Crystallinity of regenerated cellulose from [Bmim]Cl dependent on the hydrogen bond acidity/basicity of anti-solvents

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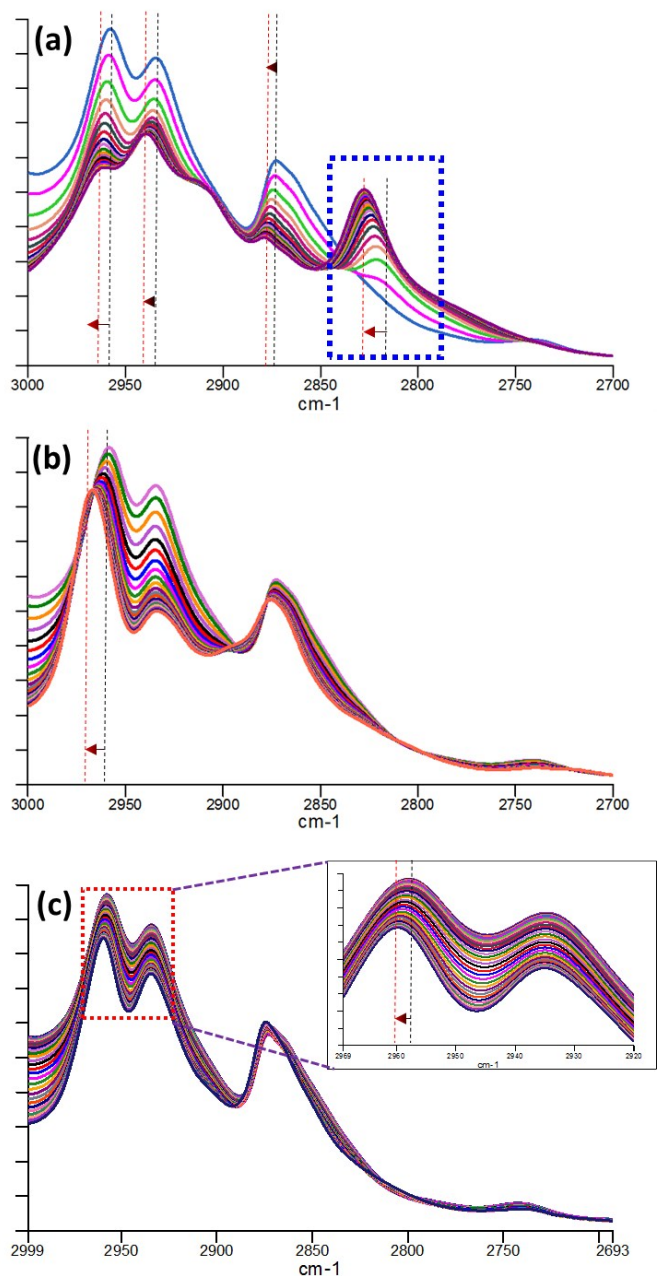
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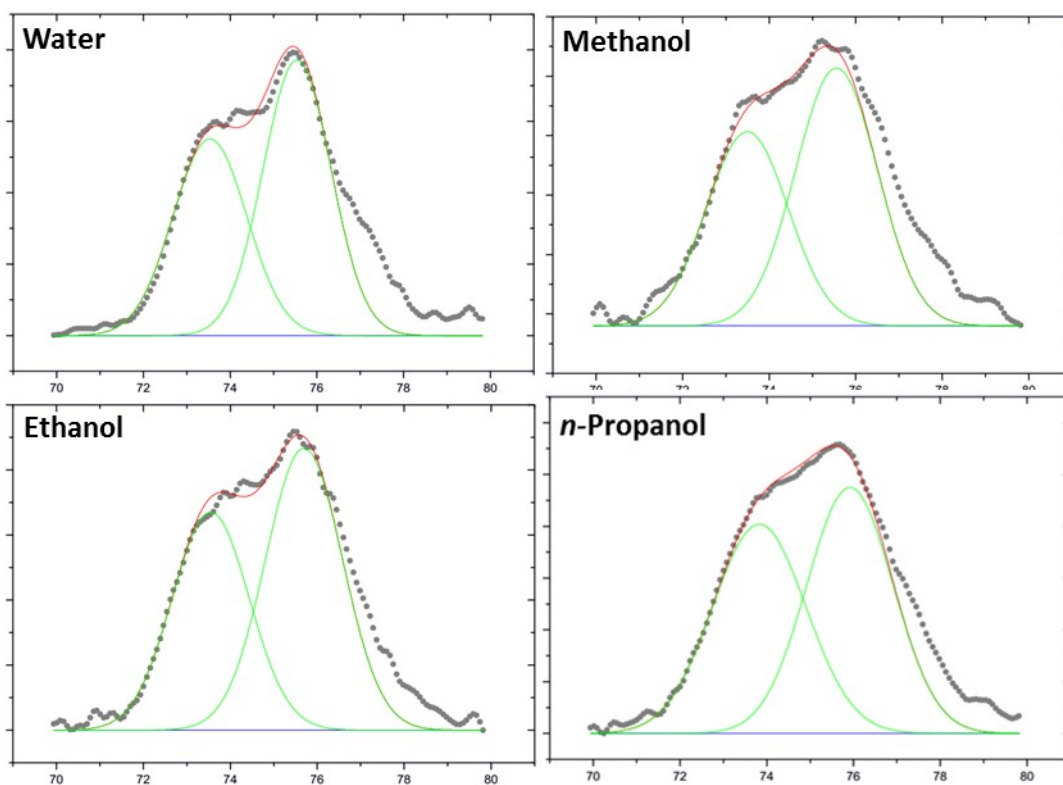* E-mail: zhouqun@mail.tsinghua.edu.cn

This file includes:

1. **Fig. S1**

2. **Fig. S2**

3. **Table S1**

Fig. S1 Blue shift of peaks assigned to alkyl C-H stretching of IL and AS: (a) methanol, (b) ethanol and (c) *n*-propanol. Peak enclosed by blue dash frame is characteristic for methanol. IL peaks overlap peaks of ethanol and propanol. The inset in (c) was enlarged diagram of spectra.

Fig. S2 ^{13}C NMR spectra peak fitting of regenerated by different anti-solvents to measure the regularity of regenerated cellulose by relative peak height (RPH)

Table S1. Diffusion coefficients and cellulose regularity calculated by different methods

Anti-solvent	Diffusion coefficient (10^{-6} cm^2/s)	Cellulose regularity	
		FWHM of XRD	RPH of NMR
Water	27.39±1.68	24.96	0.7124
Methanol	10.5±1.51	10.62	0.7283
Ethanol	3.32±0.82	6.32	0.7742
n-Propanol	2.03±0.47	6.23	0.8523