SUPPLEMENTARY INFORMATION FILE

Nanosilver-loaded metal-organic framework UiO-66 with strong fungicidal activity

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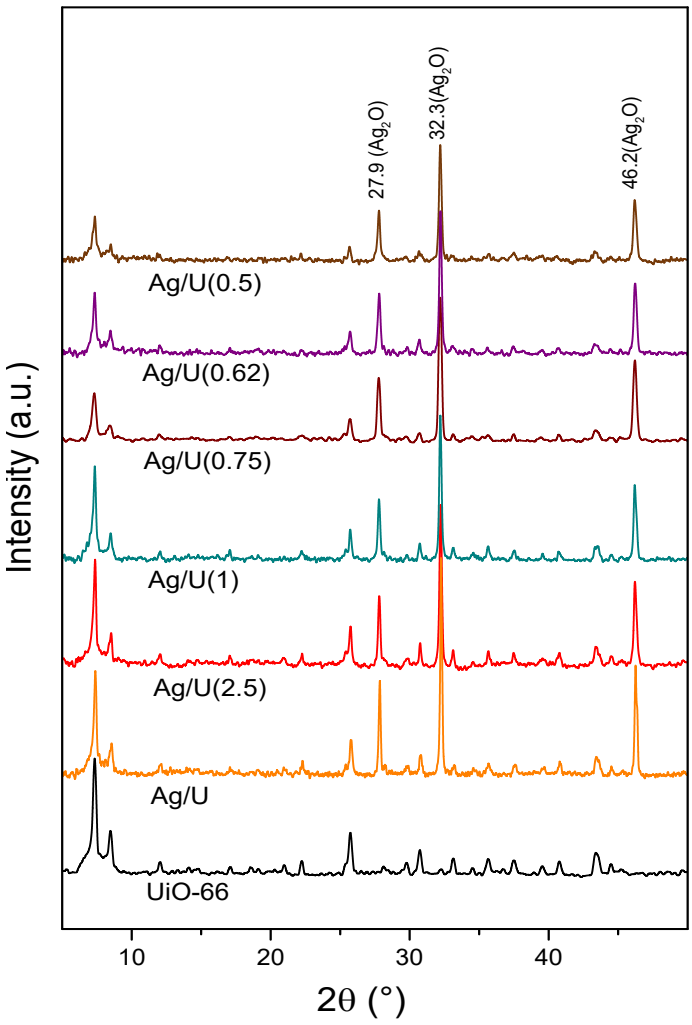


Figure S1. XRD of Ag/UiO-66 samples before the thermal treatment.

