

Table S2. Physical characterization of pretreated substrates.

Pretreated substrates	Accessibility (SS ^c)	CrI ^a (XRD ^d)	Gross fiber characteristics		DPw ^b (GPC ^g)
			AL ^e (mm)	AW ^f (μm)	
SPCS	36	60%	0.45	19.4	1596
SPP	35	62%	0.30	21.2	1154
SPLP	24	47%	0.45	28.6	892
OPCS	53	67%	0.53	18.9	1768
OPP	44	64%	0.46	22.4	1591
OPLP	33	57%	1.81	32.4	1563

^aCrI: cellulose crystallinity; ^bDPw: Cellulose degree of polymerization; ^cSS: Simons' staining; ^dXRD: X-ray diffraction; ^eAverage length; ^fAverage width; ^gGPC: gel permeation chromatography;

SP/OP- CS, P, and LP: Steam and organosolv pretreated corn stover, poplar and lodgepole pine.