

Table S1. Ge/Si ratio of weekly time-series water samples in Xiangqu

Date	Xiangqu River	
	Ge/Si 10 ⁻⁶ mol/mol	discharge m ³ /s
20190420	23.4	19.1
20190427	24.8	22.3
20190504	23.4	23.1
20190511	20.2	18.5
20190518	23.0	18.3
20190526	23.1	18.4
20190602	22.5	18.1
20190609	22.9	20.6
20190615	27.0	19.2
20190623	25.9	19.3
20190701	33.6	21.4
20190708	25.8	242.0
20190713	13.8	578.0
20190720	13.2	355.0
20190727	19.0	184.0
20190803	13.4	336.0
20190810	1.4	499.0
20190817	5.2	207.0
20190825	1.1	131.0
20190831	20.8	93.7
20190908	3.9	106.0
20190912	19.0	134.0
20190921	13.4	183.0
20190928	12.6	125.0
20191005	13.4	102.0
20191012	19.6	83.9
20191019	20.4	65.8
20191026	20.8	56.7
20191102	20.4	48.2
20191109	20.8	38.9
20191117	19.8	33.9
20191123	24.6	32.7

Table S2. Calculation of G_{hydr} , S_{hydr} and G_{lost} .

Hydrothermal water	Ge (10^{-3} $\mu\text{mol/L}$)	Si ($\mu\text{mol/L}$)	Ge/Si (10^6 mol/mol)	Cl ⁻ ($\mu\text{mol/L}$)	Ge/Cl	Si/Cl	average Ge/Cl	average Si/Cl	The corresponding river
HW-1	102	598	170	11099	0.01	0.05			
HW-2	99	746	133	13797	0.01	0.05	0.02	0.12	MT13
HW-3	121	806	151	7537	0.02	0.11			
HW-4	174	1212	144	4930	0.04	0.25			
HW-7	121	618	195	13873	0.01	0.04	0.01	0.04	MT14
HW-11	181	1457	124	1491	0.12	0.98	0.12	0.98	MT7
HW-6	142	917	155	3506	0.04	0.26	0.04	0.25	MT1
HW-15	207	1370	151	5669	0.04	0.24			
River water	Ge (10^{-3} $\mu\text{mol/L}$)	Si ($\mu\text{mol/L}$)	Ge/Si (10^6 mol/mol)	Cl ($\mu\text{mol/L}$)	Cl corr. rain ($\mu\text{mol/L}$)	G_{hydr} (10^{-3} $\mu\text{mol/L}$)	S_{hydr} ($\mu\text{mol/L}$)	$S_{\text{hydr}}\%$ %	$G_{\text{lost}}\%$ %
MT1	0.8	284	2.9	200	187	7.18	71	25	88
MT7	4.6	219	21.1	170	157	18.96	214	98	76
MT13	4.5	150	29.7	343	329	5.58	17	12	20
MT14	4.6	145	31.6	606	592	5.15	6	4	11