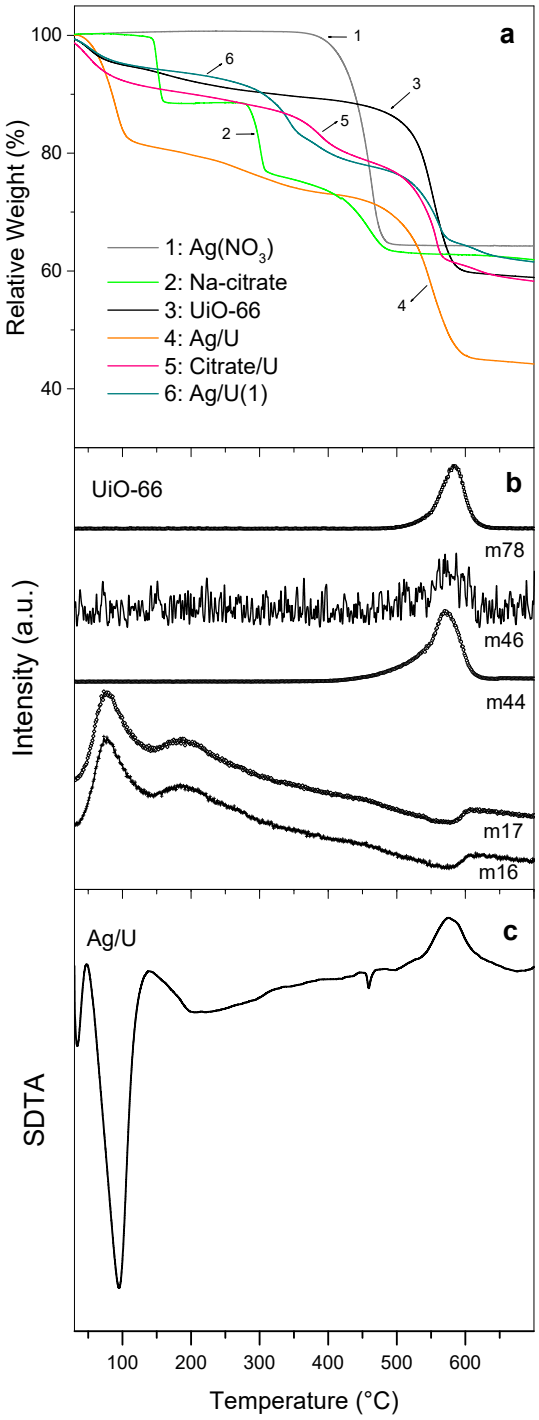


Figure S2. TGA-MS: a) TGA of Ag/UiO-66 and precursor samples, b) mass spectra of UiO-66. Note: m16 (O_2, H_2O); m17(OH, H_2O); m44(CO_2); m46(COOH of BDC); m78(C_6H_6), c) SDTA of Ag/U sample.

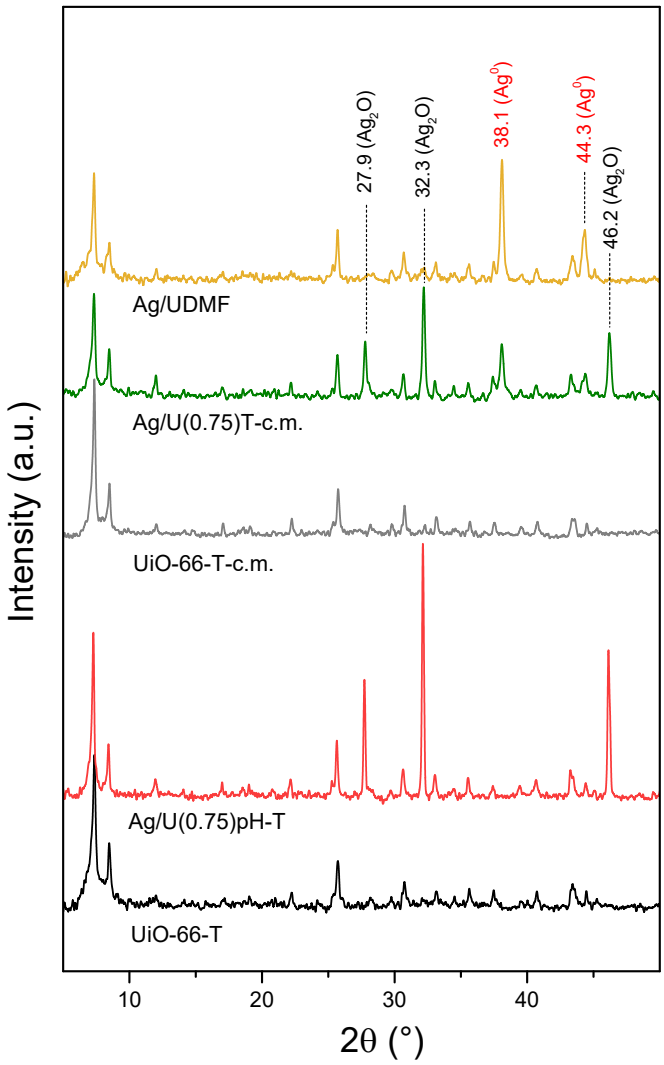


Figure S3. XRD samples with different post-synthetic treatments and exposed to the culture medium.

