

Supporting Information

**Defective MZrO_x supported Pt catalysts for catalytic
oxidation of glycerol: tailoring oxygen vacancy over the
support**

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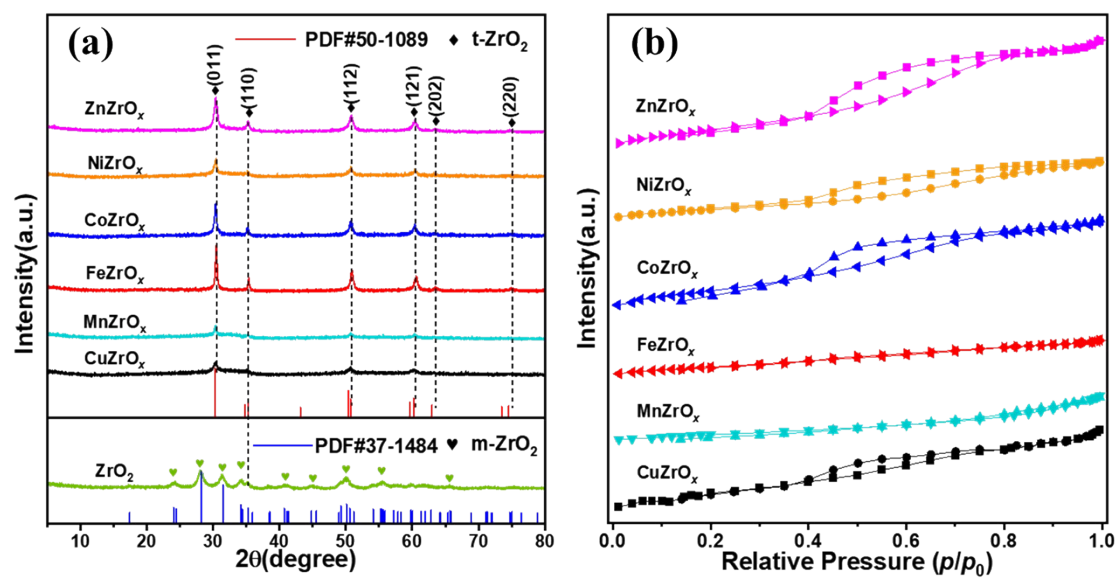


Fig. S1 (a) XRD patterns, (b) N_2 adsorption-desorption isotherms of $MZrO_x$ supports.

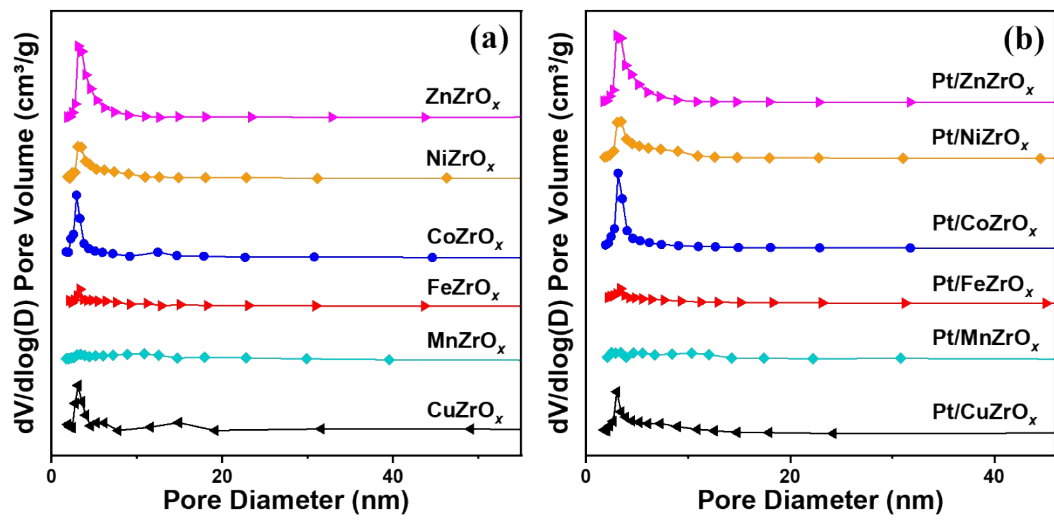


Fig. S2 (a) MZrO_x supports, (b) Pt/MZrO_x catalysts of pore diameter distribution.

