	Retention time (min)	Quantity		Qualification	
Compounds		Collision energy (eV)	Monitored transition (m/z)	Collision energy (eV)	Monitored transition (m/z)
DEP	8.66	24	149.0-65.0	16	149.0-93.0
DIBP	10.42	26	149.0-65.0	18	149.0-93.0
DBP	11.20	24	149.0-65.0	17	149.0-93.0
BBP	15.32	26	149.0-93.0	12	149.0-121.0
DEHP	17.63	12	149.0-93.0	20	149.0-121.0
DOP	20.17	15	149.0-93.0	18	149.0-121.0

Table 1S GC-MS/MS MRM data acquisition approach for six PAEs.

	Extraction time (min)	pH	stirring rate (rpm)
Low level (-1)	10	3	100
High level (+1)	60	10	1000
Centre (0)	35	6.5	550
Experiments			
1	+1	0	+1
2	+1	0	-1
3	0	0	0
4	0	+1	+1
5	-1	-1	0
6	-1	0	+1
7	0	-1	-1
8	+1	+1	0
9	0	-1	+1
10	-1	0	-1
11	+1	-1	0
12	0	0	0
13	0	0	0
14	-1	+1	0
15	0	0	0
16	0	+1	-1
17	0	0	0

Table 2S Experimental domain and response surface design matrix for the optimization of significant parameters.



Fig 1S Nitrogen sorption isotherm profiles and pore size of MWCNTs-HMs.