

Supporting information

Doxorubicin-Loaded Metal-Organic Frameworks Nanoparticles with Engineered Cyclodextrin Coatings: Insights on Drug Location by Solid State NMR Spectroscopy

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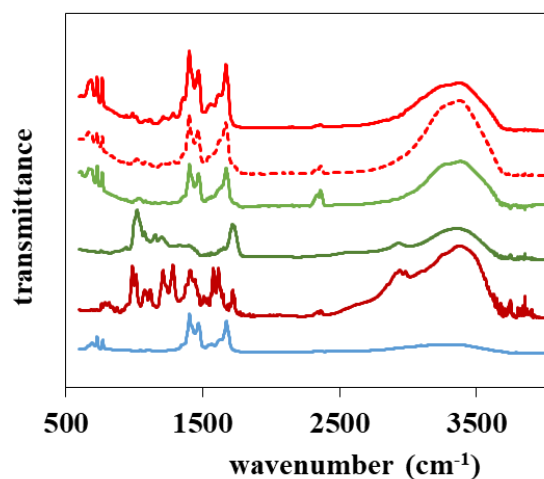


Figure S1. FTIR Characterization of the particles before and after drug loading and/or surface functionalization (blue: empty nanoMOFs; dark green: CD-CO; green: nanoMOFs coated with CD-CO; red: nanoMOFs loaded with DOX at TDL of 50 %; red dashed line: nanoMOFs loaded with DOX at TDL of 50% and coated with CD-CO).

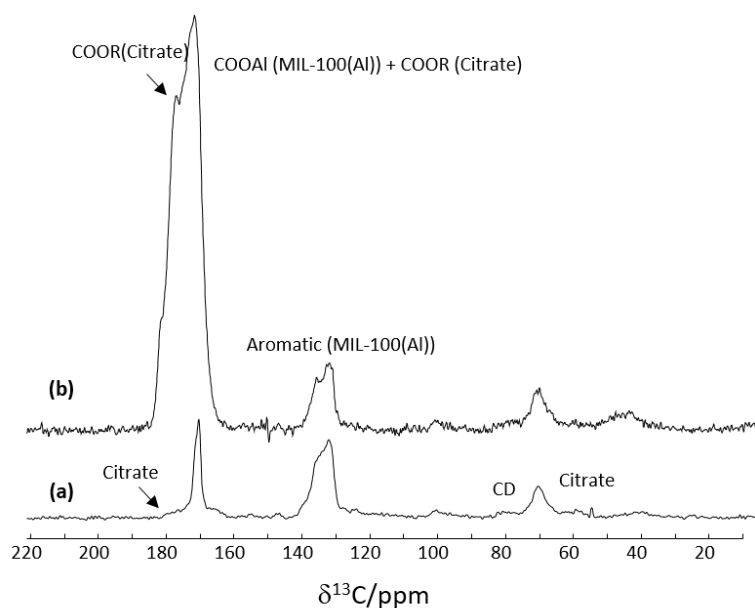


Figure S2. ^{13}C CPMAS NMR spectra of (a) CD-CO coated nanoMIL-100(Al) and (b) ^{13}C -CD-CO coated nanoMIL-100(Al)

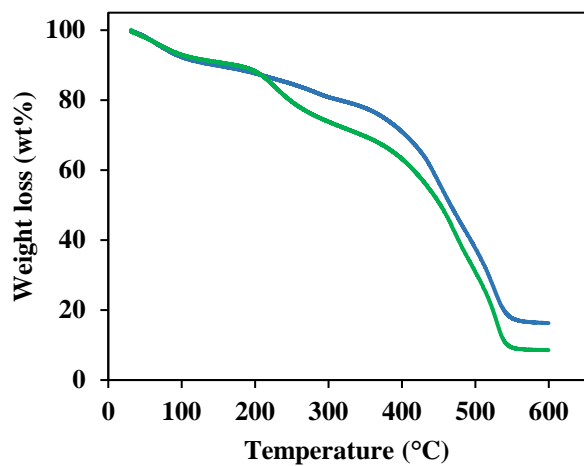


Figure S3. TGA curve of nanoMOFs (blue) and CD-CO coated nanoMOFs (green)

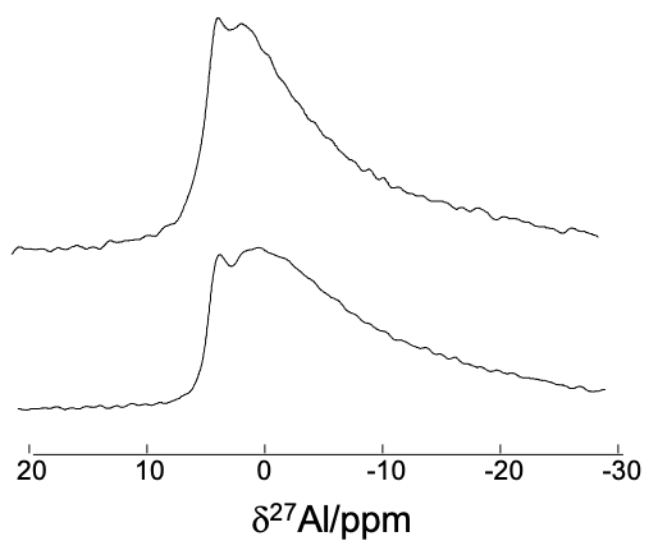


Figure S4. ^{27}Al MAS NMR spectrum of nanoMIL-100 (bottom) and CD-CO coated nanoMIL-100 (top)

