ESRF	**Experiment title:** **Towards better sensors: insights into sensor operation from time resolved in situ XAS studies**	**Experiment number**: **MA-769**
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Abstract:

The feasibility of the in situ and operando methodology in studying the chemical and electronic phenomena associated with an active metal electrode-oxide interface in metal-oxide-based gas sensors (picture) is demonstrated. It is experimentally verified that the Pt electrodes in metal-oxide based gas sensors are partially oxidised and that the oxidised Pt electrodes contribute to overall sensing performance.

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