Supplementary information

Table S1 Chemical shifts of ^{1}H NMR spectra for twenty kinds of ILs

Ionic liquids[a]	^{1}H NMR spectra (δ, ×10^{-6})[b]								
	2-H	3-H	4-H	5-H	6-H	7-H	8-H	9-H	10-H
[Emim][Br]	10.05 (1H, s)	_	7.58 (1H, s)	7.69 (1H, s)	2.98 (3H, s)	4.34 (2H, q)	1.51 (3H, t)		
[Emim][BF$_4$]	10.12 (1H, s)	_	7.41 (1H, d)	7.54 (1H, d)	4.07 (3H, s)	4.30 (2H, q)	1.47 (3H, t)		
[Amim][Cl]	9.89 (1H, s)	_	7.51 (1H, s)	7.68 (1H, s)	4.08 (3H, s)	4.33 (2H, q)	1.91 (2H, t)	0.96 (3H, t)	
[Amim][BF$_4$]	9.25 (1H, s)	_	7.41 (1H, d)	7.34 (1H, d)	3.86 (3H, m)	4.96 (2H, d)	6.07 (1H ,m)	5.45 (1H, m)	
[Pmim][Br]	10.03 (1H, s)	_	7.65 (1H, s)	7.69 (1H, s)	3.68 (3H, s)	4.32 (2H, q)	1.91 (2H, t)	0.96 (3H, t)	
[Pmim][BF$_4$]	10.15 (1H, s)	_	7.42 (1H, s)	7.58 (1H, s)	4.07 (3H, s)	4.29 (2H, t)	1.95 (2H, m)	0.98 (3H, t)	

[Bmim][Br]	10.06	_	7.61	7.72	3.02	4.35	1.91	1.38	0.96
	(1H, s)		(1H, d)	(1H, s)	(3H, s)	(2H, t)	(2H, m)	(2H, q)	(3H, t)
[Bmim][Cl]	10.17	_	7.51	7.66	4.11	4.35	1.87	1.38	0.95
	(1H, s)		(1H, d)	(1H, s)	(3H, s)	(2H, t)	(2H, m)	(2H, q)	(3H, t)
[Bmim][BF_4]	10.09	_	7.43	7.59	4.07	4.32	1.89	1.36	0.96
	(1H, s)		(1H, d)	(1H, s)	(3H, s)	(2H ,t)	(2H, m)	(2H, q)	(3H, t)
[Bmim][HSO_4]	10.12	_	7.38	7.54	4.13	4.34	1.93	1.31	0.92
	(1H, s)		(1H, d)	(1H, s)	(3H, s)	(2H ,t)	(2H, m)	(2H, q)	(3H, t)
[Bmim][OTM]	10.02	_	7.44	7.48	4.14	4.27	1.87	1.22	0.91
	(1H, s)		(1H, d)	(1H, s)	(3H, s)	(2H ,t)	(2H, m)	(2H, t)	(3H, t)
[Bmim][PTSA]	10.16	_	7.44	7.56	4.08	4.29	1.86	1.33	0.93
	(1H, s)		(1H, d)	(1H, s)	(3H, s)	(2H ,t)	(2H, m)	(2H, q)	(3H, t)
[Hmim][Br]	9.92	_	7.73	7.67	3.04	4.31	1.88	1.34	0.92
	(1H, s)		(1H, d)	(1H, d)	(3H, d)	(2H ,t)	(2H ,m)	(2H ,m)	(2H ,m)
[Hmim][BF_4]	9.94	_	7.54	7.71	4.11	4.34	2.02	1.34	1.31
	(1H, s)		(1H, d)	(1H, d)	(3H ,d)	(2H ,t)	(2H ,m)	(2H ,m)	(2H ,m)

