

Supporting Materials

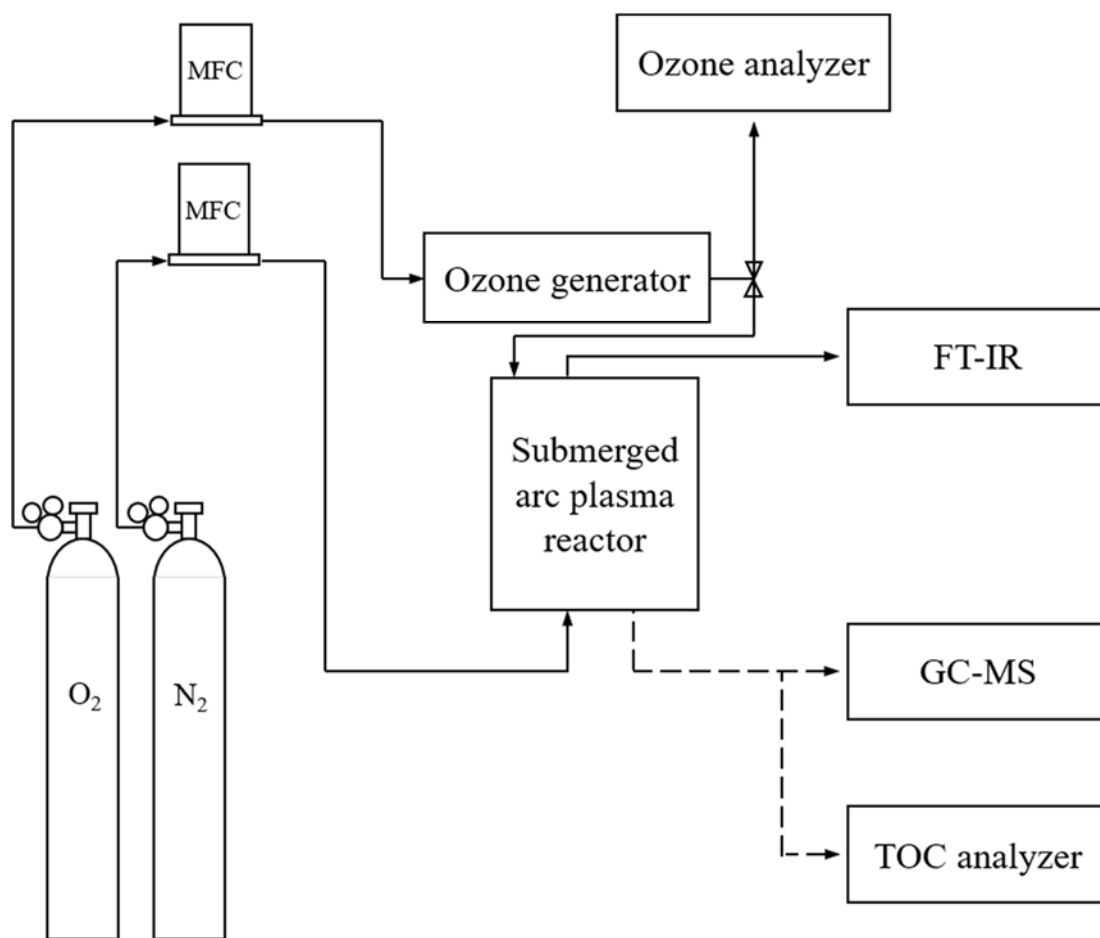


Fig. S1 Overall experimental apparatus of an ozone generator and submerged arc plasma for the removal of phenol

