Supporting Information

Hexagonal In_2O_3 short nanorods rich in O vacancy-defect toward promoting highly efficient photothermal CO_2 reduction into C_2H_5OH

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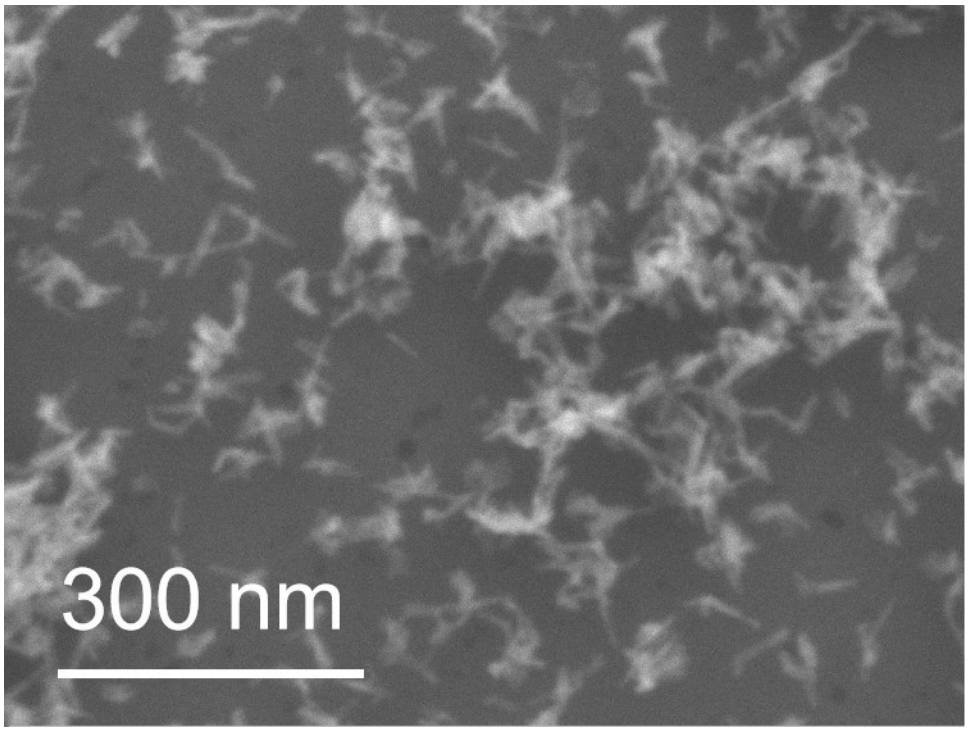

Fig. S1 SEM image of InOOH precursor.

