Enhanced catalytic activity of perovskite oxides nanofibers for combustion of methane in coal mine ventilation air

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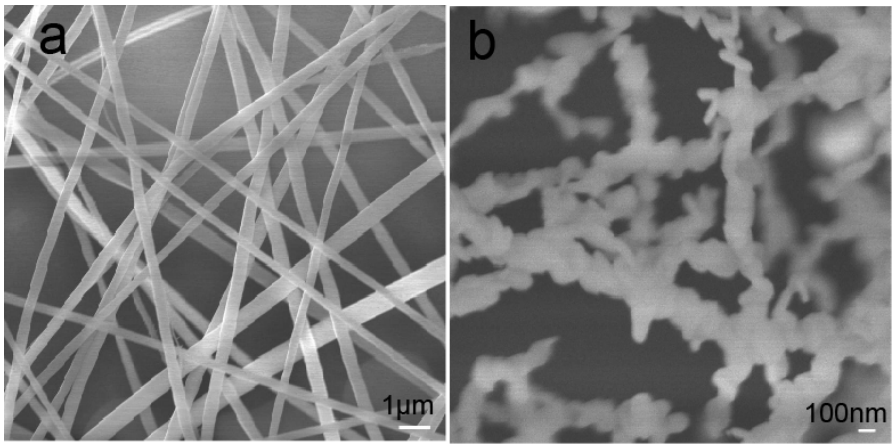

Figure S1. SEM images for $LaCoO_3$ precursor fibers (a) and $LaCoO_3$ calcined at 800 °C (b) prepared without citric acid

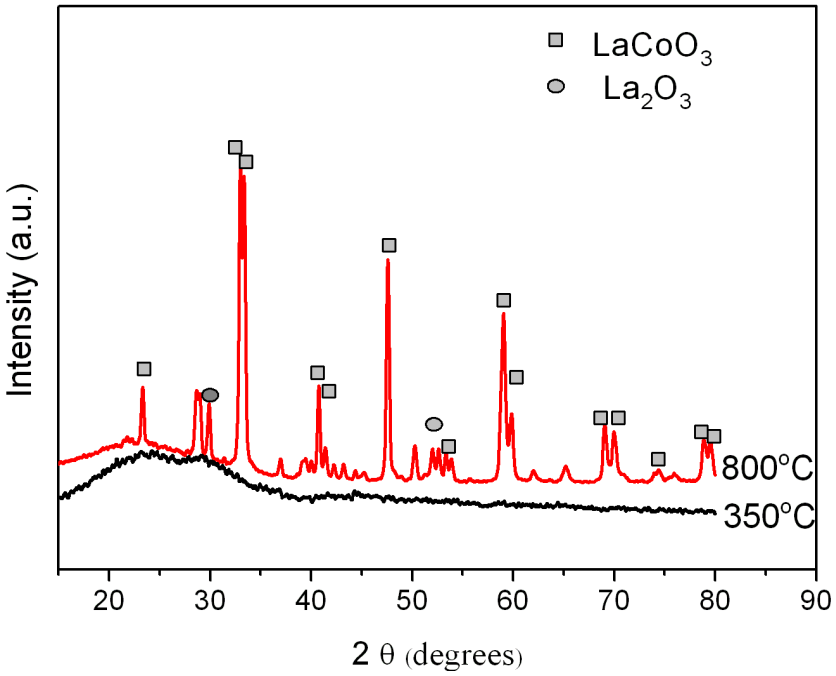

Figure S2. X-ray diffraction patterns of $LaCoO_3$ prepared without citric acid and calcined at different temperature

