

## *Supporting information*

### Enhanced Carboxylation of Furoic Salt with CO<sub>2</sub> by ZnCl<sub>2</sub> Coordination for Efficient Production of 2,5-Furandicarboxylic Acid

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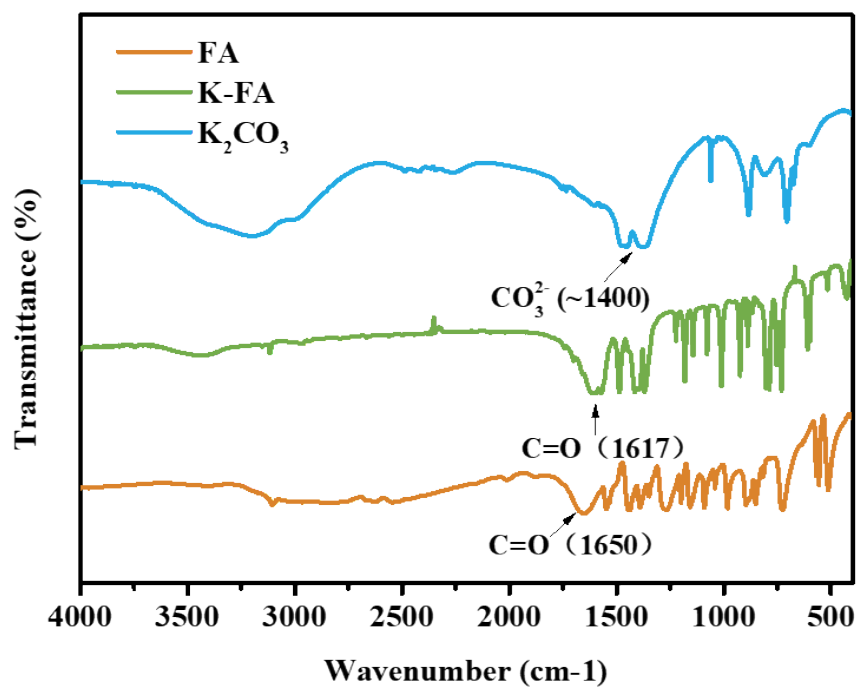


Figure S1. *Infrared spectra of FA, K<sub>2</sub>CO<sub>3</sub> and K-FA*

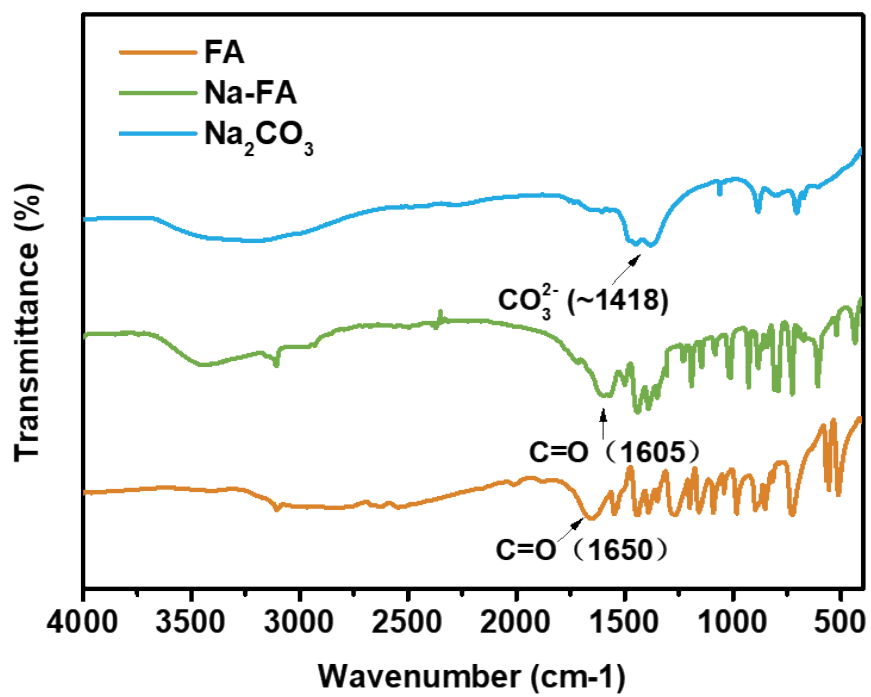


Figure S2. Infrared spectra of FA, Na<sub>2</sub>CO<sub>3</sub> and Na-FA.

