Supporting information to:

Chain length study of silver carboxylates in focused electron beam induced deposition

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S1. Distribution of the impinging flux of precursor molecules as a fraction of the flux leaving nozzle exit

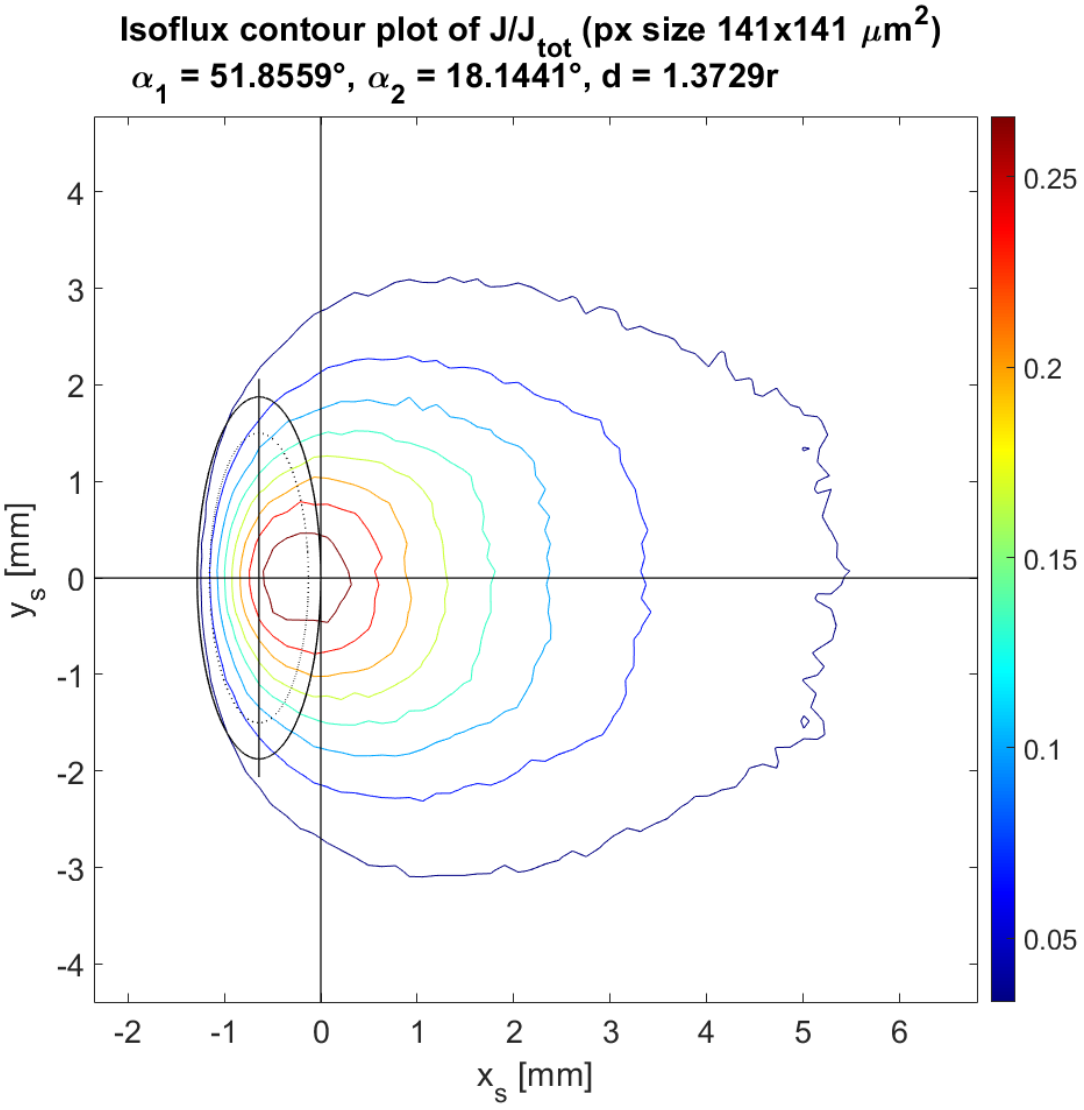

Figure S1 Distrubution of the impinging flux of molecules as a fraction of the flux leaving nozzle exit.

