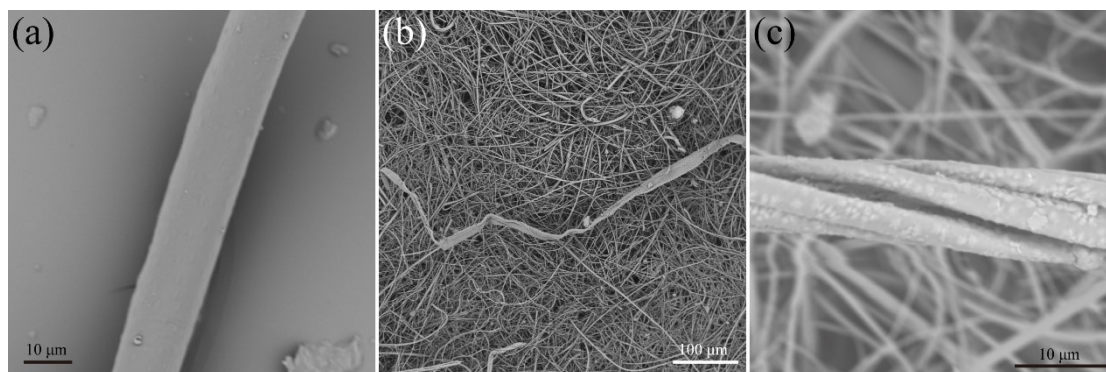


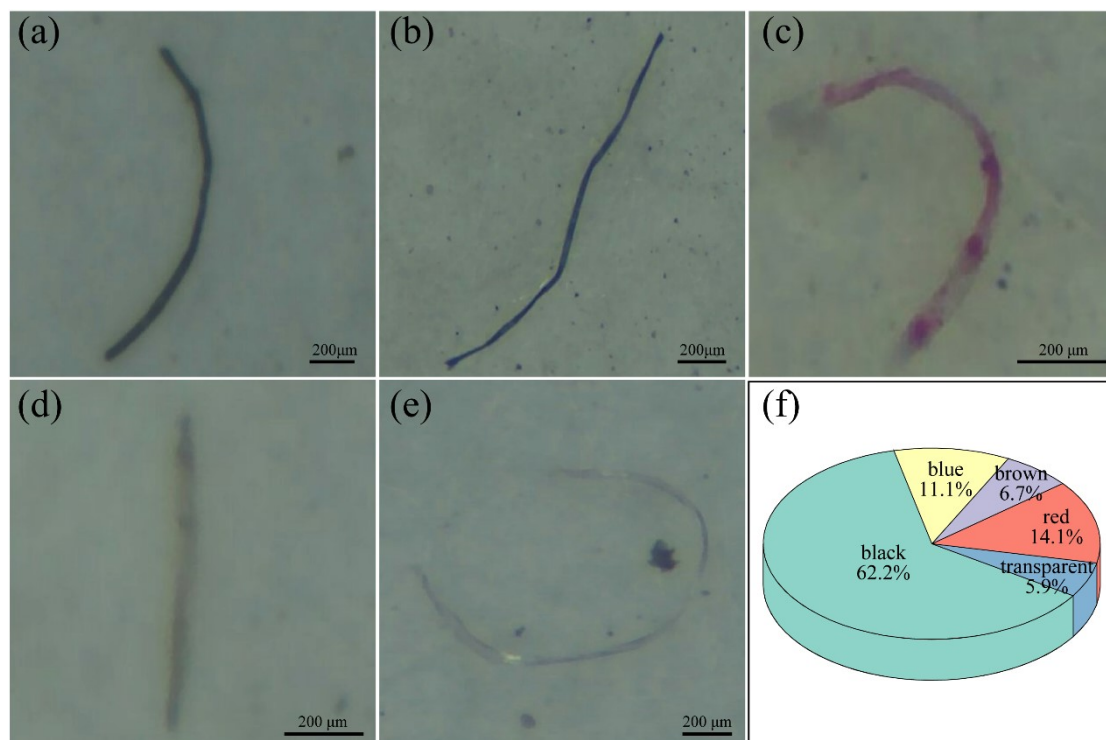
1 *Supporting Information for*
2 **Characterization of atmospheric microplastics in Hangzhou, a Megacity of the**
3 **Yangtze River Delta, China**

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6 Figure S1. SEM images depicting the morphology of atmospheric MPs: (a) smooth, (b)
7 flattened, (c) twisted

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10 Figure S2. Colors of atmospheric MPs: (a) black, (b) blue, (c) red, (d) brown, (e)
11 transparent. (f) fractions of different atmospheric MPs colors.

