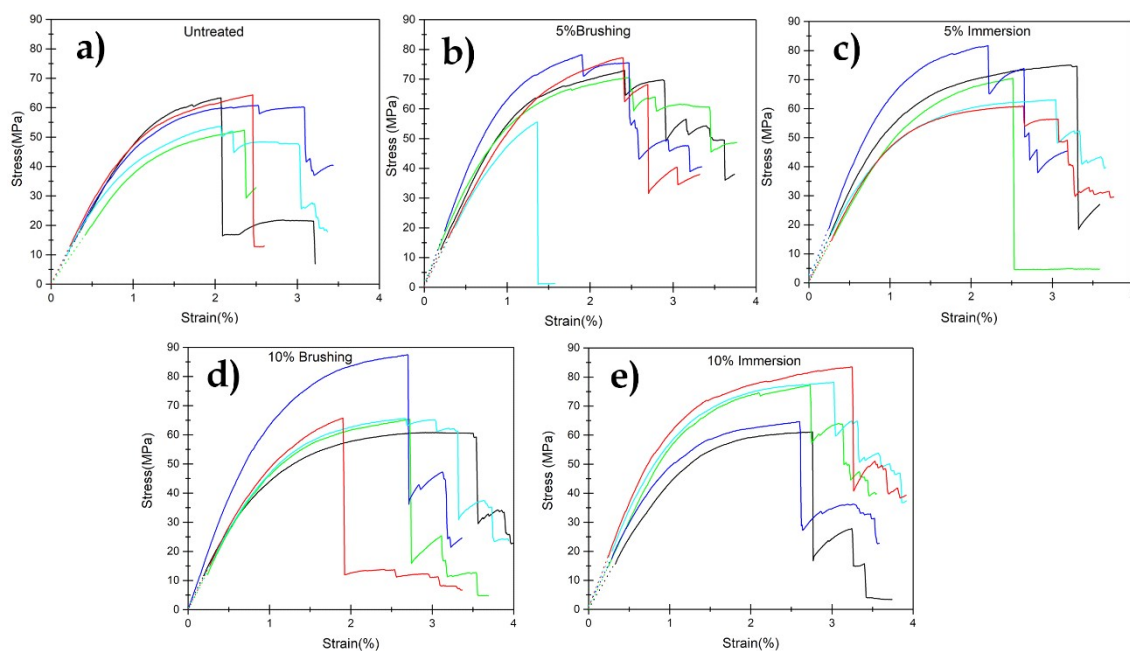
**Figure S3:** Optical profilometry images corresponding to the sample treated with 10%-Brushing PVBVA. (a) and (b) show the 2D and 3D images of the sample before treatment and (c) and (d) the corresponding ones upon the treatment with the 10% PVBVA solution at 555x.



**Figure S4:** Optical profilometry images corresponding to the sample treated with 10%-Immersion PVBVA. (a) and (b) show the 2D and 3D images of the sample before treatment and (c) and (d) the corresponding ones upon the treatment with the 10% PVBVA solution at 555x.



**Figure S5:** Force (kN) vs displacement (mm) curves obtained in the three-bending point test experiments.



**Figure S6:** Stress (MPa) vs strain (%) curves obtained in the three-bending point test experiments.