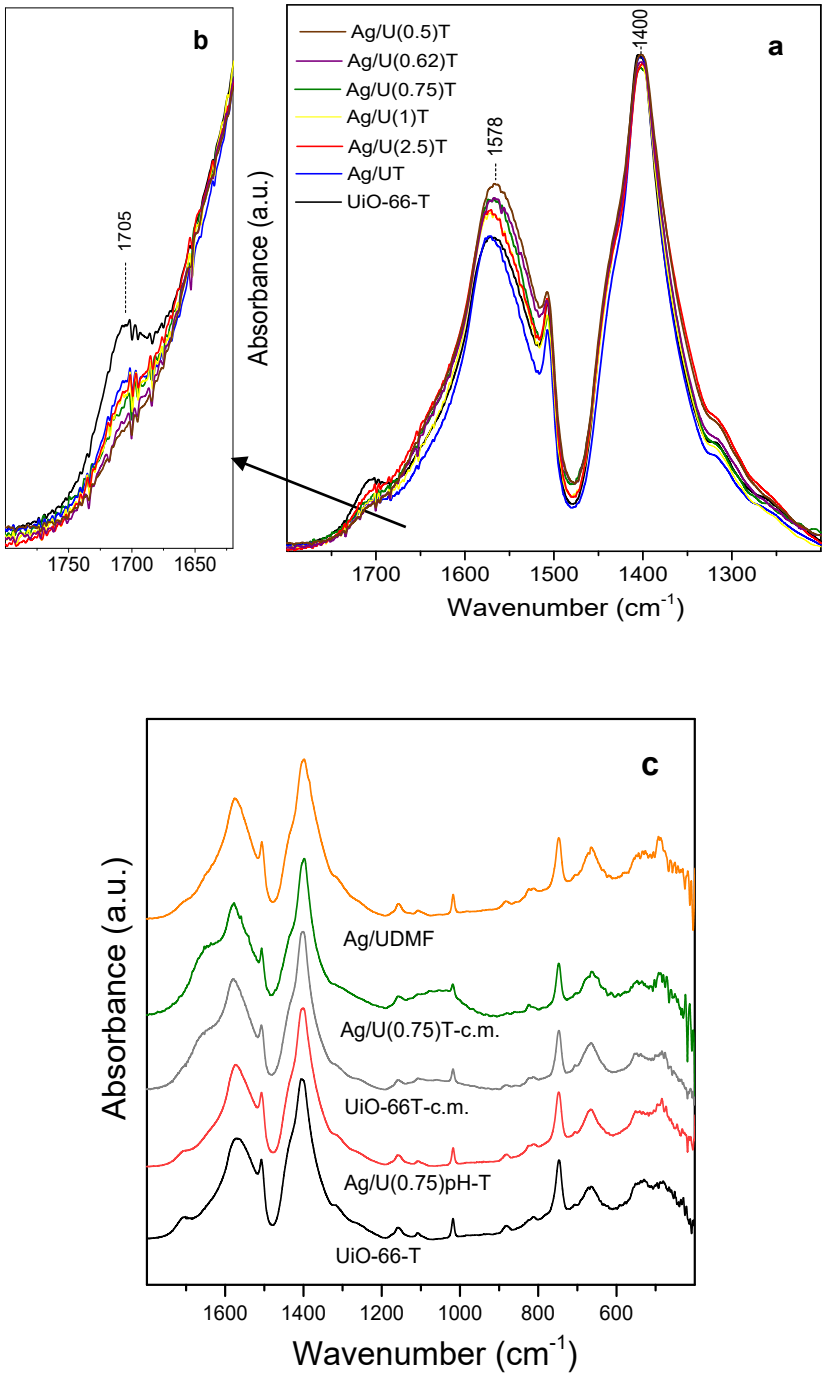


Figure S4. FTIR spectra: a) Ag/UiO-66 samples with different R values and thermally treated; b) close view in the COOH stretching region; c) Ag/UiO-66 and UiO-66 samples exposed to the culture medium and with different preparation treatments.

