

Table S1. Experimental mixtures used in the trial campaigns at 900 °C and 1100 °C, base addition of the respective chlorides represents the approximate 2-fold of the stoichiometric demand of chlorine

		Chlorination Agent									
		AlCl ₃ ·6H ₂ O			FeCl ₃ ·6H ₂ O			MgCl ₂ ·6H ₂ O			
		CA/R Ratio	b. a.	2-fold of b. a.	3-fold of b. a.	b. a.	2-fold of b. a	3-fold of b. a.	b. a.	2-fold of b. a	3-fold of b. a.
Iron precipitation residue	Zn-Jarosite	R [g]	51.13	37.58	29.70	49.02	35.34	27.62	46.70	32.98	25.49
		CA[g]	28.87	42.42	50.30	30.98	44.66	52.38	33.30	47.02	54.51
	Zn-Goethite	R [g]	47.46	33.74	26.17	45.26	31.55	24.22	42.87	29.28	22.23
		CA[g]	32.54	46.26	53.83	34.74	48.45	55.78	37.13	50.72	57.77
	Ni-Jarosite	R [g]	58.58	46.20	38.15	56.76	43.98	35.90	54.72	41.58	33.53
		CA[g]	21.42	33.80	41.85	23.24	36.02	44.10	25.28	38.42	46.47
	Zn-Jarosite calcined	R [g]	39.48	26.21	19.61	37.23	24.26	17.99	34.84	22.27	16.36
		CA[g]	40.52	53.79	60.39	42.77	55.74	62.01	45.16	57.73	63.64
	Zn-Goethite calcined	R [g]	41.77	28.27	21.36	39.52	26.24	19.64	37.11	24.16	17.91
		CA[g]	38.23	51.73	58.64	40.48	53.76	60.36	42.89	55.84	62.09
	Ni-Jarosite	R [g]	49.54	35.88	28.13	47.39	33.66	26.10	45.04	31.34	24.03
	calcined	CA[g]	30.46	44.12	51.87	32.61	46.34	53.90	34.96	48.66	55.97