

Table S1

sample		IS	QS	B_{hf}	Γ	area frac.
pristine	Fe ²⁺	1.28 ± 0.01	3.13 ± 0.01	-	0.31 ± 0.01	94.0 %
	Fe ³⁺	0.79 ± 0.05	0.41 ± 0.26	-	0.40 ± 0.30	6.0 %
0.25 h	Fe ²⁺	1.28 ± 0.01	3.10 ± 0.01	-	0.35 ± 0.01	79.2 %
	Fe ³⁺	0.45 ± 0.02	0.78 ± 0.03	-	0.67 ± 0.04	20.8 %
0.5 h	Fe ²⁺	1.28 ± 0.01	3.11 ± 0.01	-	0.34 ± 0.01	76.4 %
	Fe ³⁺	0.43 ± 0.01	0.85 ± 0.01	-	0.61 ± 0.02	23.6 %
1 h	Fe ²⁺	1.47 ± 0.01	2.71 ± 0.03	-	0.33 ± 0.04	6.7 %
	Fe ^{x+}	0.65 ± 0.01	0.44 ± 0.01	-	0.45 ± 0.02	27.4 %
	Fe ^{y+}	0.18 ± 0.01	-	-	0.07 ± 0.01	65.9 %
2 h	Fe ^{x+}	0.45 ± 0.01	0.78 ± 0.01	-	0.41 ± 0.02	27.3 %
	Fe ^{y+}	0.29 ± 0.01	0.30 ± 0.01	-	0.64 ± 0.01	72.7 %
3 h	Fe ^{x+}	0.41 ± 0.01	0.64 ± 0.02	-	0.60 ± 0.02	65.8 %
	Fe ^{y+}	0.22 ± 0.02	0.34 ± 0.03	-	0.48 ± 0.04	34.2 %
5 h	Fe ^{x+}	0.43 ± 0.01	0.64 ± 0.01	-	0.51 ± 0.01	53.7 %
	Fe ^{y+}	0.20 ± 0.01	0.41 ± 0.01	-	0.43 ± 0.01	29.7 %
	Fe ⁰	-0.00 ± 0.02	0.06 ± 0.03	31.3 ± 0.1	1.13 ± 0.05	16.6 %

