

Supporting Information

Low-temperature chemical vapor deposition of cobalt oxide thin films from a dicobalttetrahydrane precursor

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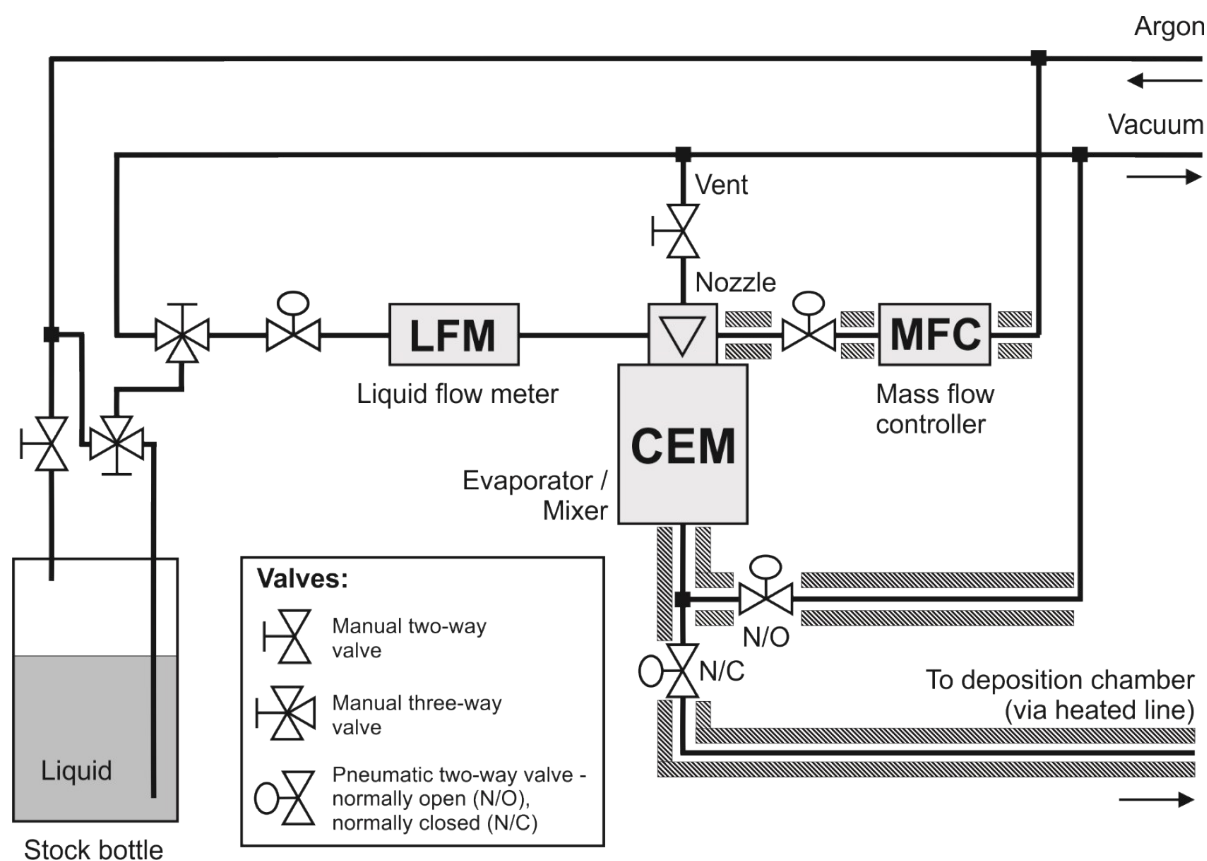