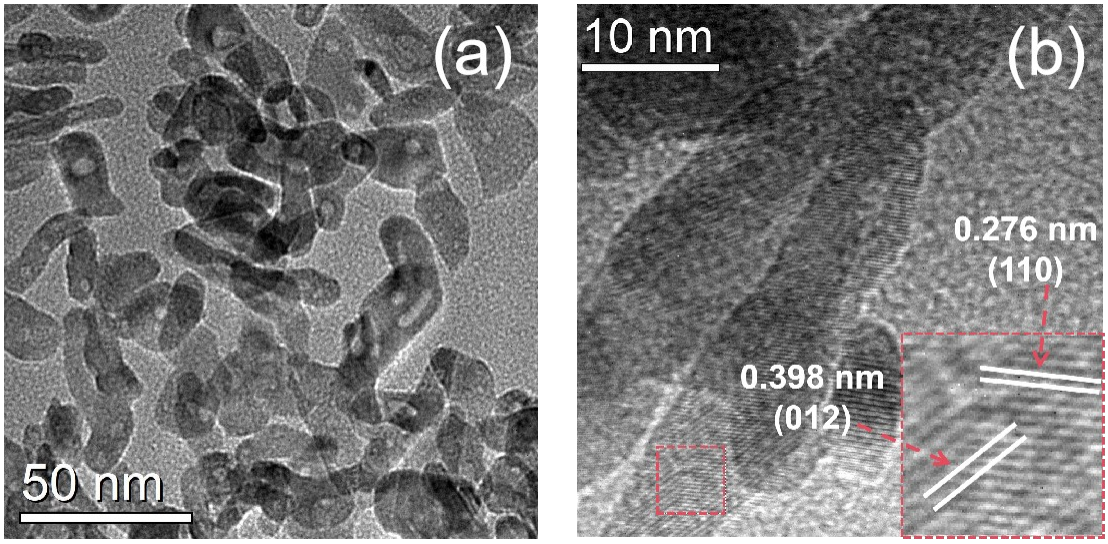

Fig. S2 (a) TEM image and (b) HRTEM image of h-In_2O_3.

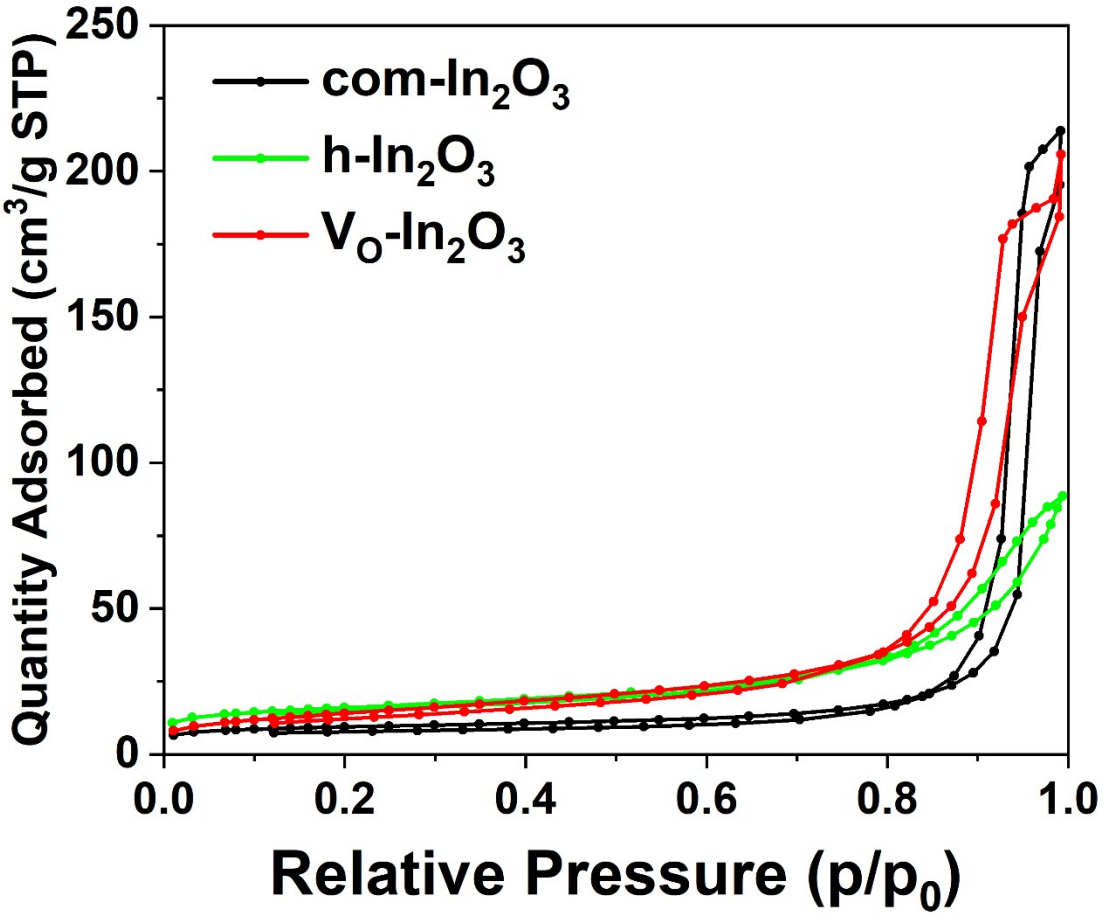

Fig. S3 The result of N_2 isotherms adsorption-desorption experiment of com-In_2O_3, h-In_2O_3, V_O-In_2O_3.

