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Supporting Information

Anthropogenic PAHs in lake sediments: A literature review during 2002–2018

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Table S1. PAH concentrations (ng g^{-1} dry weight) in lake sediments from different locations.

	Sampling sites	Sampling time	ΣPAHs	Mean	Analyte
1	Lakes of the North Spitsbergen[1]	2005	2–429		Σ16PAHs
2	6 remote lakes from Ny-Ålesund, Svalbard, Norway[2]	2005	11–1100		Σ15PAHs (PAH_{16} minus DahA and BaA, with the addition of Dibenzo[1,2,5,6]perylene)
3	Lake Yamdrok in southern Tibetan Plateau, China[3]		0.83–12		Σ8PAHs (BaA, CHR, BbF, BkF, BaP, InP, DahA, and BghiP)
4	Lake Peiku Co, Nam Co, Cuo E, Cuo Na and Keluke, Tibetan Plateau, China[4]	2006–2007	98–595		Σ16PAHs
5	Lake Pumoyum Co, Tibetan Plateau, China[5]	2014	30–229		Σ15PAHs (PAH_{16} minus NAP)
6	Lake Qinghai, northeast Qinghai–Tibet plateau, China[6]	2012	366–966		Σ16PAHs
7	Lake Qinghai, northeast Qinghai–Tibet plateau, China[7]	2006	11–279		Σ16PAHs
8	Fuxian Lake, Yungui plateau, China[8]	2015	83.2–261.7	143.3	Σ16PAHs
9	Lake Tai Basin, China[9]	2014	17-4700		Σ16PAHs
10	Lake Tai, China[10]	2014	430-831	572	Σ16PAHs
11	Lake Tai, China[11]		280-840	460	Σ16PAHs
12	Lake Tai, China[12]	2010	255.07–1059.39	580.54±236.99	Σ15PAHs (PAH_{16} minus

					ACL)
13	Lake Tai, China[13]	2010	209–3843	584	Σ15PAHs (PAH_{16} minus ACL)
14	Lake Tai, China[14]		378.6–1047		Σ16PAHs
15	Lake Tai Basin, China[15]		12.1–2281.1		Σ16PAHs
16	Lake Tai body, China[15]		11.4 –209.9		Σ16PAHs
17	Lake Tai, China[16]	2009	436.6–1334.9	957.6±67.5	Σ15PAHs (PAH_{16} minus ACL)
18	Wulihu Bay, Lake Tai, China[17]	2000	13–963		Σ16PAHs
19	Meiliang Bay, Lake Tai, China[18]	2003	2091.8–4094.4		Σ16PAHs
20	Meiliang Bay, Lake Tai, China[19]	2003	1207–4754		Σ16PAHs
21	East Lake, Wuhan, China[20]	2012-2013	10.9–2478.1	685.8	Σ16PAHs
22	South Lake, Wuhan, China[21]		336–5358		Σ16PAHs
23	Main river estuaries of Lake Chao, China[22]	2012	136–70500		Σ28PAH
24	Lake Chao and its tributaries, China[23]	2012	10.8–33090		Σ16PAH+perylene
25	Lake Chao, China[24]	2010-2011	109.7–6245.8	908.5± 1878.1	Σ16PAHs
26	Lake Chao, China[25]	2011	80.82–30365	5,254.70	Σ15PAHs (PAH_{16} minus NAP)
27	Lake Chao, China[26]	2009	60.8–10200	1230	Σ16PAHs
28	Changdang Lake, south of Jintan City, China[27]	2013	180.66–441.26		Σ14PAHs (PAH_{16} minus ACN and InP)
29	Honghu Lake, central China[28]	2014	93–431		Σ16PAHs

