Perfluorooctanoic acid in indoor particulate matter triggers oxidative stress and inflammation in corneal and retinal cells

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Supplement table 1: Quality Assurance for PFCs analysis with GC-MS

Peak Name	8:2FTOH	10:2FTOH	PFOA
Instrument detection limits (ng/mL)	8.31	9.51	549.00
Method detection limits (ng/mL)	9.73	13.73	674.17
Coefficients of calibration curve (R^2)	0.9997	0.9996	0.9994
Recovery% (RSD)	90.25(6.21)	93.26 (7.06)	90.73 (9.58)

Supplement table 2. Weight distribution of different indoor dusts.

		Weight (mg; %)			
Location	Total	>PM_{10}	$PM_{10-2.5}$	$PM_{2.5-1}$	<PM_1
Library#1	4443.94	4135.8 (93.07)	296.7 (6.68)	11.01 (0.25)	0.36 (0.01)
Library#2	6635.97	6212.3 (93.62)	368.9 (5.56)	53.5 (0.81)	1.35 (0.02)
Decoration	5896.79	5348.3 (90.70)	432.5 (7.33)	111.9 (1.90)	4.05 (0.07)
Office	14315.57	13279.2 (92.76)	852.2 (5.95)	173.9 (1.21)	10.31 (0.07)
House	9955.09	9538.1 (95.81)	362.0 (3.64)	52.4 (0.53)	2.55 (0.03)

* Percentage(%)=$\frac{\text{weight(mg)}}{\text{total weight(mg)}}\times 100\%$

Supplementary table 3. Concentrations of perfluorinated compounds for each particle and surface area.

Particle size/ concentration	ng/g	fg/particle	fg/μm^2
8:2 FTOH			
10 ~ 50	2763	0.0781	0.0000276
2.5 ~ 10	14542	0.0036	0.0000308
1 ~ 2.5	24796	0.0002	0.0000189
10:2 FTOH			
10 ~ 50	2763	0.0281	0.000009950
2.5 ~ 10	14542	0.0015	0.000013264
1 ~ 2.5	24796	0.0001	0.000008001
PFOA			
10 ~ 50	2763	0.0656	0.0000232
2.5 ~ 10	14542	0.0042	0.0000362
1 ~ 2.5	24796	0.0003	0.0000205

Supplementary table 4. Concentrations of perfluorinated compounds among different indoor $PM_{2.5-1}$ particulates

Location	Concentration (ng/g), RSD (%)					
	8:2 FTOH		10:2 FTOH		PFOA	
Library#1	24796	3.2	10515	5.5	26882	3.9
Library#2	ND		ND		19304	8.8
Decoration	ND		ND		12752	8.3
Office	ND		ND		15716	5.4
House	ND		ND		17453	8.2

RSD: relative standard deviation

ND: not detectable

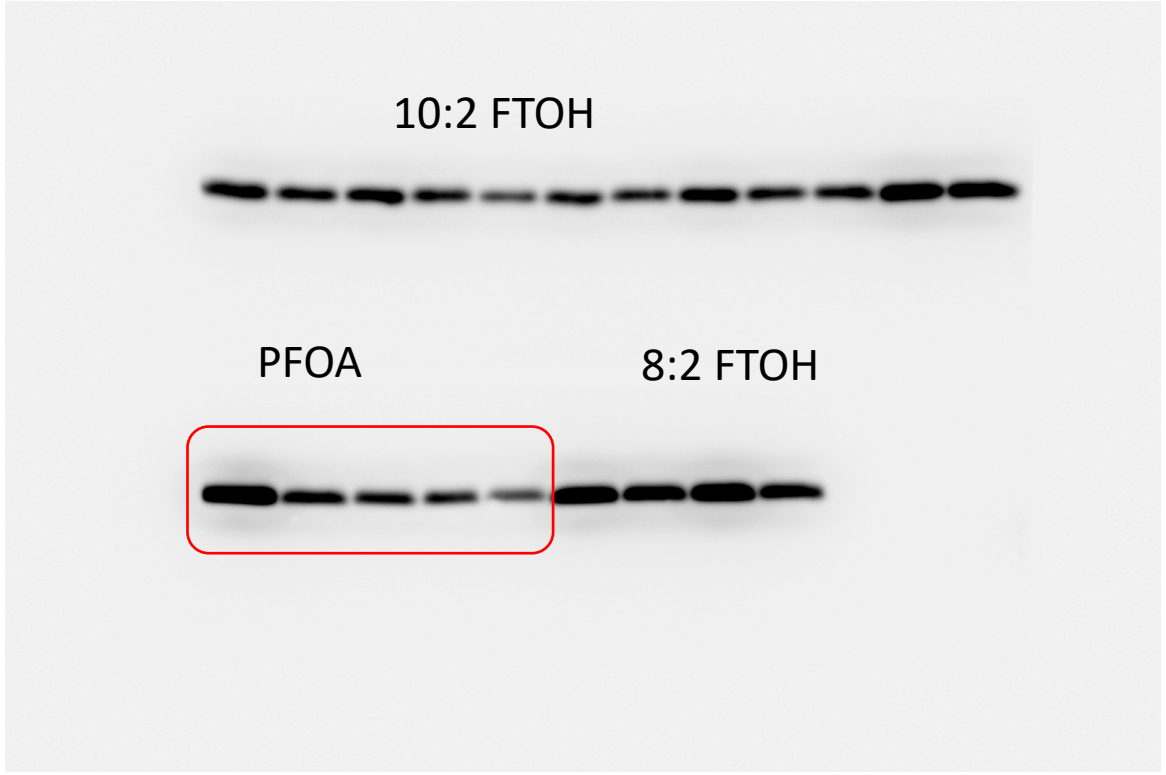
Supplementary table 5. Concentration change rate of perfluorinated compounds in carpet (ng g^{-1}/h) during accelerated aging

