Supporting Information for the Article

Oriented growth of the functionalized metal-organic framework CAU-1 on –OH- and –COOH-terminated self-assembled monolayers

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Supplementary material (ESI) for PCCP
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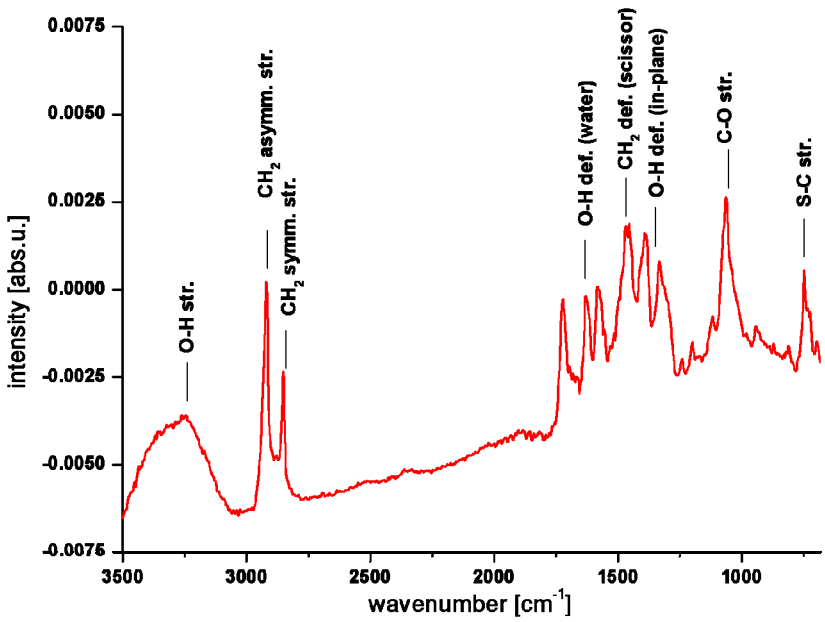

Figure S1. RAIR-spectrum of a 16-mercaptohexadecanol (MHD) self-assembled monolayer on a gold substrate.

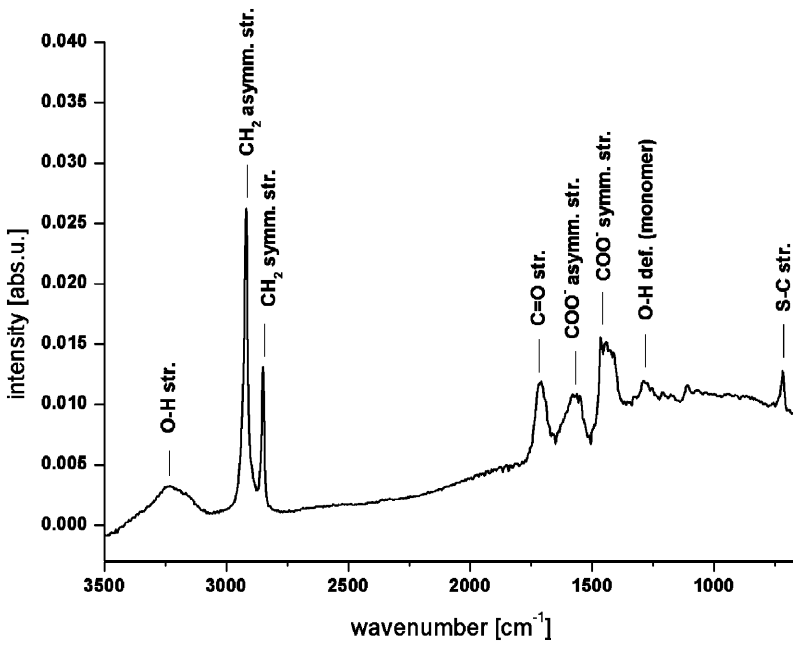

Figure S2. RAIR-spectrum of a 16-mercaptohexadecanoic acid (MHDA) self-assembled monolayer on a gold substrate.