30	Shilianghe Reservoir, eastern China[29]	2014	17.37–839.55	213.5	Σ16PAH+perylene
31	Yangzong Lake, Southwest China[30]	2013	461–2028		Σ16PAHs
32	Hongfeng Lake, Southwest China	2006	2936.1–5282.3		Σ16PAHs
33	Erhai Lake, Southwest China[31]		32.42–558.53	256.7	Σ16PAHs
34	Dianchi Lake, Southwest China[32]	2012	590–23250		14 parent and 11 alkylated PAHs
35	Dianchi Lake, Southwest China[33]	2012	210–11070		Σ16PAHs
36	Estuaries of Dianchi Lake, Southwest China[33]	2012	230–12271		Σ16PAHs
37	Dianchi Lake, Southwest China[34]	2006	479.3–4560.8		Σ16PAHs
38	Dianchi Lake, Southwest China[35]	2006		2,249.2±1,497.6	Σ16PAHs
39	Lake Poyang, China[35]	2006		459.3±205.3	Σ16PAHs
40	Lake Poyang, China[36]	2011	33.0–369.1	157.0±63.2	Σ16PAHs
41	Nansi Lake, situated between Jiangsu Province and the southwest of Shandong Province, China[37]	2001	160–32600		Σ16PAHs
42	Lake Baiyangdian, China[38]	2009	97.2–2402		Σ16PAH+perylene
43	Lake Bosten[35]	2007	334.9–1394.1	821.2±236.5	Σ16PAHs
44	The sediment samples were collected from five lakes, including Qinghai Lake (QH), Bosten Lake (BS) and Sugan Lake (SG) in northwestChina, Erhai Lake (EH) and Chenghai Lake (CH) in southwest China[39]		334.92–3902.97	804.62	Σ16PAHs
45	Xiamen Harbour and Yuan Dan Lake, China[40]	2002	97.6–1376.5		15 parent and 9 alkylated PAHs
46	Lake Wuliangsu, China[41]	2008	119–568		Σ16PAHs

47	Lake Lianhuan in Heilongjiang Province, China[42]	2007	477–2247	1019	Σ16PAHs
48	Lake Lianhuan in Heilongjiang Province, China[43]	2007	198–1056	446	Σ16PAHs
49	Lake Lianhuan in Heilongjiang Province, China[44]	2007	297–1327	672	Σ16PAHs
50	Dahuofang Reservoir, Northeast China[45]	2010	323–912	592±139	Σ16PAHs
51	Wanghua Lake, Northeast China[46]	2007	215–1308	694	Σ16PAHs
52	Keqin Lake, Northeast China[46]	2007	140–363	223	Σ16PAHs
53	Sihailongwan Maar Lake, North China[47]	2009	473.9–2289		Σ16PAHs
54	Issyk-Kul Lake Basin, Kyrgyz Republic[48]	2014	68.58–475.95	134.45	Σ16PAHs
55	Lake Sihwa, Korea[49]	1998–2015	11.3–1900	231	Σ15PAHs (PAH_{16} minus NAP)
56	Lake Kitaura, Japan[50]	2002	380–520		Σ16PAHs+perylene+ Benzo[c]phenanthrene+ Benzo[j]fluoranthen+ Benzo[a]fluoranthen+ Benzo[e]pyrene
57	Lake Biwa, Japan[51]	2003	140–780		Σ8PAHs (FLU, PHE, ANT, BaA, CHR, BkF, BaP, BghiP)
58	Lake Suwa, Japan[52]	2003	795 (maximum)		Σ16PAHs+Benzo[e]pyrene
59	Kandy Lake, Sri Lanka[53]	2004	1378.5–3044.6	2000.9	Σ16PAHs
60	Negombo Lagoon, Sri Lanka[53]	2004	348.3–1503.5	618.3	Σ16PAHs
61	Bolgoda and Beira Lakes, Sri Lanka[54]	2003–2004	152–569	329	Σ11PAHs
62	Lake Baikal, Russia[55]	2013	24.9–278.6		Σ15PAHs (PAH_{16} minus