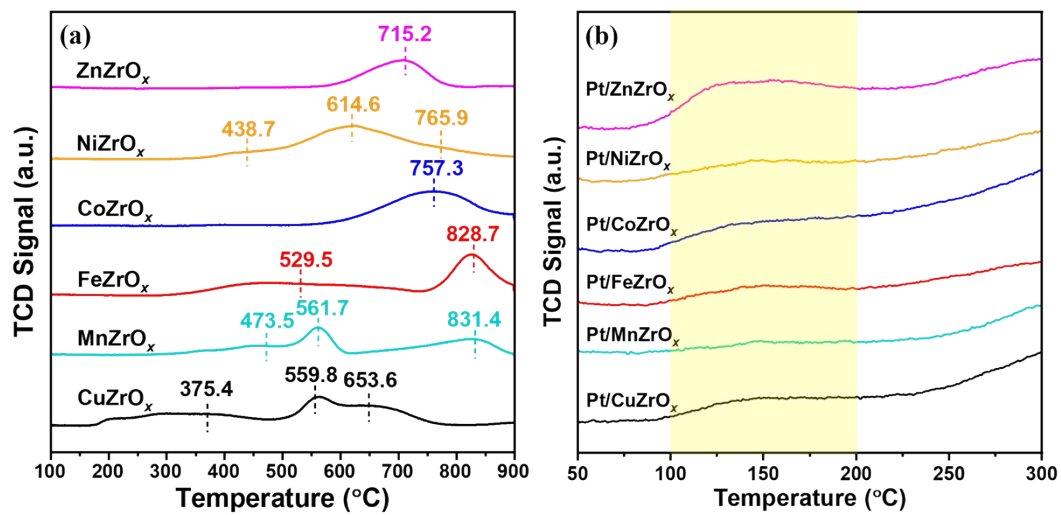


Fig. S3 (a) H₂-TPR curves of MZrO_x supports, (b)NH₃-TPD curves zoomed views in the range of 50~300 °C of Pt/MZrO_x catalysts.

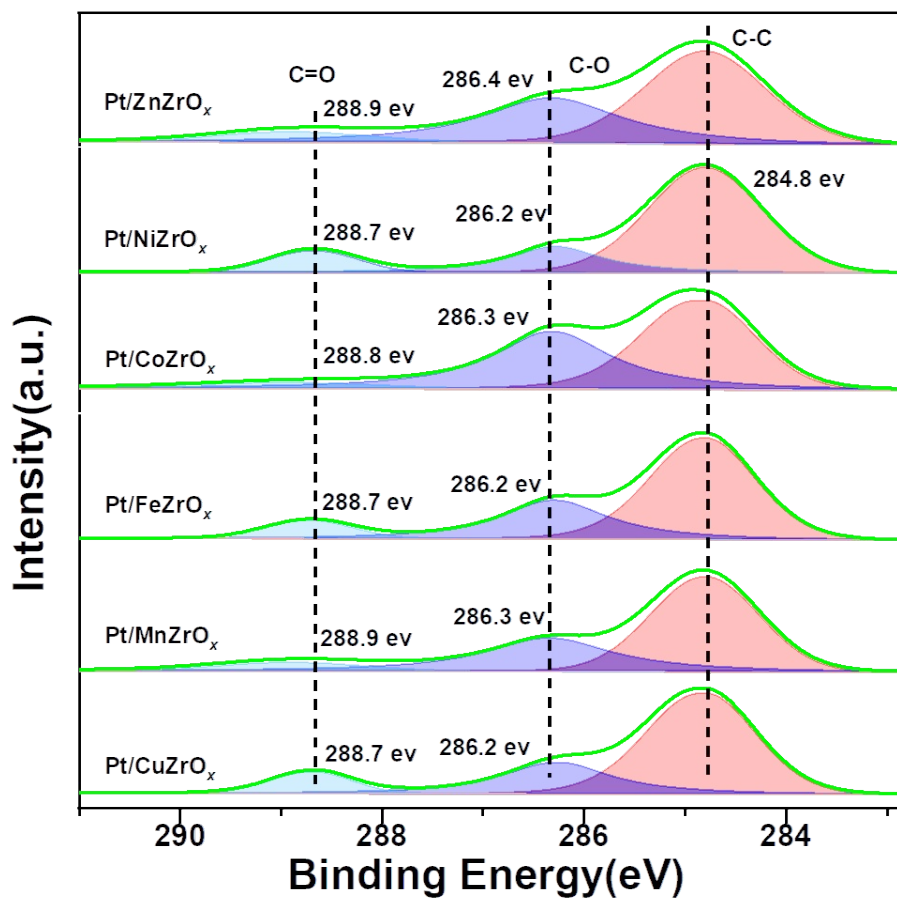


Fig. S4 C 1s of Pt/MZrO_x catalysts.

Table S1 Physicochemical properties of the MZrO_x supports.

Catalyst	S _{BET} (m ² ·g ⁻¹)	V _P (m ³ ·g ⁻¹)	D _P (nm)
CuZrO _x	26.61	0.034	5.16
MnZrO _x	9.13	0.019	8.27
FeZrO _x	12.81	0.016	4.89
CoZrO _x	27.16	0.039	5.73
NiZrO _x	14.61	0.025	6.87
ZnZrO _x	31.68	0.049	6.24