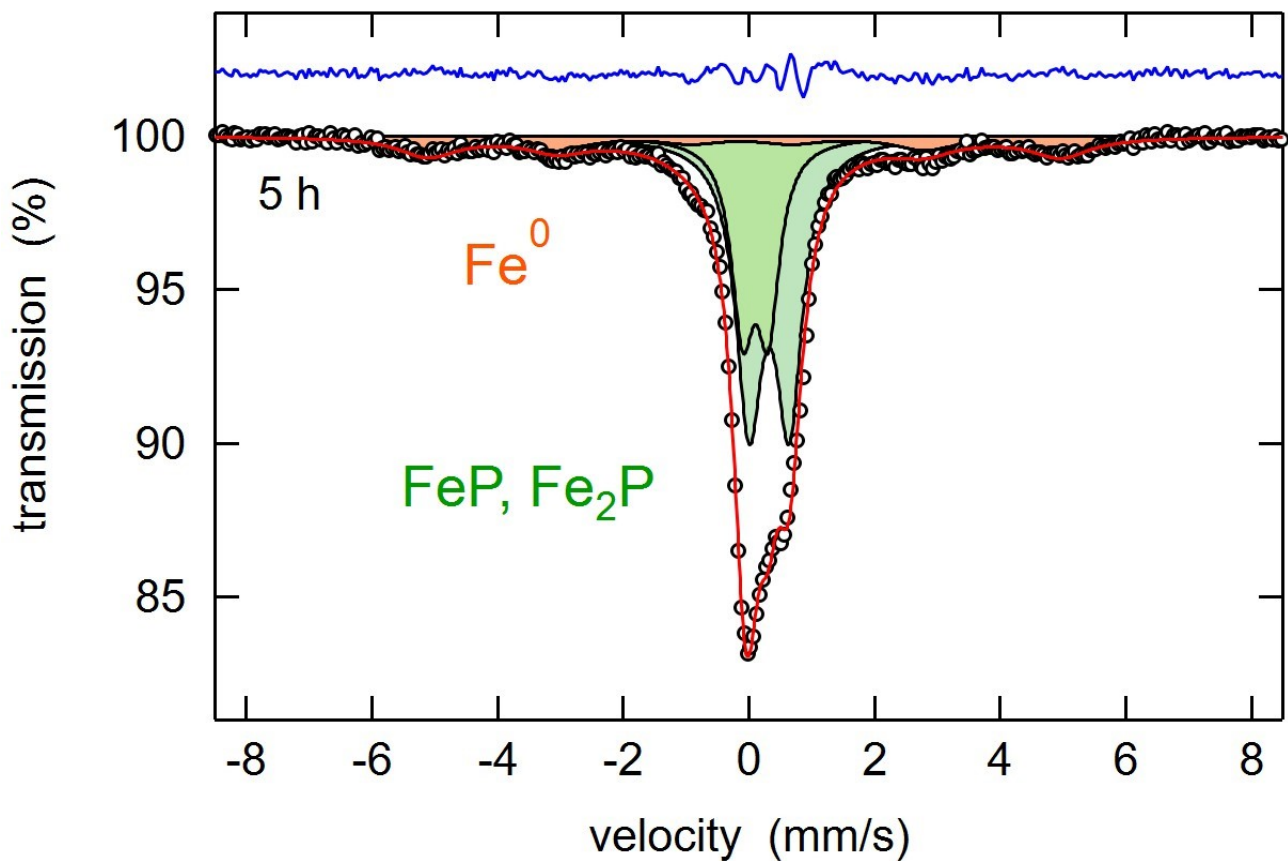


Figure S1

