Supplementary information for

Formation of glassy $MgO/Na_2O–SiO_2$ solid within Scots pine (*Pinus sylvestris* L.) sapwood through a wet-chemistry approach

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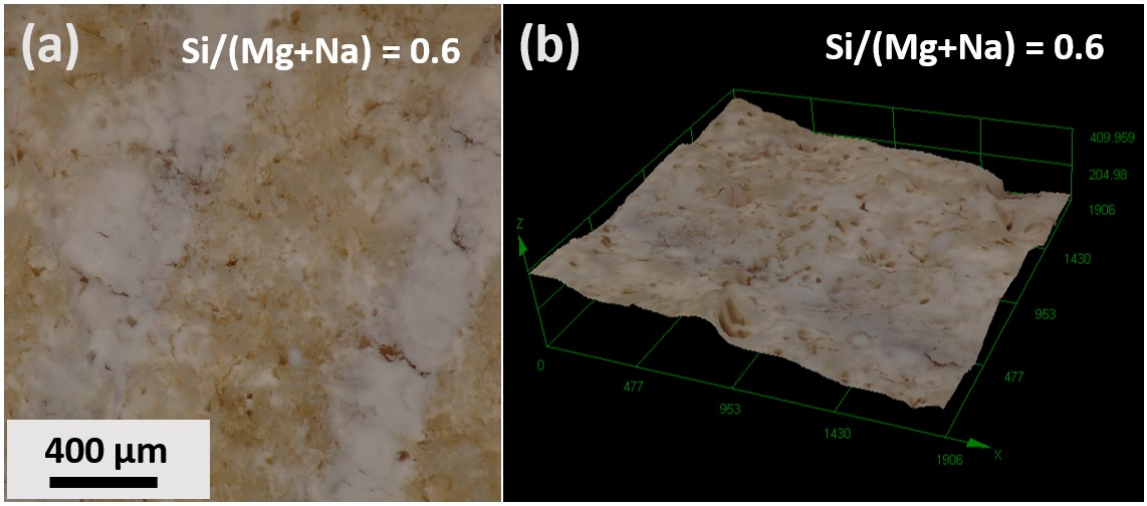

Fig. S1. Photomicrographs of the representative silicate-modified wood sample (Si/(Mg+Na) = 0.6), showing as-deposited silicate powders on (a) the cross-sectional surface and (b) a 3D topographical view of the cross-section.

Table S1. Density values for the untreated and modified Scots pine sapwood calculated from CT images.

Specimen No.		*Untreated wood (conditioned to reach 12% MC)*			*0.05 M $MgSO_4 \cdot 7H_2O$ treated wood and dried at 60 °C for 12h*			*$Na_2O \cdot 3.3SiO_2$ solution-treated wood and dried at r.t. for 24 h*			*Mg-(Na-O-Si) modified wood and dried at r.t. for 30 days*		
1% $Na_2O \cdot 3.3SiO_2$	Energy	**80**	**110**	**130**	**80**	**110**	**130**	**80**	**110**	**130**	**80**	**110**	**130**
S1	**Density**	505.2	505.3	507.2	554.6	554.1	555.7	839.2	836	838	502.7	502.9	504.5
S2		548.6	548.8	550.8	593.5	593.4	595.1	823.7	822.7	824.6	546.3	546.7	548.6
S3		513.6	513.6	515.4	588.7	587.9	589.3	833	830.9	832.2	514	514.3	516.1
5% $Na_2O \cdot 3.3SiO_2$	Energy	**80**	**110**	**130**	**80**	**110**	**130**	**80**	**110**	**130**	**80**	**110**	**130**
S4	**Density**	480.7	480.8	482.4	494.9	494.5	496.1	787.6	784	785.1	490.8	490	491.5
S5		459.6	459.7	461.3	486.5	486.4	487.7	765.1	762	763.2	465.8	464.4	466.2
S6		492.8	493.2	494.9	514.4	514.1	515.5	651.6	649.8	651	498.1	497.9	500.3
10% $Na_2O \cdot 3.3SiO_2$	Energy	**80**	**110**	**130**	**80**	**110**	**130**	**80**	**110**	**130**	**80**	**110**	**130**
S7	**Density**	481.1	481.1	482.6	491.3	491.1	492.6	722.6	719.1	720.5	499.6	498.3	499.3
S8		489.8	490	491.7	496.2	496.1	497.7	752.8	749	740.5	507.6	506	507.3
S9		473.2	473.2	474.8	488	488	489.5	769.5	765.6	767	490.3	488.4	489.9