Electronic Supplementary Material (ESI) for Analytical Methods.

Accuracy improvement on quantitative analysis of the total iron content in branded iron ores by laser-induced breakdown spectroscopy combined with double back propagation artificial neural network

Piao Su,[a,b] Shu Liu,*[b] Hong Min,[b] Yarui An,*[a] Chenglin Yan,[b] and Chen Li[b]

[a]Institute of Bismuth Science, University of Shanghai for Science and Technology, Shanghai 200093, China. Email: anyarui@usst.edu.cn

[b]Technical Center for Industrial Product and Raw Material Inspection and Testing of Shanghai Customs, Shanghai 200135, China. Email: liu_shu@customs.gov.cn

Table S1 The element content range (wt%) of different types of branded iron ores

Brand	SiO_2	Al_2O_3	CaO	MgO
FMG	4.880-6.190	2.560-2.780	0.041-0.171	0.057-0.116
MAC	2.540-5.460	2.140-2.540	0.009-0.054	0.073-0.149
PB	3.220-4.110	2.120-2.850	0.001-0.196	0.067-0.162
Newman	3.043-4.240	1.228-1.660	0.001-0.137	0.041-0.131