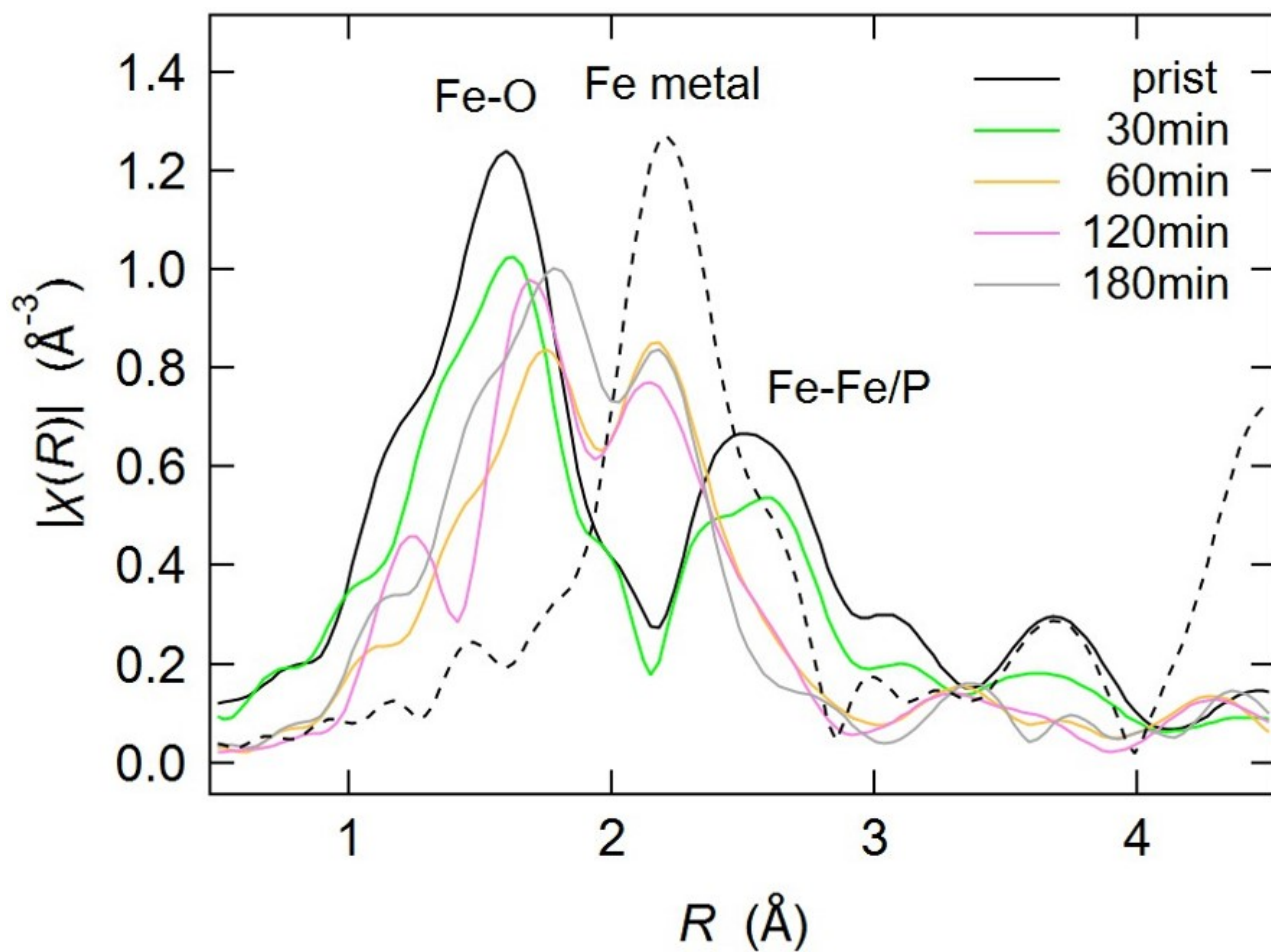


Figure S2

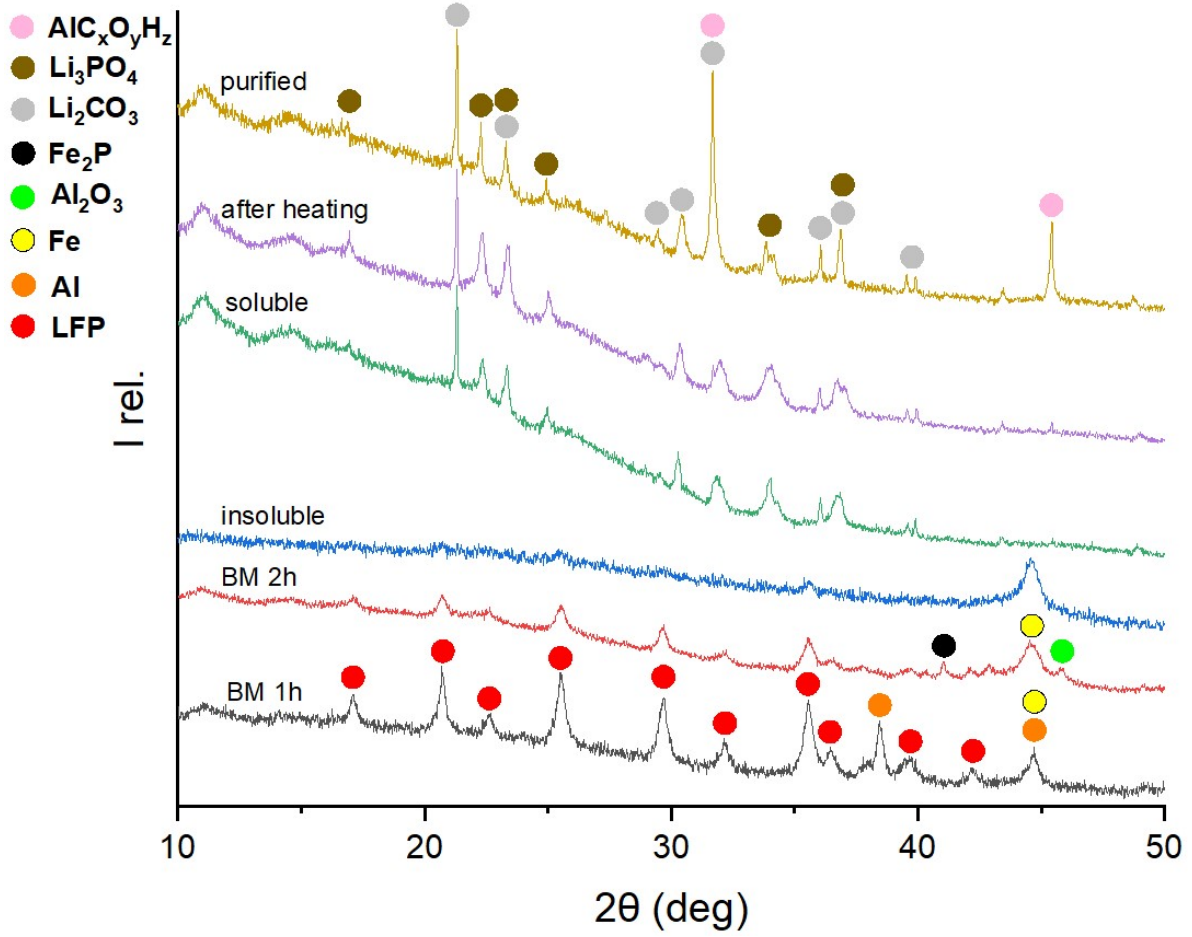


