Chemical characteristics and source apportionment of PM$_{2.5}$ during winter in south Urumqi, China

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Table captions

TableS1 Descriptive statistics of 17 PAHs analyzed and total PAHs (ng m^{-3})

Figure captions

Fig.S1. Scatter plots of Ca^{2+} *vs* Mg^{2+}

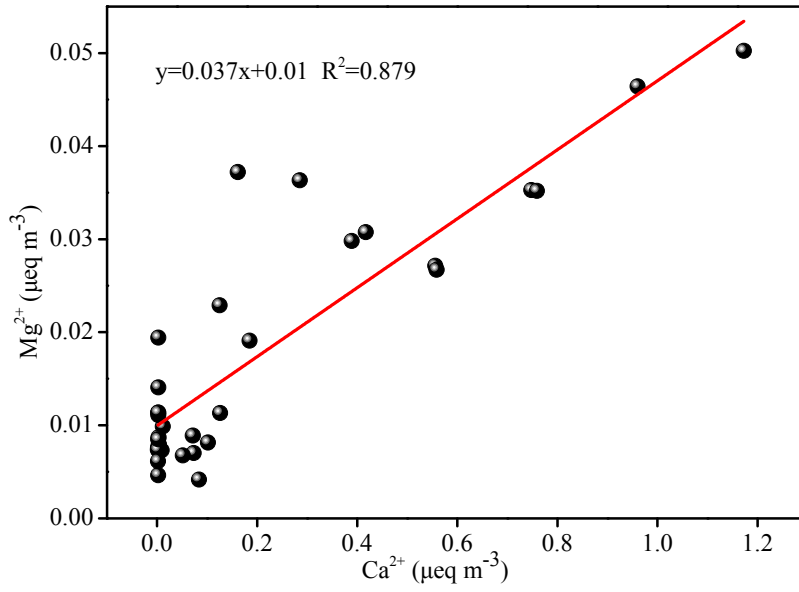**Fig.S2.** Scatter plots of K^+ *vs* SO_4^{2-}

Fig.S3. Enrichment factors of elements in $PM_{2.5}$ in Urumqi

Fig.S4. Scatter plots between OC and EC in winter in Urumqi
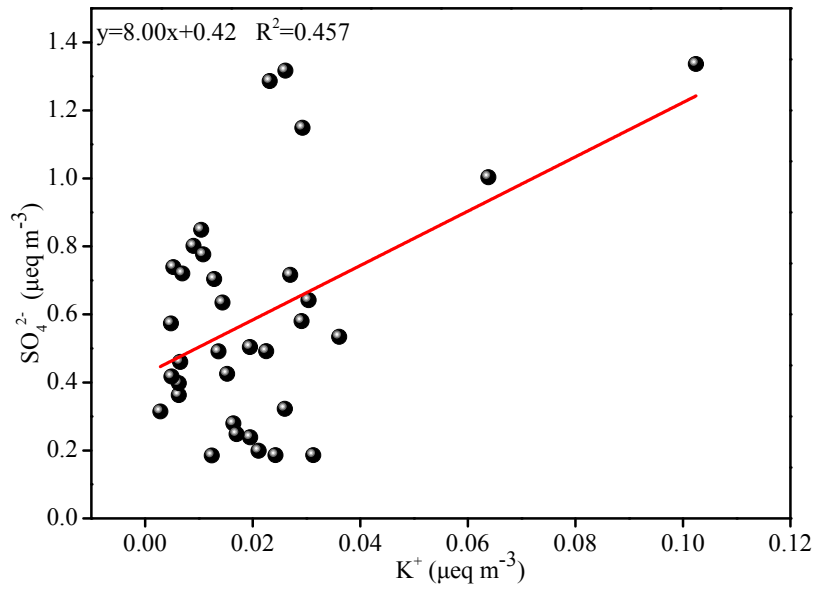
Fig.S5. The scatter plot for the Flu/(Flu+Pyr) *vs* IcdP/(BghiP+IcdP) and BaA/(Chr+BaA) *vs* IcdP/(BghiP+IcdP) during sampling period

