

Supporting Information

Surface modification of PHBV fibrous scaffold via lithium borohydride reduction

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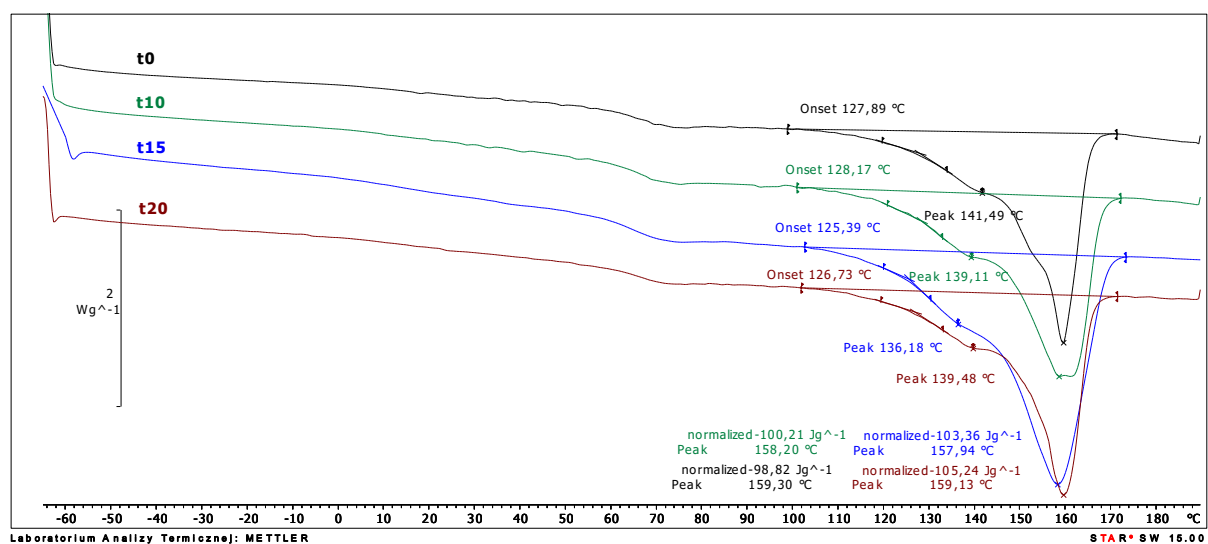


Figure S1. DSC first heating thermograms of the untreated and LiBH₄-treated PHBV fibrous mats.

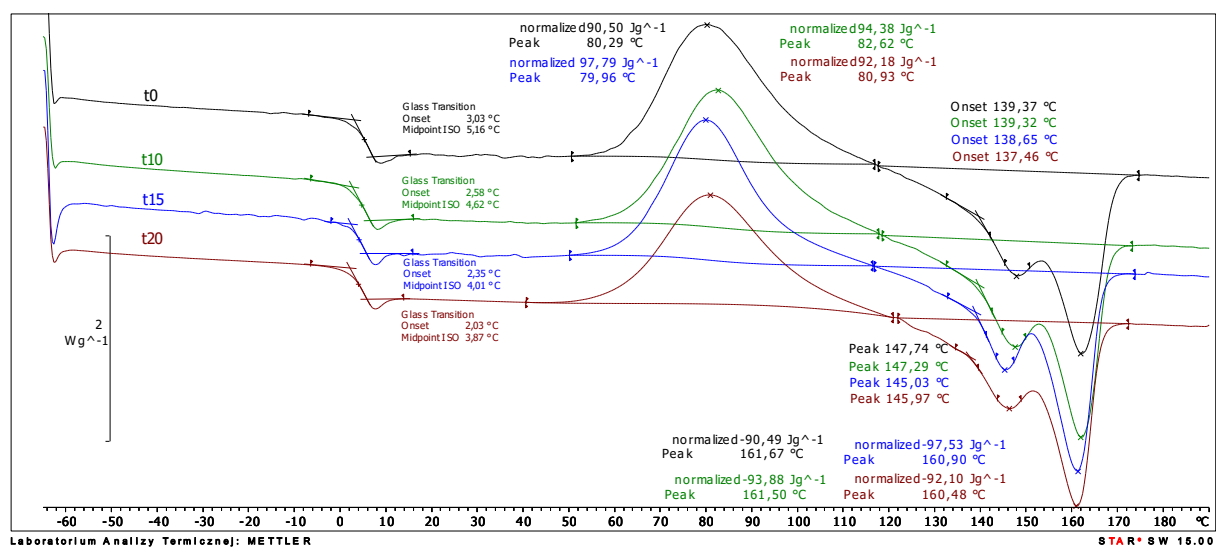


Figure S2. DSC second heating thermograms of the untreated and LiBH₄-treated PHBV fibrous mats.

