Supporting Information

Effect of Metal Loading Sequences in CO_2 Methanation Activity on Samarium-Doped Ceria Supported Bimetallic Catalysts

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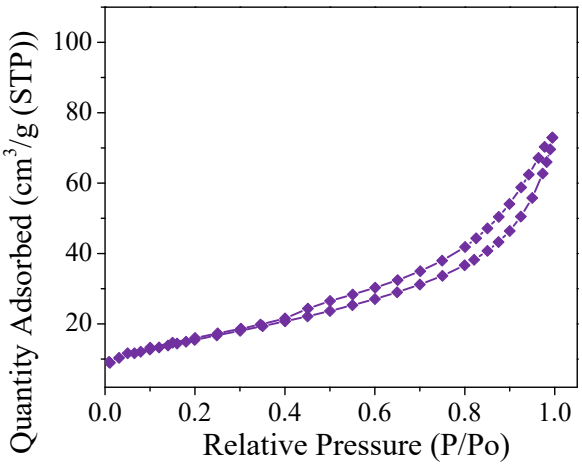
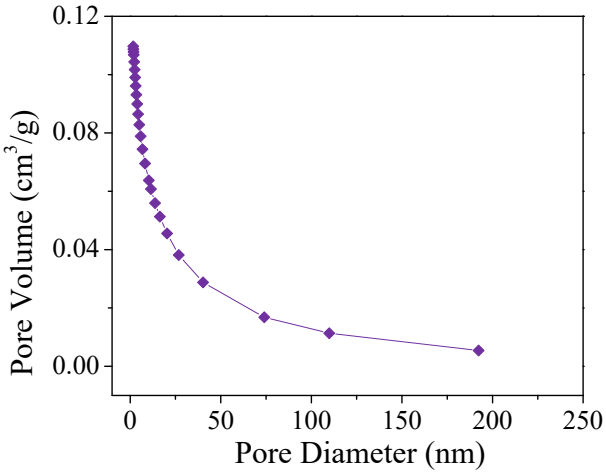
(a)

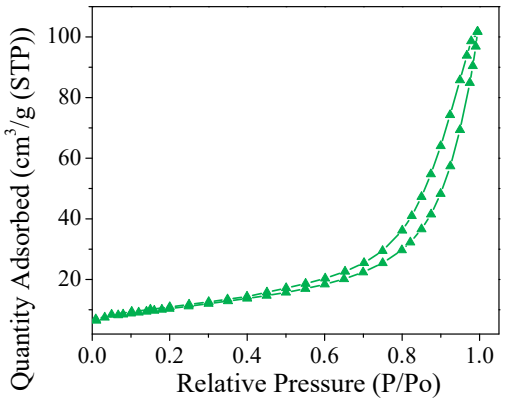


(b)

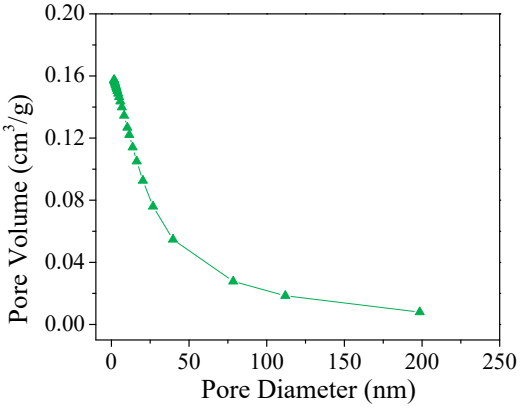


Sample	BET Surface Area	Pore Volume		Pore Size
La/Ni/SDC	28.6874 m^3/g	less than 427.85 nm diameter at P/Po = 0.995478100:	0.0956 cm^3/g	13.327 nm

(c)



(d)



Sample	BET Surface Area	Pore Volume		Pore Size
La/Ni/SDC	37.447 m^3/g	less than 368.95 nm diameter at P/Po = 0.9947	0.1574 cm^3/g	16.813 nm

Figure S1. Nitrogen adsorption isotherm the Pore Size Distribution (PSD) for La/Ni/SDC catalyst measured at 77 K

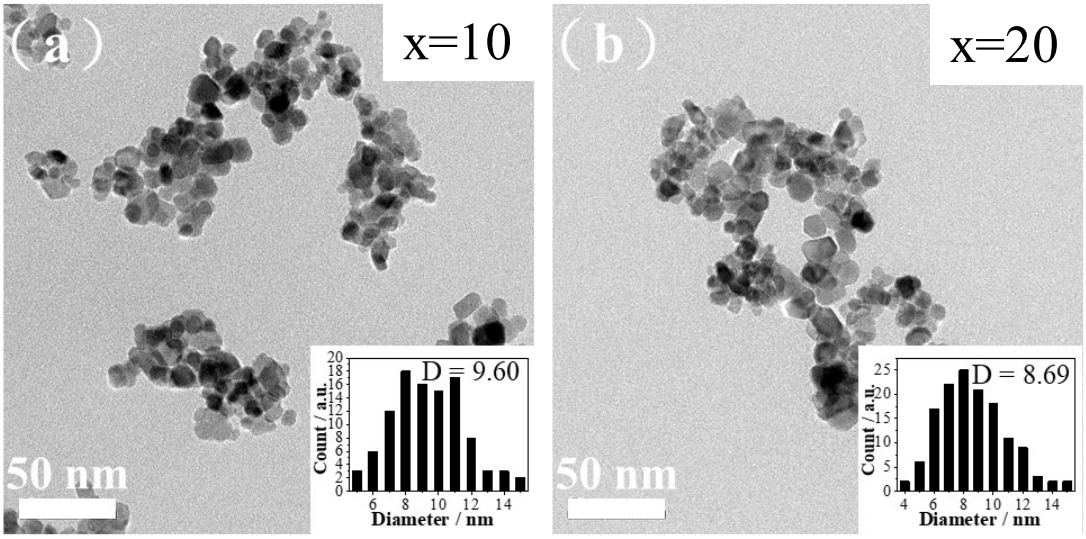


Figure S2. TEM images and particle size distribution of as-synthesized samarium-doped ceria catalyst (number of X denoted as doping ratio of Sm to Ce in SDC, e.g.,10: Sm 10% and 90% Ce)