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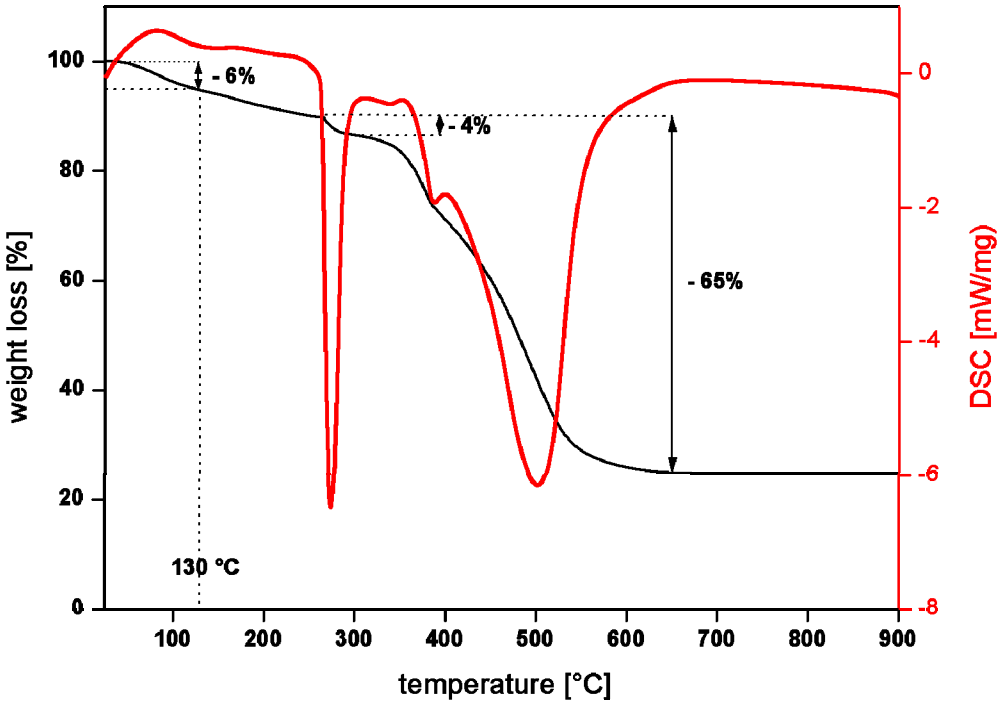

Figure S3. TGA and DSC data of bulk CAU-1 showing the solvent removal and decomposition of the product.