All presented deposition experiments were performed around 0.2 mm of lateral distance from the upper edge of the nozzle exit, position here at 0 on the X axis.

S2. Comparison between measured SAED patterns and the ones of pure Ag and AgO $[Ag_2(\mu\text{-}O_2CCF_3)_2]$

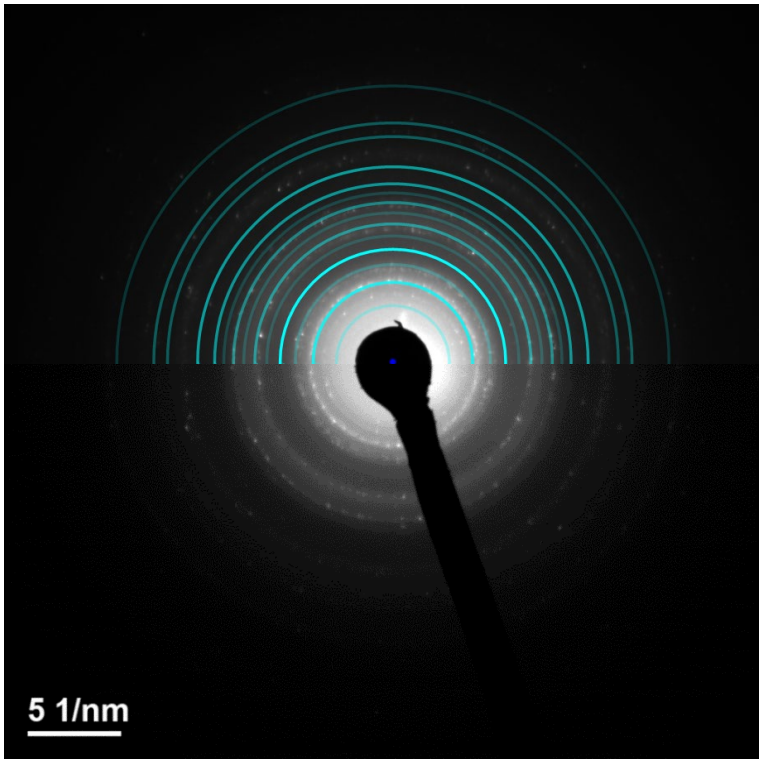

Figure S2.1 SAED pattern obtained from the deposit manufactured with $[Ag_2(\mu\text{-}O_2CCF_3)_2]$ compared to pattern of pure AgO (cyan rings).