Table S1. Thermal properties of the untreated and LiBH₄-treated PHBV polymer as determined from the second DSC heating thermograms

Sample	2 nd Heating ^a				
	T_g [°C]	T_{m1} [°C]	T_{m2} [°C]	ΔH_m [J/g]	χ_c^b [%]
PHBV0	5.2	147.7	161.7	89.8	70.2
PHBV10	4.6	147.3	161.5	93.3	72.9
PHBV15	4.0	145.0	160.9	97.2	75.9
PHBV20	3.7	146.0	160.5	93.8	73.3

^a The heating rate was 20°C/min in the temperature range from –65 to 190°C; ^b ΔH_{m100} = 128.0 J/g

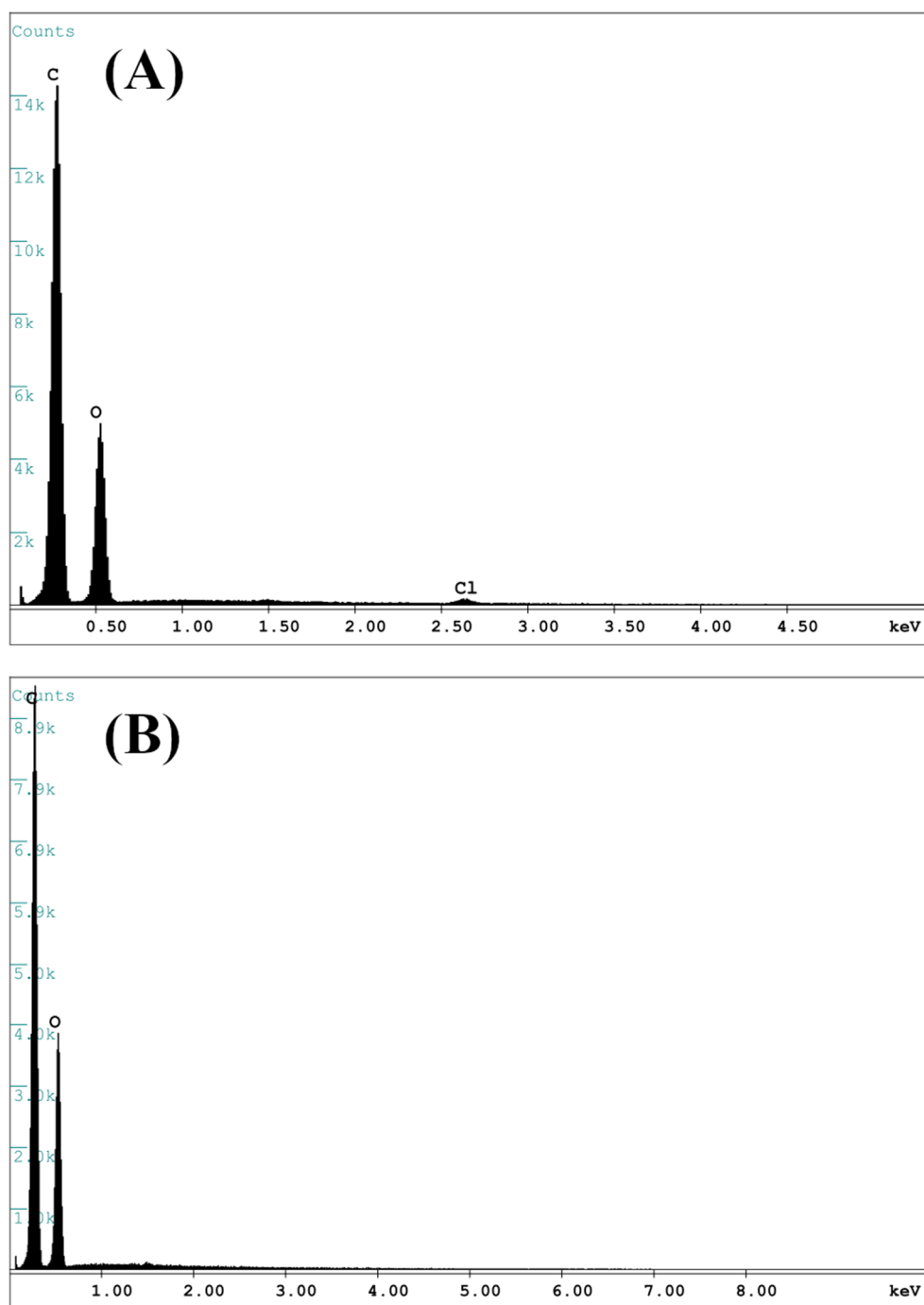


Figure S3. Representative EDS spectra obtained by X-ray microanalysis of (A) PHBV15 mat before washing it with ethanol and (B) PHBV15 mat after ethanol washing. Please note that ethanol washing effectively removes LiCl from the material surface.

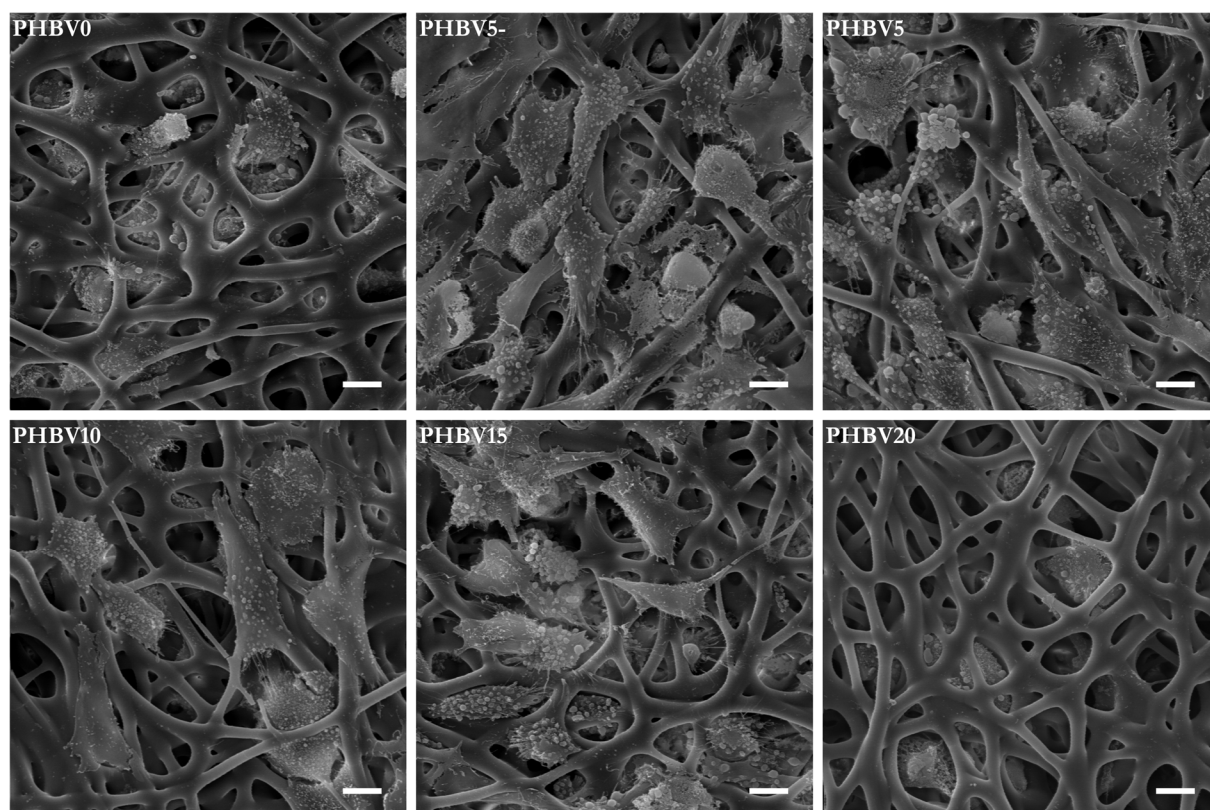


Figure S4. SEM images of SaOS-2 cells cultured for 7 days on the different modified PHBV fibers (scale bars are all 10 μm).