Electronic Supplementary Material (ESI) for RSC Advances.
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Electronic supplementary info:

Brushite mineralised Scots pine (*Pinus Sylvestris* L.) sapwood – revealing mineral crystallization within wood matrix by *in-situ* XRD

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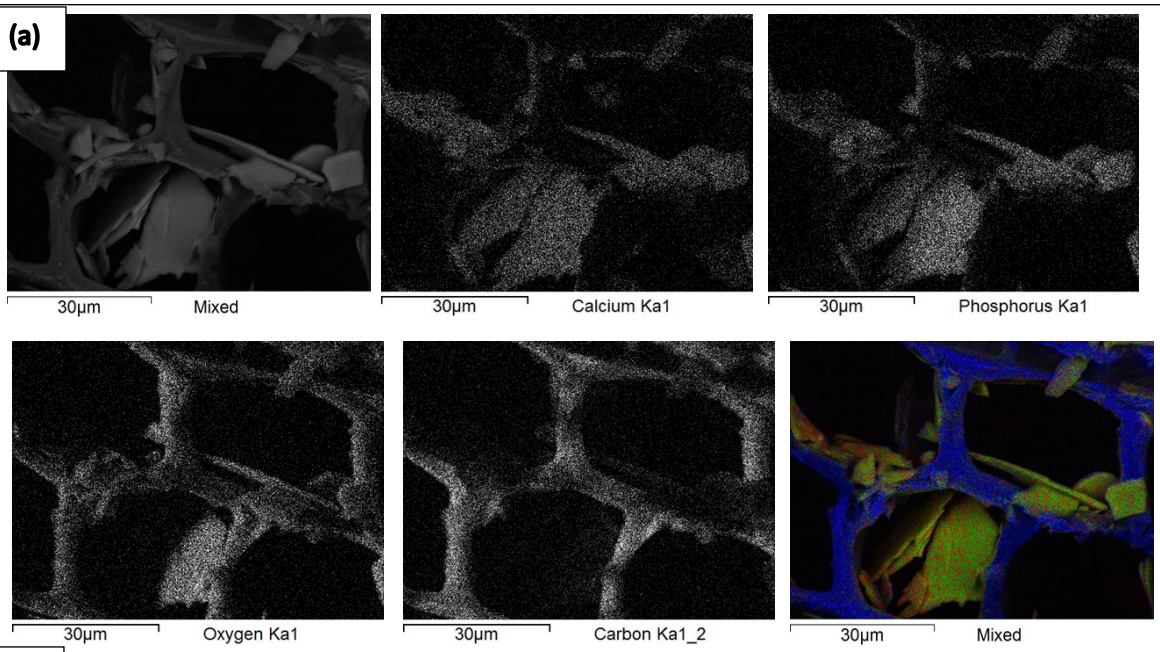
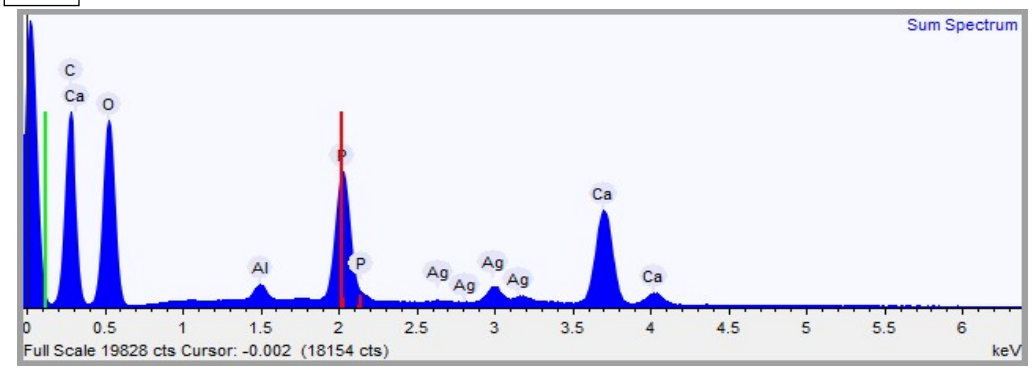
(a)



(b)



(c)

Summary results

Element	Weight %	Weight % σ	Atomic %
Carbon	41.364	0.225	52.944
Oxygen	42.643	0.249	40.977
Aluminum	1.404	0.022	0.800
Phosphorus	4.692	0.043	2.329
Calcium	6.387	0.053	2.450
Silver	3.510	0.072	0.500

Fig. S1. Representative SEM/EDS analysis data of the DCPD(1)-wood stab after the leaching: (a) EDS mapping images showing distribution of the individual Ca, P, O, C elements and of multiple elements (RGB colours assigned as Ca- red, P – green and C – blue), (b) sum EDS spectrum, and (c) summary of results of EDS analysis.