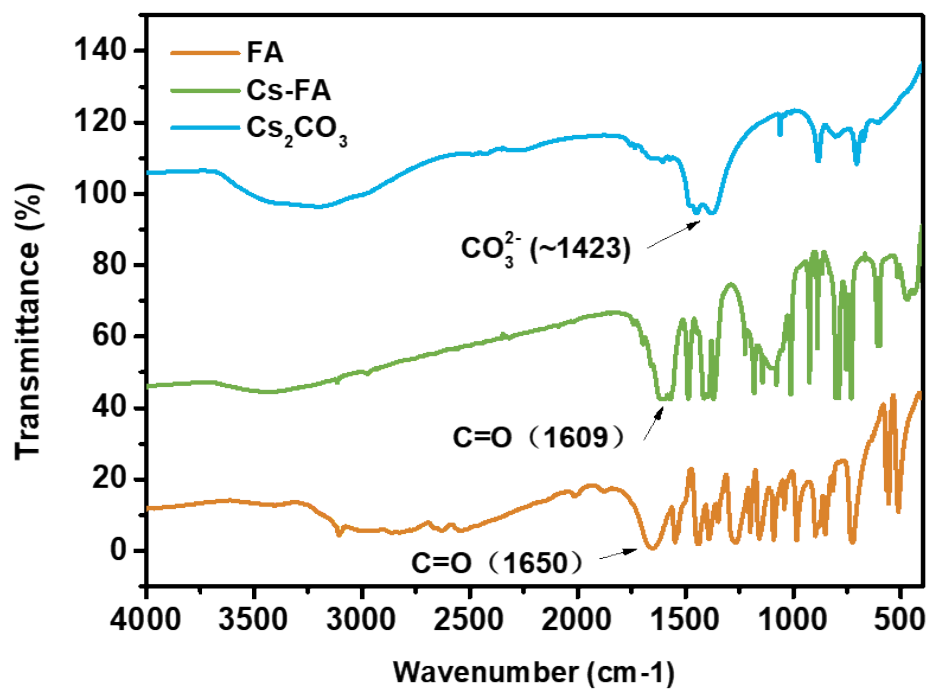


Figure S3. Infrared spectra of FA,  $\text{Cs}_2\text{CO}_3$  and Cs-FA.

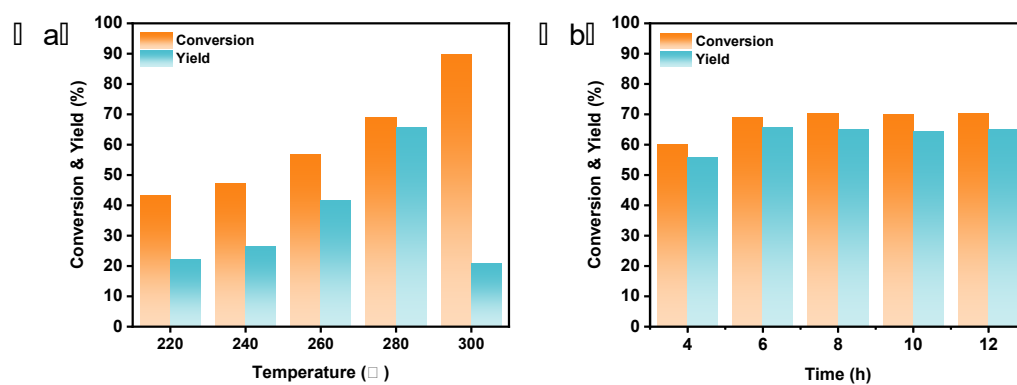


Figure S4. Effect of FeCl<sub>3</sub> on CO<sub>2</sub> carboxylation in K-FA/Cs<sub>2</sub>CO<sub>3</sub> reaction system. (a) Reaction temperature; (b) Reaction time. Reaction conditions: 1 mmol K-FA, 1 mmol Cs<sub>2</sub>CO<sub>3</sub>, 220 ~ 300°C, 1 MPa CO<sub>2</sub>, 4 ~ 12 h.

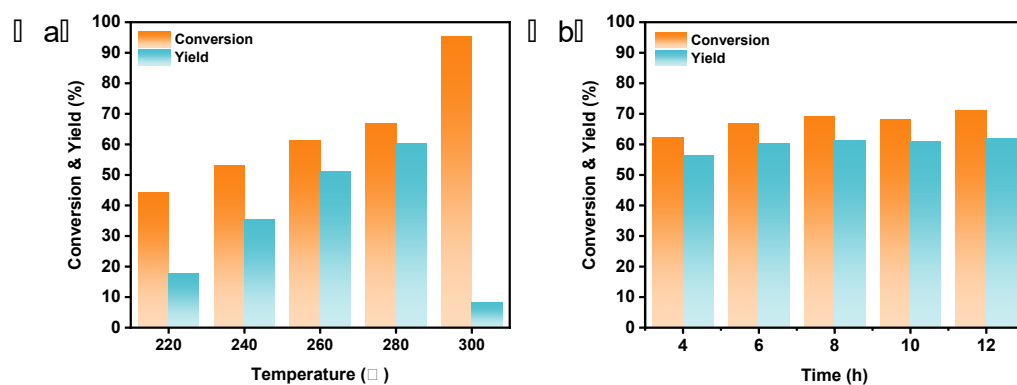


Figure S5. Effect of  $\text{CuCl}_2$  on  $\text{CO}_2$  carboxylation in  $\text{K-FA}/\text{Cs}_2\text{CO}_3$  reaction system. (a) Reaction temperature; (b) Reaction time. Reaction conditions: 1 mmol  $\text{K-FA}$ , 1 mmol  $\text{Cs}_2\text{CO}_3$ , 220 ~ 300°C, 1 MPa  $\text{CO}_2$ , 4 ~ 12 h.