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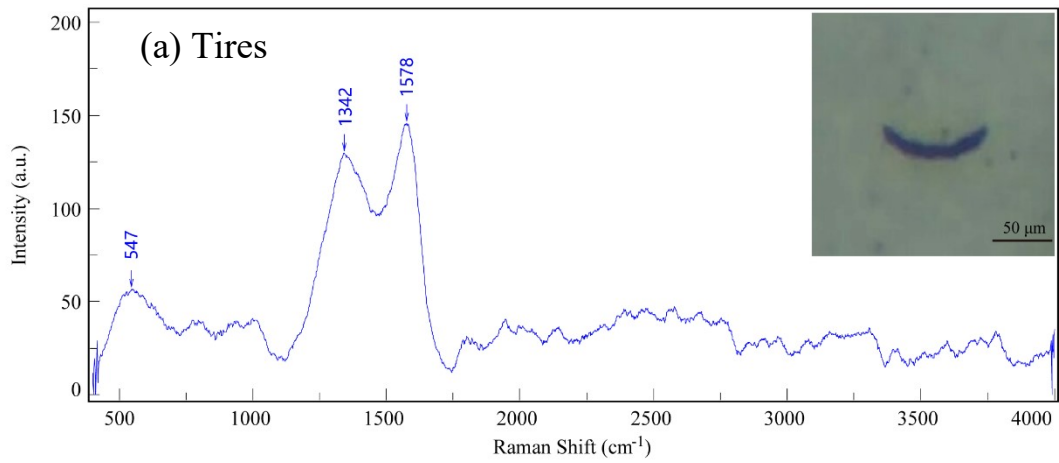
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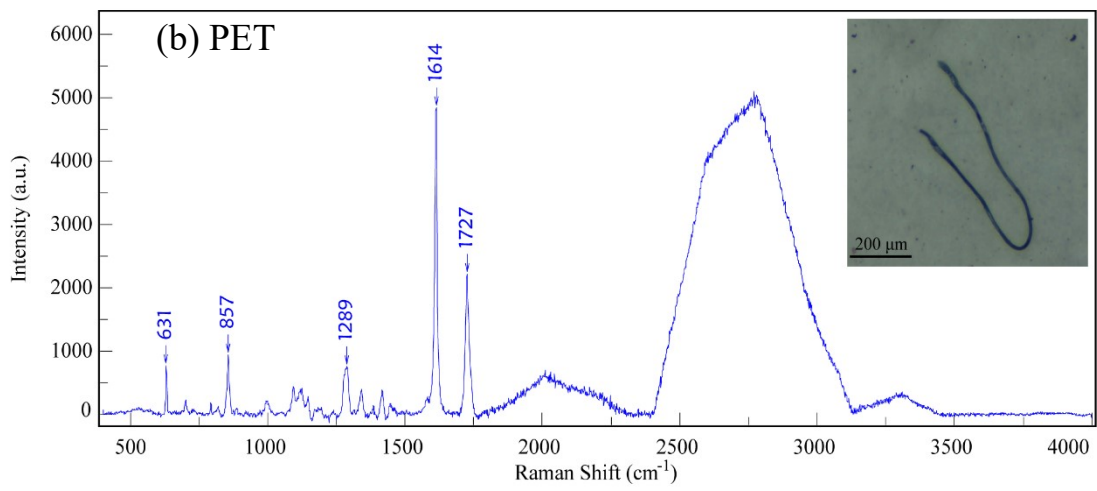
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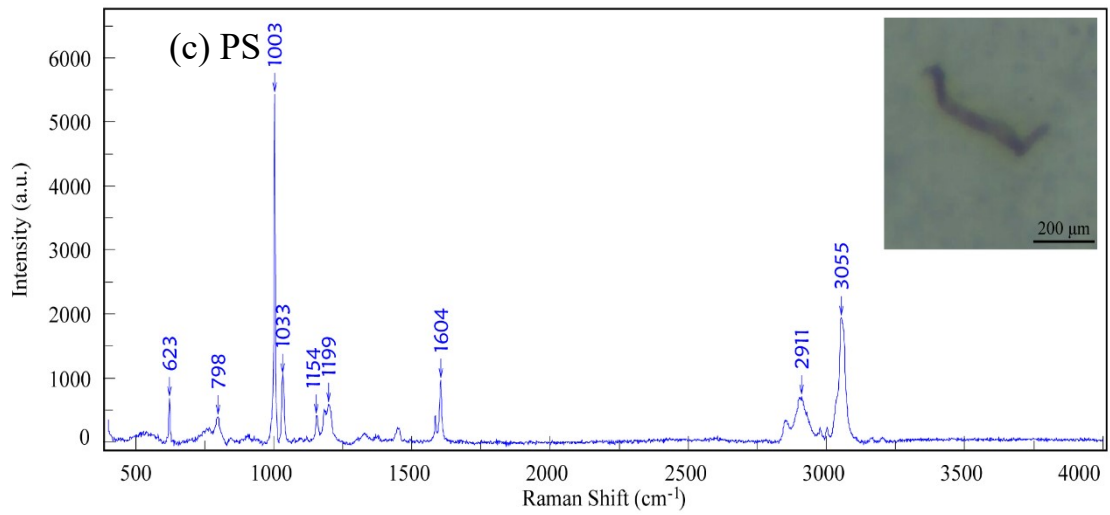
