
Supplementary information

Elemental profiles and determinants of hair composition in residents of Nanning, China: insights from multivariate and comparative analyses

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Table S1 Concentrations of Macro- and Trace Elements and Potentially Toxic Elements in Hair Samples from Nanning Residents.

Sample	Ca (μg/g)	Na (μg/g)	K (μg/g)	Mg (μg/g)	Zn (μg/g)	Cu (μg/g)	Fe (μg/g)	Mn (ng/g)	Ni (ng/g)	Se (ng/g)	Mo (ng/g)	Co (ng/g)	V (ng/g)	Cr (ng/g)	As (ng/g)	Sr (ng/g)	Cd (ng/g)	Ba (ng/g)	Pb (ng/g)	Ti (ng/g)
M1	690.03	5.33	0.00	20.02	267.00	9.20	8.70	95.48	48.73	193.93	85.84	1.92	35.02	68.06	638.96	565.03	24.50	242.03	502.30	173.261
M2	805.82	282.15	445.19	49.24	250.76	11.48	15.93	138.93	96.30	98.68	61.44	1.99	35.62	87.04	335.89	417.03	2.88	265.76	94.75	367.99
M3	712.94	541.73	1111.52	36.69	255.89	11.23	9.38	175.83	315.39	59.11	59.50	3.90	49.60	127.00	251.46	445.09	5.24	859.04	154.94	727.872
M4	578.78	335.42	180.00	30.31	189.84	11.90	6.01	125.32	45.51	74.09	32.61	1.94	42.70	119.14	142.61	405.09	3.45	533.19	286.81	361.6
M5	819.35	1890.61	650.19	35.88	247.52	10.57	7.20	103.24	186.48	41.06	47.91	2.48	44.25	120.29	248.72	660.97	3.51	370.07	149.06	604.785
M6	769.74	423.15	826.42	44.83	249.62	13.93	9.54	181.93	51.77	105.42	42.57	2.66	34.54	77.22	198.57	400.67	4.54	304.64	209.10	1447.98
M7	1032.14	637.89	380.45	70.23	217.00	12.44	9.51	185.36	44.95	49.42	56.45	3.24	38.34	91.77	1192.99	636.00	2.00	262.95	156.20	802.607
M8	909.99	590.94	533.99	34.45	235.05	15.27	12.02	188.10	83.02	84.03	38.81	2.07	32.79	82.51	618.56	635.56	5.87	373.78	216.89	311.328
M9	941.58	287.54	171.89	57.28	263.43	13.27	11.40	218.97	93.68	78.03	43.23	2.81	38.20	78.74	155.51	529.97	7.35	374.22	161.70	1292.71
M10	777.49	314.16	277.88	38.89	278.17	12.87	11.72	297.11	127.57	97.95	58.00	4.02	52.96	123.61	1152.31	495.25	23.18	500.87	340.03	1886.14
M11	768.84	275.02	248.94	42.55	273.79	12.65	12.59	313.06	108.95	114.23	54.71	3.66	41.80	93.63	842.37	478.25	20.88	500.62	314.36	1141.3
M12	1120.69	1469.88	306.18	77.28	269.04	12.04	10.01	228.05	57.82	30.32	46.49	3.26	39.06	98.00	224.52	562.38	7.31	410.30	133.18	489.525
M13	572.11	820.82	529.74	28.62	268.35	13.15	10.72	297.21	58.14	-	38.52	5.08	65.79	171.51	470.11	322.80	8.12	282.27	295.11	953.414
M14	935.97	2240.17	774.39	40.72	240.89	12.88	7.19	159.28	54.49	58.83	72.51	2.00	31.82	75.61	4130.58	592.24	8.73	292.21	151.36	758.448
F1	2462.24	152.33	182.63	52.97	318.98	22.15	7.52	122.20	363.82	24.06	50.68	8.47	69.23	184.48	93.14	1929.52	8.42	1113.34	225.67	807.428
F2	2740.82	1098.77	700.33	66.28	686.18	22.31	8.26	199.31	209.68	65.15	55.32	19.47	59.59	123.96	134.88	2755.80	32.39	1788.91	495.66	195.192
F3	4212.66	126.41	0.00	126.79	729.15	26.69	7.29	167.36	185.46	128.40	33.34	8.03	70.20	163.49	95.36	3755.24	19.97	2248.64	276.14	68.166
F4	2235.82	537.55	636.30	60.75	448.46	26.19	7.37	208.78	124.80	33.36	60.81	8.84	46.20	82.33	151.10	2186.97	14.22	1302.92	296.04	328.048
F5	2541.58	18.49	13.41	70.02	427.35	19.26	9.50	192.51	602.78	120.80	43.08	5.60	38.29	81.64	76.35	2386.12	8.29	1197.75	195.33	257.44
F6	1751.16	58.92	27.05	77.86	378.62	26.34	7.22	194.58	68.82	144.73	43.81	4.45	40.96	98.98	125.87	1484.38	4.55	666.13	95.25	163.66
F7	2992.02	56.92	30.07	112.17	607.76	24.89	6.85	206.44	136.63	138.51	44.68	5.20	33.38	67.17	95.27	2808.25	11.60	1422.62	165.25	152.784
F8	2026.22	24.32	38.86	50.13	431.48	32.36	7.08	190.64	121.67	126.71	52.40	9.06	41.74	79.04	91.08	2073.69	20.67	3162.01	501.49	147.784
F9	1541.98	682.24	492.22	42.26	562.97	19.65	8.15	230.20	225.85	80.48	37.11	8.83	58.67	122.18	97.84	1668.93	20.12	1296.93	372.89	372.703
F10	1872.64	17.15	4.88	61.00	586.09	20.99	5.96	158.16	200.64	156.90	50.29	8.09	48.17	67.77	128.92	1962.99	9.80	1277.41	146.41	169.065

