

## Appendix Captions

**Fig.A.1** FT-IR spectra of PVC under different thermal pretreatment time (a-0d, b-1d, c-3d, d-5d, e-7d, f-8d, g-9d, h-10d)

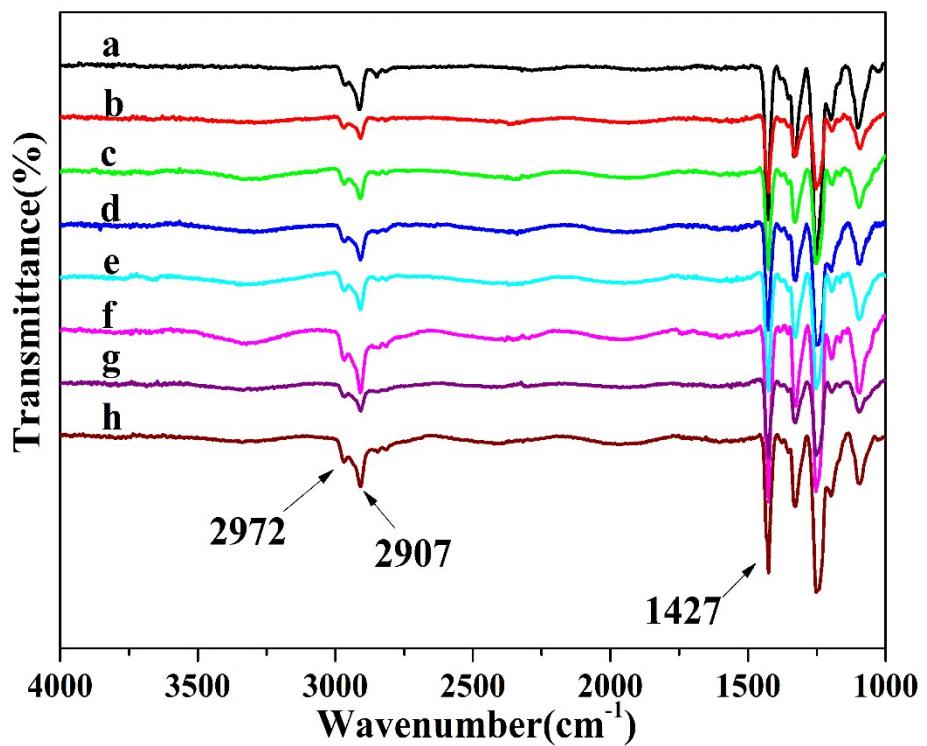
**Fig.A.2** FT-IR spectra of PVC under different alkali treatment time (a-0h, b-1h, c-3h, d-5h, e-8h, f-10h, g-12h, h-13.5h)

**Table A.1** Number-Average and Weight-Average Molecular Weights and Polydispersities of PVC pretreated via the thermal and alkali method as a function of time

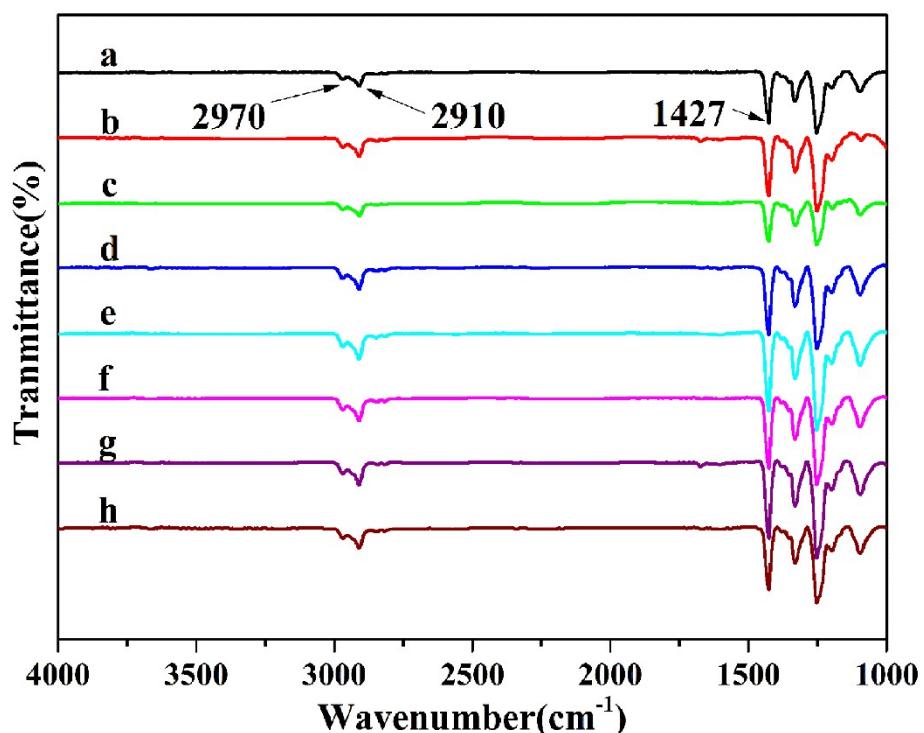
**Table A.1**

Number-Average and Weight-Average Molecular Weights and Polydispersities of PVC pretreated via the thermal and alkali method as a function of time

Thermal pretreatment time (d)	Mn (g/mol)	Mw (g/mol)	PDI	Alkali pretreatment time (h)	Mn (g/mol)	Mw (g/mol)	PDI
<i>a</i> -0d	69238	110854	1.601	<i>a</i> -0h	69238	110854	1.601
<i>b</i> -1d	69415	100356	1.446	<i>b</i> -1h	76770	110268	1.436
<i>c</i> -3d	69530	100695	1.448	<i>c</i> -3h	70249	112299	1.598
<i>d</i> -5d	65454	98297	1.502	<i>d</i> -5h	70347	112129	1.594
<i>e</i> -7d	68632	104514	1.523	<i>e</i> -8h	77470	115814	1.495
<i>f</i> -8d	68456	103277	1.509	<i>f</i> -10h	70932	111942	1.578
<i>g</i> -9d	68219	102908	1.508	<i>g</i> -12h	74123	112964	1.524
<i>h</i> -10d	66998	102521	1.53	<i>h</i> -13.5h	70362	110692	1.573



**Fig.A.1** FT-IR spectra of PVC under different thermal pretreatment time (a-0d, b-1d, c-3d, d-5d, e-7d, f-8d, g-9d, h-10d)



**Fig.A.2** FT-IR spectra of PVC under different alkali treatment time (a-0h, b-1h, c-3h, d-5h, e-8h, f-10h, g-12h, h-13.5h)