[Omim][Br]	10.14 (1H, s)	_	7.77 (1H, s)	7.69 (1H, s)	3.08 (3H, m)	4.37 (2H, m)	1.78 (2H, m)	1.28 (2H, m)	0.93 (2H, m)
[Omim][BF_4]	10.17 (1H, s)	_	7.55 (1H, s)	7.72 (1H, s)	4.15 (3H, m)	4.36 (2H, m)	1.93 (2H, m)	1.27 (2H, m)	1.25 (2H, m)
[Demim][Br]	10.24 (1H, s)	_	7.65 (1H, d)	7.52 (1H, d)	3.04 (3H, s)	4.32 (2H, t)	1.72 (2H, m)	1.26 (2H, m)	0.94 (2H, m)
[Demim][BF_4]	10.27 (1H, s)	_	7.43 (1H, d)	7.59 (1H, d)	4.11 (3H, s)	4.33 (2H, t)	1.87 (2H, m)	1.27 (2H, m)	1.25 (2H, m)
[Bpy][Br]	9.51 (1H, d)	8.14 (1H, d)	8.72 (1H, m)	8.14 (1H, d)	9.47 (1H, d)	4.52 (2H, t)	2.01 (2H, m)	1.45 (2H, m)	0.84 (3H, t)
[Bpy][BF_4]	9.54 (1H, d)	8.21 (1H, d)	8.56 (1H, m)	8.21 (1H, d)	9.52 (1H, d)	4.51 (2H, t)	2.04 (2H, m)	1.44 (2H, m)	0.94 (3H, t)

	11-H	**12-H**	**13-H**	**14-H**	**15-H**	**16-H**
[Hmim][Br]	1.84 (2H, m)	0.82 (3H, t)				
[Hmim][BF_4]	1.92	0.89				

	(2H, m)	(3H, t)				
[Omim][Br]	1.18 (2H, m)	1.18 (2H, m)	1.29 (2H, m)	0.86 (3H, t)		
[Omim][BF_4]	1.28 (2H, m)	1.28 (2H, m)	1.35 (2H, m)	0.87 (3H, t)		
[Demim][Br]	1.18 (2H, m)	1.15 (2H, m)	1.27 (2H, m)	1.26 (2H, m)	1.38 (2H, m)	0.83 (3H, t)
[Demim][BF_4]	1.26 (2H, m)	1.26 (2H, m)	1.34 (2H, m)	1.24 (2H, m)	1.35 (2H, m)	0.87 (3H, t)

[a] Twenty kinds of ILs were all dissolved in $CDCl_3$ and recorded on Varian-INOVA 400 NMR spectrometry.

[b] ^1H NMR chemical shifts were recorded at 100MHz and reported downfield from trimethylsilane (TMS). Multiplicities are abbreviated as s=singlet, d=doublet, q=quartet, t=triplet and m=multiplet.

Table S2 Chemical shifts of ^{13}C NMR spectra for twenty kinds of ILs

Ionic liquids[a]	^{13}C NMR spectra (δ, $\times10^{-6}$)[b]														
	2-C	3-C	4-C	5-C	6-C	7-C	8-C	9-C	10-C	11-C	12-C	13-C	14-C	15-C	16-C
[Emim][Br]	137.13	-	121.86	123.57	36.54	48.35	13.43								
[Emim][BF_4]	137.12	-	121.88	123.54	36.47	48.33	13.42								
[Amim][Cl]	138.07	-	121.96	123.64	36.74	53.11	133.11	115.54							
[Amim][BF_4]	138.06	-	121.97	123.62	36.66	53.13	133.09	115.51							
[Pmim][Br]	137.19	-	121.85	123.57	36.68	49.72	21.01	13.49							
[Pmim][BF_4]	137.14	-	121.87	123.56	36.64	49.68	21.01	13.46							
[Bmim][Br]	137.05	-	121.93	123.57	36.63	49.69	32.00	19.30	13.32						
[Bmim][Cl]	137.28	-	121.79	123.53	36.34	49.47	31.91	19.20	13.23						
[Bmim][BF_4]	137.02	-	121.95	123.56	36.56	49.67	31.98	19.28	13.29						
[Bmim][HSO_4]	137.12	-	121.77	123.44	36.52	49.56	31.93	19.23	13.24						
[Bmim][OTM]	137.22	-	121.85	123.56	36.60	49.68	32.00	19.30	13.33						
[Bmim][PTSA]	137.16	-	121.90	123.54	36.58	49.68	32.01	19.31	13.34						
[Hmim][Br]	136.55	-	121.75	123.58	36.47	49.72	29.88	25.51	30.73	22.01	13.59				

[Hmim][BF_4]	136.52	-	121.79	123.57	36.38	49.68	29.86	25.47	30.71	22.00	13.58				
[Omim][Br]	136.79	-	121.78	123.59	36.49	49.80	29.99	25.91	28.69	28.61	31.33	22.22	13.74		
[Omim][BF_4]	136.77	-	121.80	123.56	36.40	49.78	29.97	25.88	28.67	28.60	31.32	22.24	13.73		
[Demim][Br]	137.33	-	121.74	123.58	36.72	50.09	30.22	26.17	30.23	29.12	29.34	28.88	37.68	22.54	13.98
[Demim][BF_4]	137.30	-	121.78	123.55	36.64	50.06	30.17	26.13	30.17	29.10	29.32	28.85	31.71	22.51	13.97
[Bpy][Br]	145.17	128.41	145.01	128.44	145.22	61.68	33.71	19.22	13.44						
[Bpy][BF_4]	145.14	128.43	145.03	128.41	145.14	61.65	33.67	19.18	13.40						

[a] Twenty kinds of ILs were all dissolved in $CDCl_3$ and recorded on Varian-INOVA 400 NMR spectrometry.