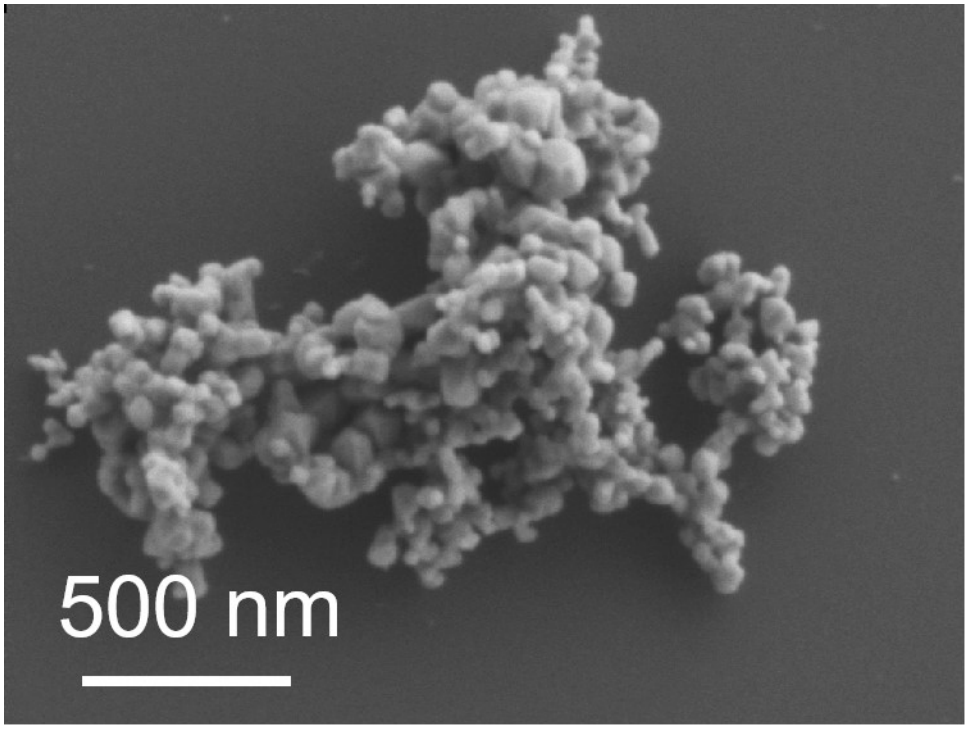

Fig. S4 SEM image of com-In_2O_3.

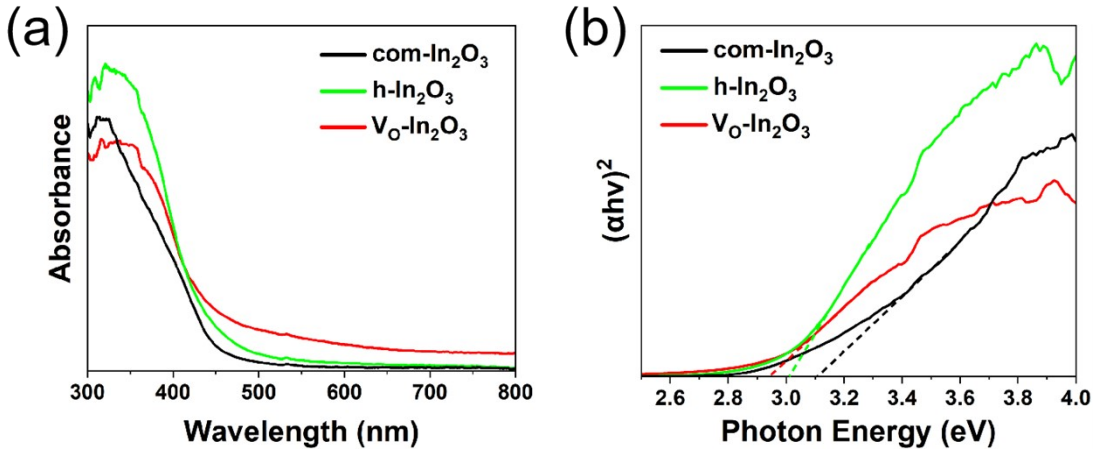

Fig. S5 (a) UV-visible absorption spectra and (b) band edge of com-In_2O_3, h-In_2O_3 and V_O-In_2O_3.