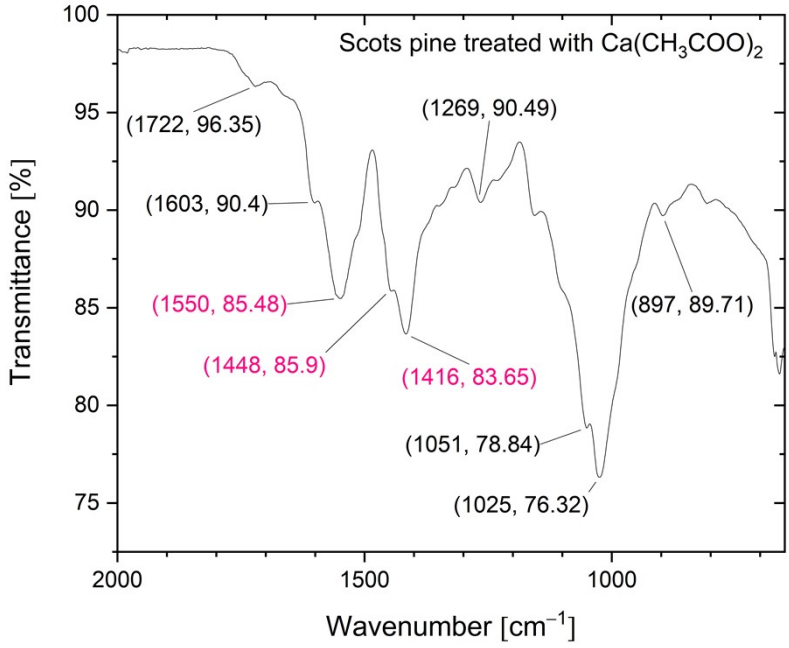


Fig S2. FTIR spectrum of the Scots pine sapwood sample treated with solution of 0.5 M $Ca(CH_3COO)_2$.

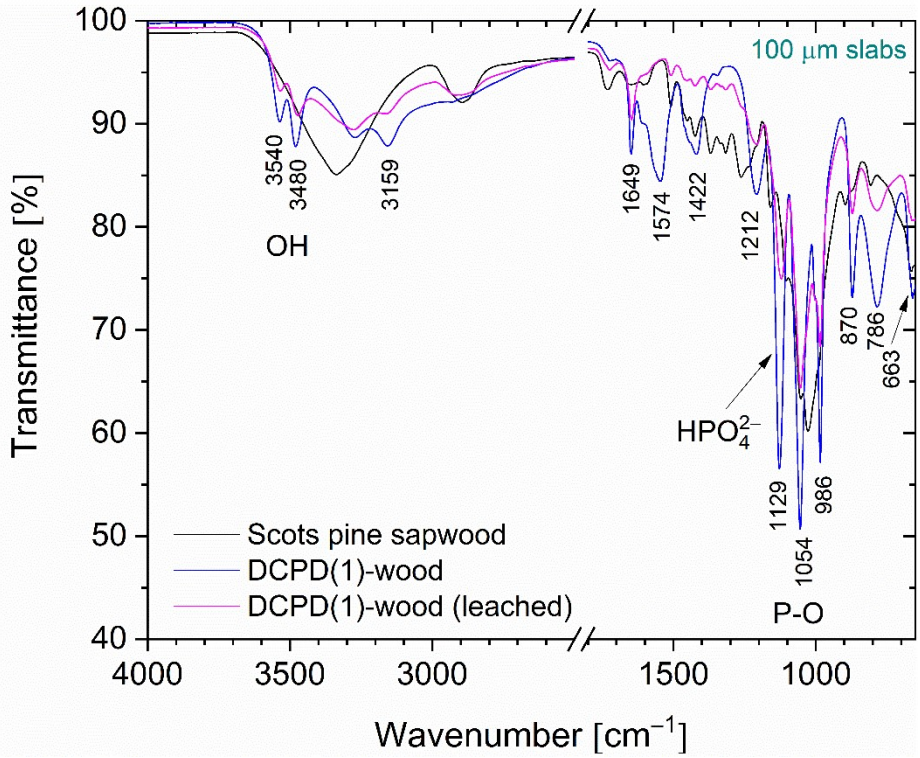


Fig. S3. FTIR spectra of the untreated wood and mineralised wood (100 μm) slabs from the solutions of 0.5 M $Ca(CH_3COO)_2$ and 0.3 M $NH_4H_2PO_4$ before and after the "leaching".