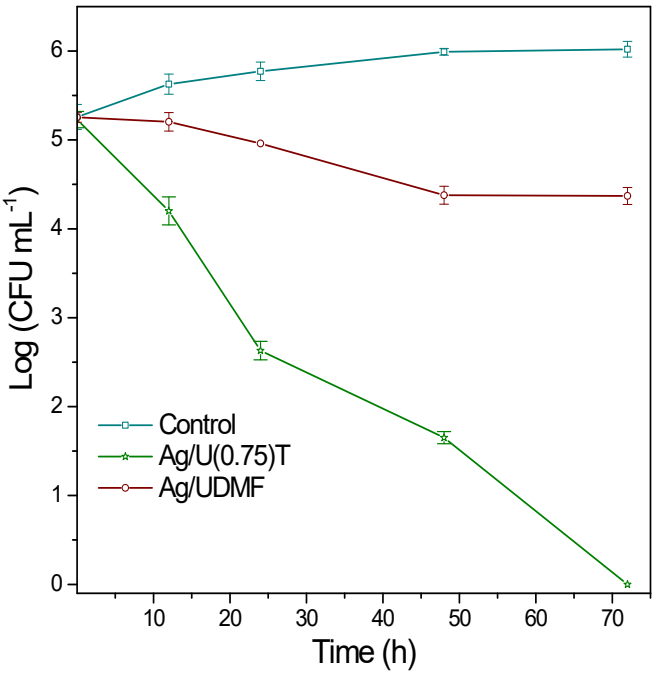
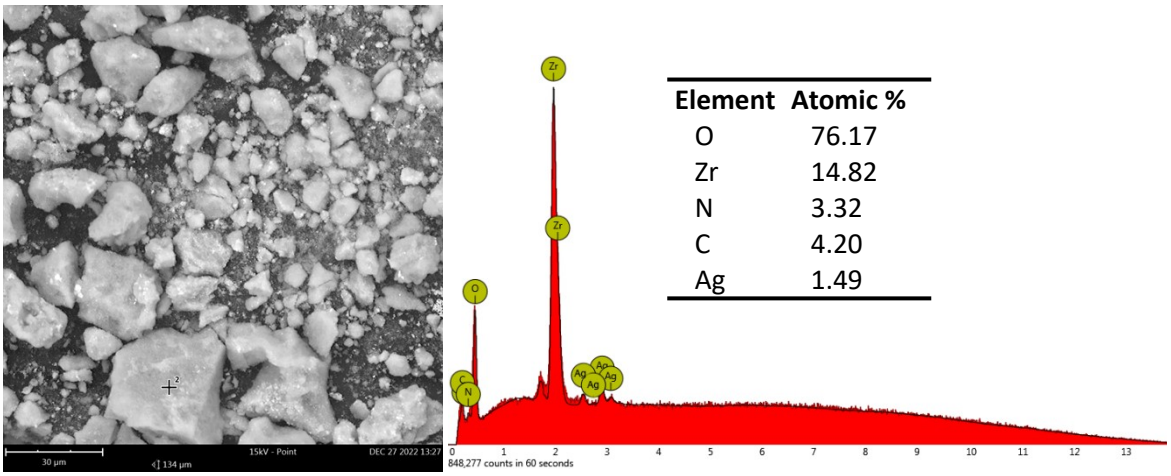