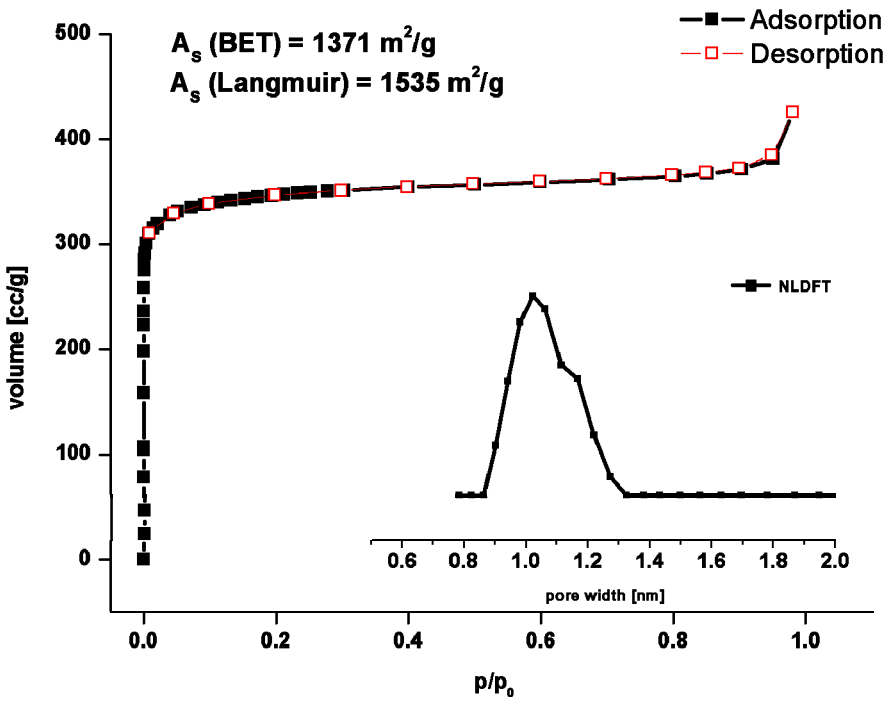

Figure S4. Physisorption measurement performed with nitrogen at 77 K for bulk CAU-1 showing a type I isotherm, the specific surface area (BET) and the pore size distribution (NLDFT).

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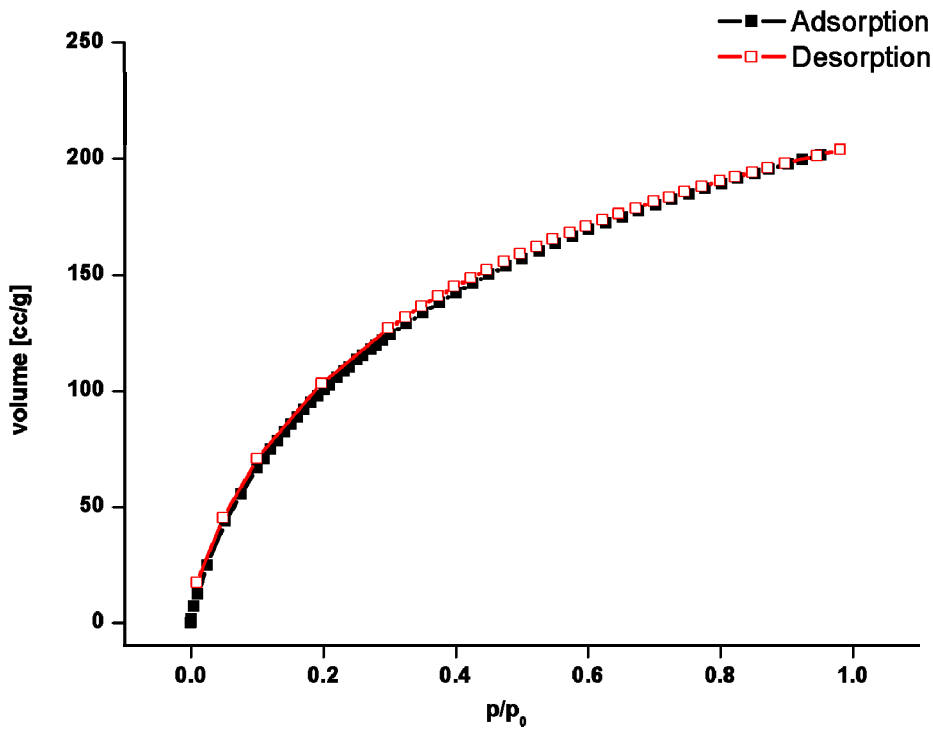

Figure S5. Physisorption measurement performed with H_2 at 77 K for bulk CAU-1.

