

## Description of Additional Supplementary Files

File Name: Supplementary Movie 1

Description: **A time-lapse movie of the release of an SrRuO<sub>3</sub> film**

A time-lapse movie of the release of a 5x5 mm<sup>2</sup> SrRuO<sub>3</sub> (SRO) thin film over the course of approximately 1 hour. The SRO film is 50 nm-thick. The water penetrates the sides of the substrate and the film starts to get released from the sides (00:10). The released film together with the PDMS have a slightly lighter colour than the centre, where the film is still attached to the Sr<sub>3</sub>Al<sub>2</sub>O<sub>6</sub>/SrTiO<sub>3</sub> substrate. The film is completely released after about one hour (00:42 in the movie).