



## Supporting Information

for

### Structure-dependent thermochromism of PAZO thin films: theory and experiment

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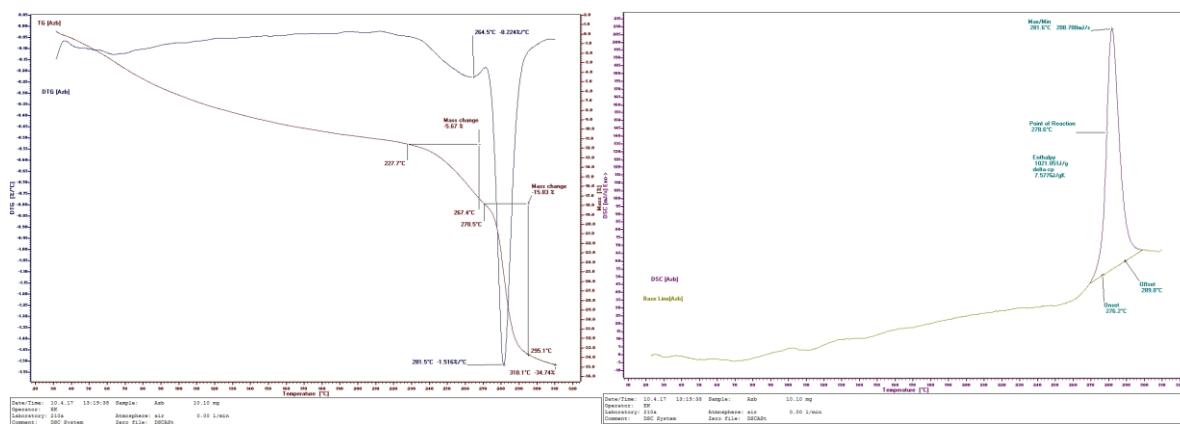
### Additional experimental data

## Differential thermal analysis (DTA) and thermogravimetric analysis (TGA) of PAZO

The study of PAZO was conducted up to a temperature of 300 °C in order to establish the boundary conditions and determine whether heating would induce changes in the optical spectrum. The spectra were recorded in real time at each temperature reached. To achieve this, experiments were performed at different heating rates of 5 °C/min and 1 °C/min, allowing the sample to equilibrate at the slower rate.

From the DTA and TGA analyses (Figure S1), a noticeable change in weight and in the rate of weight loss is observed at around 281 °C, where the steepest slope of the thermogravimetric curve occurs. These changes also produced a distinct optical response, manifested as a blue shift of the absorption peaks.

Based on these observations, 230 °C was selected as the operating temperature corresponding to the maximum optical response, which coincides with a 6% weight loss and lies within the linear region of the thermogravimetric curve. No chemical changes are expected to occur in this temperature range.



**Figure S1:** Differential thermal analysis (DTA) and thermogravimetric analysis (TGA) of PAZO.