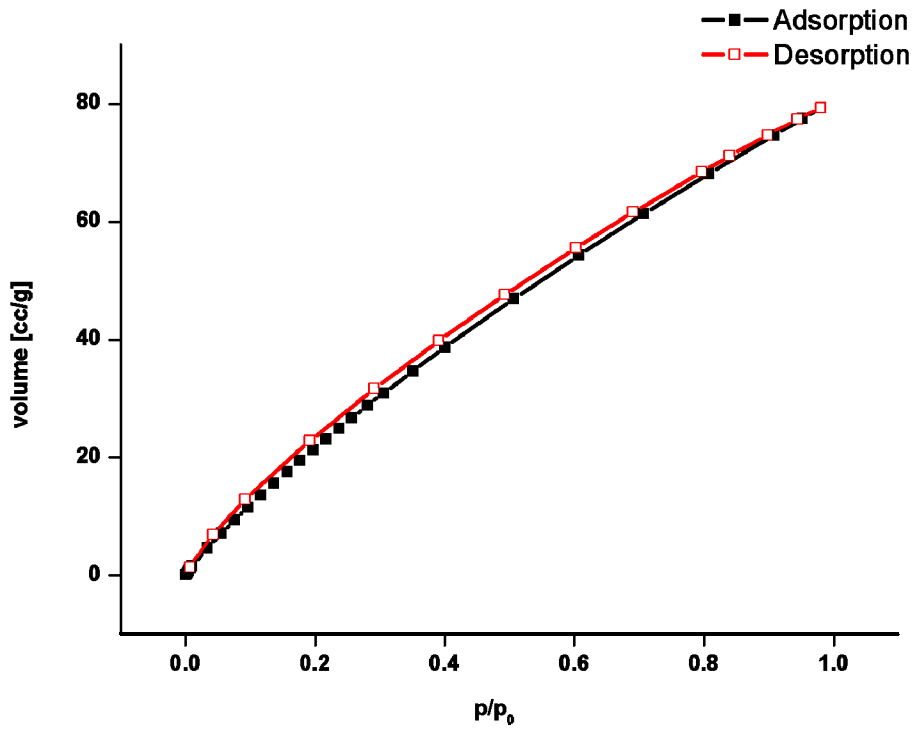

Figure S6. Physisorption measurement performed with CO_2 at 273 K for bulk CAU-1.

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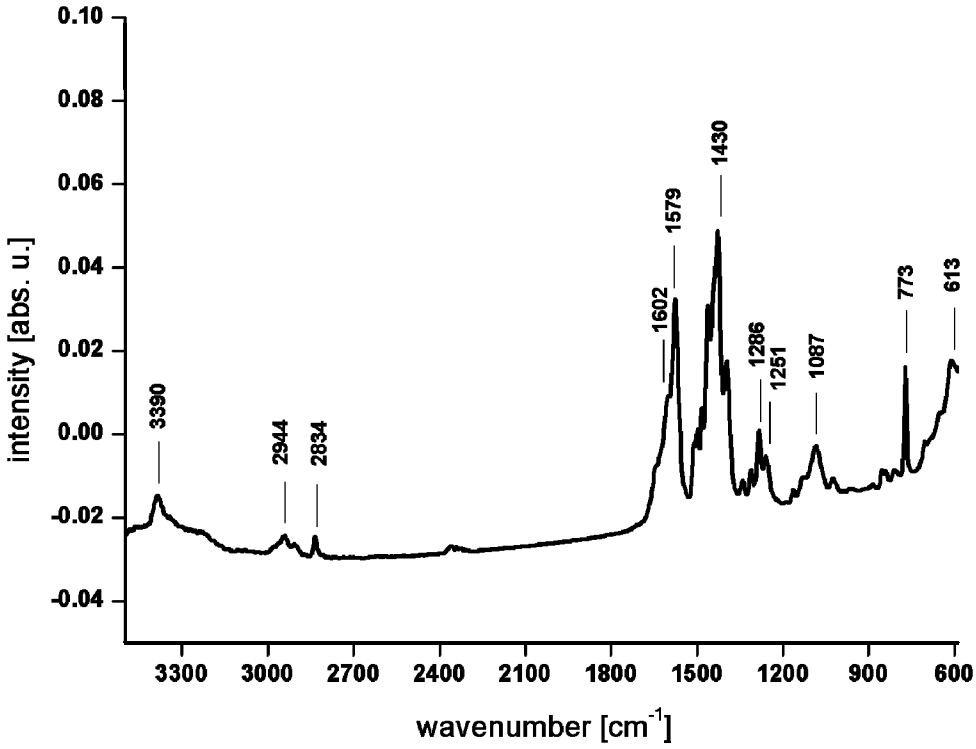

Figure S7. IR spectrum of bulk CAU-1.