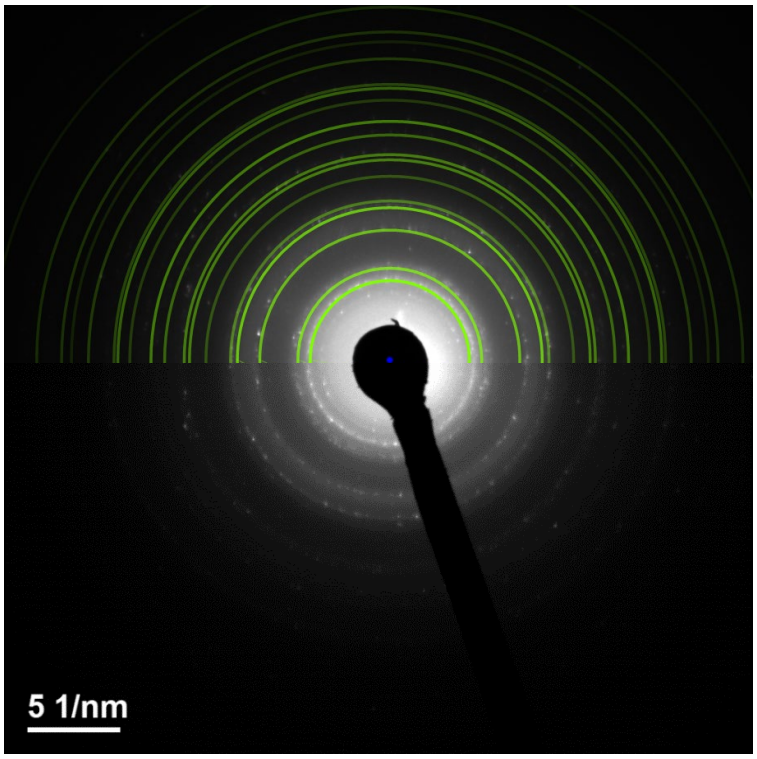

Figure S2.2 SAED pattern obtained from the deposit manufactured with $[Ag_2(\mu\text{-}O_2CCF_3)_2]$ compared to pattern of pure Ag (green rings).

[Ag2(μ-O2CC3F7)2]

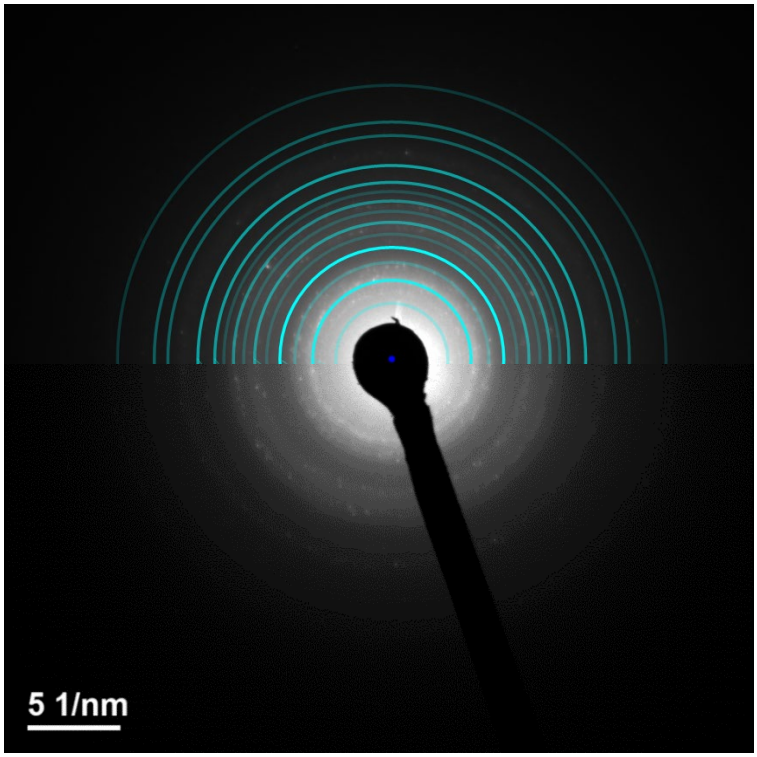

Figure S2.3 SAED pattern obtained from the deposit manufactured with [Ag2(μ-O2CC3F7)2] compared to pattern of pure AgO (cyan rings).