[b] ^{13}C NMR chemical shifts were recorded at 400MHz and reported downfield from trimethylsilane (TMS)

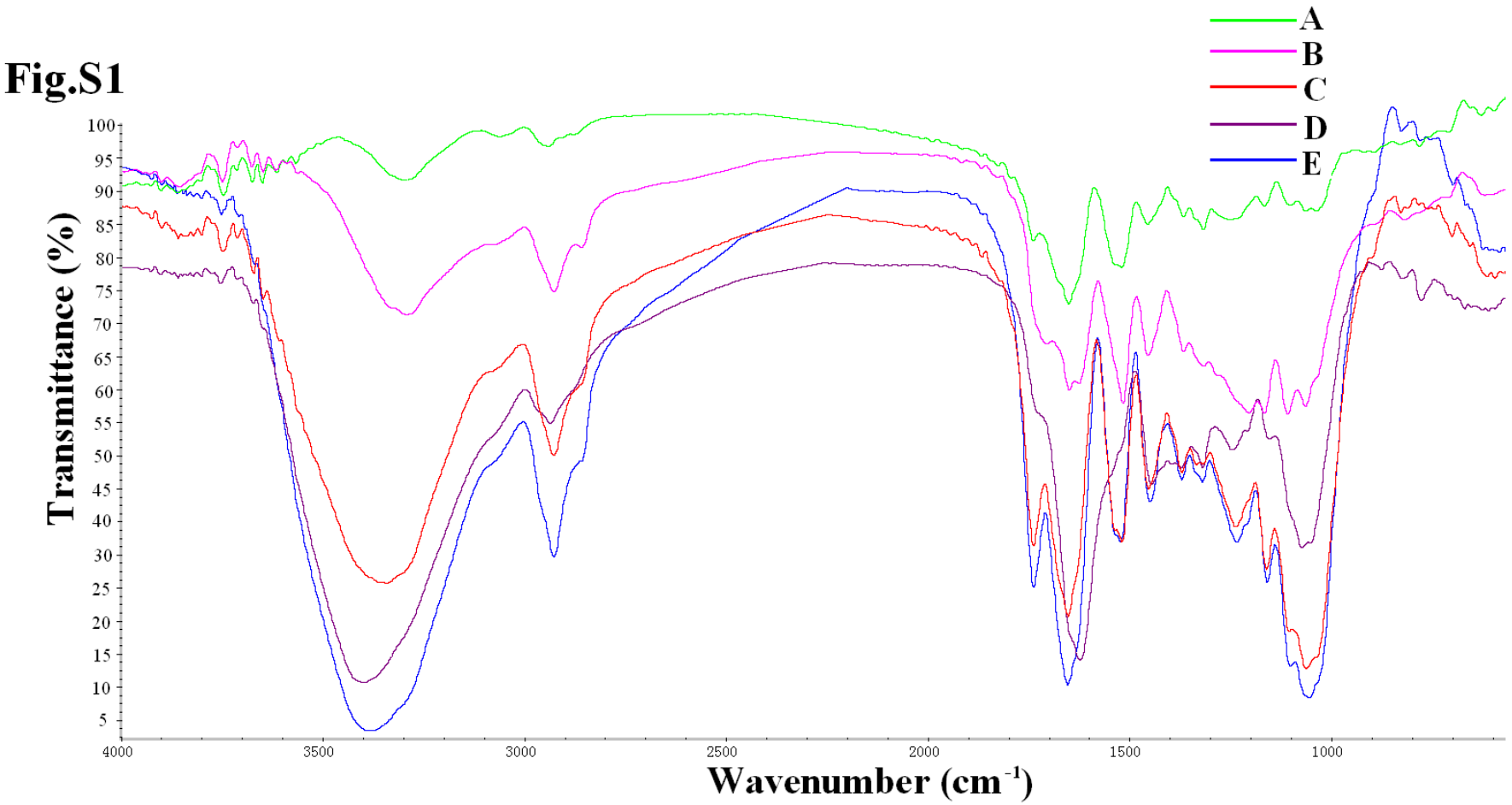

Fig. S1. FT-IR spectra of *Toona sinensis* samples before and after different extraction techniques. The FT-IR spectrograms of: (A) untreated, (B) after ME for 24 h, (C) after HE for 4 h, (D) after UAE for 2 h, (E) after MAE for 20 min.