Figure S3

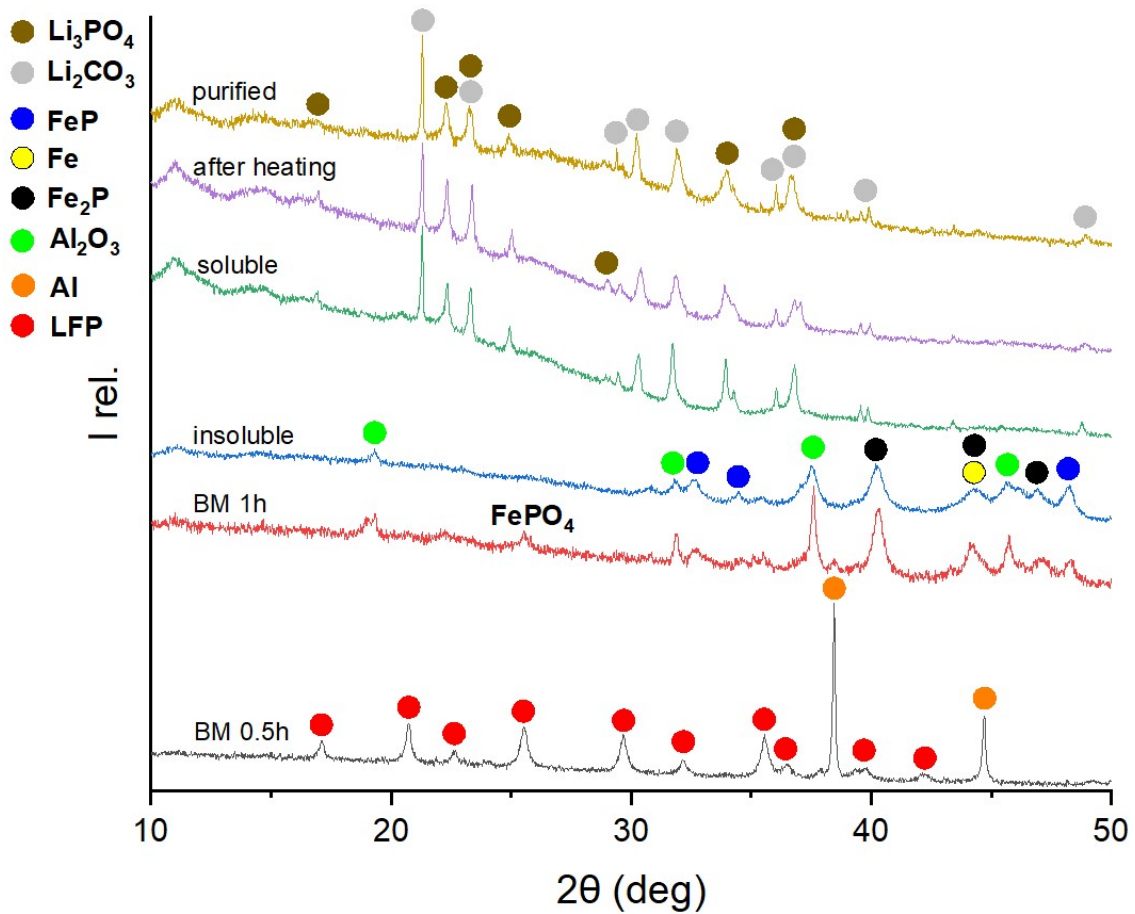