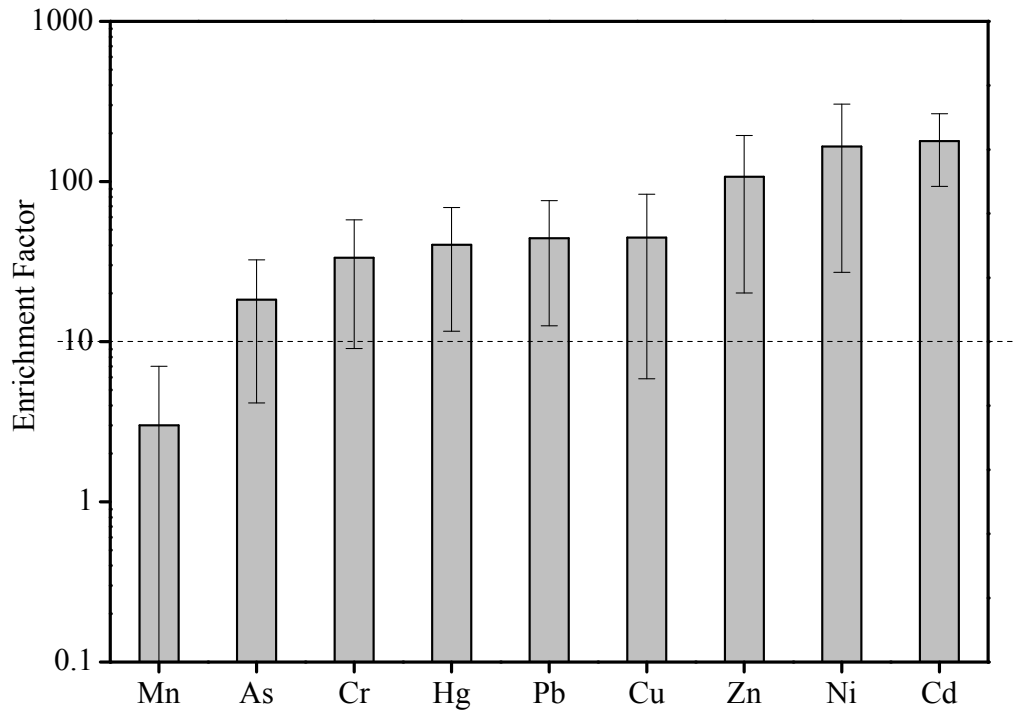<div align="center">TableS1 Descriptive statistics of 17 PAHs analyzed and total PAHs (ng m^{-3})</div>

