

**PM_{2.5}-bound polycyclic aromatic hydrocarbons (PAHs),
oxygenated-PAHs and phthalate esters (PAEs) inside and outside
Middle School Classrooms in Xi'an, China: Concentration,
characteristics and health risk assessment**

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Table S1. The sig data for independent-sample t-test among PM mass and PAHs levels in outdoor (O) and indoor classrooms (IA/IB) in this study.

	O VS IA	O VS IB	IA VS IB
PM	0.066	0.299	0.319
PAHs	0.728	0.87	0.895
OPAHs	0.209	0.125	0.009
PAEs	0.105	0.058	0.681

Table S2. The sig data for independent-sample t-test among each PAHs, OPAHs, and PAEs congener in outdoor (O) and indoor classrooms (IA/IB) in this study.

	O VS IA	O VS IB	IA VS IB
ACE	0.906	0.895	0.767
FLO	0.959	0.786	0.744
PHE	0.584	0.599	0.986
ANT	0.976	0.568	0.617
FLU	0.783	0.612	0.776
PYR	0.709	0.639	0.863
BaA	0.818	0.798	0.952
CHR	0.797	0.707	0.867
BbF	0.615	0.771	0.894
BkF	0.638	0.887	0.807
BaF	0.548	0.726	0.902
BeP	0.659	0.834	0.879
BaP	0.651	0.750	0.957
PER	0.889	0.930	0.834
IcdP	0.621	0.974	0.702
BghiP	0.613	0.979	0.695
DahA	0.836	0.868	0.722
COR	0.670	0.845	0.584
DaeP	0.989	0.777	0.786
9FLO	0.975	0.357	0.268
ANTQ	0.099	0.105	0.008
BaAQ	0.570	0.794	0.458
DMP	0.288	0.902	0.220
DEP	0.002	0.005	0.027
DBP	0	0	0.011
BBZP	0.754	0.561	0.783
DEHP	0.389	0.338	0.863
DNOP	0.724	0.606	0.864
DEHA	0.904	0.917	0.846

Table S3. Diagnostic ratios of PAHs obtained in this study and values from reported papers.

	IcdP/(IcdP+BghiP)	Flu/(Flu+PYR)	ANT/(ANT+PHE)	BaA/(BaA+CHR)	BaP/BghiP
Outdoor	0.49-0.52 (0.50±0.01) ^a	0.50-0.54 (0.52±0.01)	0.22-0.33 (0.29±0.03)	0.32-0.48 (0.42±0.05)	0.56-0.81 (0.68±0.08)
Indoor A	0.49-0.52 (0.51±0.01)	0.51-0.54 (0.53±0.01)	0.22-0.33 (0.28±0.04)	0.33-0.47 (0.42±0.05)	0.58-0.83 (0.69±0.07)
Indoor B	0.49-0.52 (0.50±0.01)	0.51-0.54 (0.43±0.04)	0.23-0.35 (0.29±0.04)	0.34-0.47 (0.43±0.04)	0.58-0.75 (0.65±0.06)
Petrogenic	< 0.2	< 0.4 ^b	< 0.1 ^c	< 0.2	
Pyrogenic			> 0.1 ^c		
Fossil fuel combustion	0.2-0.5	0.4-0.5		> 0.35	> 0.6 ^d
Grass, wood, coal combustion	> 0.5	> 0.5		0.2-0.35	

^a means the range and mean±SD (in brackets). ^b de La Torre-Roche et al., 2009. ^c Pies et al., 2008. ^d Tobiszewski and Namieśnik, 2012.

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