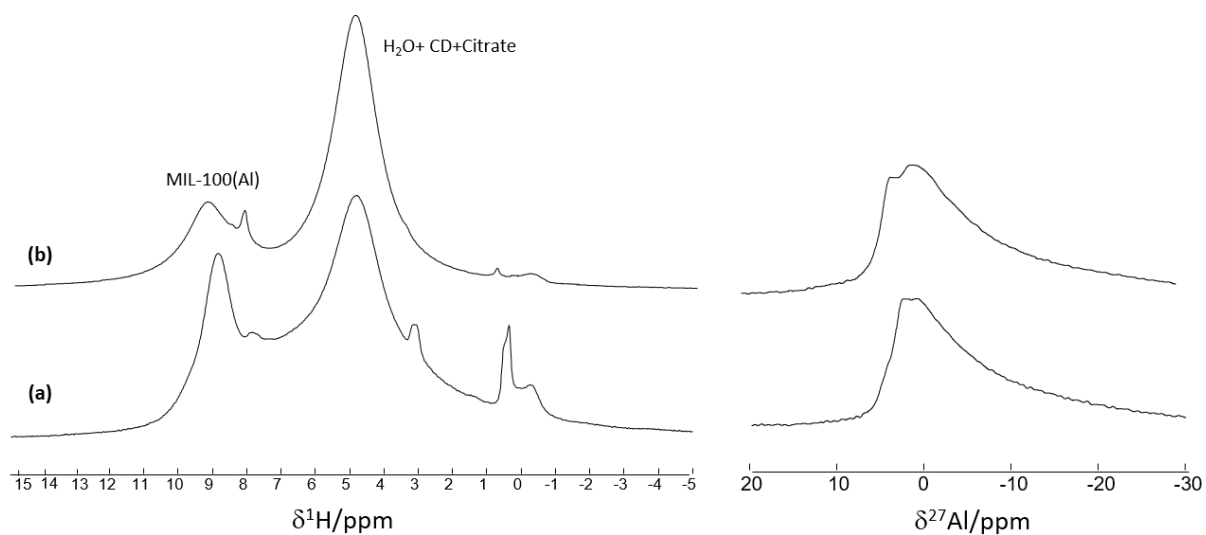


Figure S5. ^1H (left) and ^{27}Al (right) MAS NMR spectra of (a) CD-CO coated nanoMIL-100(Al) and (b) ^{13}C - CD-CO coated nanoMIL-100(Al)

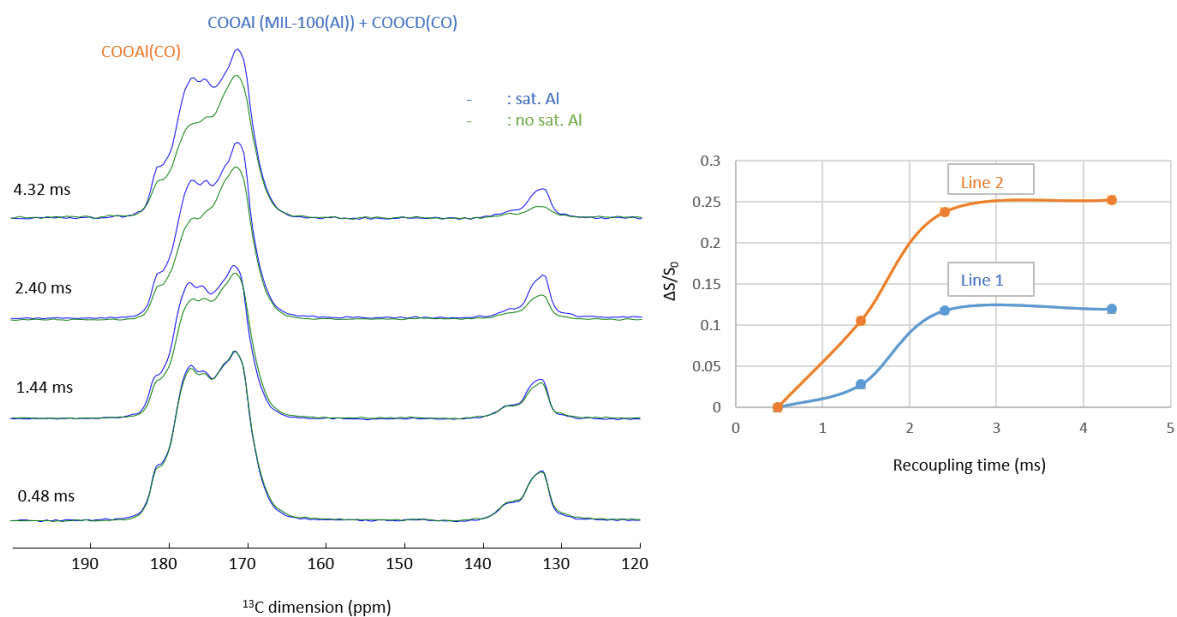


Figure S6. Left: ^{13}C - ^{27}Al CP-RESPDOR NMR spectra (left) with non (green) and saturation (blue) of Al nuclei, recorded at 12.5 kHz (9.4 T) at different recoupling time. Right: RESPDOR curves of Line 2 (corresponding to COOAl (CO) and shown in orange) and Line 1 (corresponding to COOAl (MIL-100(Al)) + COOCD (CO) and shown blue)