Supplementary Information

Molecular gated nanoporous anodic alumina for the detection of cocaine

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Powder X-Ray diffration

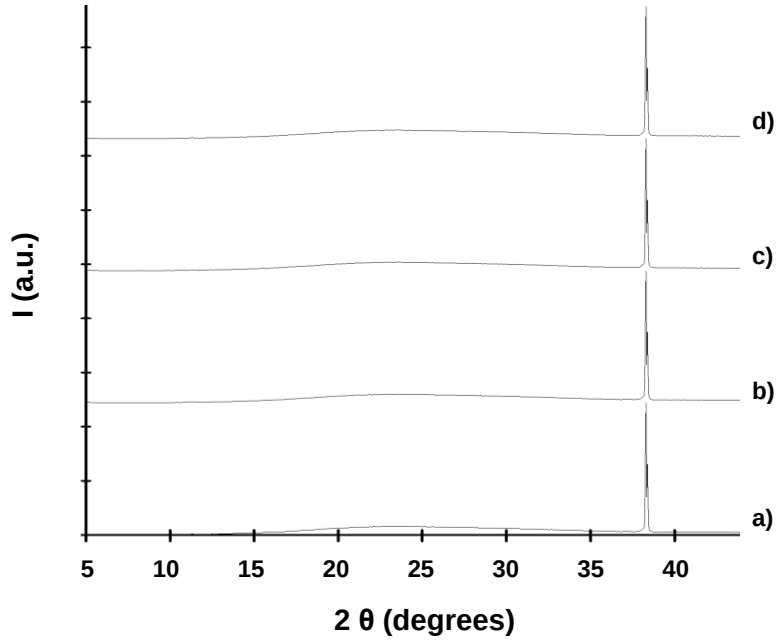

Figure S1. Powder X-ray diffraction pattern for a) as synthesized NAA support, b) **S1**, c) **S2** and d) gated **S3.**

Detection of cocaine in saliva samples

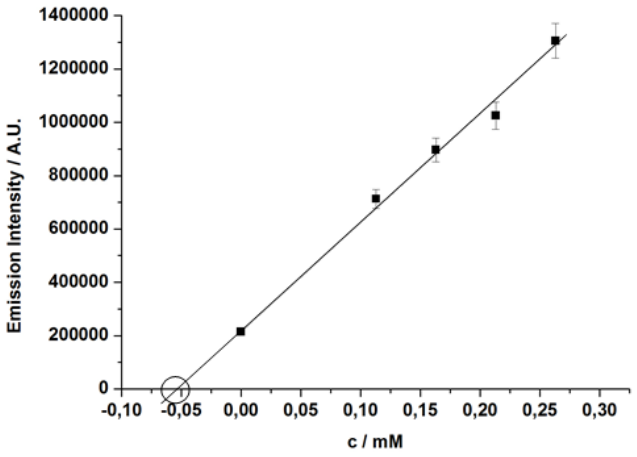

Figure S2. Standard addition method using **S3** for the detection of cocaine in a saliva sample spiked with cocaine (63 μM). From the intercept of the curve with the x-axis a concentration of cocaine of 56 μM was determined.

Release experiments of S3-R after calcination

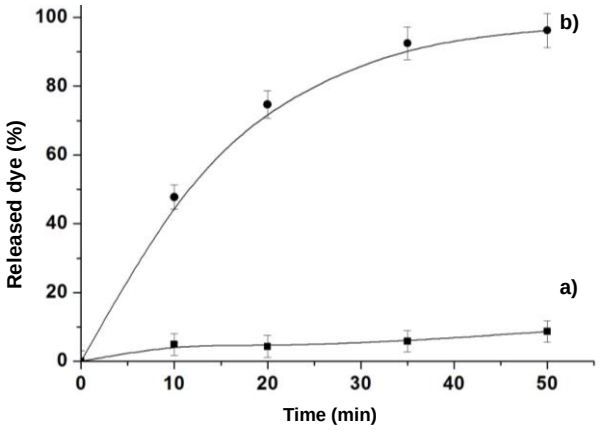

Figure S3. Release of rhodamine B from support **S3-R** in the absence (a) and in the presence (b) of cocaine (1 mM).

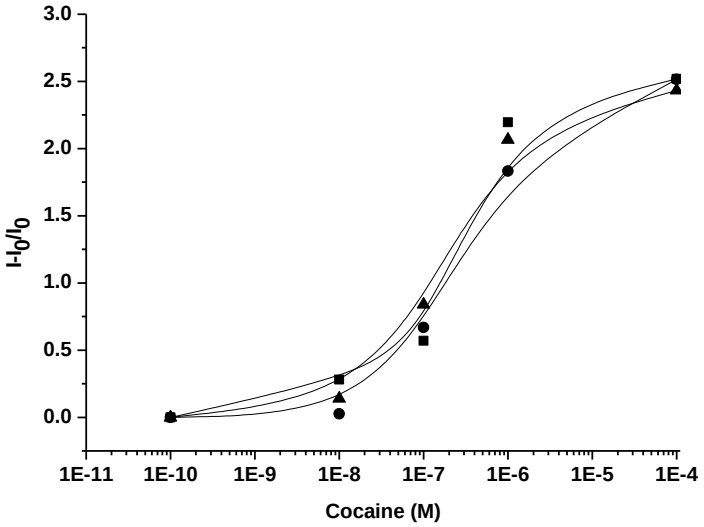

Figure S4. Release profiles of solid **S3-R** in the presence of increasing quantities of cocaine for three successive recycling calcination processes.