Supporting Information

Applicability of Vapor-Deposited Thermoresponsive Hydrogel Thin Films in Ultrafast Humidity Sensors/Actuators

Fabian Muralter, Francesco Greco, Anna Maria Coclite*

Institute of Solid State Physics, NAWI Graz, Graz University of Technology, Petersgasse 16, 8010 Graz, Austria

*corresponding author: fmuralter@tugraz.at

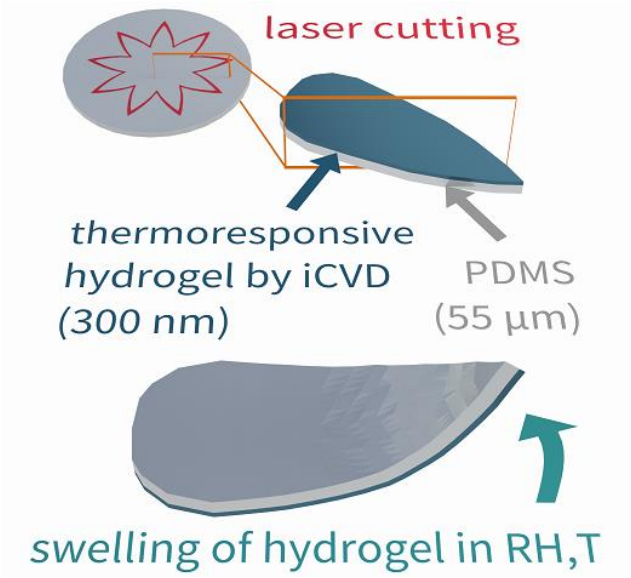

Figure S1: Schematics of the flower-shaped hygromorphic device used for demonstration of the applicability of the hydrogel thin film in sensor/actuator devices with petals that bend as a function of relative humidity (RH) and temperature (*T*)

Video S1: Bilayer flower-shaped hygromorphic actuator bending its petals due to swelling of the thermoresponsive hydrogel thin film (on top) as a function of relative humidity (bottom left of video) at a temperature of 25 °C

Video S2: Bilayer flower-shaped hygromorphic actuator bending its petals due to swelling of the thermoresponsive hydrogel thin film (on the bottom) as a function of temperature (top left of video) at a relative humidity of the environment of 35% RH (measured at 25 °C)