Figure S4

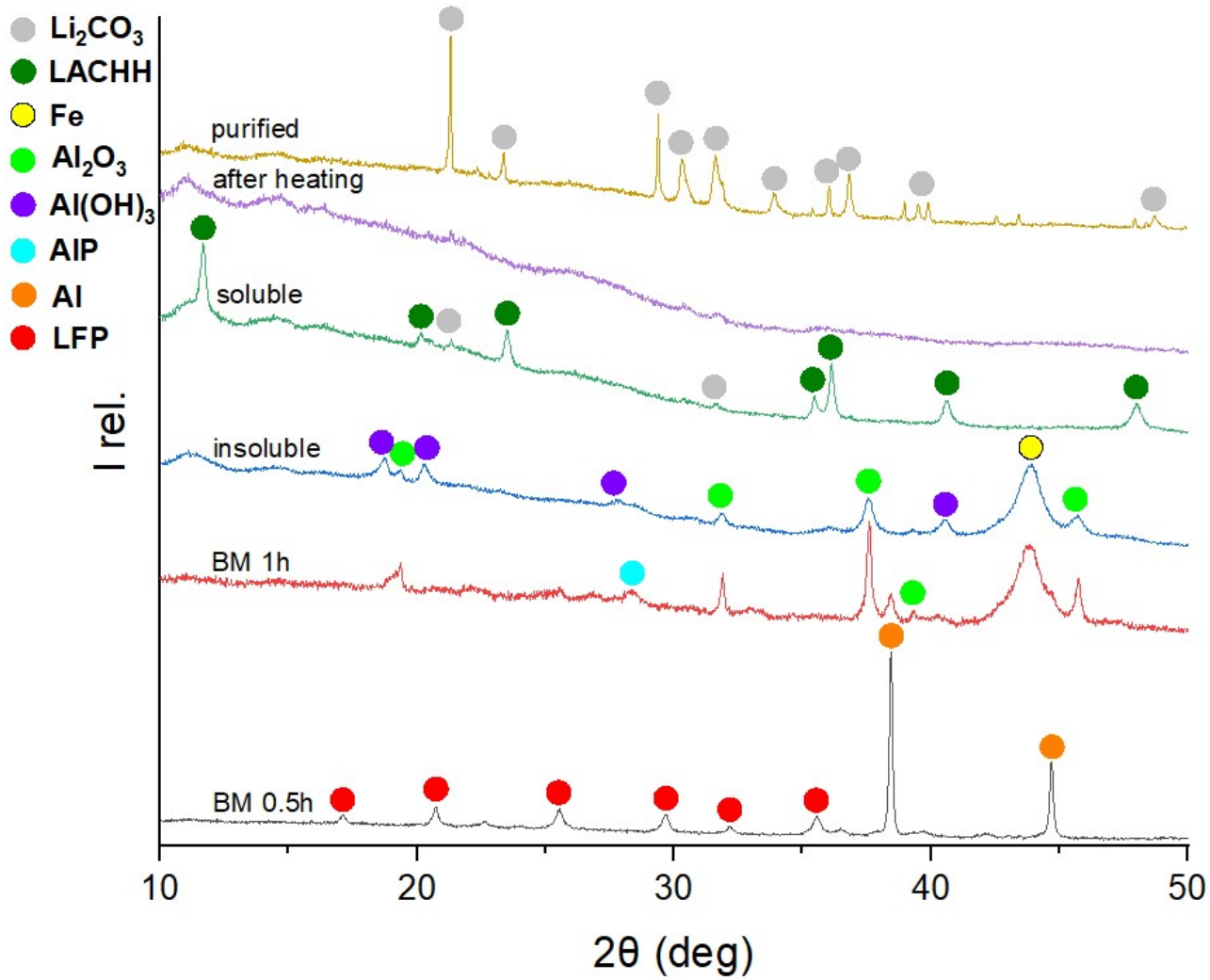


Figure S5