

Article

Comparison of Butyric acid Leaching Behaviors of Zinc from Three Basic Oxygen Steelmaking Filter Cakes

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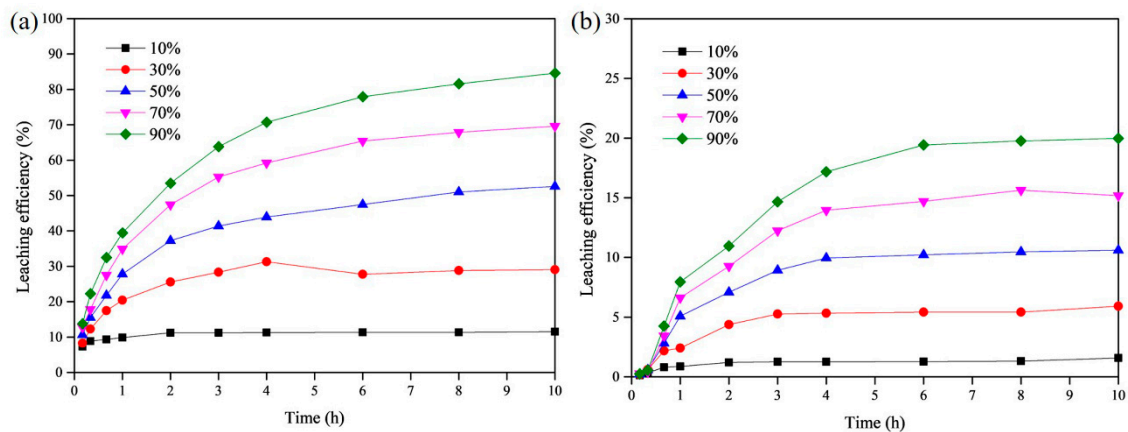


Figure S1. Progress of leaching of (a) Zn and (b) Fe from BOS-3 using 1.0 M butyric acid with different L/S stoichiometric ratios.

Table S1. The pH variations obtained from the leachates for the three BOS filter cakes under different leaching conditions.

Sample	Acid Concentration	Initial pH	Final pH (L/S Stoichiometric Ratio)				
			10%	30%	50%	70%	90%
BOS-1	0.5 M	2.46	4.89	4.24	4.02	3.83	3.75
	1.0 M	2.32	4.84	4.27	3.99	3.83	3.68
	1.5 M	2.17	4.71	4.29	4.04	3.90	3.73
	2.0 M	2.10	4.49	4.25	4.01	3.84	3.73
BOS-2	0.5 M	2.48	5.55	5.28	4.94	4.64	4.51
	1.0 M	2.33	4.80	4.65	4.28	4.03	3.87
	1.5 M	2.17	-	4.41	4.18	4.02	3.89
	2.0 M	2.10	-	-	-	4.08	3.93
BOS-3	0.5 M	2.45	6.02	5.67	5.42	5.10	4.95
	1.0 M	2.31	5.82	5.41	5.01	4.93	4.84
	1.5 M	2.17	5.74	4.90	5.06	4.74	4.63
	2.0 M	2.10	6.31	4.71	5.02	4.86	4.76