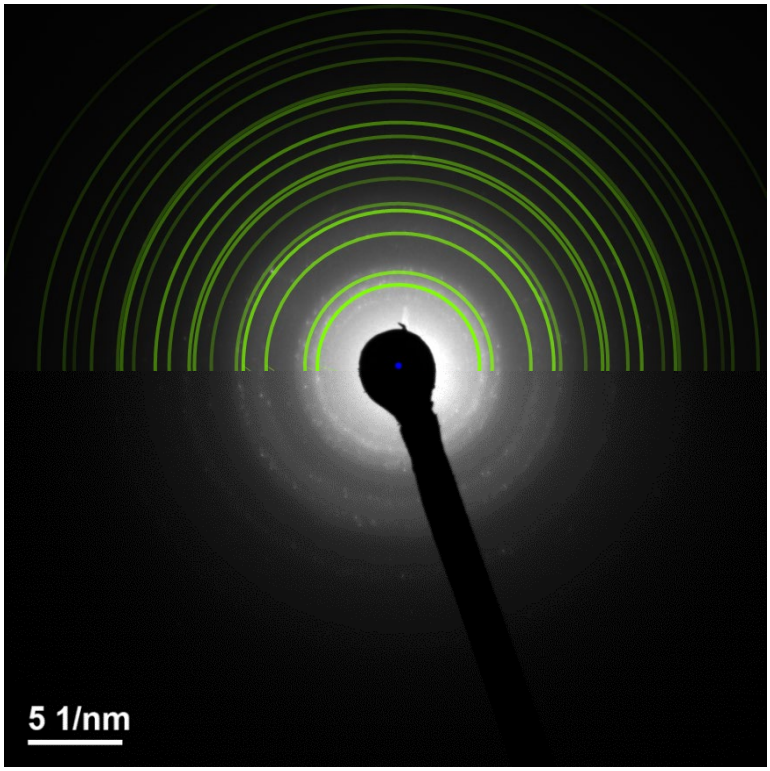

Figure S2.4 SAED pattern obtained from the deposit manufactured with [Ag2(μ-O2CC3F7)2] compared to pattern of pure Ag (green rings).

[Ag2(μ-O2CtBu)2]

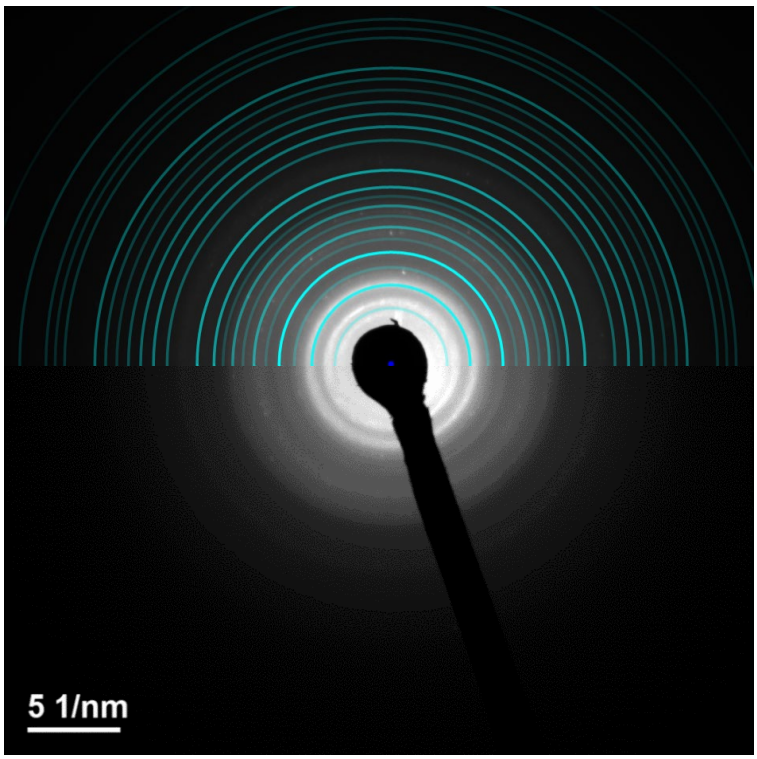

Figure S2.5 SAED pattern obtained from the deposit manufactured with [Ag2(μ-O2CtBu)2] compared to pattern of pure AgO (cyan rings).

