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Hydrothermal synthesis of highly dispersed Bi–Ni–Sb–O pyrochlore for catalytic oxidation of carbon monoxide

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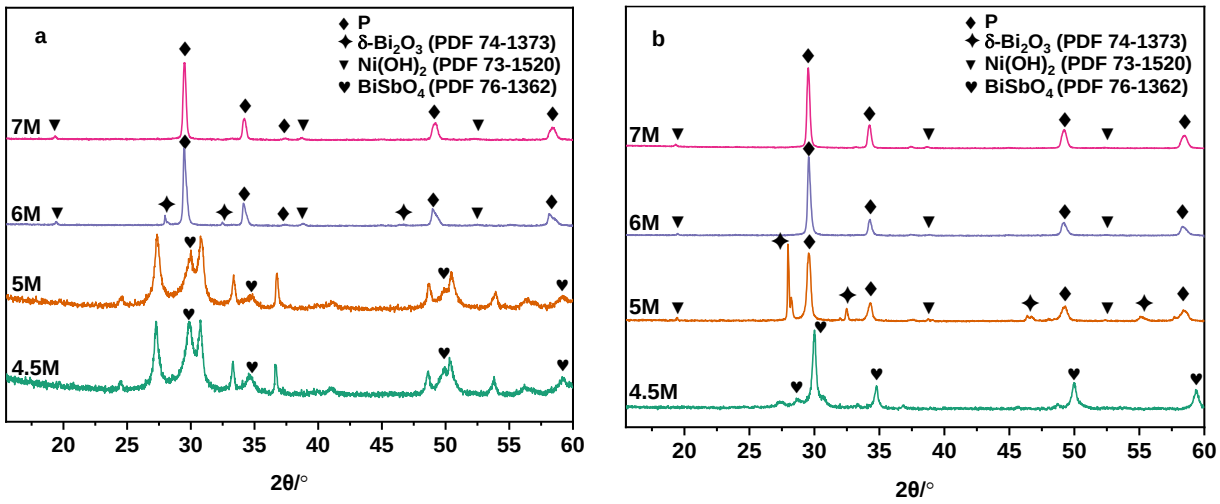

Figure S1. X-ray patterns of the Bi-Ni-Sb-O pyrochlores, synthesized under HT conditions during 48 (a) and 80 h (b) from the precipitate, obtained by precipitation with alkali solutions of various concentrations.

Table S1. Elemental composition according to EDX analysis for Bi-Ni-Sb-O - pyrochlores obtained from precursors precipitated with 6M NaOH solution under HT conditions for 80 h, at 200 and 190°C.

	ω(Bi), wt%	ω(Ni), wt%	ω(Sb), wt%
Theoretical composition $Bi_{1.8}Ni_{0.86}Sb_{1.33}O_7$	63.81	8.63	27.54
200°C	64.1±0.9	7.8±1.0	28.1±1.1
190°C	64.8±1.2	6.4±1.1	29.8±0.8

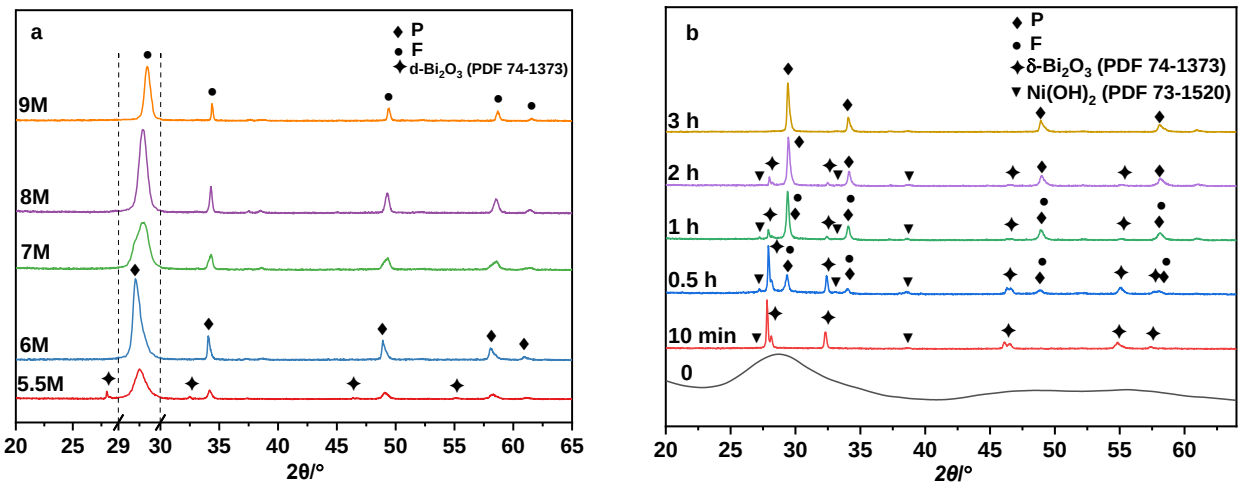

Figure S2. X-ray patterns of samples synthesized (a) at MWHT treatment for 3 h from precipitate applied at different concentrations of NaOH; (b) at different time of MWHT treatment from precipitate applied with 6M NaOH solution. P- Bi-Ni-Sb-O pyrochlore, F - unknown fluorite-like phase.

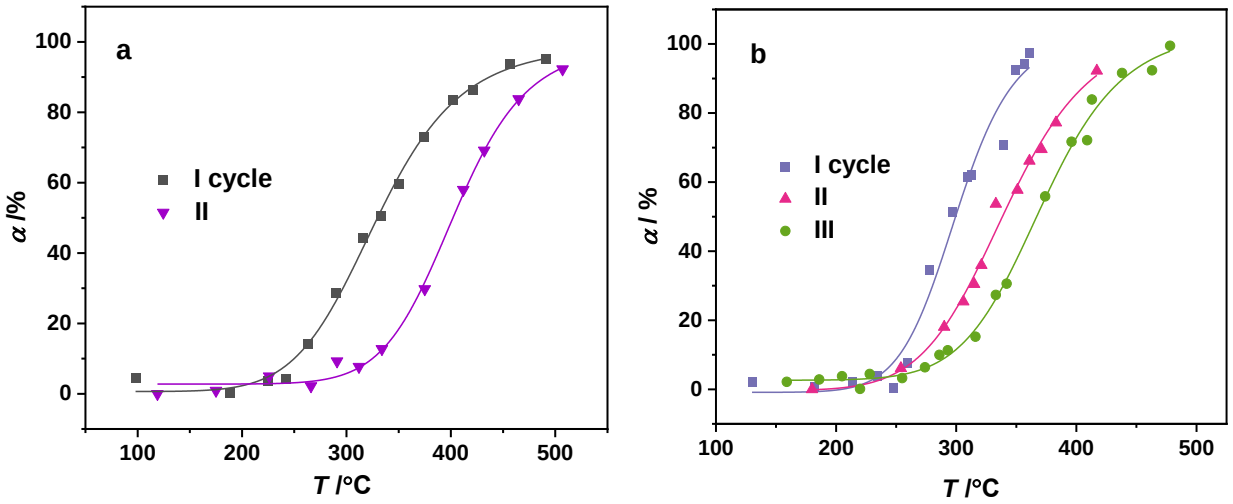

Figure S3. Temperature dependences of CO conversion (α) on the Bi-Ni-Sb-O pyrochlore catalysts, synthesized by HT (a) and MWHT (b) methods.