F11	1549.14	21.59	20.23	38.85	524.70	21.91	6.98	163.78	149.39	178.24	35.66	8.55	36.49	64.70	103.07	1897.25	13.20	1346.26	247.81	219.414
F12	2879.07	11.19	0.00	88.89	596.28	23.56	5.67	307.93	130.34	162.32	37.07	8.22	38.91	65.11	76.22	2837.39	18.24	1875.02	198.35	111.376
F13	1348.56	24.35	0.00	26.99	371.52	22.65	6.17	107.96	120.94	85.81	37.44	6.13	37.14	70.84	97.73	1232.11	10.99	735.18	263.88	86.06
F14	2905.16	48.40	0.00	100.53	639.38	19.68	5.16	20.38	8.90	-	2.66	0.71	2.16	2.72	48.28	221.66	0.92	136.39	17.81	231.012
F15	2477.25	11.74	0.00	92.22	631.26	21.18	6.01	173.78	159.04	122.53	36.88	7.04	28.95	48.46	95.31	2153.06	18.10	1117.62	155.56	78.768
F16	2211.45	95.50	26.41	41.51	387.83	26.41	7.43	207.02	119.01	75.09	58.61	9.01	61.88	148.32	139.27	2187.21	20.91	1376.84	244.48	330.772

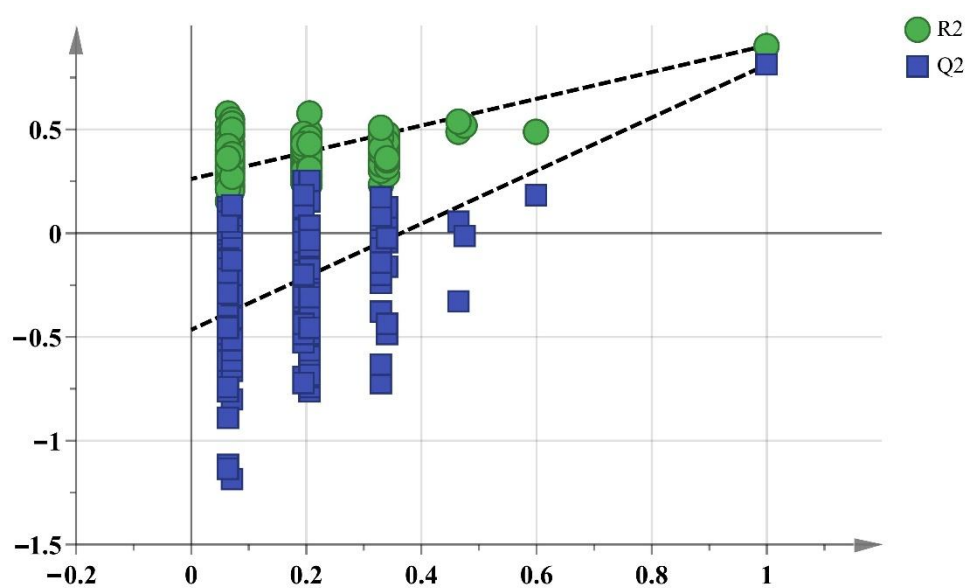


Fig. S1 OPLS-DA results of validate model.

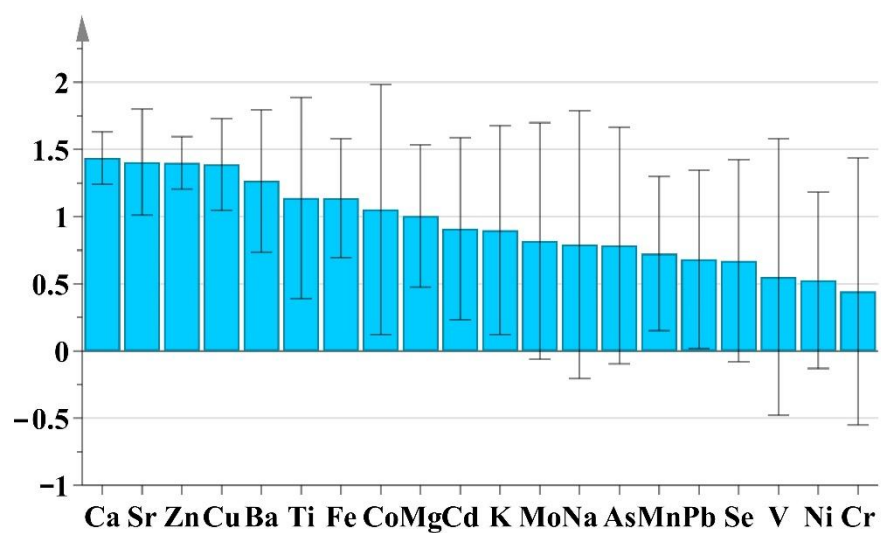


Fig. S2 Variable Importance for the Projection (VIP) plot.