

Supplementary Date

Metal–organic frameworks-based biosensor for MicroRNA detection in prostate cancer cell lines

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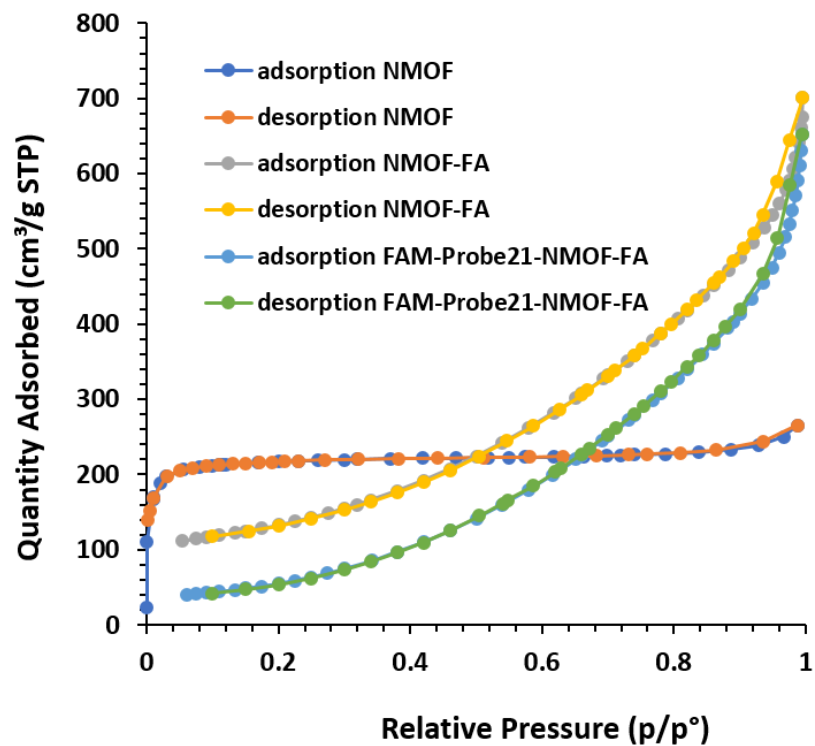


Figure S1: Nitrogen adsorption-desorption isotherms of NMOF(UIO-66-NH₂), NMOF-FA and Probe21-NMOF-FA.

