

Reversible and irreversible membrane fouling in hollow-fiber UF
membranes filtering surface water: effects of ozone/powdered
activated carbon treatment

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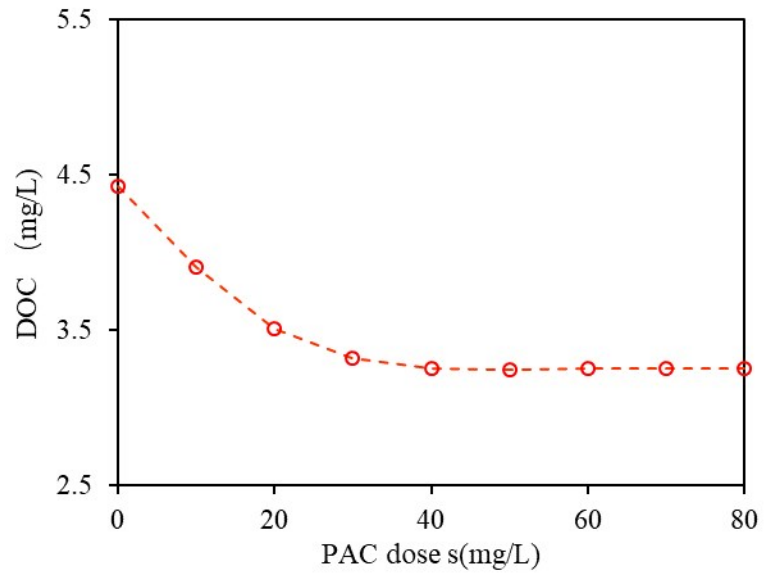