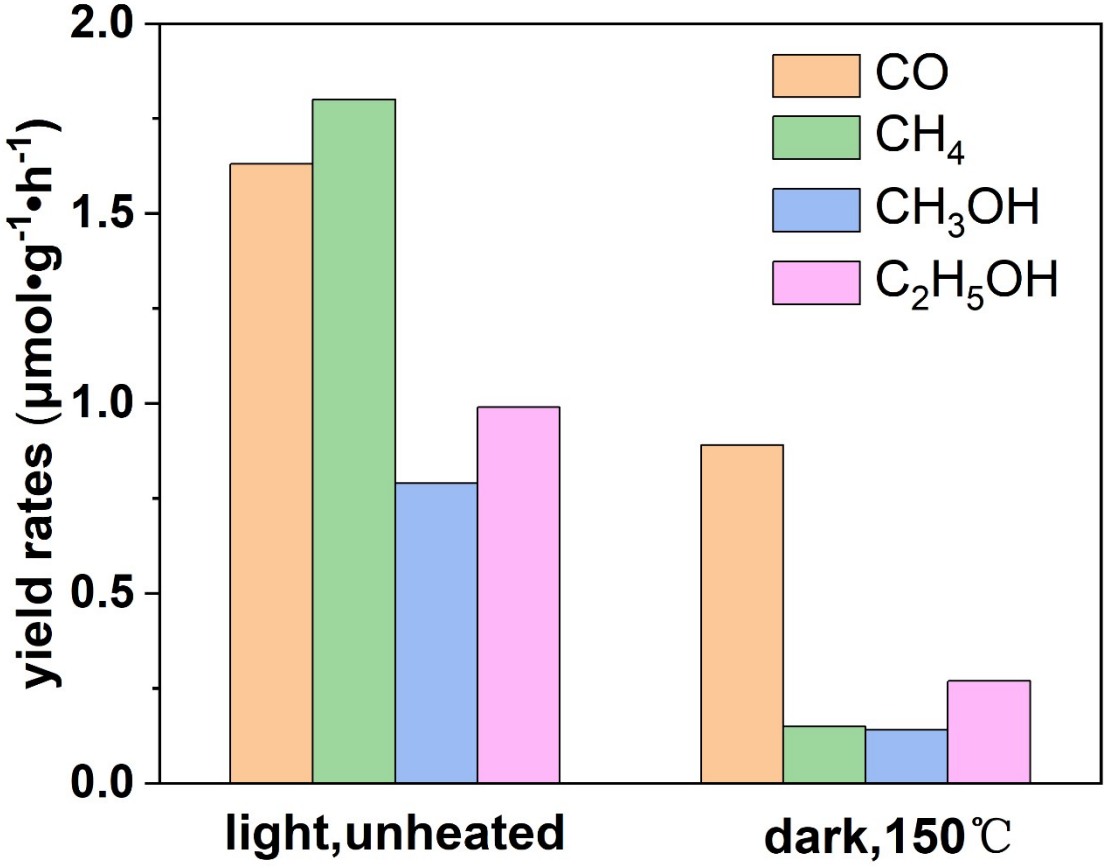

Fig. S6 Photocatalytic and thermal catalytic performance of V_O-In_2O_3.

Table S1 The product selectivity and electron selectivity of C_2H_5OH for com-In_2O_3, h-In_2O_3 and V_O-In_2O_3.

	com-In_2O_3	h-In_2O_3	V_O-In_2O_3
$S_p(C_2H_5OH)$	11.57%	12.84%	47.07%
$S_e(C_2H_5OH)$	15.98%	15.62%	58.19%