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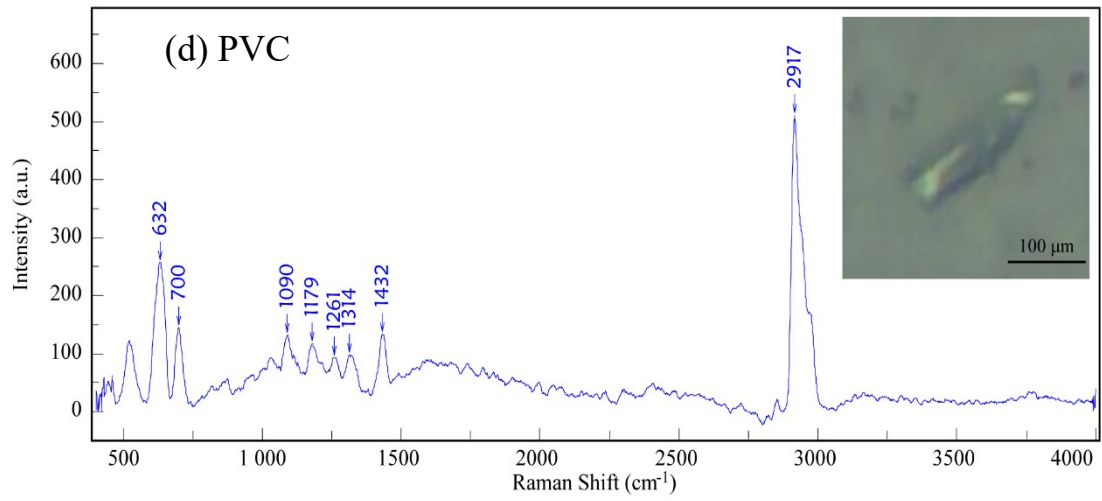
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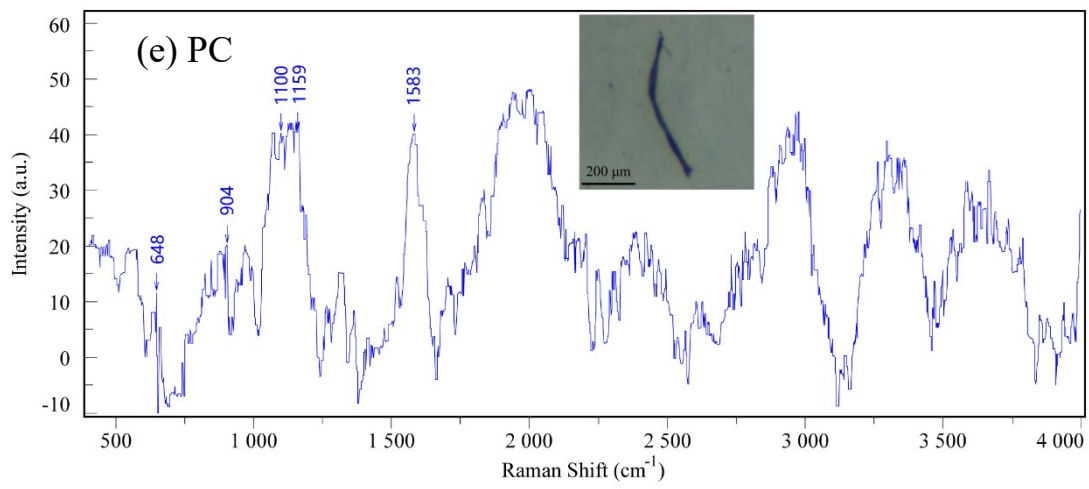
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