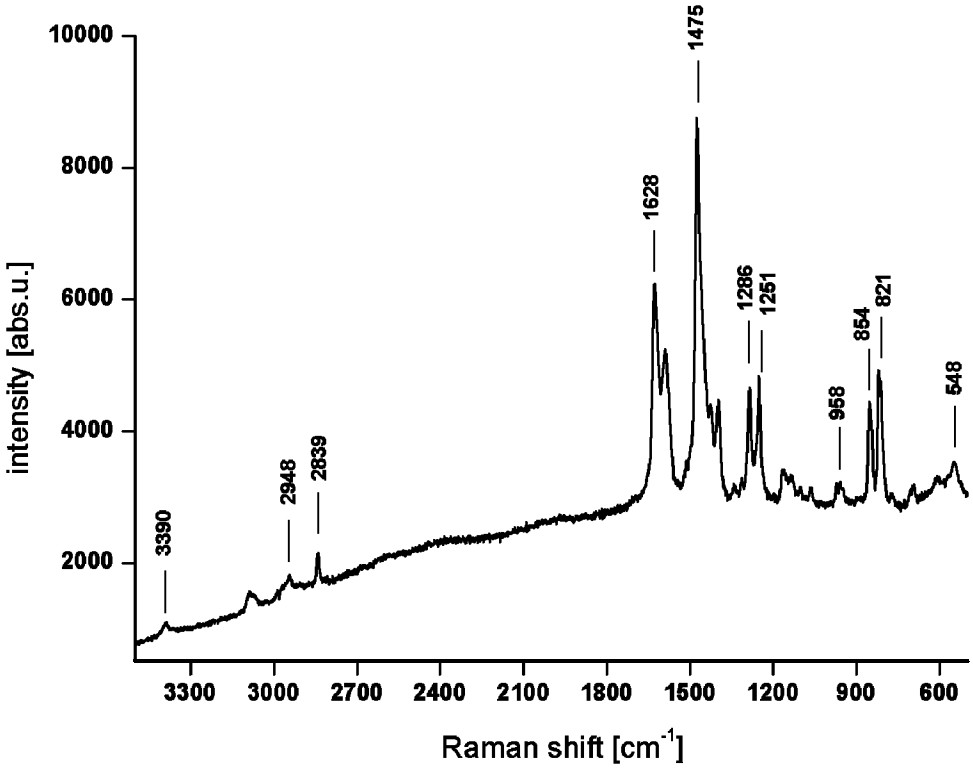

Figure S8. Raman spectrum of bulk CAU-1.

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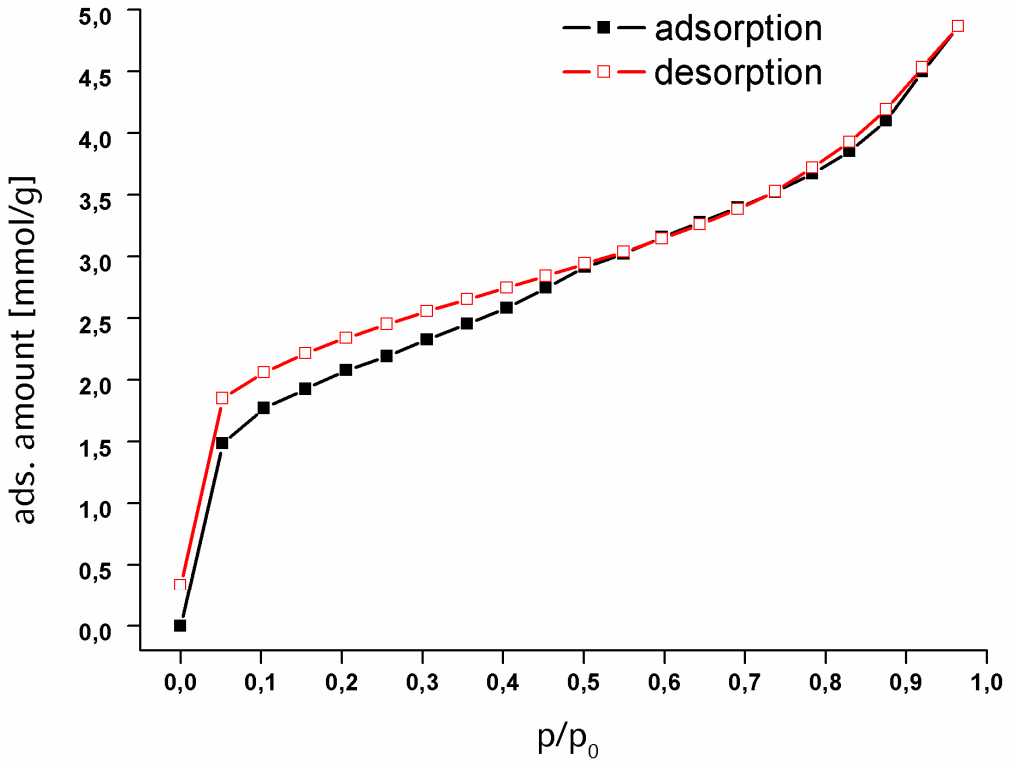

