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Aldol condensation of refluxing acetone on CaC₂ achieves efficient coproduction of diacetone-alcohol, mesityl oxide and isophorone

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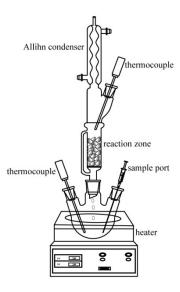


Fig.S1 Refluxing reaction experimental setup

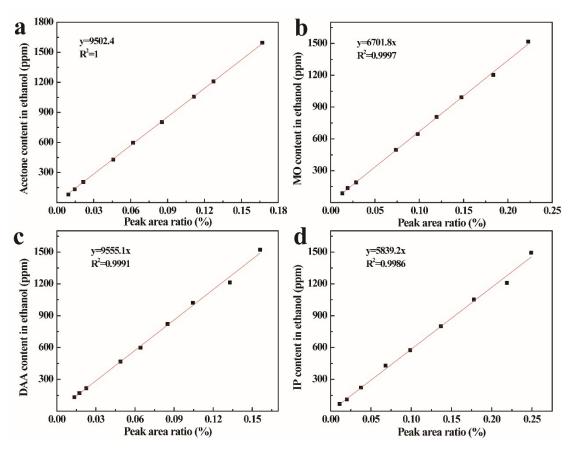


Fig.S2 Standard curve of acetone-ethanol (a), MO-ethanol (b), DAA-ethanol (c) and IP-ethanol (d)

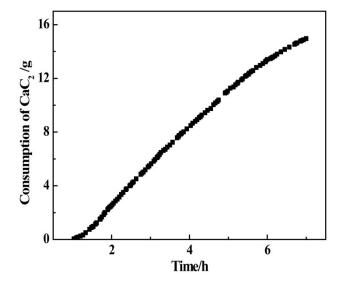


Fig.S3 Consumption of CaC₂ at the boiling point of acetone

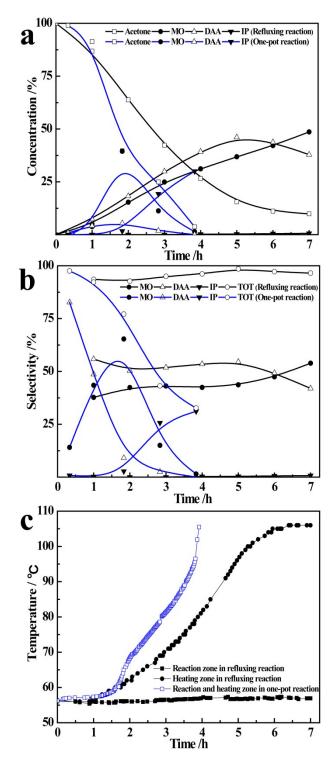


Fig. S4 Variation of liquid concentration (a), selectivity (b) and temperature (c) with time at two reaction processes