Table 5 Elemental affinities deduced from Pearson's correlation coefficients between individual elements in 9 minable coal seams and ash yield, and selected elements or element combinations.

Correlation coefficients with ash yield		
Group 1	r_{ash}=0.7—0.8	Y, Al, Si, Ti, Sc, Th, Pb
Group 2	r_{ash}=0.5—0.69	Cu, Be, V, Li, Mo, Mg, Ca, Na, Zn, Sn, K, Fe, Mn, Ni
Group 3	r_{ash}=0.35—0.49	P, Bi, Cr, Cd
Group 4	r_{ash}<0.35	As, Se, Ba, Sb, S, Co
Correlation coefficients with selected elements combinations		
r_{Ca+Mg}	>0.7	Fe, P, Zn, Sn, Na, Th, Pb
	0.5—0.7	Bi, Mn, Si, Ti, Cd, Li
	0.35—0.49	Sc, Se
r_{Al+Si}	>0.7	V, Sc, Be, Bi, Mo, Li,Ni
	0.5—0.7	Sb, Y, Sn, Pb, Ni, Co
	0.35—0.49	Cd
r_{S+Fe}	>0.7	No elements
	0.5—0.7	Co, Bi, Sb, As
Correlation coefficients with selected elements		
	r_{Ca-Mg}=0.82; r_{Mn-Fe}=0.73; r_{Mn-Mg}=0.78; r_{Mn-Ca}=0.80; r_{Fe-Se}=0.75; r_{Ni-S}=0.15; r_{Se-Pb}=0.66; r_{Li-Si}=0.69; r_{Li-Al}=0.72; r_{Fe-S}=0.2; r_{Sb-S}=0.6	