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## Supplementary data

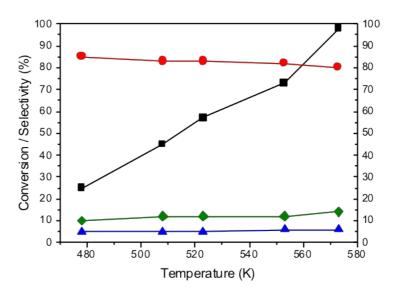


Fig. S1: Variation of acetoin conversion ( $\blacksquare$ ) and selectivity to diacethyl ( $\bullet$ ), CO<sub>x</sub>( $\blacksquare$ ) and acetic acid ( $\spadesuit$ ) as a function of temperature on the WV-2 catalyst; acetoin/O<sub>2</sub>/N<sub>2</sub>=1.3/20.4/78.3 m<sub>cat</sub>=170 mg.

K

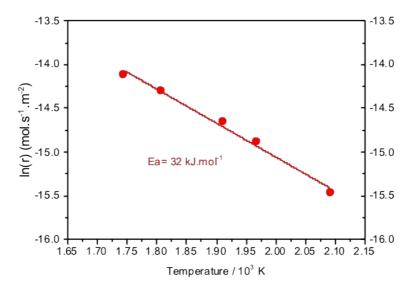


Fig. S2: Rate constant for acetoin conversion as a function of reciprocal temperature on WV-1;  $acetoin/O_2/N_2=1.3/20.4/78.3$