

Supplementary Information

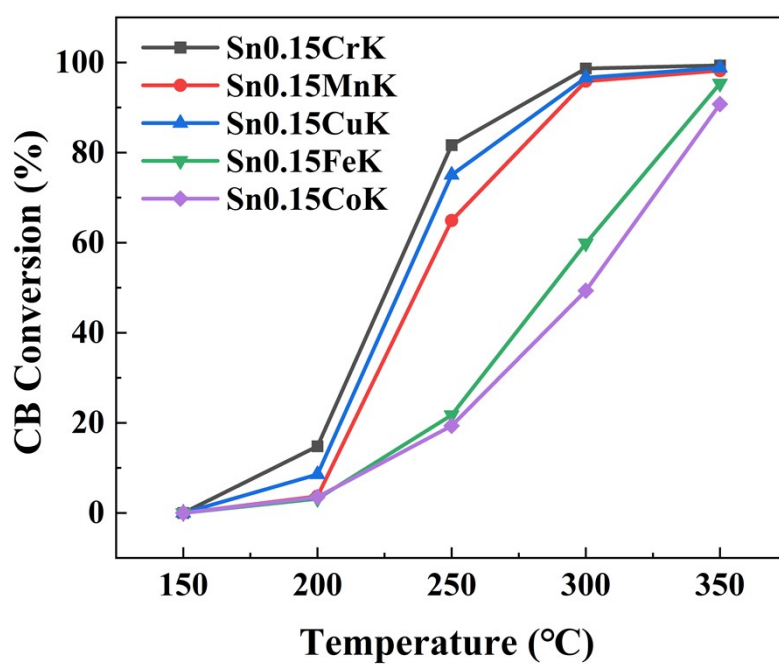


Fig. S1 The activity of Sn0.15MK catalysts for CB combustion, gas composition: 300 ppm CB, 20% O₂, balance N₂; GHSV = 15 000 h⁻¹.