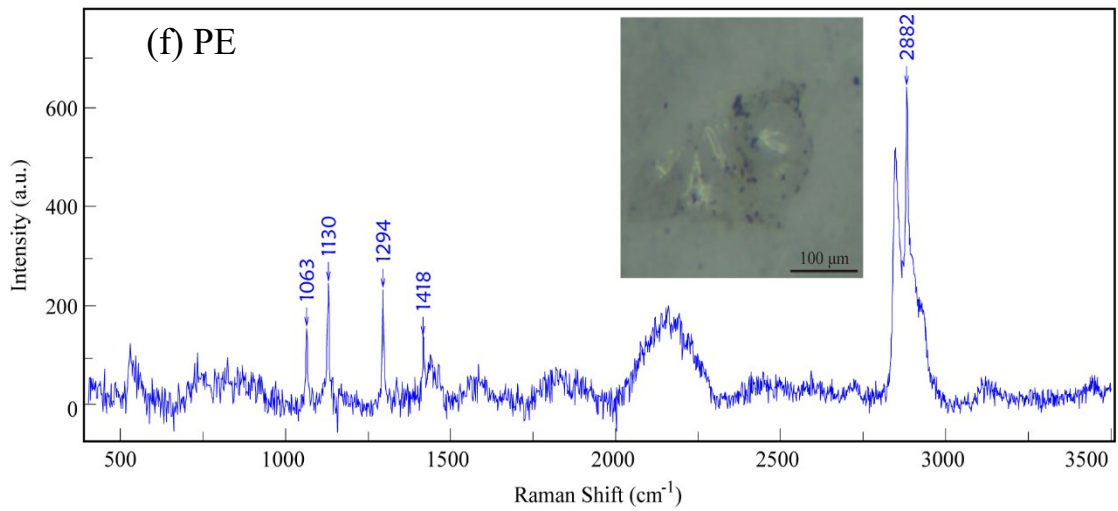
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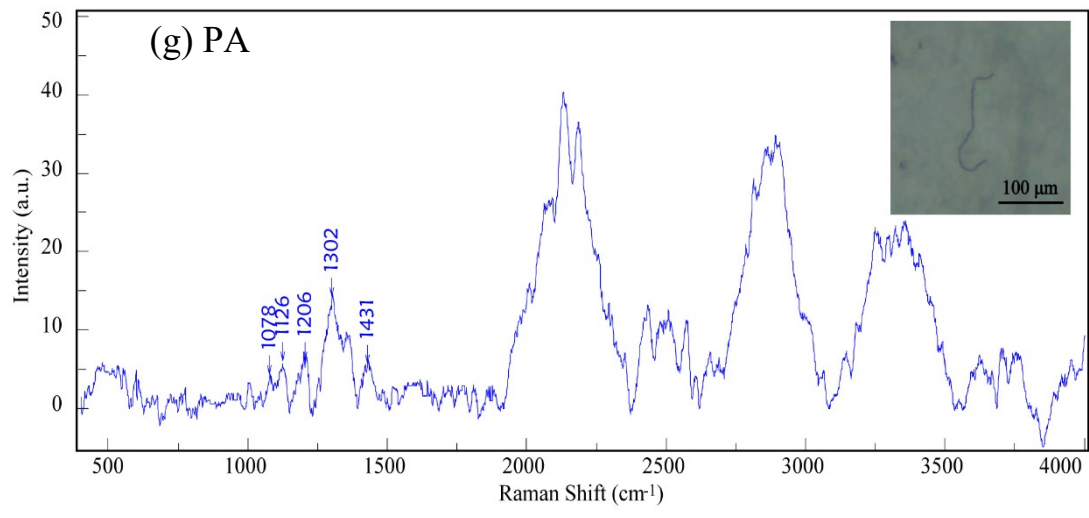
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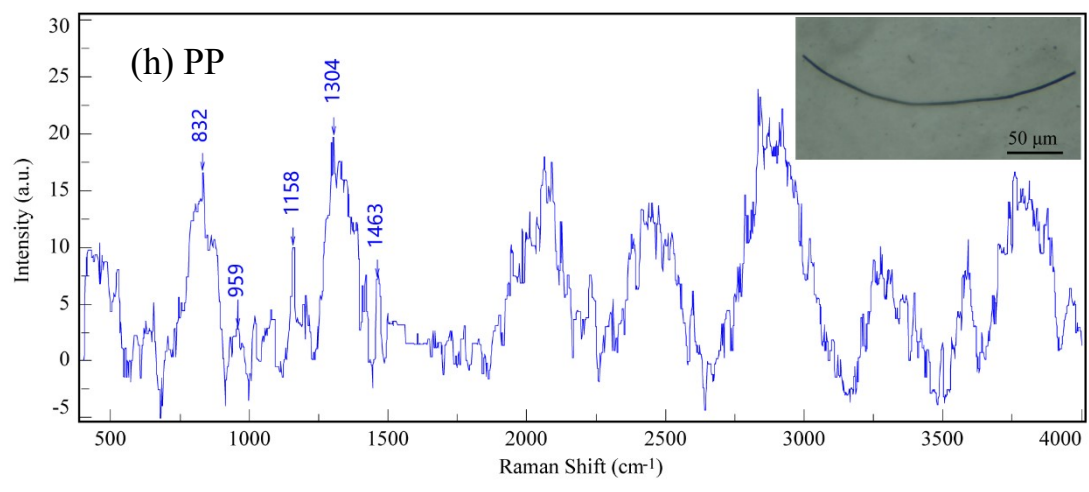