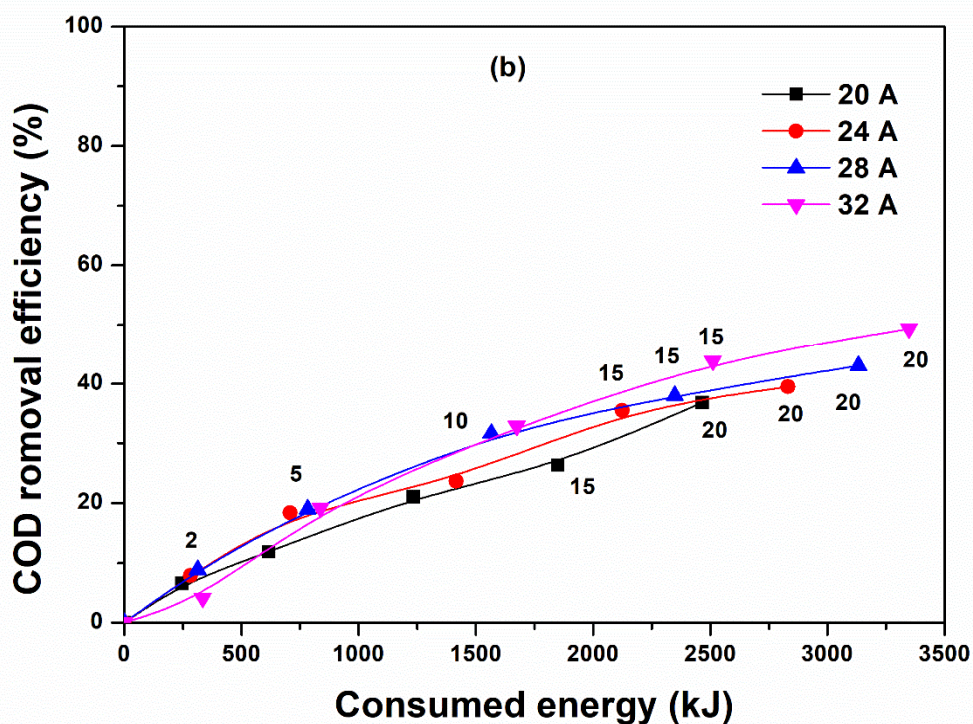
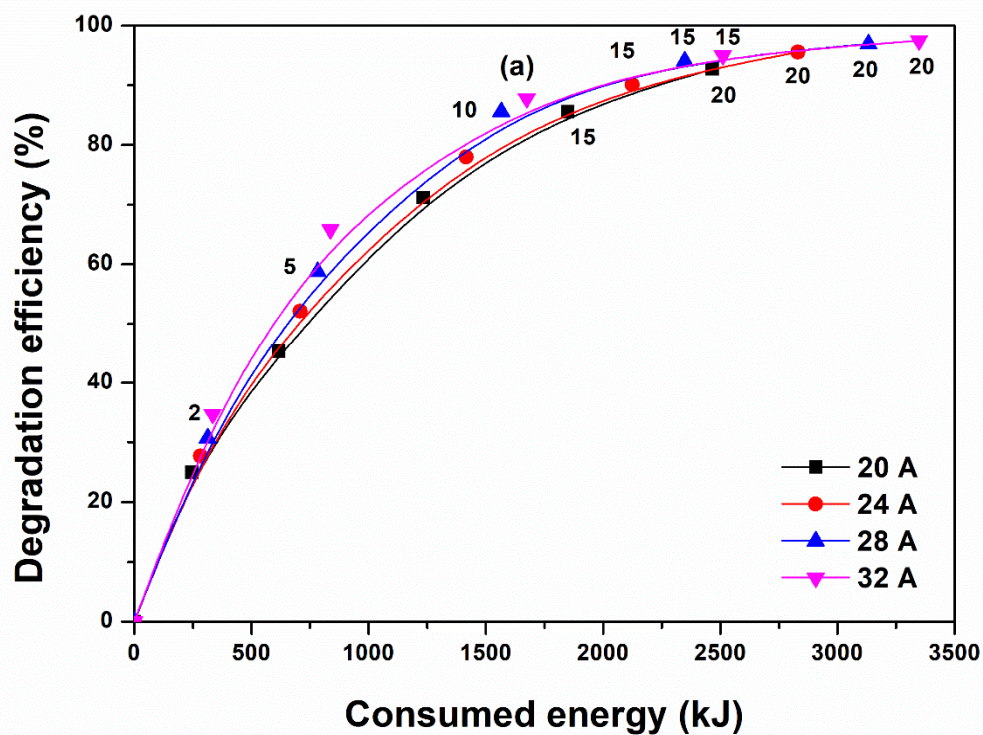


Fig. S2 (a) phenol degradation efficiency and (b) COD decrease efficiency with changing the input power controlled by plasma current; the integers indicate the treatment time corresponding to each plot