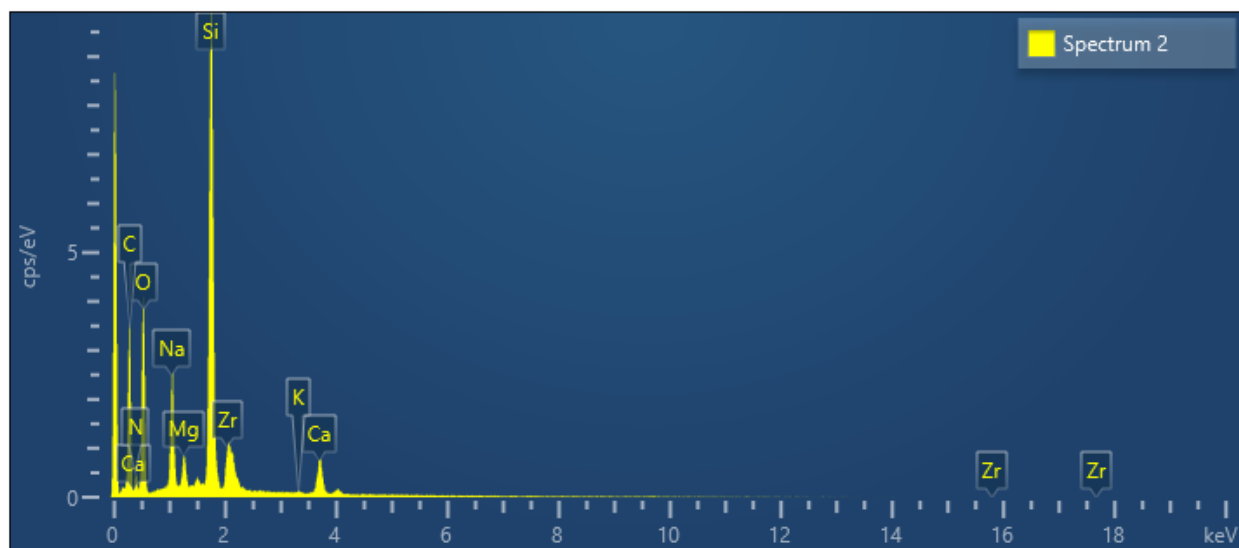


Figure S2: Energy-Dispersive X-ray (EDX) spectroscopy of UIO-66-NH₂

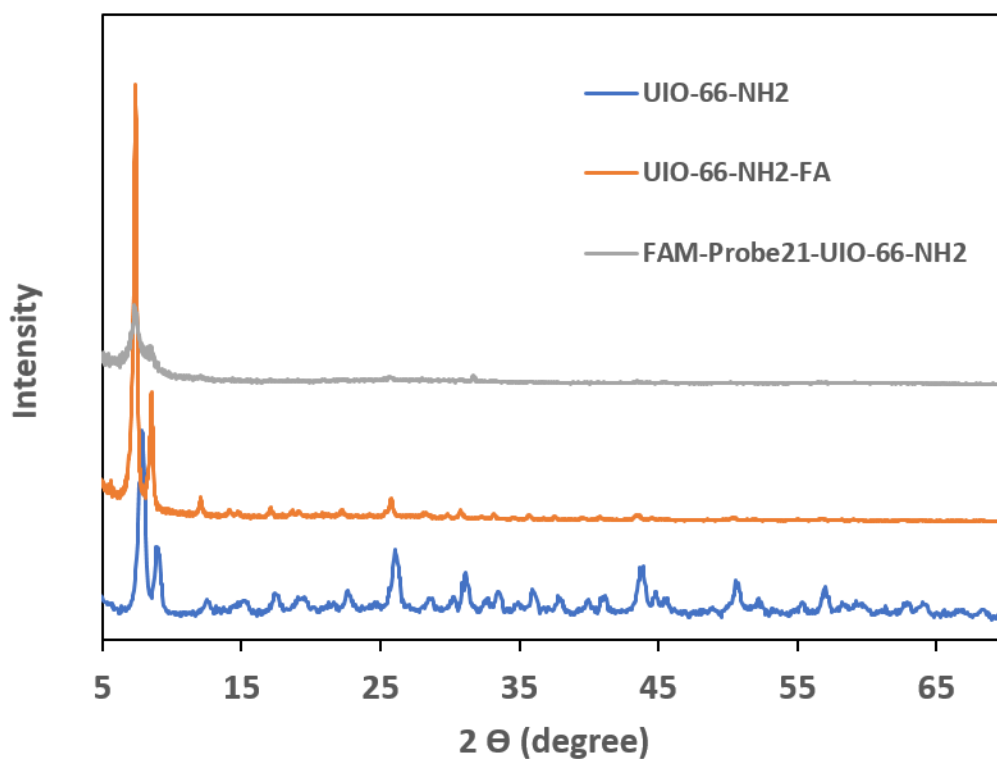


Figure S3: X-ray diffraction patterns (EXRD) of NMOF (UIO-66-NH₂), UIO-66-NH₂-FA and Probe21-UIO-66-NH₂-FA.

Table S1: Experimental data for the stability and reproducibility of FAM-Probe21-NMOF. Concentration of NMOF, FAM-Probe21 and miR-21 were 3 μ g/mL, 5 μ M and 1 μ M, respectively.

Stability					
Test	1	2	3	4	RSD(%)
Fluorescence intensity	1226.4	1212.4	1205.1	1202.5	0.88%
Reproducibility					
Biosensor	1	2	3	4	RSD(%)
Fluorescence intensity	1226.6	1207.6	1218.8	1201.5	0.92%