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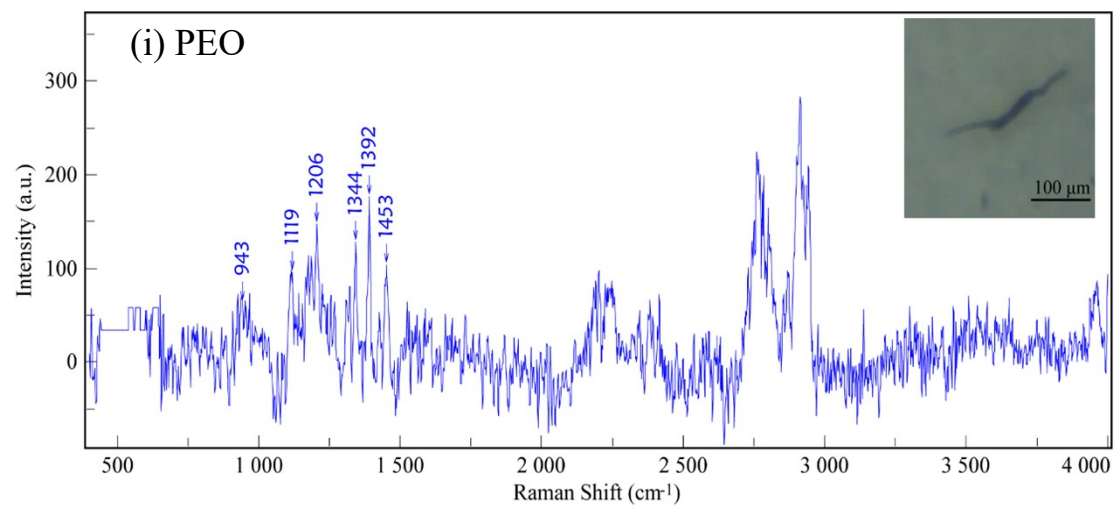
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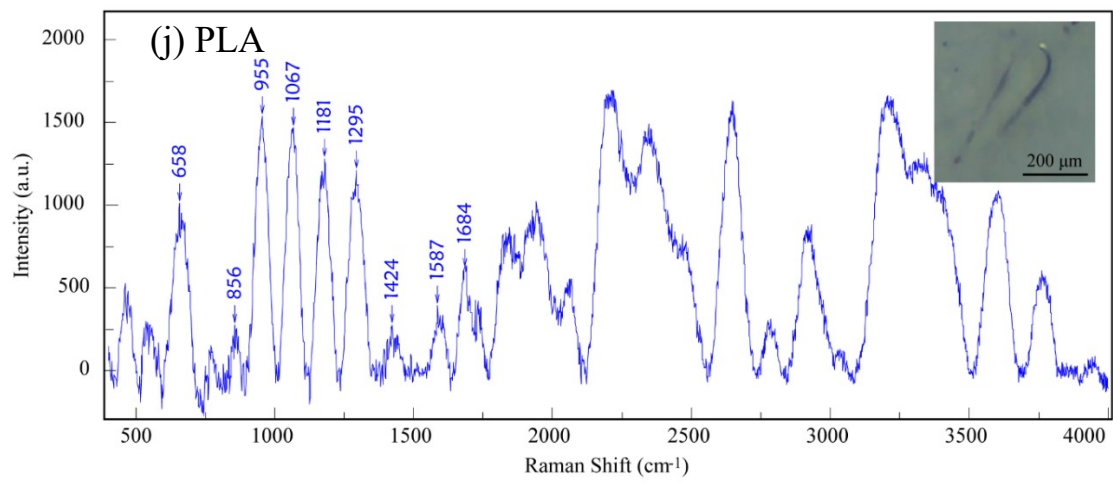
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Figure S3. Raman spectra and microscopic images of MPs