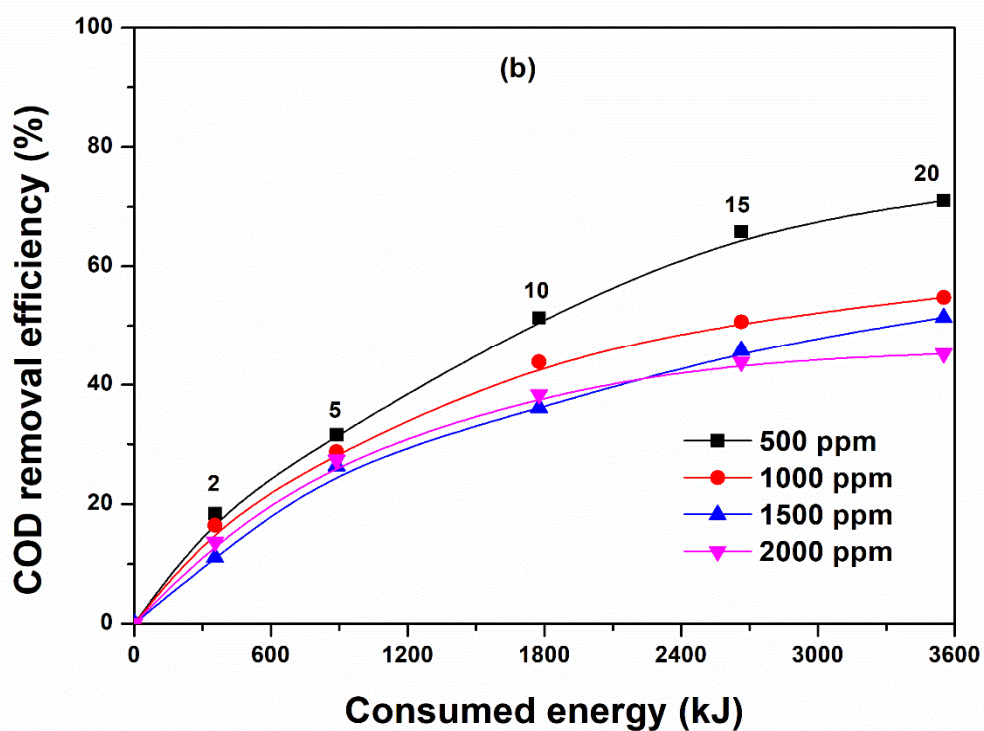
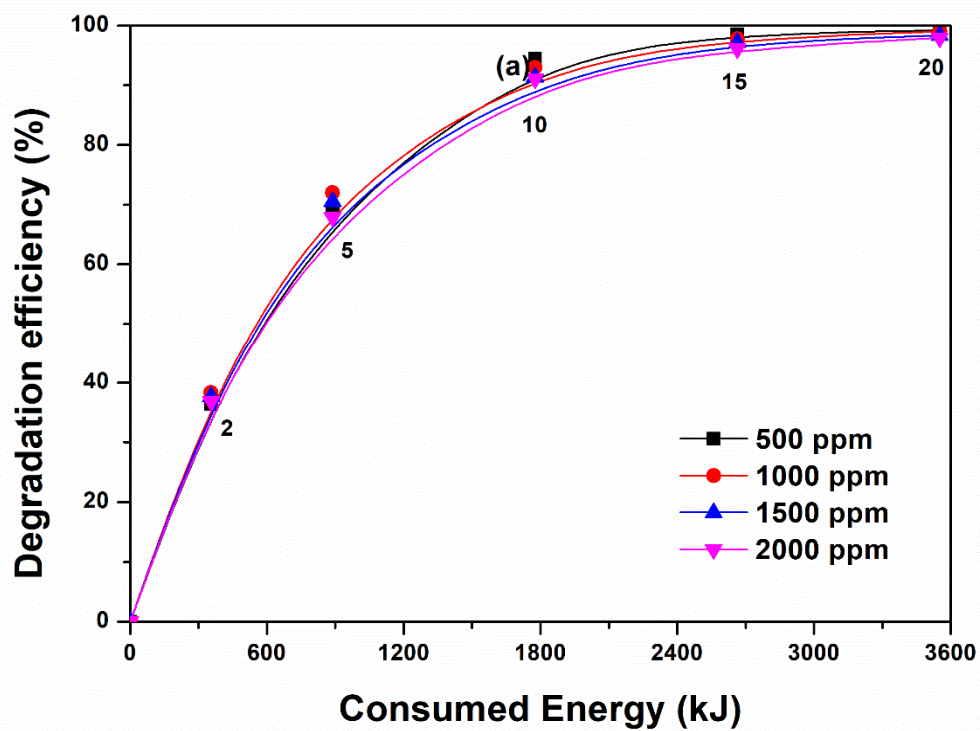


Fig. S3 (a) phenol degradation efficiency and (b) COD decrease efficiency with changing the initial concentration of phenol at the same input power of arc plasma; the integers indicate the treatment time corresponding to each plot