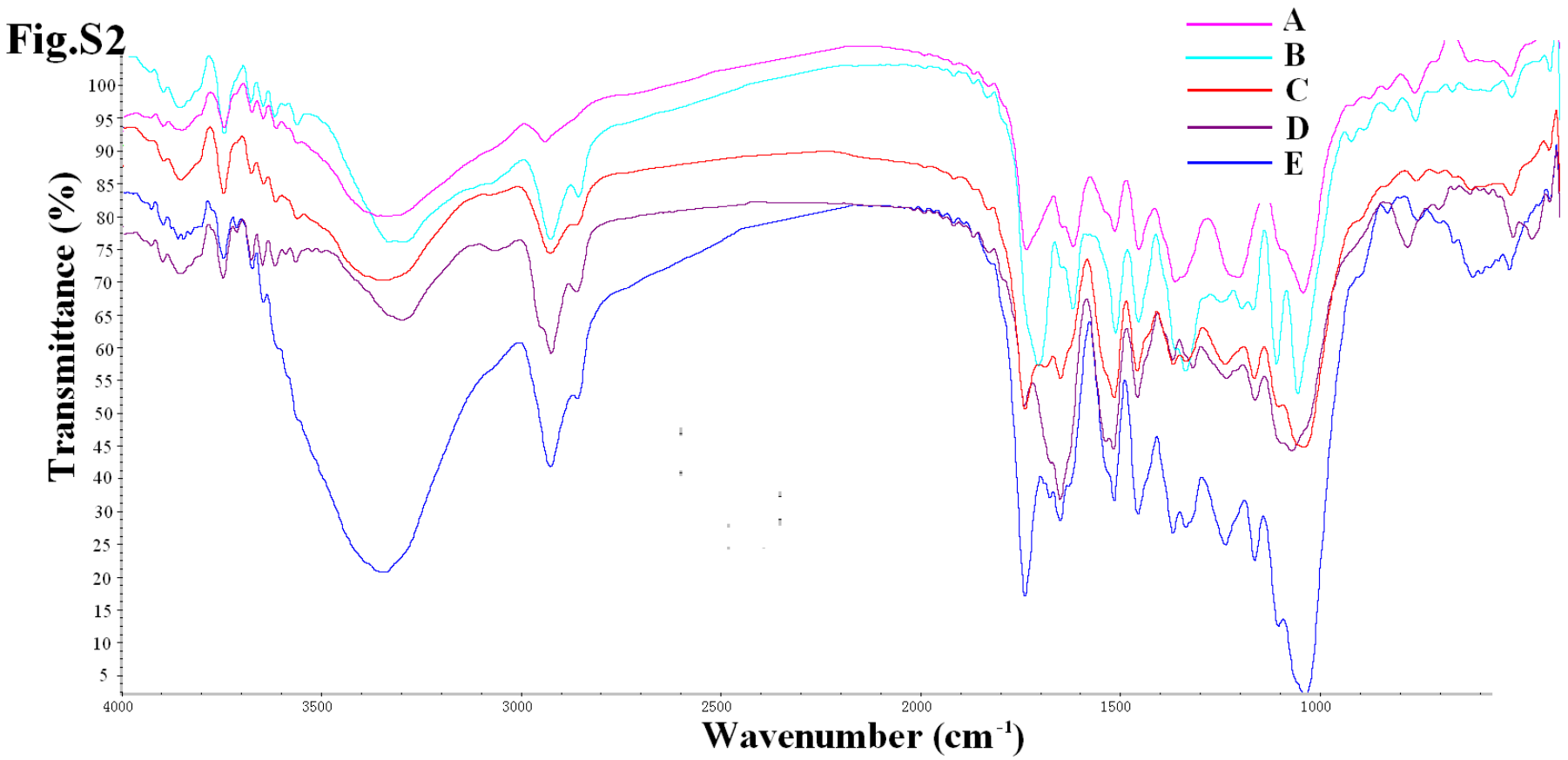

Fig. S2. FT-IR spectra of *Rosa chinensis* samples before and after different extraction techniques. The FT-IR spectrograms of: (A) untreated, (B) after ME for 24 h, (C) after HE for 4 h, (D) after UAE for 2 h, (E) after MAE for 20 min.

