

Supporting Information

Kim et al. 10.1073/pnas.1308958110

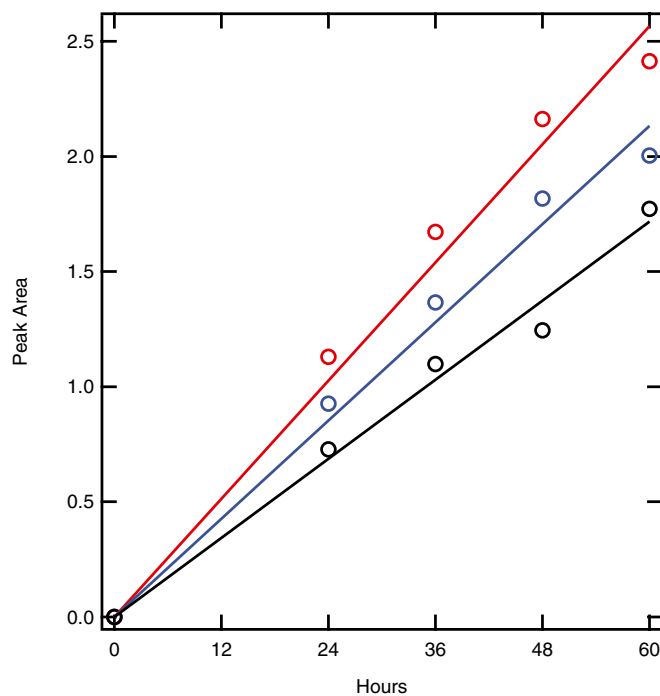


Fig. S1. Hydrogen evolution kinetics under different wavelengths of UV. Data points measured at 12 h are ignored due to the detection limit. Red, blue, and black lines correspond to 260, 270, and 280 nm bandpass filters, respectively. The ratios of slopes correspond to the ratios of overlapping area between effective absorption cross-section and the UV output through filters.

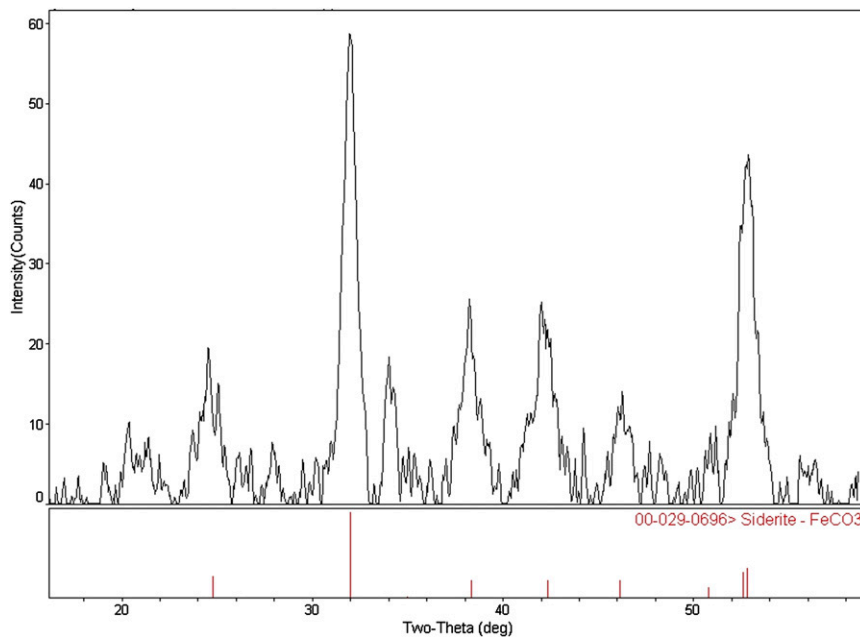


Fig. S2. X-ray diffraction spectra of siderite (*Upper*) and the reference peak profile of siderite (*Lower*).

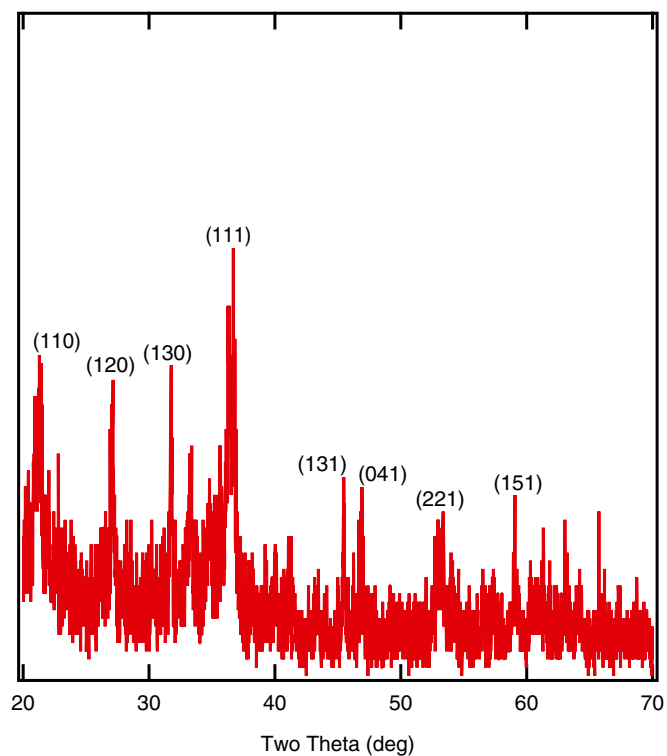


Fig. S3. XRD spectra of goethite.

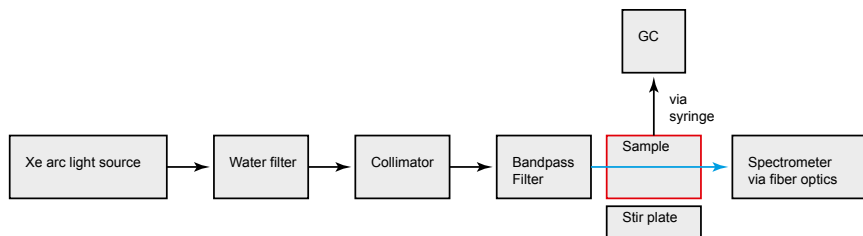


Fig. S4. Schematic box diagram of optical components. All components were attached to the optics table, except for the gas chromatograph.