Fig. S1 Isotherm adsorption curve of PAC used

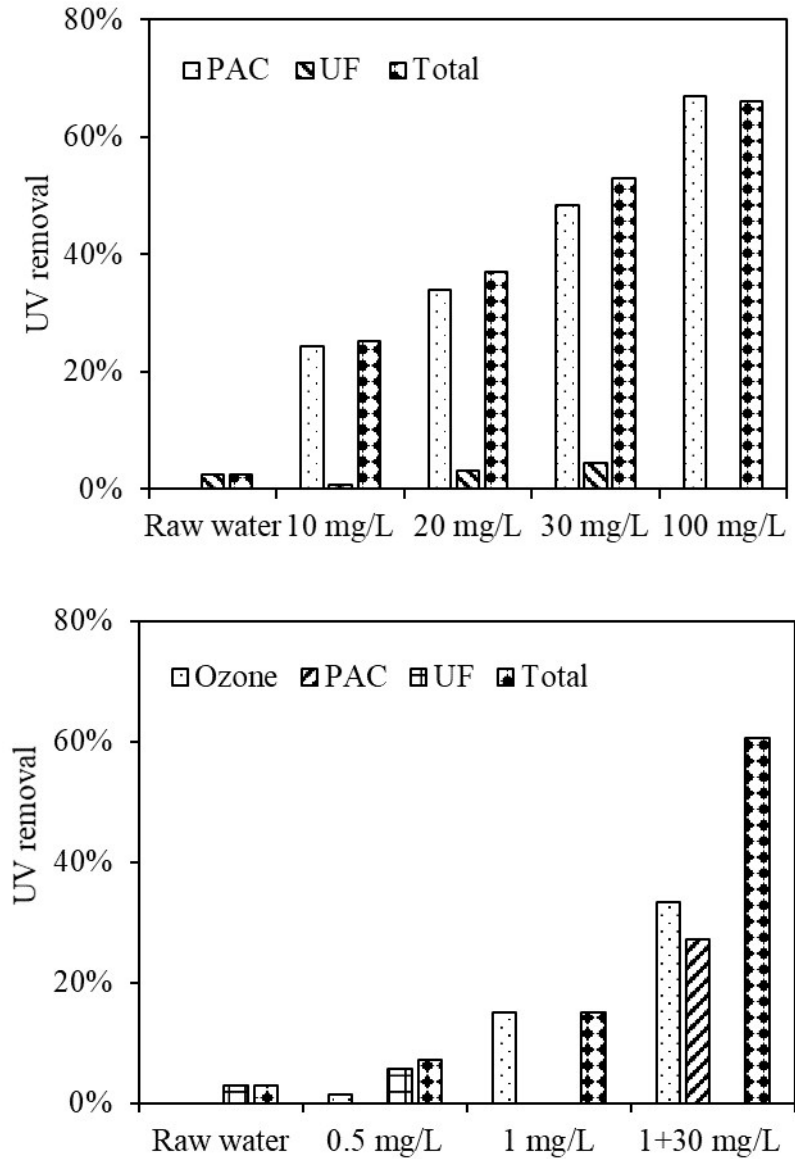


Fig. S2. UV removal during UF treatment and PAC and ozone treatment

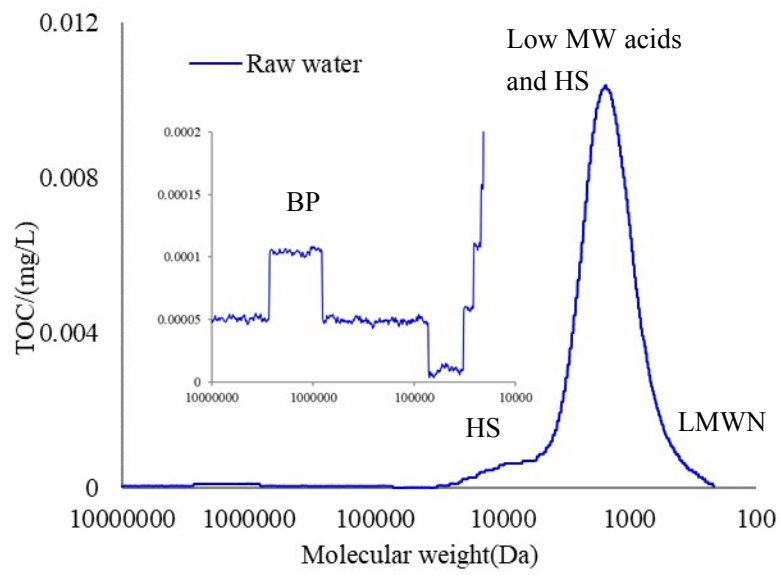


Fig. S3. MW distribution of raw water

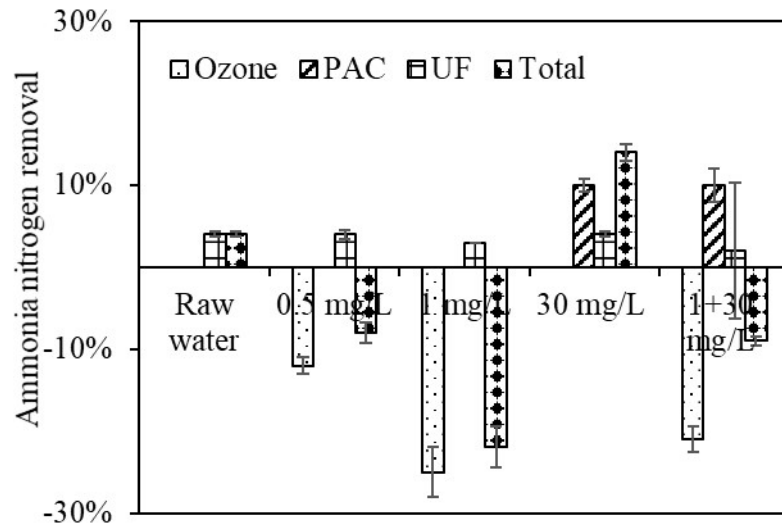


Fig. S4. Ammonia nitrogen removal by PAC and ozone treatment during UF

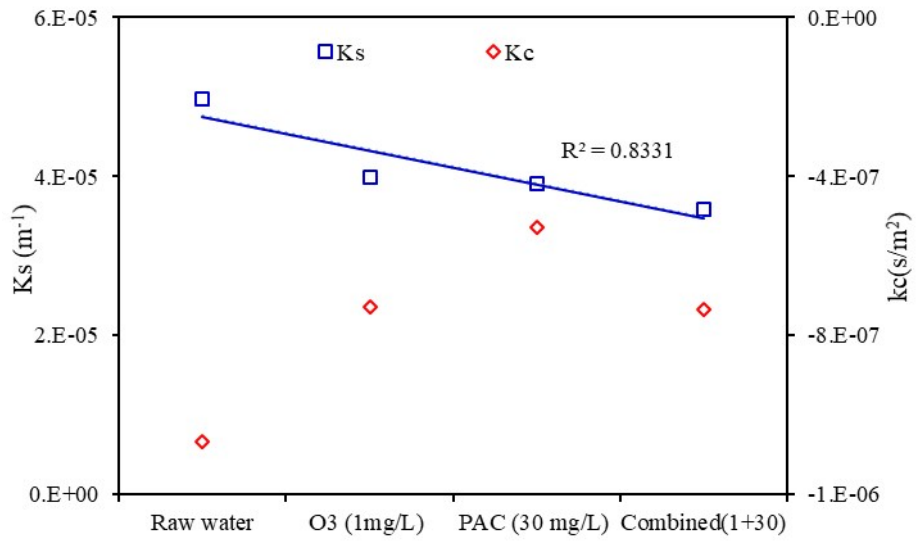


Fig. S5 Fitting parameters under various PAC/ ozone treatment.

Table S1 The Characteristics of PAC used

PAC	
Moisture (%)	8.6
Ash (%)	4.4
Ph (5%)	5.8
Methylene blue adsorption (ml/0.1g)	16
BET (mg/L)	1632
particle size D (4,3)	26.63
D(3,2)	10.93
D(10)	5.51
D(50)	22.23
D(90)	53.73
Carboxyl (mmol/g)	1.53
Lactone group (mmol/g)	1.28
Basic group(mmol/g)	0.26

Table S2 The Peak areas of HPSEC-OCD chromatograms with peak-fitting for the feed and permeate by UF under ozone and PAC treatment.

Sample (mg/L)	Parts of the HPSEC-OCD chromatogram			
	Peak A	Peak B	PeakC	PeakD
Source	100*	30.3*	3.43*	2.83*
0.5	83*	1*	0*	10*
1	53*	-3*	3*	12*
30	73.8*	7*	-2*	4*
1+30	0*	6*	-5*	11*