Figure S8. EtOH sorption isotherms recorded from a CAU-1 thin film with preferred [011] orientation.

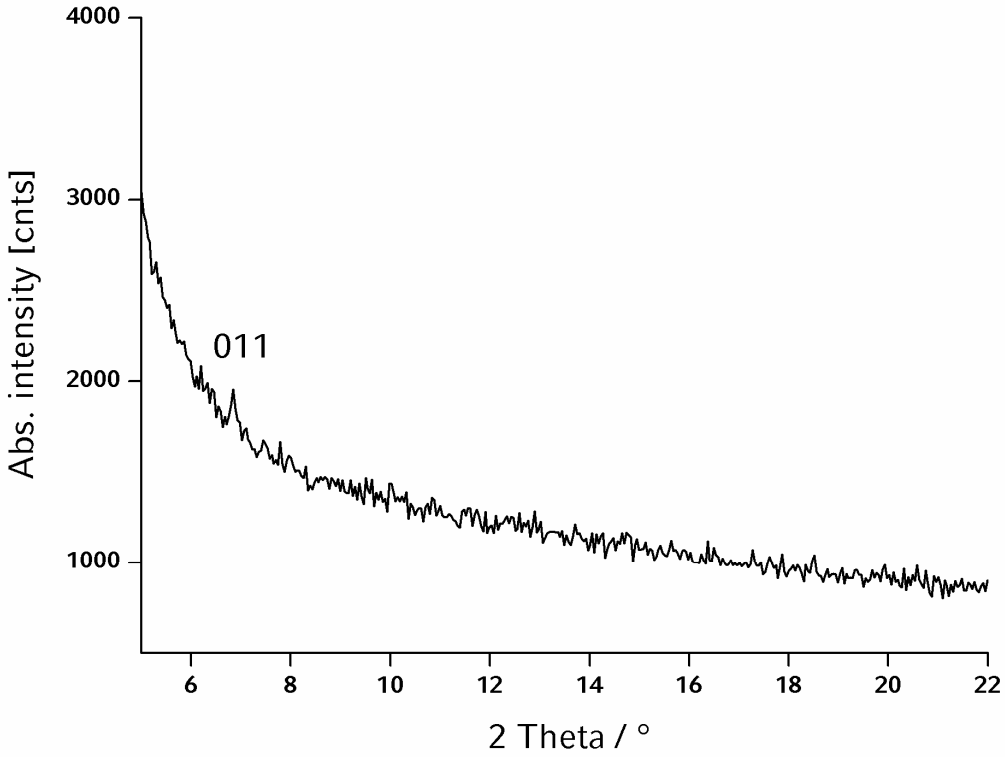

Figure S9. X-ray diffraction pattern of CAU-1 (**A**) crystals with preferred [011] orientation on a MHDA SAM-functionalized QCM chip. The small signal to noise ratio is attributed to the small area of the gold electrode.