Fig. S3

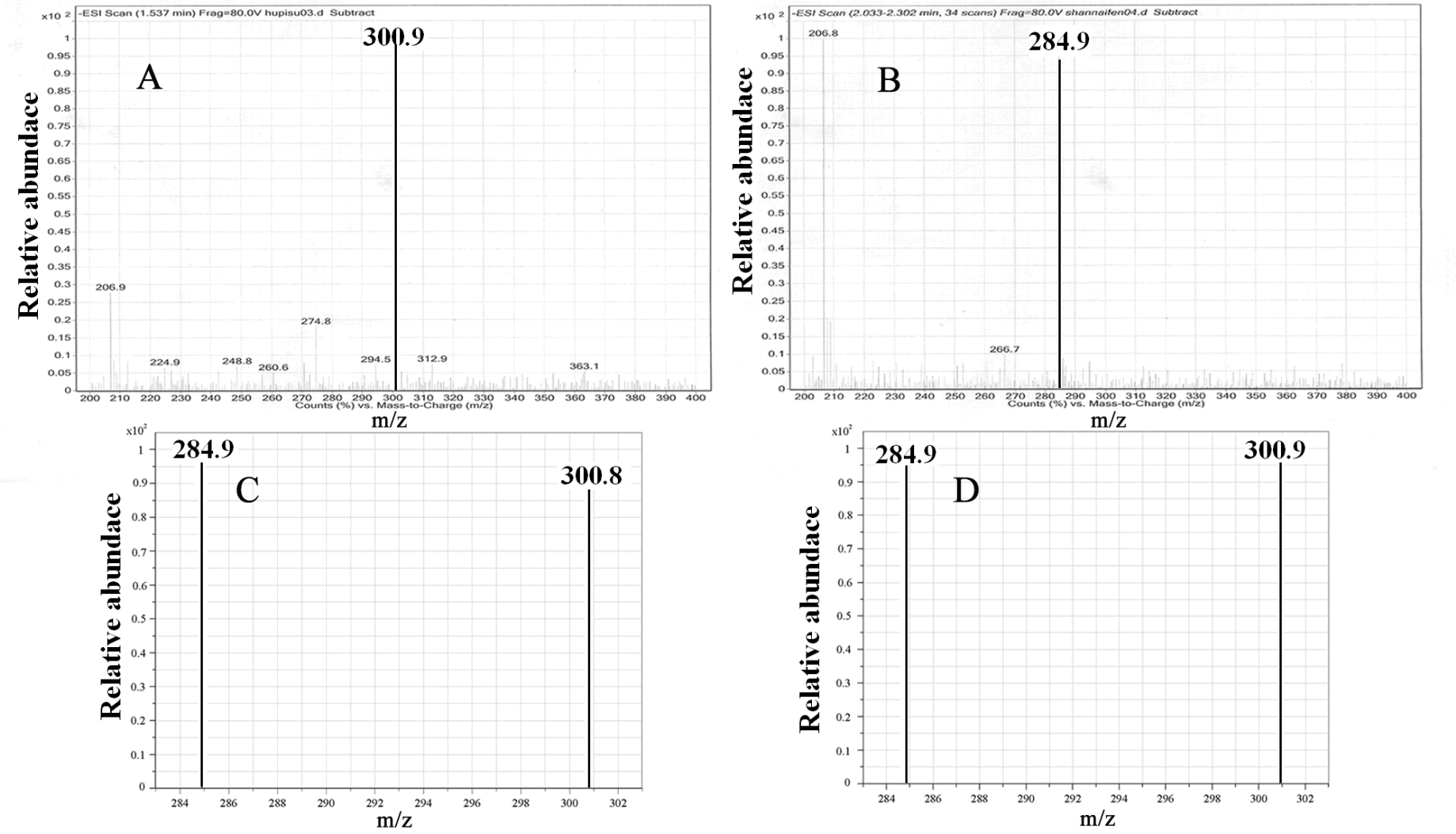

Fig. S3. Negative ion mass spectrums of quercetin standard solution (A), kaempferol standard solution (B), extracted T*oona sinensis* sample (C) and extracted *Rosa chinensis* sample (D), respectively.