

Supporting Information for “Fluffy mesoporous Al₂O₃ supported Ag–In₂O₃ schottky junction catalysts for selective hydrogenation of C=O of α,β -unsaturated aldehydes”

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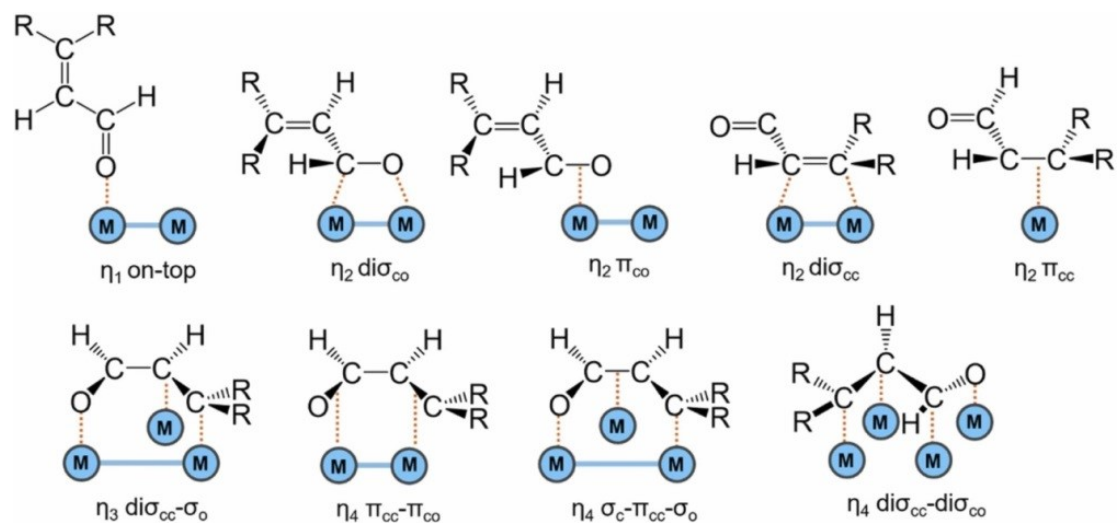


Fig. S1 Adsorption patterns of UAL on metal species. Adapted with permission from Applied Catalysis A: General, 2023, 666, 119423. Copyright 2023 Elsevier.

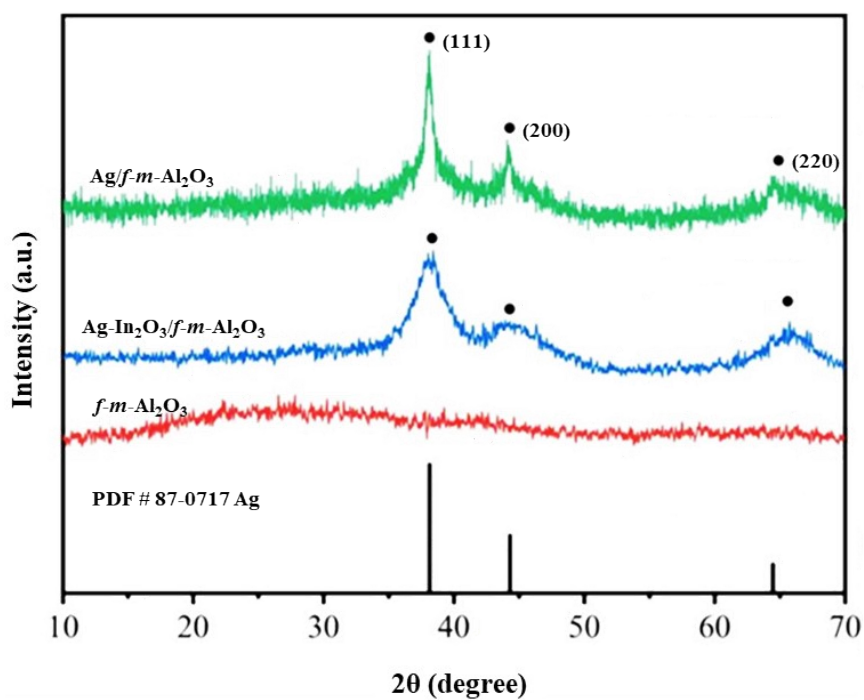


Fig. S2 XRD patterns of $Ag/f-m-Al_2O_3$, $Ag-In_2O_3/f-m-Al_2O_3$ and $f-m-Al_2O_3$.