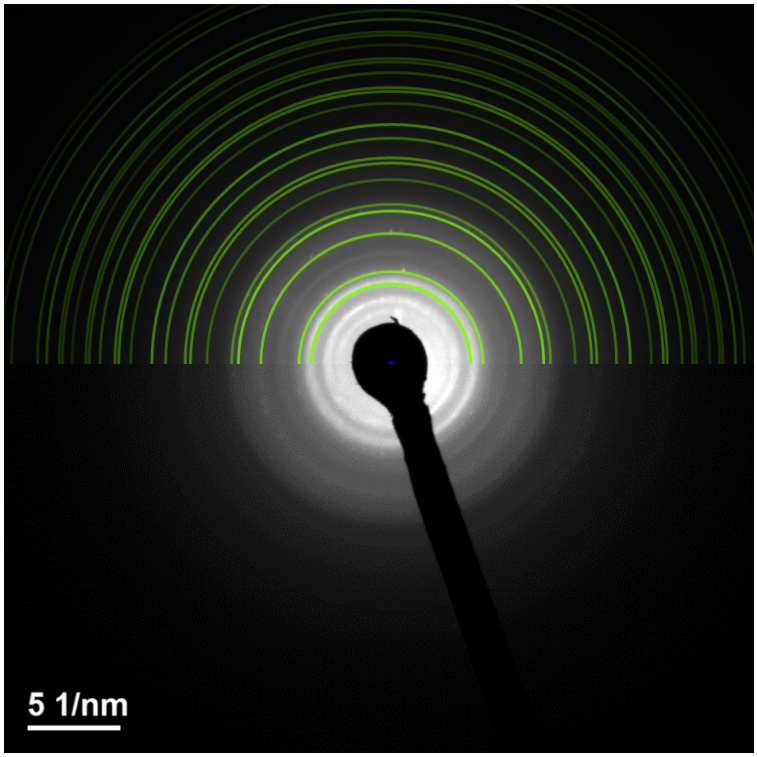

Figure S2.6 SAED pattern obtained from the deposit manufactured with [Ag2(μ-O2CtBu)2] compared to pattern of pure Ag (cyan rings).

S3. AFM of the spot deposits

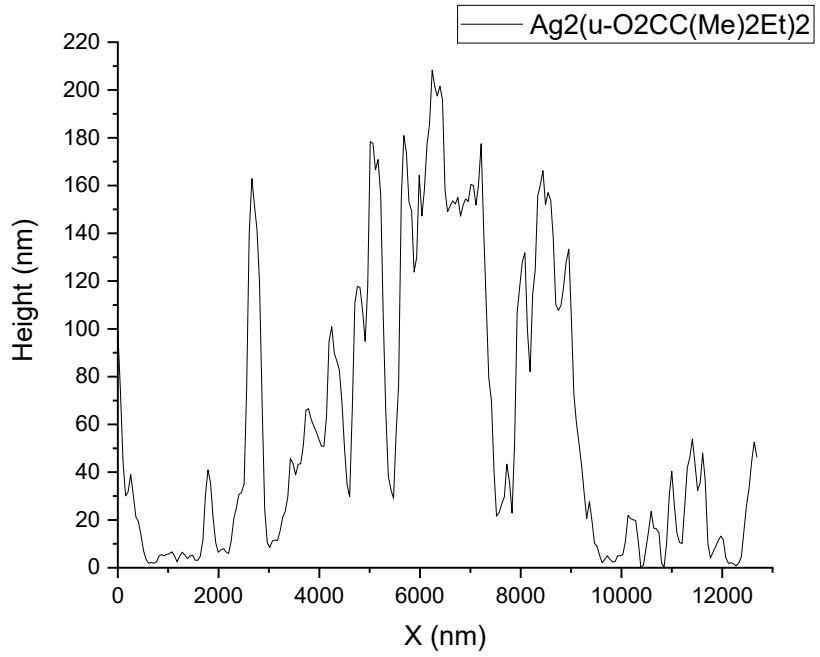

Figure S3.1 AFM profile of the spot deposit made with [Ag2(μ-O2CC(Me)2Et)2]. Measured profile was lead through the center of the deposit.