					NAP) + perylene
63	Lake Manzala, Egypt[56]	2005	246–9910	1480	Σ39PAH
64	Lake Maryut, Alexandria, Egypt[57]	2005	39.4–6200	837	Σ39PAH
65	Rivers Niger and Benue confluence, Lokoja, Central Nigeria[58]		0.159–2.603		Σ16PAHs
66	Lake Awassa, Ethiopia[59]		24.9–413	169	Σ14PAHs (PAH_{16} minus ACN and DahA)
67	Lake Ziway, Ethiopia[59]		15.0–305	175	Σ14PAHs (PAH_{16} minus ACN and DahA)
68	Refome Lake, South–South Nigeria[60]		66.99–182.24	102.21 ± 24.32	Σ13PAHs (PAH_{16} minus ACL, ACN, BbF)+perylene , dibenzothiophene and retene
69	Lake Victoria, Uganda[61]	2014	17.0– 80.2		Σ16PAHs
70	Lake Victoria, Kenya[62]		40–31950		Σ16PAHs
71	Ichkeul Lake-Bizerte Lagoon complex, Tunisia[63]	2011-2012	122-19600	1576	Σ16PAHs
72	Lady Bird Lake, Austin, Texas, USA[64]	2012		3320±1510	Σ16PAHs
73	Southern Lake Michigan, USA[65]	2011	213–1291		Σ16PAHs
74	Lake Erie, USA[66]	2006	70–53530		Σ16PAHs+Benzo[e]pyrene
75	Lake Nicaragua[67]	2010	10–640		Σ16PAHs
76	Itaipu Lake, Brazil[68]	2009	35.21–685.37	390.6 ± 201.5	Σ16PAHs
77	Chungará Lake in Northern Chile[69]	2003	1–50		Σ16PAHs
78	Laja Lake of south central Chile Andes[70]	2002	226–620		Σ14PAHs (PAH_{16} minus ACL and BbF) + perylene

79	Hasse Lake in Central Alberta, Canada[71]	2012	135-312		Σ15PAHs (PAH_{16} minus NAP) +dibenzothiophene
80	Lake PAD23 in Peace−Athabasca Delta[72]	2010	97–217		Σ15PAHs (PAH_{16} minus NAP) +dibenzothiophene
81	Cold Lake, Alberta[73]	2011	3.2–666.7		Σ16PAHs
82	Ethel Lake and Hilda Lake, Alberta[74]	2011	14–1332		Σ16PAHs
83	Alberta Lake D and Alberta Lake E[75]	2010	100–320		Σ15PAHs (PAH_{16} minus NAP) +dibenzothiophene
84	Lake Simcoe, Ontario, Canada[76]	2008	230–5400		Σ16PAHs+Benzo[e]pyrene+ perylene
85	Lake Bourget, France[77]		488		Σ15PAHs (PAH_{16} minus ACL)
86	Holzmaar Lake, Germany[78]		62–8000	3300	Σ30PAHs
87	Lake Pamvotis, Greece[79]	2005–2006	34.7–1600		Σ16PAHs
88	Lake Piediluco, Central Italy[80]	2003–2005	59.02–212.56		Σ13PAHs (PAH_{16} minus NAP, ACN, and FLA)
89	Ludaš Lake in northern Serbia[81]	2002–2014	33–483	189	Σ16PAHs
90	6 artificial lakes in Serbia (Bovan, Ćelije, Vrutci, Barje, Bojnik, and Garaši)[82]		< MDL to 728		FLU, BbF, BkF, BaP, BghiP, InP
91	53 Mediterranean shallow lakes, NW Spain[83]	2003–2004	4–4286	129±616	Σ15PAHs (PAH_{16} minus NAP)+benzo(a)phenantrene,
92	Lake Lille Lungegårdsvannet in Bergen, western Norway[84]		8161		Σ16PAHs
93	Lake Peipsi, Estonia[85]	2009	75–345		Σ12PAHs (PAH_{16} minus ACL, ACN, ANT, FLU,)

94	Lake Prosce, Plitvice Lakes National Park, central Croatia[86]		285–407		Σ16PAHs
95	Lake Iznik, Turkey[87]		17–835		Σ12PAHs (PAH_{16} minus ACL, ACN, NAP, FLU)
96	Kellys Lough, Upper Killarney and Lough Maumweein Ireland[88]	2005-2006	550–3000		Σ13PAHs (PAH_{16} minus ACL, ACN, NAP)
97	Lake Balaton, Hungary[89]	2002–2003	11–1734	132	Σ13PAHs (PAH_{16} minus ACL, ACN, NAP)

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