Figure 1: Outline of the liquid delivery system

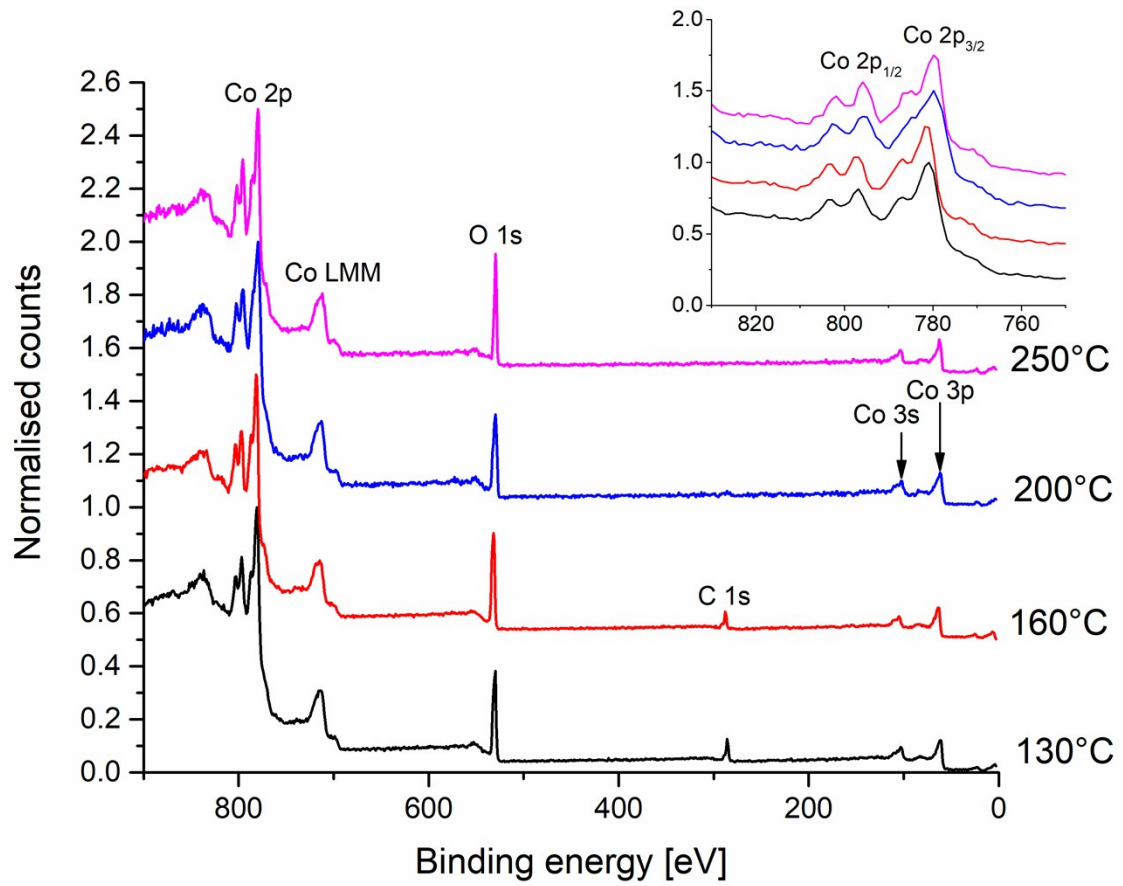


Figure 2: XPS survey spectra of films after 15min sputtering. The films were deposited with oxygen as coreactant at different temperatures. The inset shows an enlargement of Cobalt 2p spectrum.

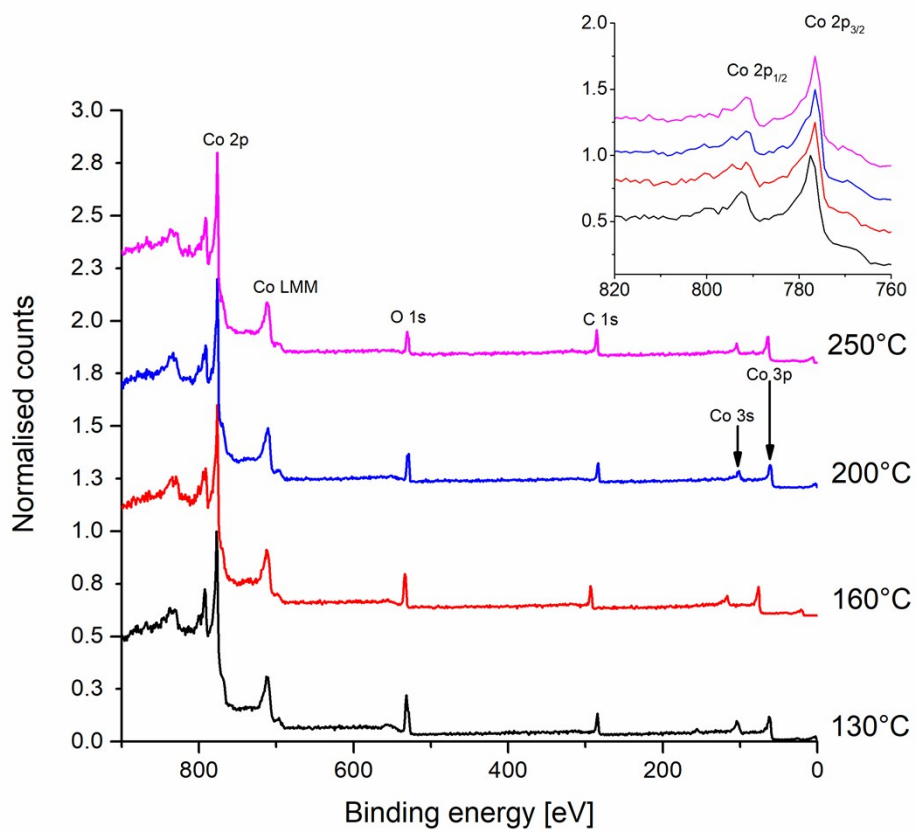


Figure 3: XPS survey spectra of films after sputtering for 15min. The films were deposited with water vapor as coreactant at different temperatures. The inset shows an enlargement of Cobalt 2p spectrum.



