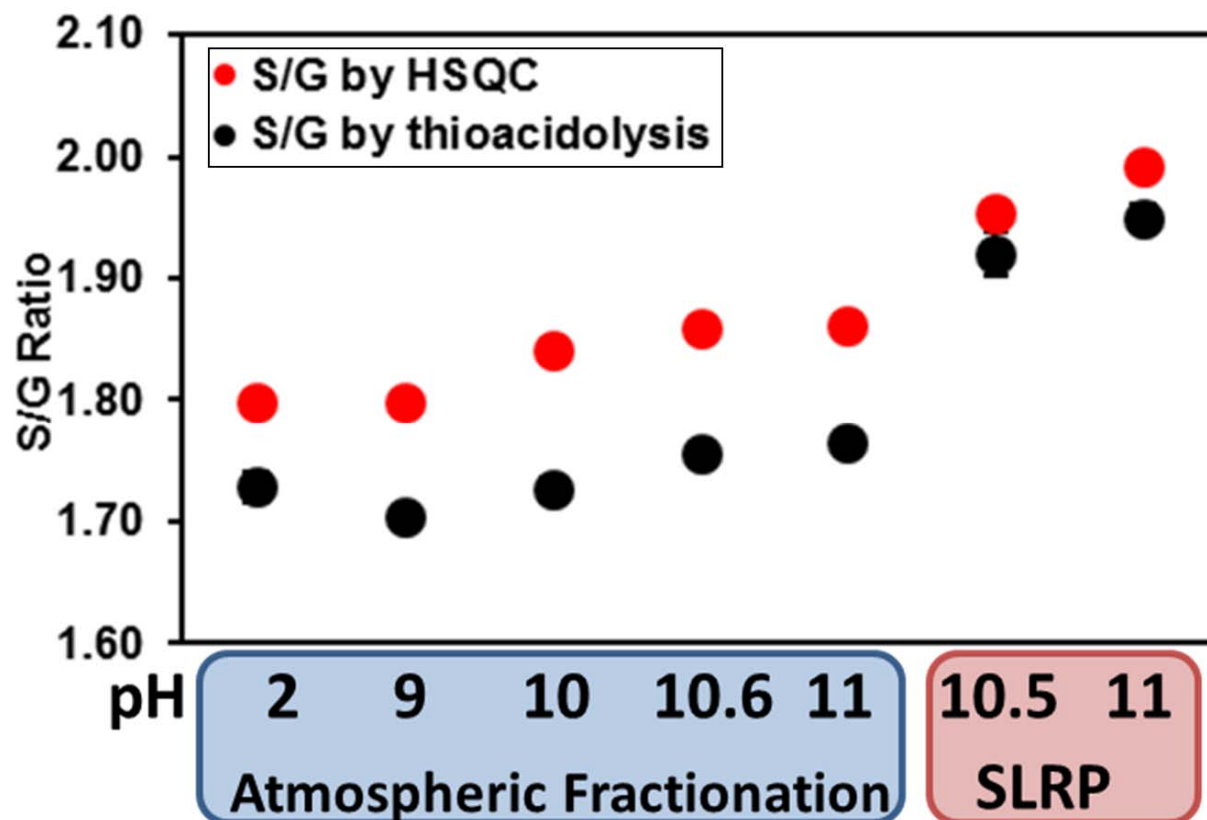
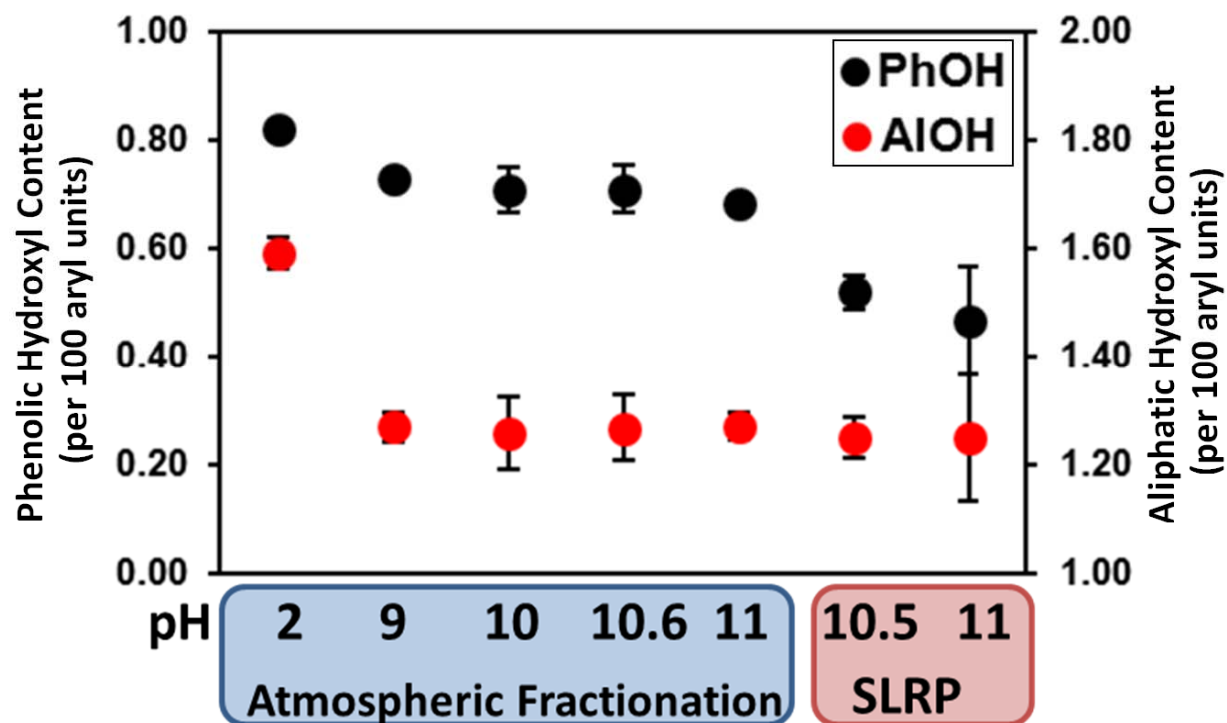