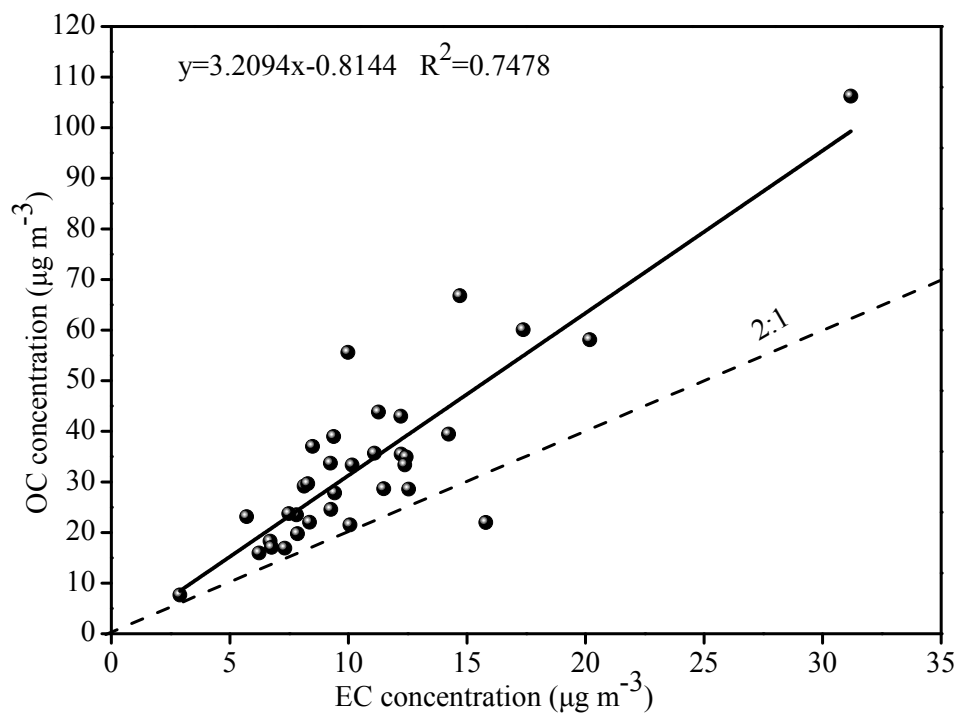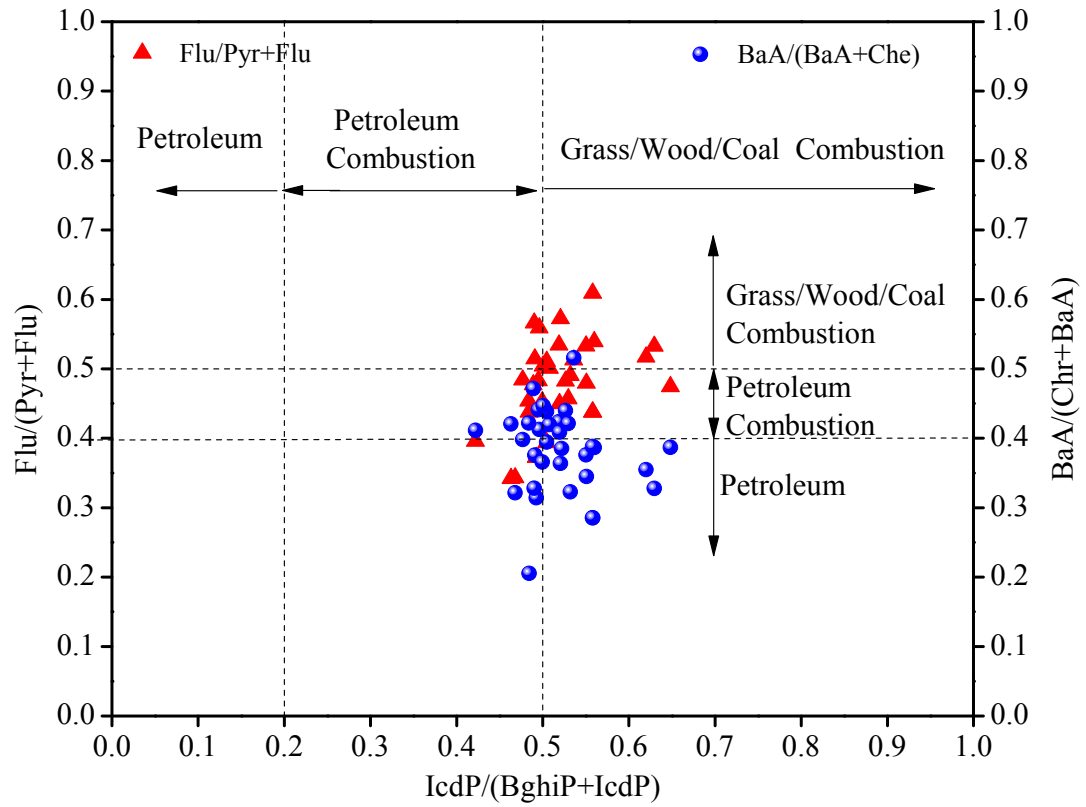| Species	Rings	Mean	SD	Median	Min	Max	TEF
Nap	2	29.02	16.64	28.48	6.10	69.32	0.001
Ace	3	22.88	21.03	16.65	2.81	91.81	0.001
Acy	3	15.30	6.24	15.51	5.07	28.72	0.001
Fl	3	21.33	21.31	17.19	3.32	130.58	0.001
Phe	3	50.14	19.65	48.68	7.12	87.55	0.010
Ant	3	10.33	20.90	10.33	1.47	86.54	0.001
Flu	4	67.78	22.66	73.64	12.72	94.84	0.001
Pyr	4	72.55	22.45	73.10	16.33	112.61	0.010
BaA	4	50.28	14.40	51.68	10.58	77.92	0.060
Chr	4	79.59	18.82	82.14	26.50	106.26	0.100
BbF	5	81.17	17.23	87.22	30.34	100.31	0.100
BkF	5	73.66	17.26	78.77	21.50	88.94	0.100
BaP	5	6.15	4.30	5.68	0.40	16.67	1.00
IcdP	6	77.58	15.58	83.00	26.41	90.61	0.100
DahA	5	41.95	26.59	43.07	3.75	92.12	1.00
BghiP	6	72.74	19.04	78.56	20.92	90.76	0.010
Cor	7	57.35	26.64	67.96	5.54	89.26	0.001
Total PAHs		829.81	185.30	854.37	200.87	1138.35	
BaPeq		66.16	20.73	70.43	13.71	99.26	

Fig.S1. Scatter plots of Ca^{2+} *vs* Mg^{2+}

Fig.S2. Scatter plots of K^+ *vs* SO_4^{2-}

Fig.S3. Enrichment factors of elements in $PM_{2.5}$ in Urumqi

$y=3.2094x-0.8144 \quad R^2=0.7478$

Fig.S4. Scatter plots between OC and EC in winter in Urumqi

Fig.S5. The scatter plot for the Flu/(Flu+Pyr) *vs* IcdP/(BghiP+IcdP) and BaA/(Chr+BaA) *vs* IcdP/(BghiP+IcdP) during sampling period