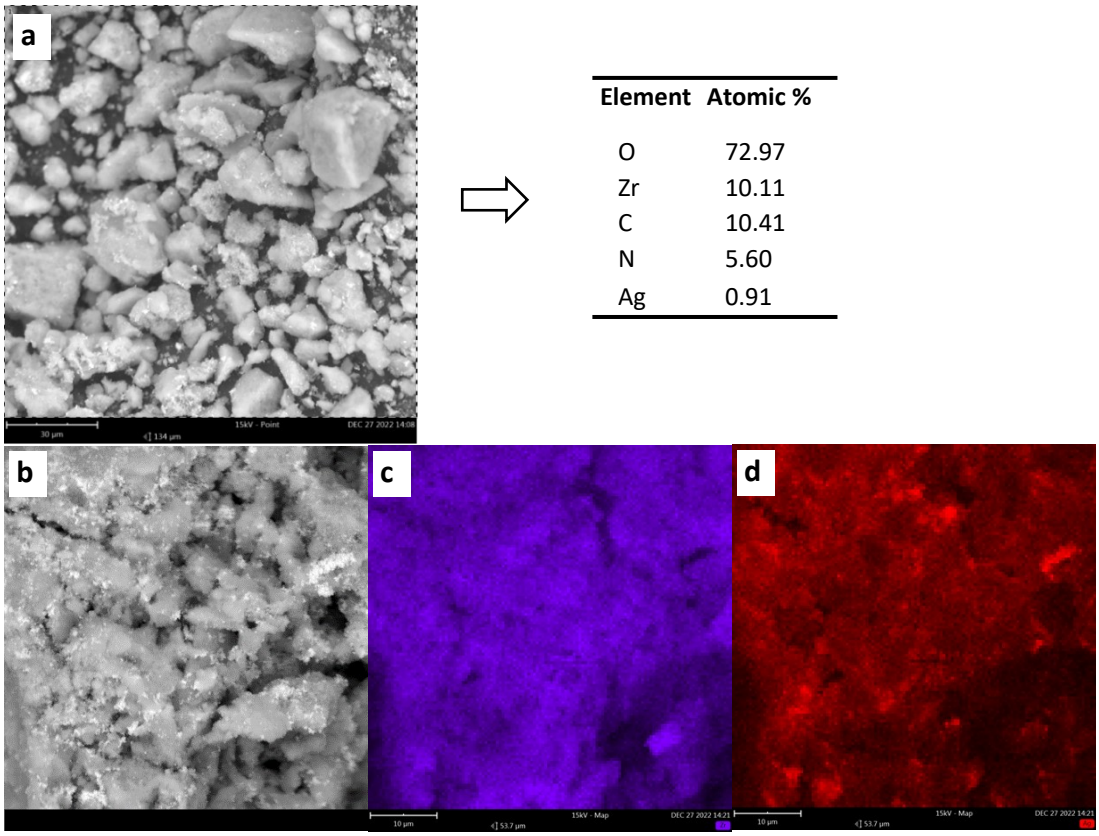