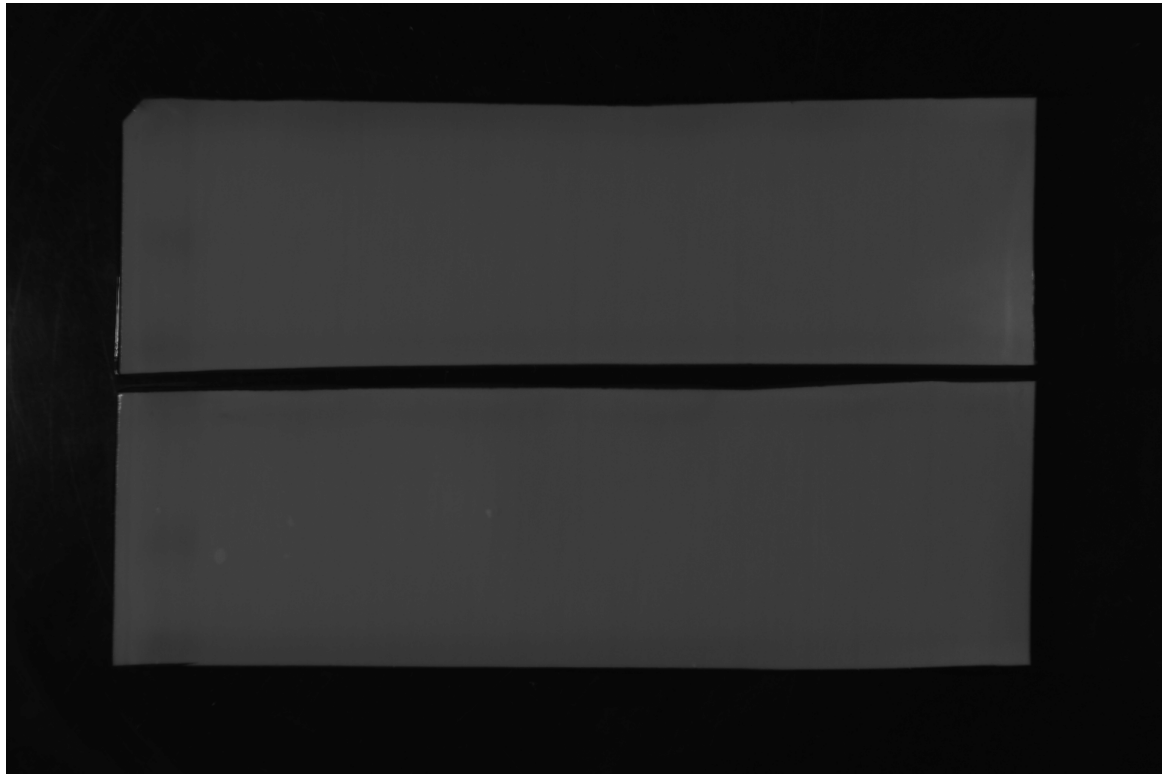
Compound	Concentration change rate of carpet (ng g^{-1}/hr)		
	12 hr	24 hr	72 hr
8:2 FTOH	402.3	497.0	238.2
10:2 FTOH	166.0	260.3	125.3
PFOA	402.6	742.3	314.8

Supplementary table 6. Concentration change rate of perfluorinated compounds in carpet (ng g^{-1}/h) during carpet cleaning

Compound	Concentration change rate of carpet (ng g^{-1}/hr)		
	12 hr	24 hr	72 hr
8:2 FTOH	2775.7	1457.3	1012.0
10:2 FTOH	1262.5	744.9	628.3
PFOA	3538.9	2111.7	1980.7

Claudin-1





β-actin