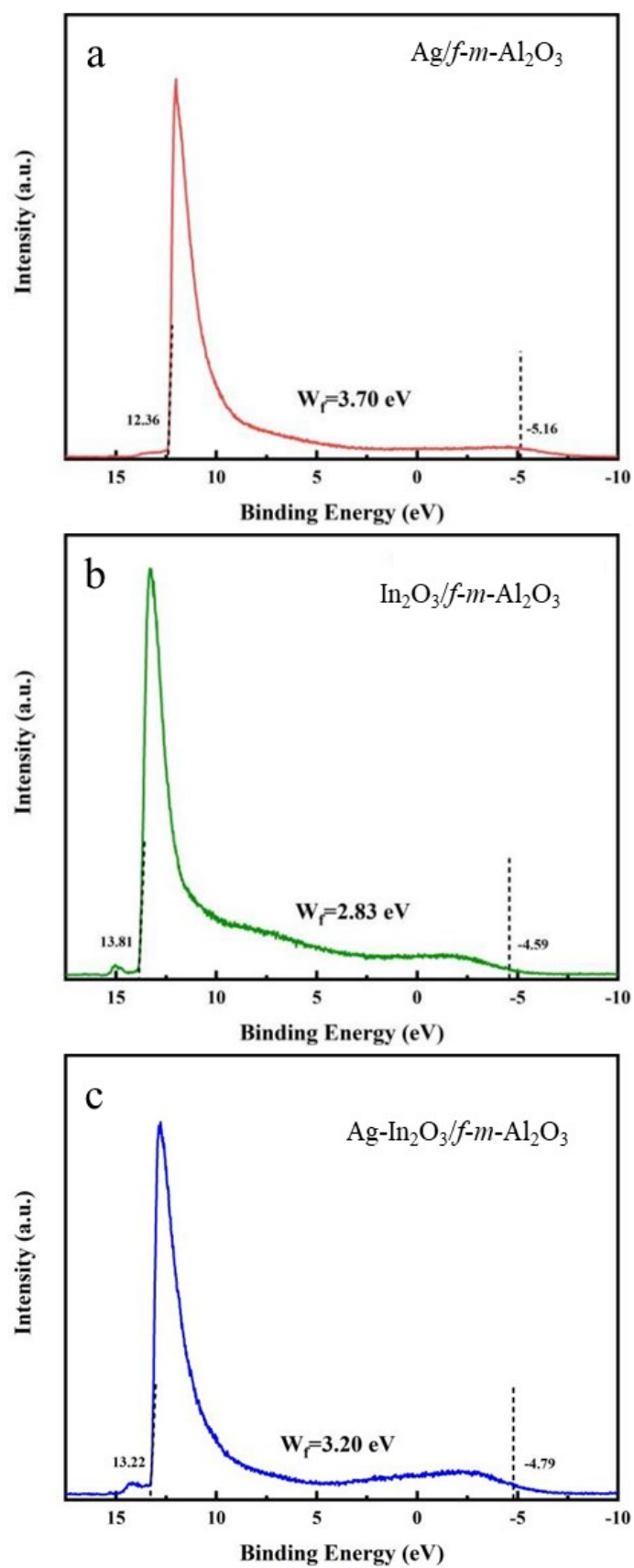


Fig. S3 The UPS spectra of (a) Ag/*f-m*-Al₂O₃, (b) In₂O₃/*f-m*-Al₂O₃ and (c) Ag-In₂O₃/*f-m*-Al₂O₃.

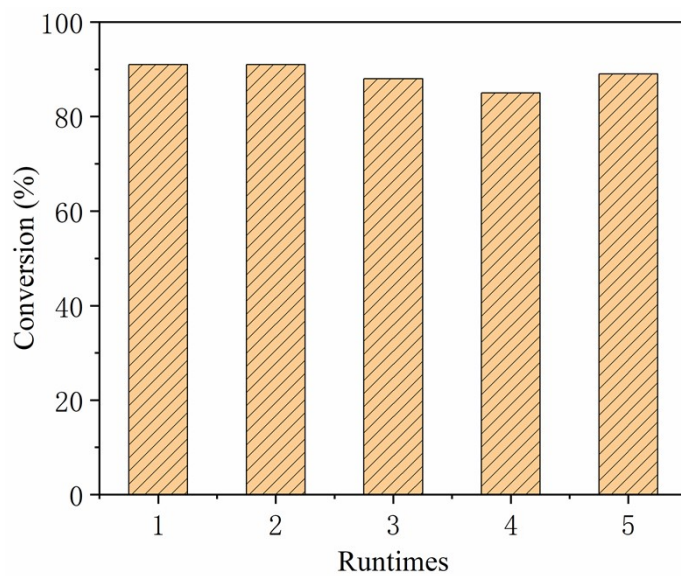


Fig. S4 Repeatability of cinnamaldehyde hydrogenation over Ag-In₂O₃/*f-m*-Al₂O₃.

Table S1 Specific surface area, pore volume and element content of the catalysts.

Catalyst	S _{BET} (m ² g ⁻¹) ^a	V (cm ³ g ⁻¹)	Elemental content (wt%) ^b	
			Ag	In
Ag-In ₂ O ₃ / <i>f-m</i> -Al ₂ O ₃	270.34	0.76	8.76	0.88
Ag-In ₂ O ₃ / <i>γ</i> -Al ₂ O ₃	25.13	0.15	9.02	0.90

^a The BET specific surface area and pore volume were calculated by single point (P/P₀=0.2).

^b The elemental contents were calculated by ICP-MS.