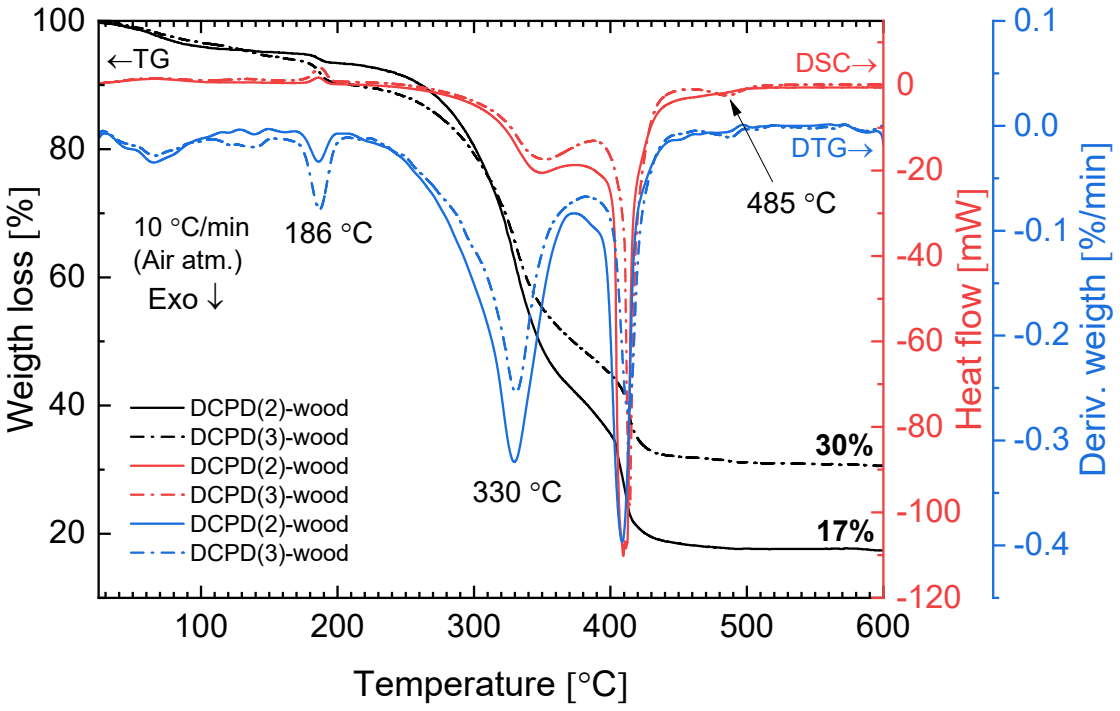


Fig. S4. TG/DSC and DTG curves of DCPD(2)-wood and DCPD(3)-wood composites.