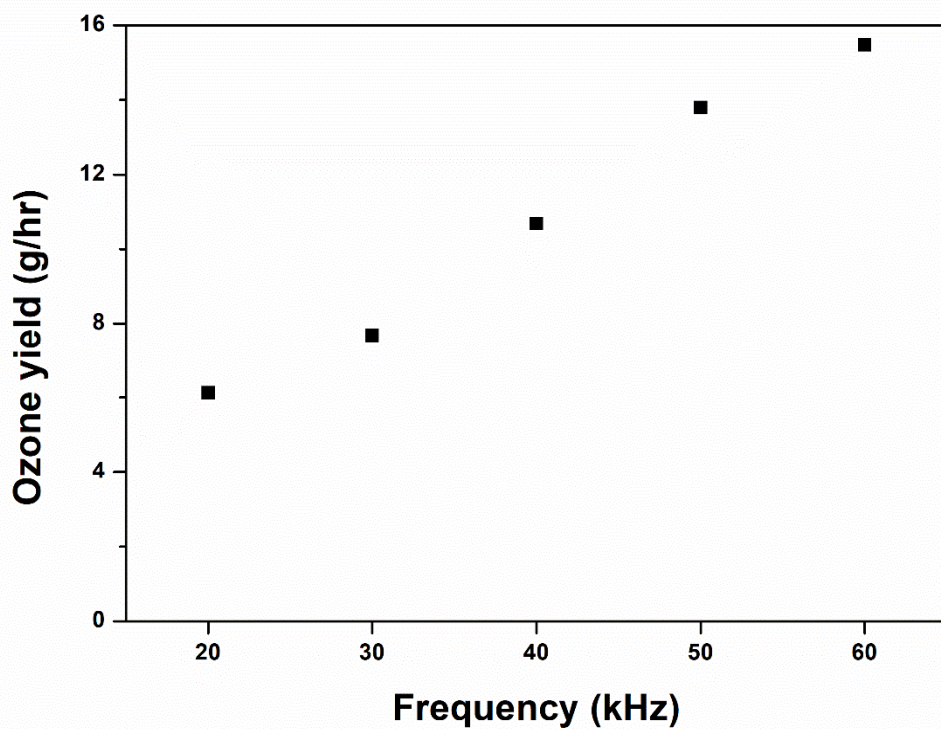


Fig. S4 Ozone production ability of an ozone generator as a function of the frequency

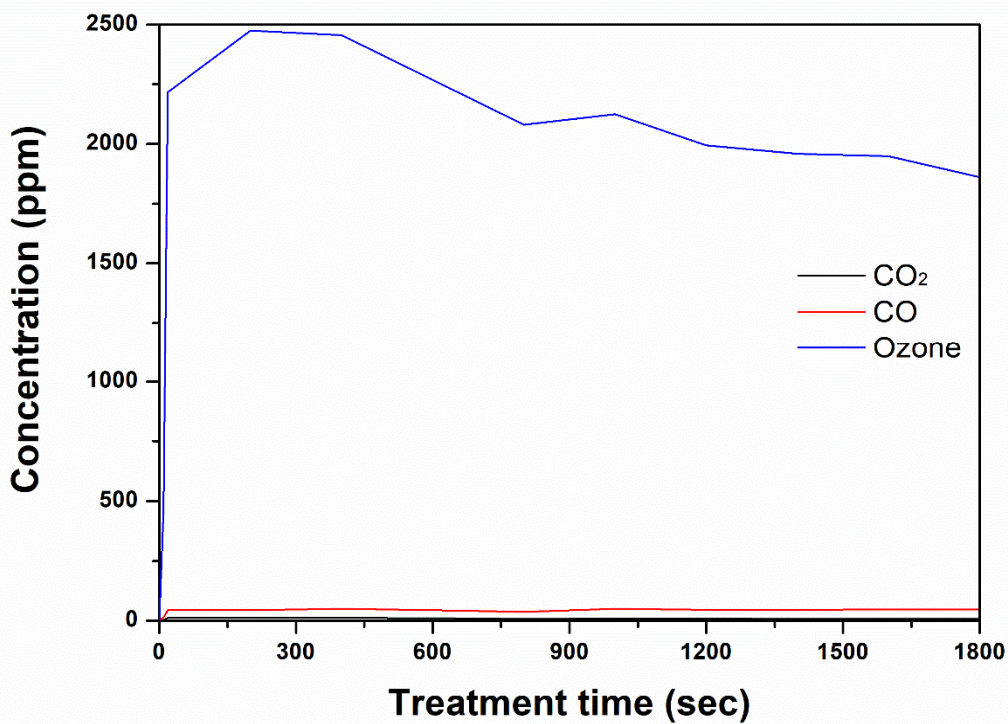


Fig. S5 Detected concentration of CO<sub>x</sub> and Ozone at single ozone oxidation