

## Supporting information

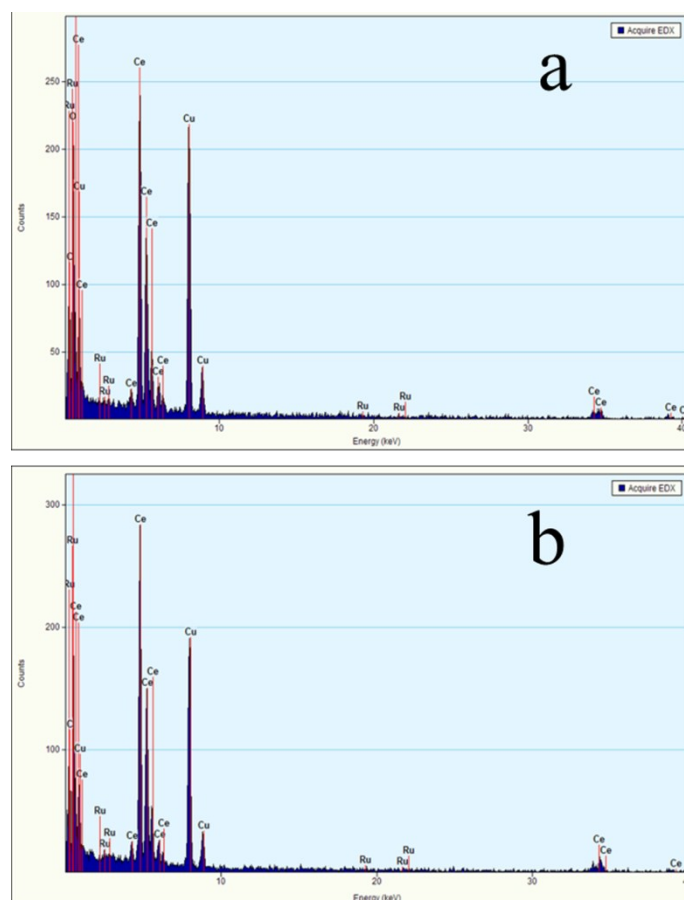


Fig. S1. The EDX images of (a) Ru/CeO<sub>2</sub> and (b) Ru/CeO<sub>2</sub>-A.

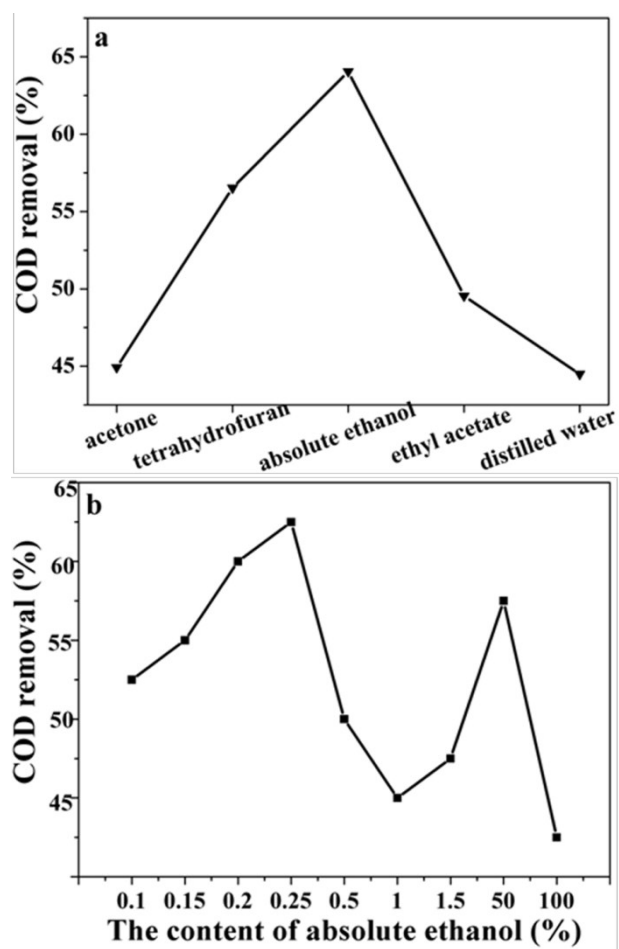


Fig.S2 The COD removal under the Ru/CeO<sub>2</sub> catalyst mediated by (a) different solvent and (b) different content of absolute ethanol.