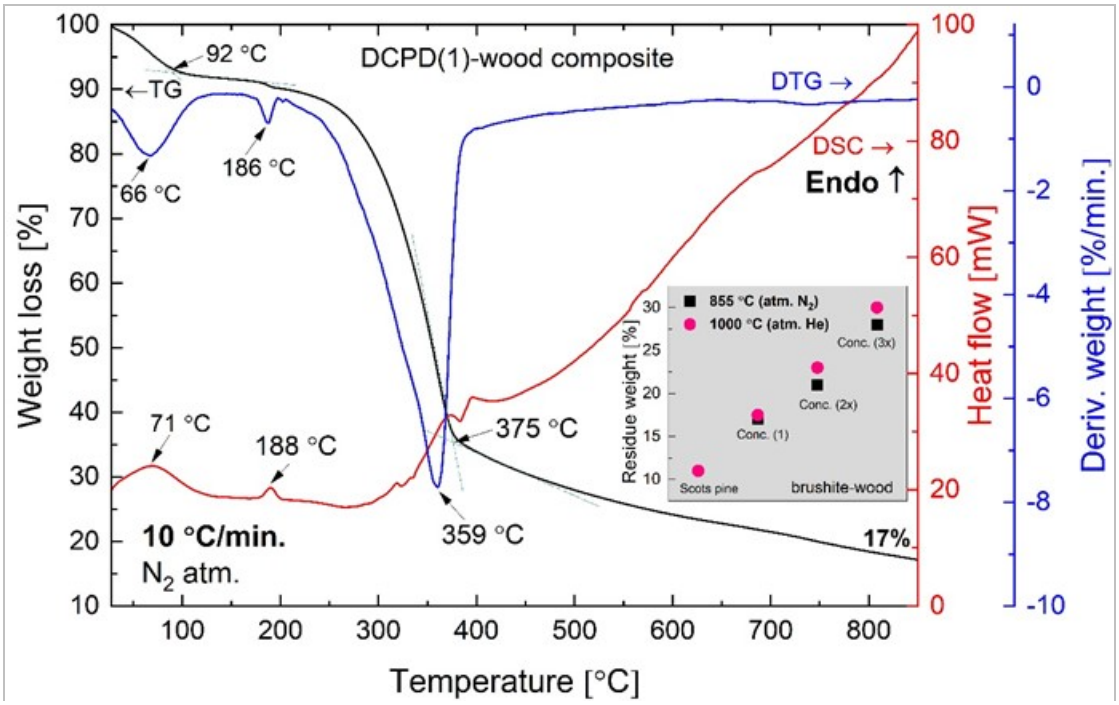


Fig. S5. TG/DTG and DSC curves of the DCDP(1)-wood composite (inset shows residue weight % for the samples after burn when TG analysis was performed in either N_2 atmosphere (10°C/min) or He atmosphere (5°C/min)).

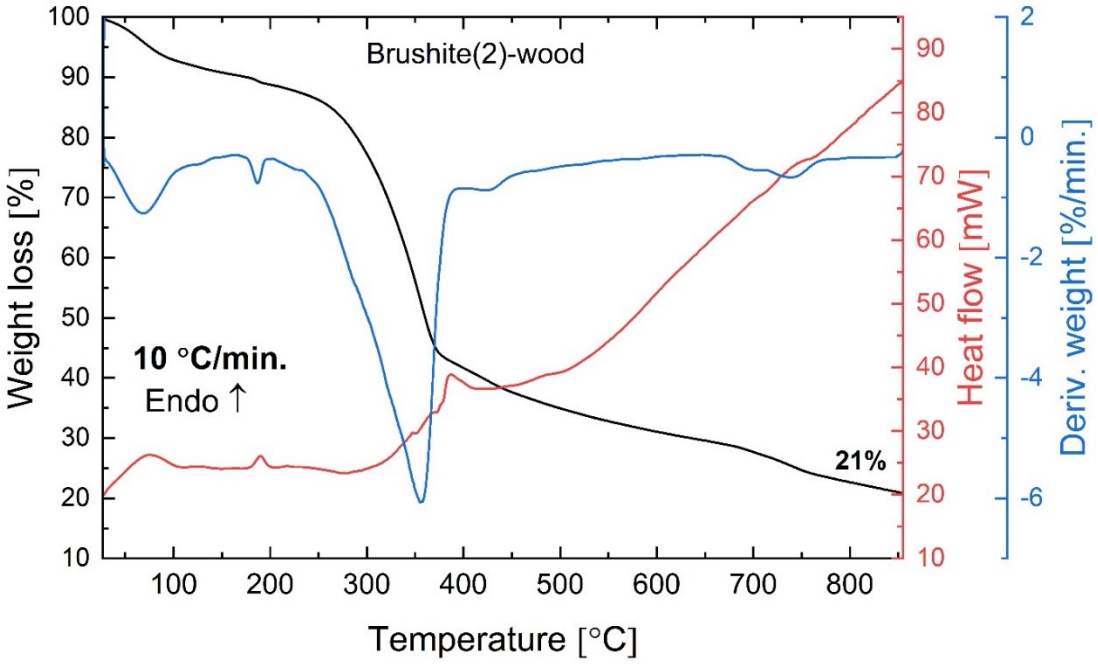


Fig. S6. TG/DTG and DSC curves of the DCDP(2)-mineralised wood (specimen taken from the middle of the block of (1×1×1) cm^3 size.