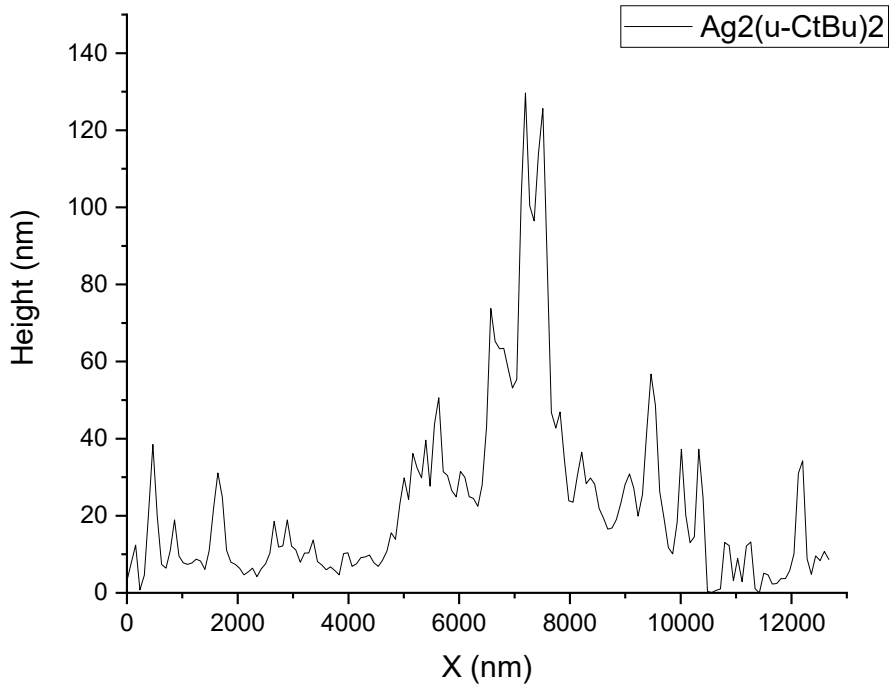

Figure S3.2 AFM profile of the spot deposit made with [Ag2(μ-O2CCtBu)2]. Measured profile was lead through the center of the deposit.

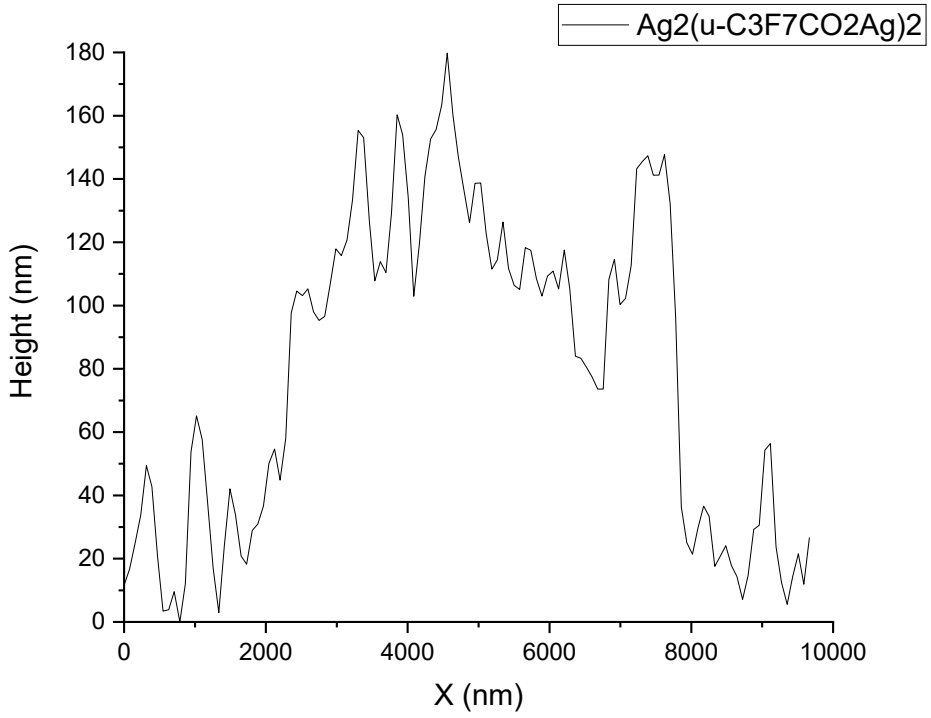

Figure S3.3 AFM profile of the spot deposit made with [Ag2(μ-O2CC3F7)2]. Measured profile was lead through the center of the deposit.