Table S1. Sample information of active sampling MPs

Sample ID	Date	Duration/h	Volume/m ³
1	12/5	6.1	1.83
2	12/6	5.1	1.53
3	12/11	6	1.8
4	12/12	6	1.8
5	12/13	6	1.8
6	12/14	6	1.8
7	12/30	5	1.5
8	1/5	5	1.5
9	1/6	6	1.8
10	1/7	6	1.8
11	1/8	6	1.8
12	1/9	3.6	1.08
13	1/13	6	1.8
14	1/14	6	1.8
15	3/19	6.1	1.83
16	3/20	8	2.4
17	4/15	9	2.7
18	4/16	9	2.7
19	5/3	9	2.7
20	5/4	9	2.7
21	11/10	11.6	3.48
22	11/11	11.4	3.42
23	11/12	11.5	3.45
24	11/13	11.7	3.51

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Table S2. Sample information of atmospheric deposition MPs

Sample ID	Start date	End date	Duration/days	Season
1	11/23	12/21	28	winter
2	12/5	12/16	11	winter
3	12/16	1/14	29	winter
4	1/14	3/19	65	winter
5	3/19	4/16	28	spring
6	4/16	5/20	34	spring
7	5/20	6/22	33	summer
8	6/22	7/20	28	summer
9	7/20	8/20	31	summer
10	8/20	9/21	32	autumn
11	9/21	11/23	63	autumn
12	11/16	12/5	19	autumn

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40 Table S3. Monthly mean meteorological data from observations collected at Mantou
 41 Mountain reference weather station (WMO 584570, 30.23 °N, 120.17 °E) in
 42 Hangzhou

Season	Year/ Month	Temperature (°C)	RH (%)	Precipitation (mm)	Wind speed (m/s)	Visibilit y (km)
Autum n	2019/11	14.4	69	27	2.1	8.1
	2019/12	9.1	74	188	2.0	5.7
Winter	2020/01	7.3	81	459	2.1	5.3
	2020/02	9.8	73	164	2.0	9.2
	2020/03	13.2	72	304	2.0	8.9
Spring	2020/04	16.5	60	101	2.2	9.9
	2020/05	23.6	71	300	2.2	8.7
Summe r	2020/06	26.2	84	768	1.9	9.5
	2020/07	26.9	85	478	1.8	10.2
	2020/08	31.1	64	134	2.4	18.9
Autum n	2020/09	23.9	74	444	1.8	11.5
	2020/10	19.1	70	80	2.1	13.6
	2020/11	15	73	67	2.1	9.1

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Table S4. Densities of different polymer

Polymer type	Density (g/cm ³)
PA	1.24
PC	1.21
PE	0.94
PES	1.40
PET	1.37
PP	0.84
PS	1.05
PVC	1.38
Tires	1.18

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