

Correction

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Correction: Catalytic decomposition of methane: Ni-promoted perovskite oxide catalysts for turquoise hydrogen and carbon nanomaterials Co-production (*Energy Mater.* 2025; 10.20517/energymater.2024.53)

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In the original publication^[1], the authors mistakenly included wrong Figures. To rectify this error, the following corrections have been made.

On page 7, **Figure 5B** should be replaced.

The corrected version of **Figure 5B** is as follows:



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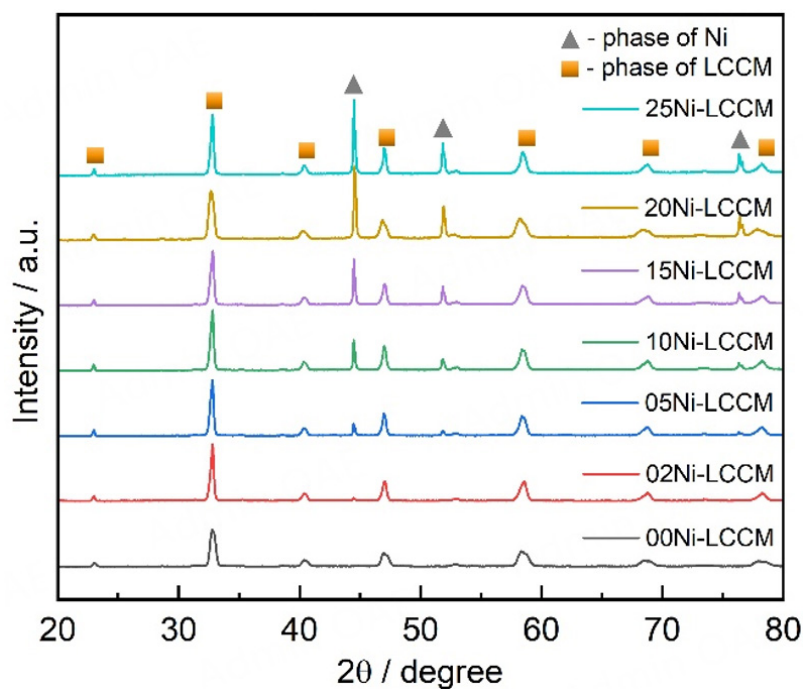


Figure 5. (B) Reduced at 750 °C for 2 h in N₂ blended H₂.

On page 9, in Table 2, the N_{Ni} value of 15Ni-LCCM was incorrectly listed as 25.94 and should be corrected to 27.13.

Table 2. Weight of xNi-LCCM under various atmospheres and carbon yields

Sample	N _{Ni}	W _L (H ₂ + N ₂)	750 °C for 15 h (CH ₄)		800 °C for 15 h (CH ₄)		850 °C for 15 h (CH ₄)	
			Y _{C xNi-LCCM}	Y _{C Ni}	Y _{C xNi-LCCM}	Y _{C Ni}	Y _{C xNi-LCCM}	Y _{C Ni}
			g _C /g _{xNi-LCCM}	g _C /g _{Ni}	g _C /g _{xNi-LCCM}	g _C /g _{Ni}	g _C /g _{xNi-LCCM}	g _C /g _{Ni}
00Ni-LCCM	0.00	-0.63	0.00	0.00	0.00	0.00	0.00	0.00
02Ni-LCCM	5.16	-1.92	0.32	6.20	0.33	6.40	0.35	6.78
05Ni-LCCM	11.75	-3.62	1.23	10.47	1.12	9.53	0.9	7.66
10Ni-LCCM	20.44	-5.99	2.92	14.29	2.37	11.59	2.33	11.40
15Ni-LCCM	27.13	-7.76	4.42	17.04	3.50	13.49	2.72	10.49
20Ni-LCCM	32.44	-9.14	5.57	17.17	4.35	13.41	3.38	10.42
25Ni-LCCM	36.76	-10.31	6.48	17.63	5.09	13.85	4.09	11.13

LCCM: (La_{0.75}Ca_{0.25})(Cr_{0.5}Mn_{0.5})O_{3-δ}.

On page 12, Figure 7B, D and F should be corrected.

The corrected version of Figure 7B, D and F is as follows:

We apologize for any inconvenience caused and state that the scientific conclusions remain unaffected. The original article has been corrected.

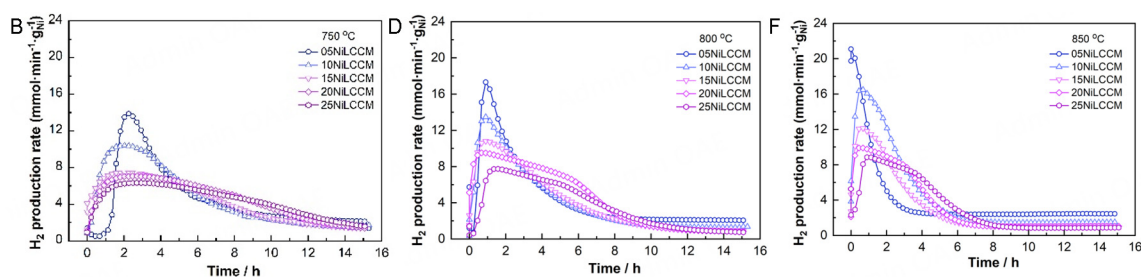


Figure 7. Profiles of H₂ formation rate as a function of time on stream over xNi-LCCM samples at (B) 750 °C; (D) 800 °C; and (F) 850 °C, respectively. LCCM: (La_{0.75}Ca_{0.25})(Cr_{0.5}Mn_{0.5})O_{3-δ}.

REFERENCES

1. Zhang, L.; Zhang, W.; Poh, C. K.; et al. Catalytic decomposition of methane: Ni-promoted perovskite oxide catalysts for turquoise hydrogen and carbon nanomaterials Co-production. *Energy Mater.* **2025**, *5*, 3-500023. DOI