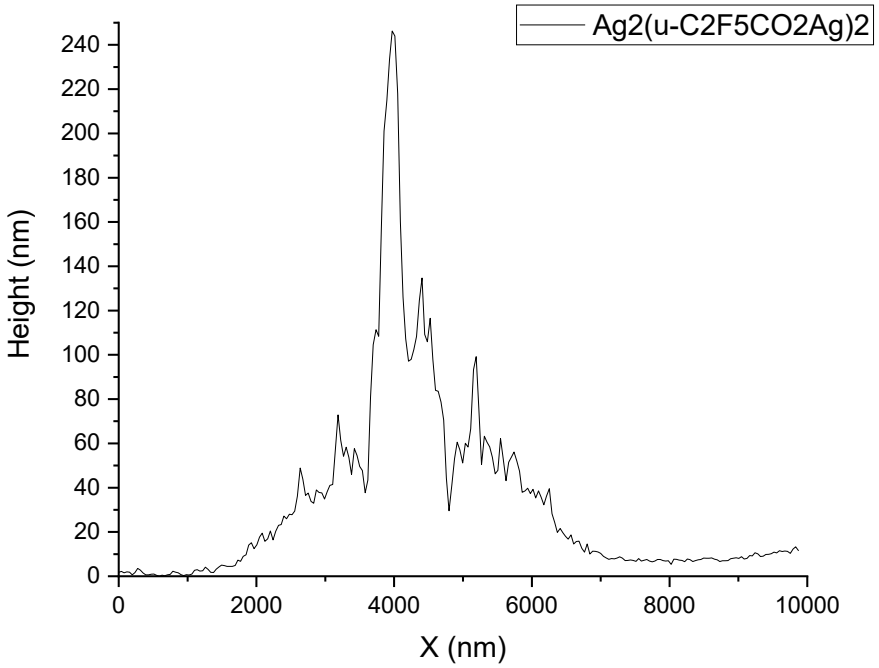

Figure S3.4 AFM profile of the spot deposit made with [Ag2(μ-O2CC2F5)2]. Measured profile was lead through the center of the deposit.

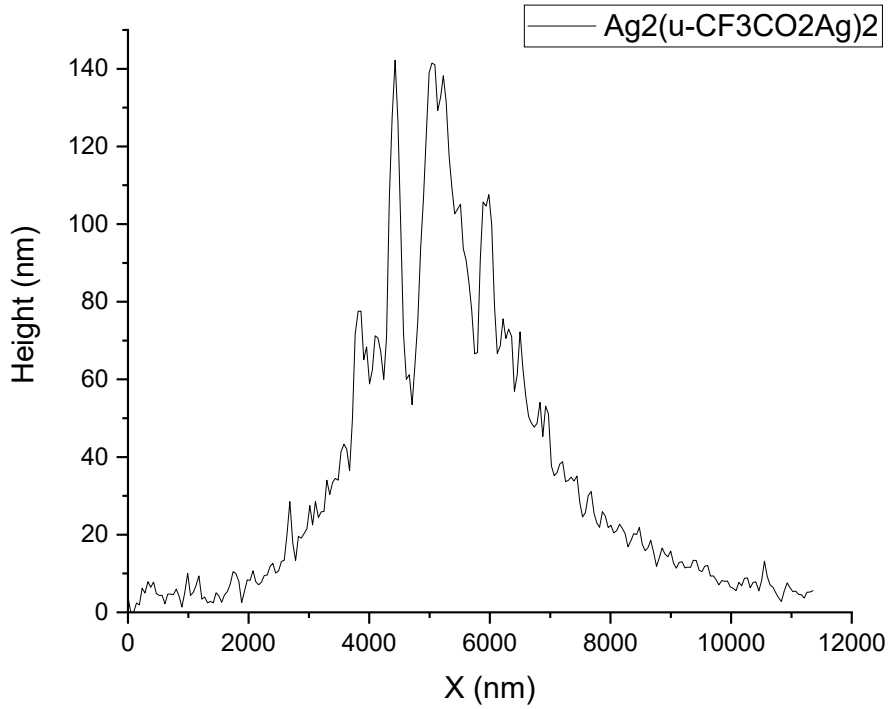

Figure S3.5 AFM profile of the spot deposit made with [Ag2(μ-O2CCF3)2]. Measured profile was lead through the center of the deposit.