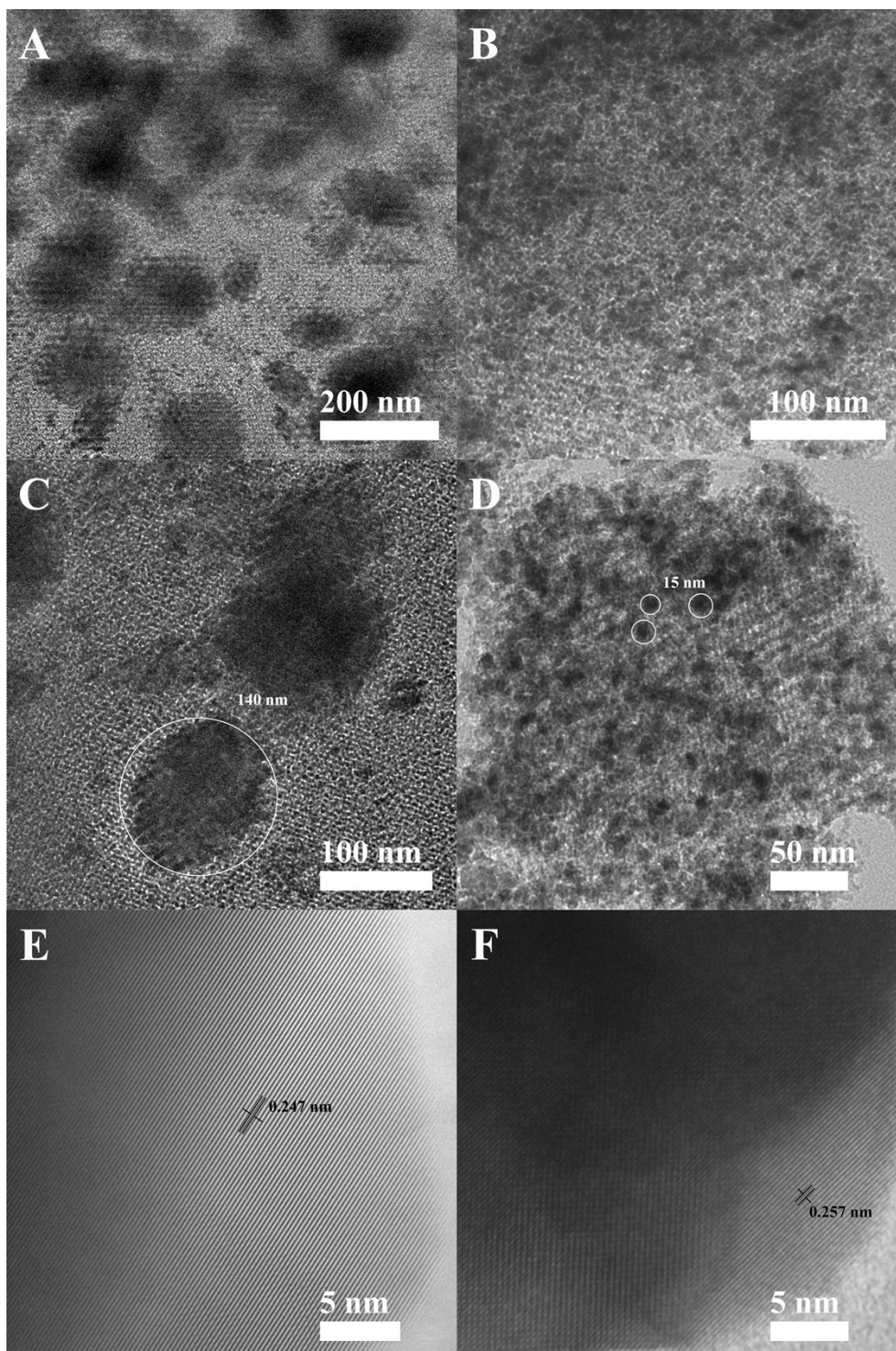


Fig. S2 TEM (A-D) and HRTEM (E, F) images of: (A, C and E) CrK and (B, D and F) Sn_{0.15}CrK.

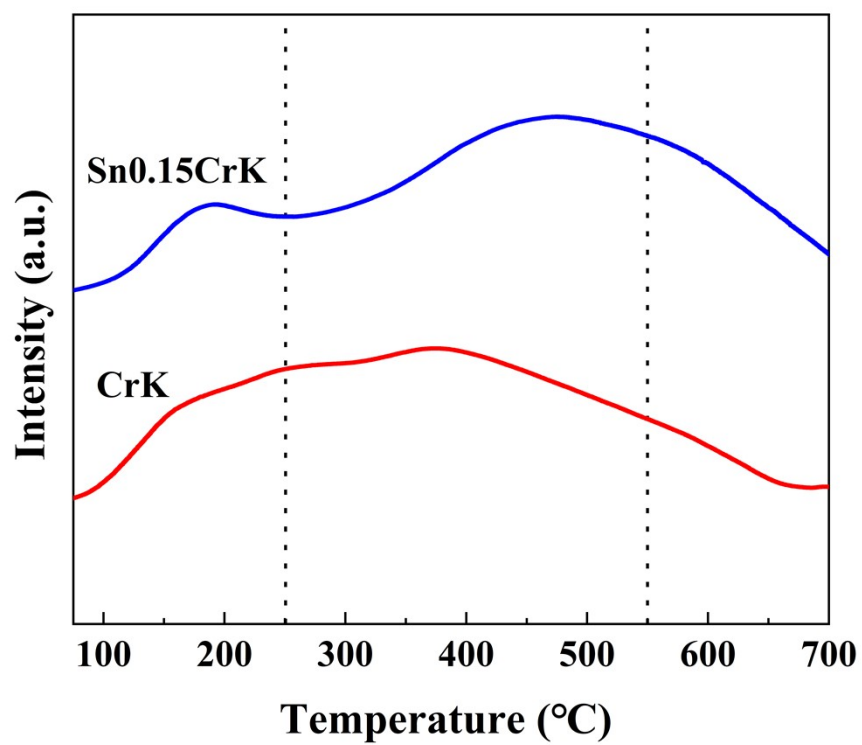


Fig. S3 O₂-TPD patterns of CrK and Sn0.15CrK.

Table S1 Comparison of different catalysts on the activity of CB.

Catalysts	CB concentration	GHSV	T50/°C	T90/°C	References
2wt% Pd/Al-PILC	0.01%	22 000 h ⁻¹	367	-	26
2wt% Pt/Al-PILC	0.01%	22 000 h ⁻¹	321	-	26
0.2wt% Pd/TiO ₂	2500 mg/m ²	30 000 h ⁻¹	280	370	27
30wt% CuCeO ₄	500 ppm	30 000 h ⁻¹	259	300	28
10wt% MnCo (3:1) /MCM-41	1000 ppm	20 000 h ⁻¹	236	280	10
10 wt% Cr/AlZr-PILC	1000 ppm	20 000 h ⁻¹	300	370	29
Sn0.15CrK	300 ppm	15 000 h ⁻¹	225	274	This work
CrK	300 ppm	15 000 h ⁻¹	257	-	This work