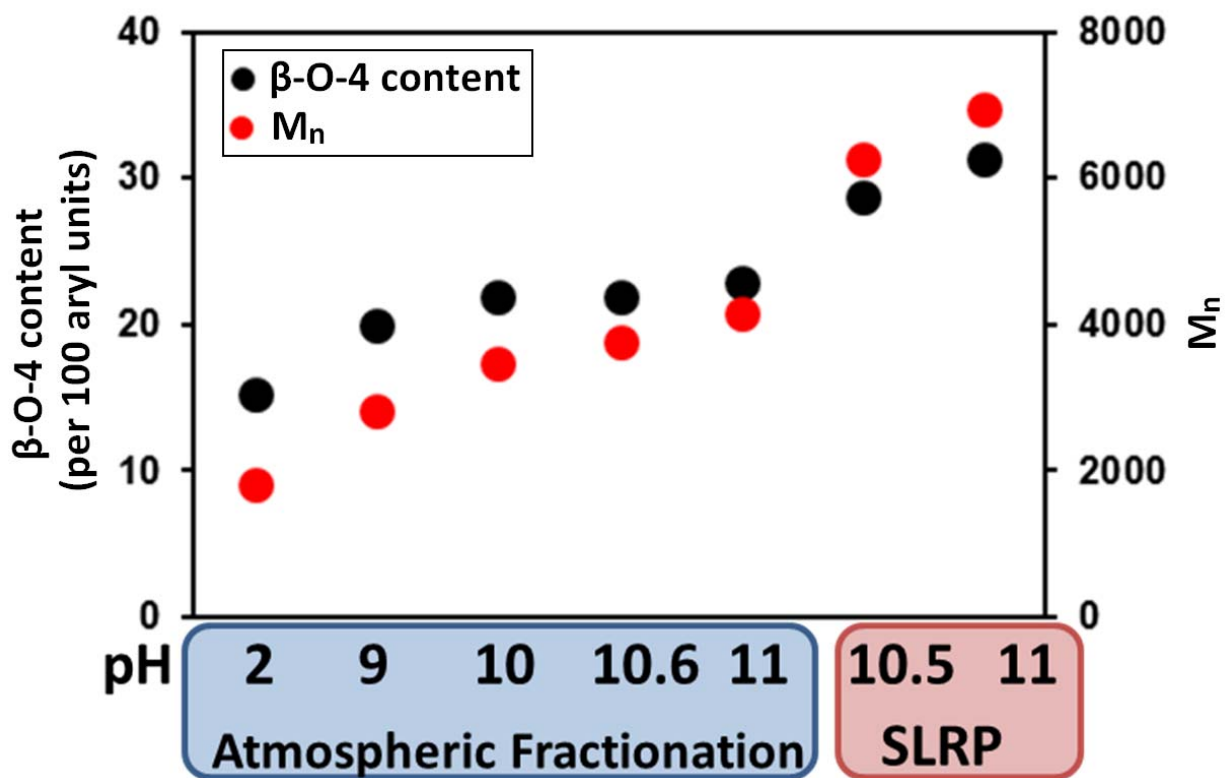
SUPPLEMENTARY INFORMATION



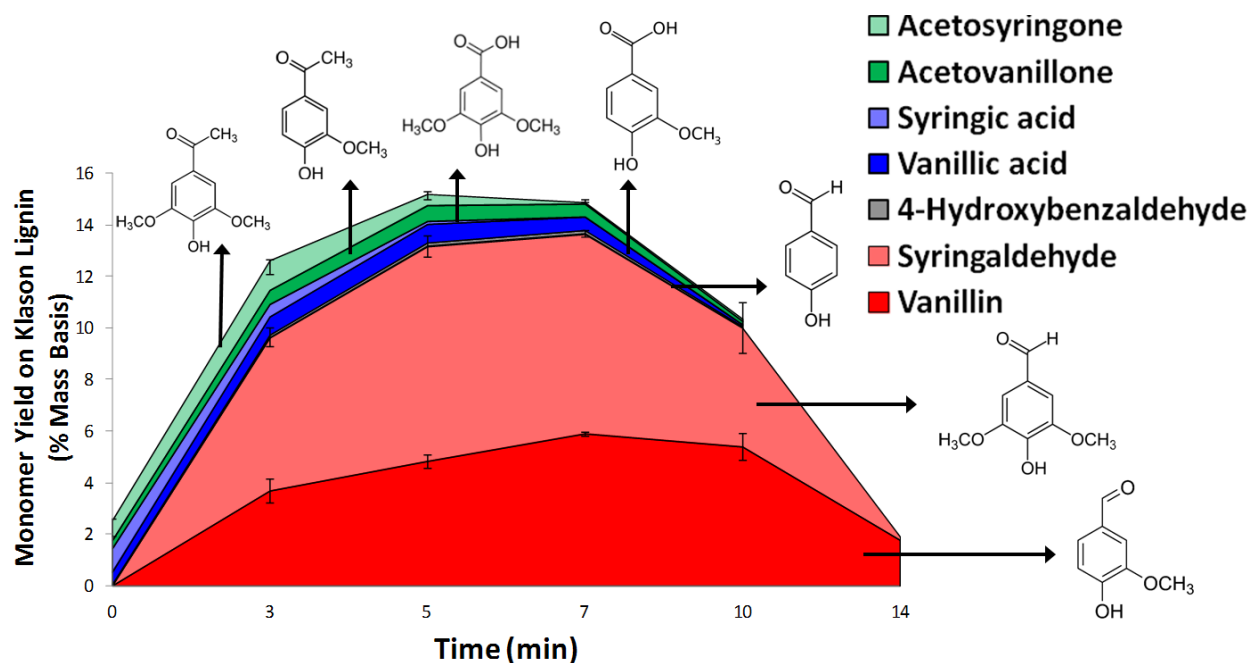
Supplemental Fig. S1. Trends of S/G ratios in fractionated lignin by HSQC NMR (red) and thioacidolysis (black) showing higher S/G values in fractions precipitated at higher pH and SLRP samples.



Supplemental Fig. S2. Trends of phenolic hydroxyl contents (black) in fractionated lignin showing lower values in fractions precipitated at higher pH, while aliphatic hydroxyl content (red) do not show any specific trend.



Supplemental Fig. S3. Trends of β -O-4 content (black) as measured by ^{13}C -NMR and number average molecular weight among fractionated lignin showing similar increasing trend in fractions precipitated at higher pH and SLRP samples.



Supplemental Fig. S4. Kinetics of Cu-catalyzed oxidation of lignin sample SLRP-2 demonstrating reaction times for optimal yields.