Figure 4: Photo of a wafer after a deposition with humid oxygen at 130°C indicating the homogeneous deposition of the complete wafer surface. The dark square above the center of the wafer and the veil above it occur due to the sputtering prior to XPS measurement

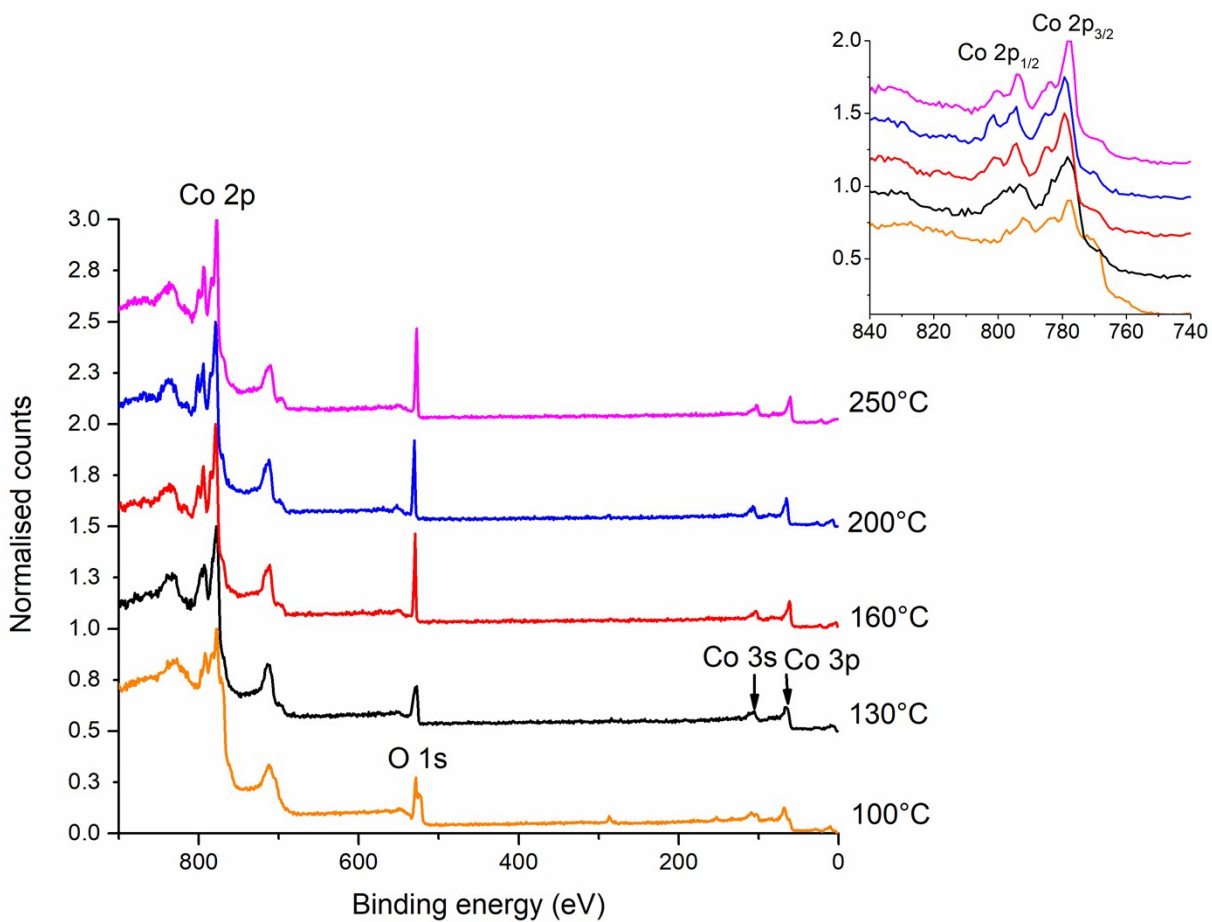


Figure 5: XPS survey spectra of films after sputtering for 15min. The films were deposited with wet oxygen as coreactant at different temperatures. The inset shows an enlargement of Cobalt 2p spectrum.

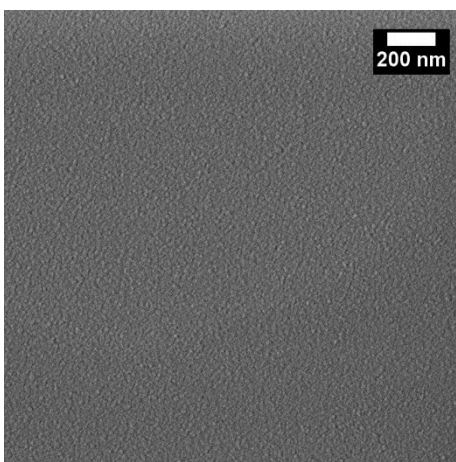


Figure 6: Top- view SEM image of cobalt oxide film deposited with wet oxygen as coreactant at 100°C