Figure S5. Colony growth curves (CFU mL^{-1}) of *P. roqueforti* at different incubation times, using Ag/UiO-66-DMF and Ag/U(0.75)T samples.



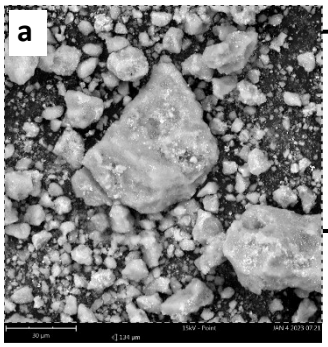
Element	Atomic %
O	76.17
Zr	14.82
N	3.32
C	4.20
Ag	1.49

Figure S6. SEM-EDS analyses of Ag(0.75)/UT sample: a) image of the region analyzed; b) EDS spectrum and elemental quantification table in one of several points analyzed.

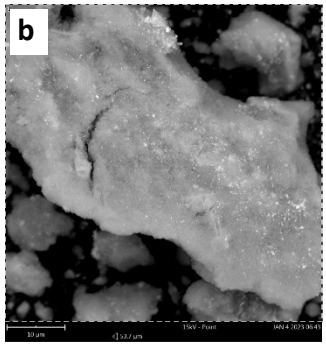


Element	Atomic %
O	72.97
Zr	10.11
C	10.41
N	5.60
Ag	0.91

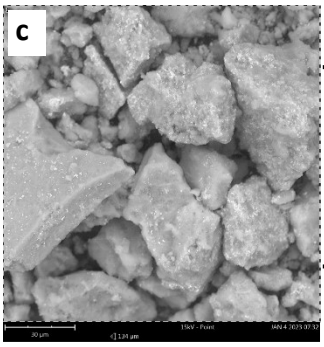
Figure S7. SEM-EDS analyses of the impregnated Ag(0.75)/U sample (before thermal treatment): a) image of the region analyzed (right side: elemental quantification table in the region analyzed); b) image of a sector analyzed by mapping; c) zirconium map; d) silver map.



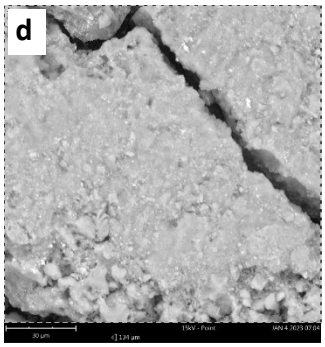
Element	Atomic %
O	59.48
Zr	23.06
N	7.27
C	8.04
Ag	2.15



Element	Atomic %
O	73.58
Zr	10.99
N	4.48
C	10.01
Ag	0.95



Element	Atomic %
O	55.41
Zr	23.41
N	8.75
C	10.57
Ag	1.86



Element	Atomic %
O	59.85
Zr	24.03
N	6.96
C	7.14
Ag	2.03

Figure S8. SEM-EDS analyzes performed on thermally-treated Ag/UiO-66 solids obtained with different proportions of nitrate/citrate: a) Ag/U(2.5)T; b) Ag/U(1)T; c) Ag/U(0.62)T; d) Ag/U(0.5)T.

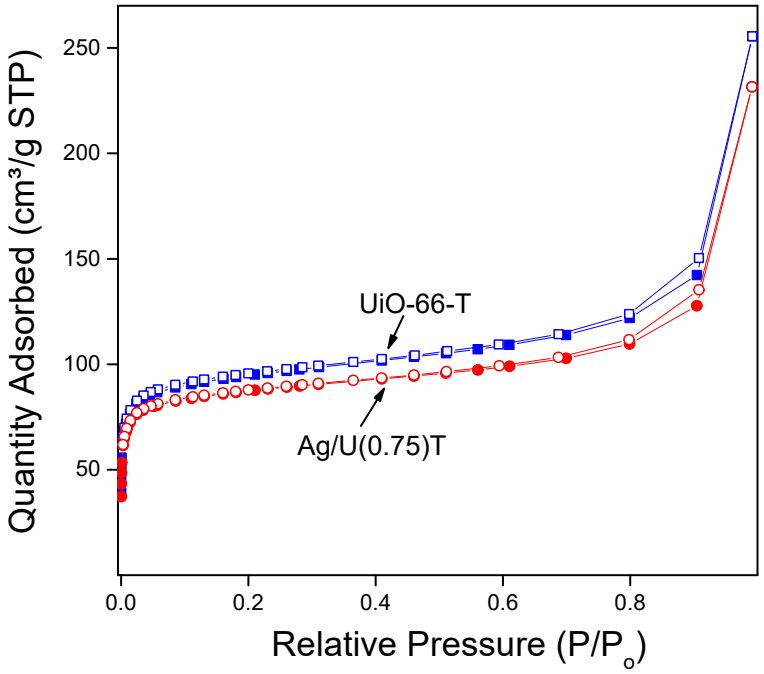


Figure S9. Adsorption-desorption isotherms of N_2 at 77 K: UiO-66 treated in He at 275 °C for 4h (square symbol and blue curve); Ag/U(0.75)T treated in He at 275 °C for 4h (circle symbol and red curve).