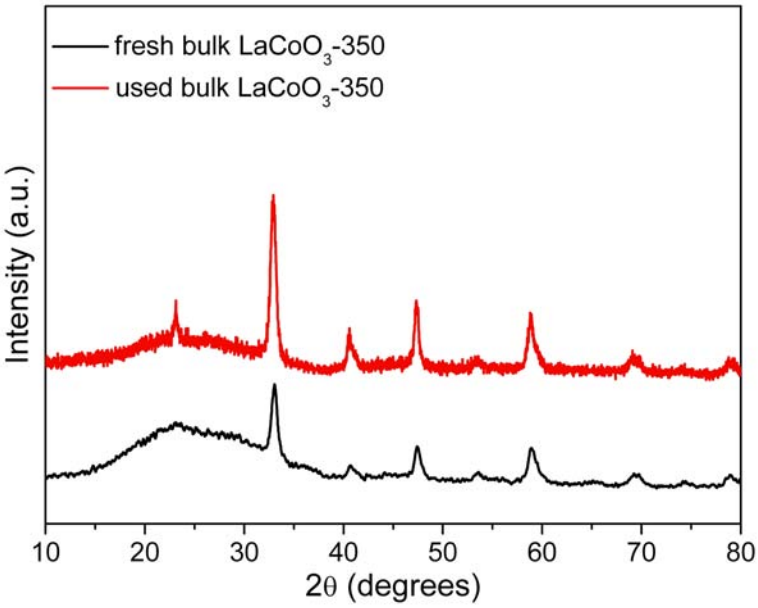

Figure S3. X-ray diffraction patterns of fresh and used bulk $LaCoO_3$-350

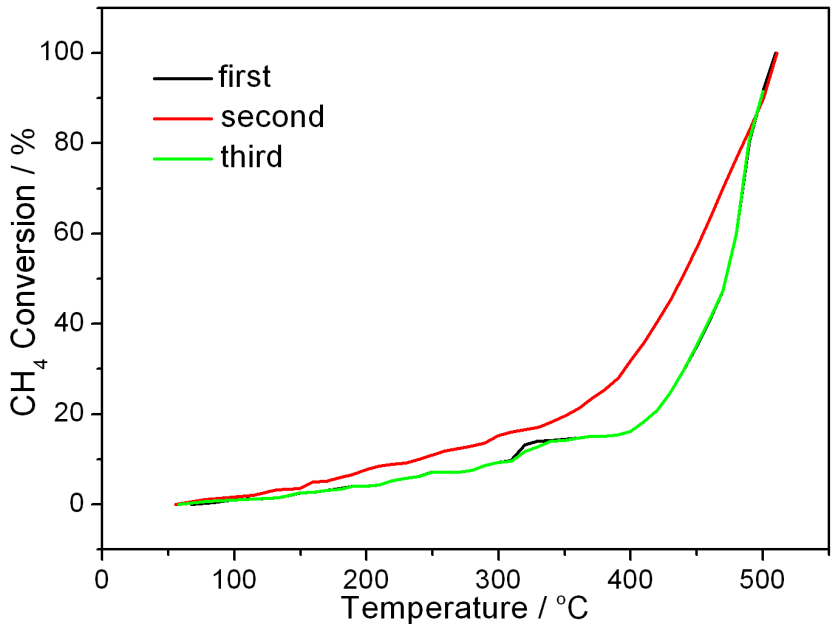

Figure S4. Methane conversion as a function of temperature over $LaCoO_3$ nanofibers prepared at 350 °C for first, second and third run (the third run was carried out after the stability test at 550 °C for 24h)

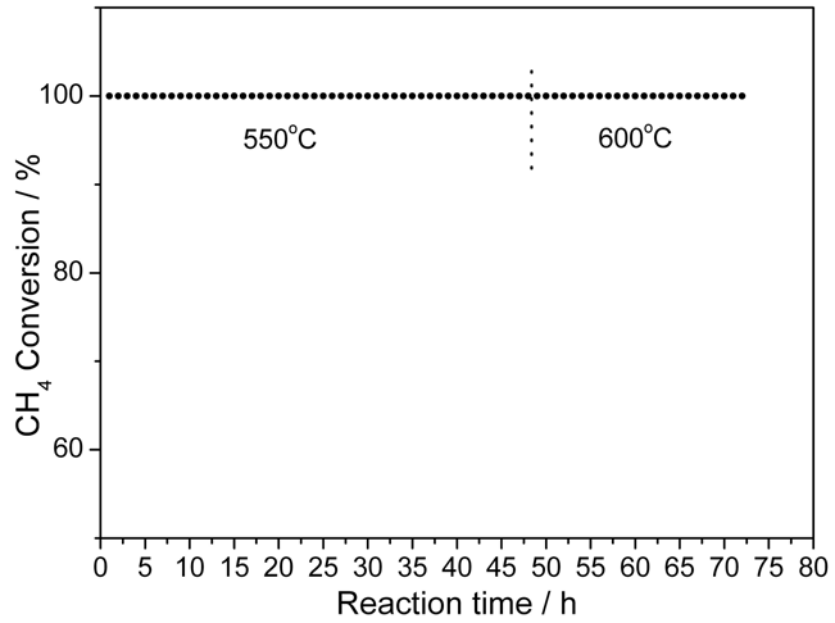

Figure S5. Time dependence of methane conversion over reused $LaCoO_3$ nanofibers at 550 °C for 48h and at 600 °C for 24h