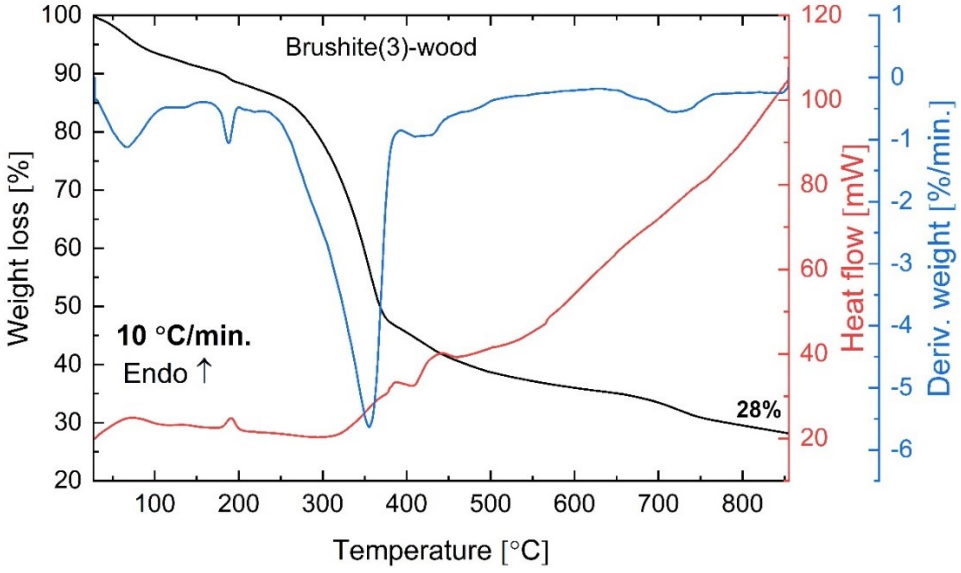


Fig. S7. TG/DTG and DSC curves of the DCDP(3)-mineralised wood (specimen taken from the middle of the block of 1×1×1 cm size).

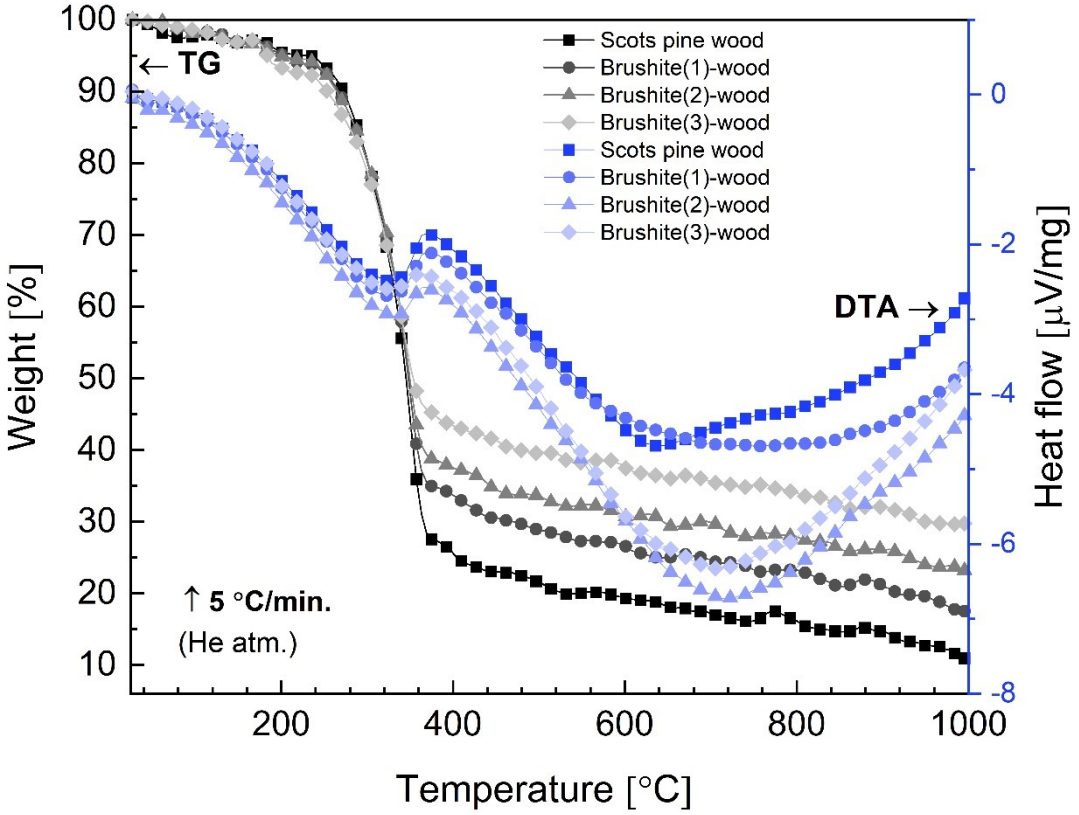


Fig. S8. TG and DTA of the brushite-mineralised Scots pine sapwood (He atm., flow rate 55 mL min^{-1}, Exo=down).