

Table S1 Quadratic orthogonal regression rotation combination test scheme and results.

experiment	Factor			CV/ %
	A: Particle size/ mm	B: Centrifugal speed/ r/min	C: Flux/ grain/s	
1	5.0	900	3000	22.42
2	1.8	1078	4189	26.01
3	4.2	722	4189	27.72
4	3.0	900	3000	14.73
5	1.8	722	1811	30.71
6	3.0	900	3000	11.54
7	1.8	1079	1811	27.78
8	3.0	900	3000	12.51
9	4.2	722	1811	19.50
10	4.2	1078	1811	18.80
11	3.0	600	3000	29.95
12	3.0	1200	3000	19.70
13	3.0	900	5000	26.90
14	4.2	1078	4189	28.65
15	1.0	900	3000	27.35
16	3.0	900	1000	25.50
17	3.0	900	3000	12.57
18	3.0	900	3000	11.28
19	3.0	900	3000	13.63
20	1.8	722	4189	27.84