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## **SUPPORTING INFORMATION**

Deposition of metallic silver coatings by Aerosol Assisted MOCVD using two new silver  $\beta$ -Diketonate adduct metalorganic precursors

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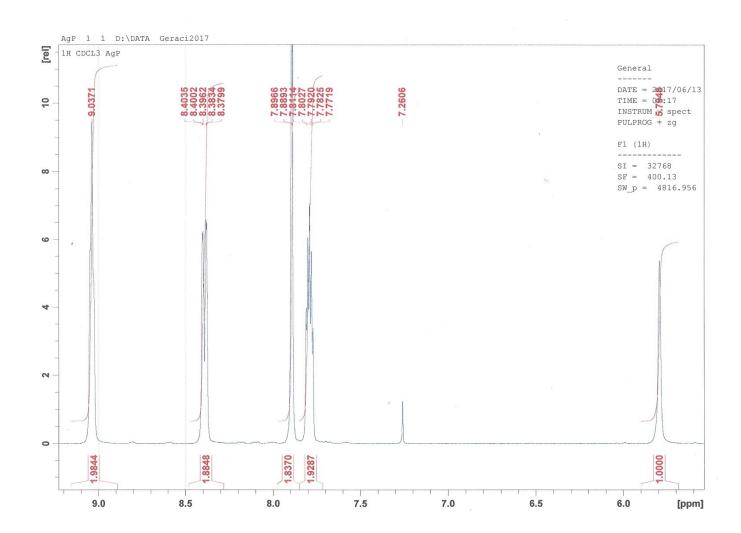


Figure. S01. <sup>1</sup>H NMR spectrum of AgP in CDCl<sub>3</sub>.

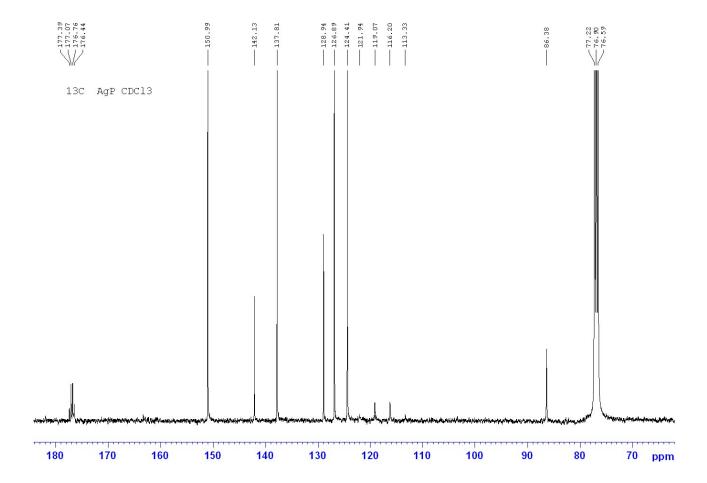


Figure. S02. <sup>13</sup>C NMR spectrum of AgP in CDCl<sub>3</sub>.

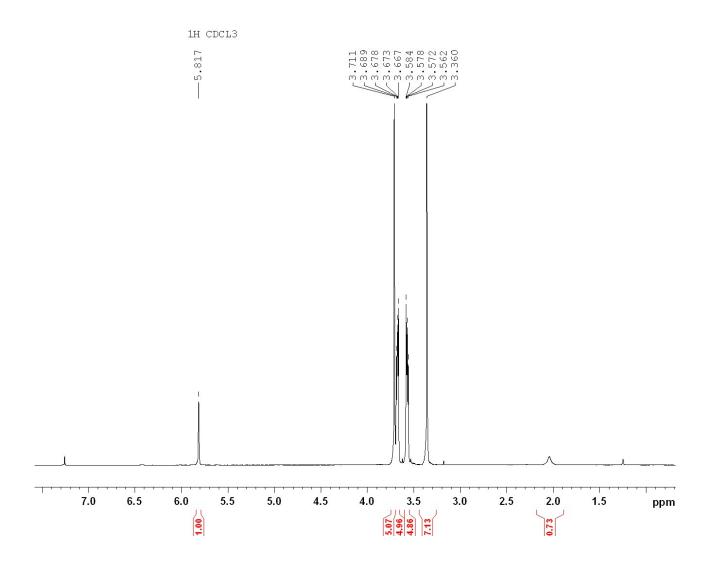


Figure. S03. <sup>1</sup>H NMR spectrum of AgT in CDCl<sub>3</sub>.

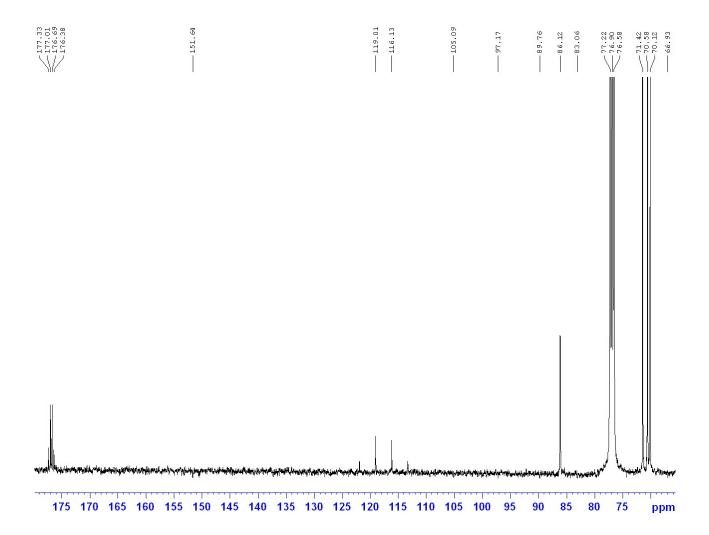
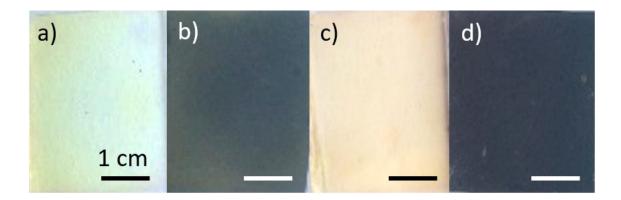
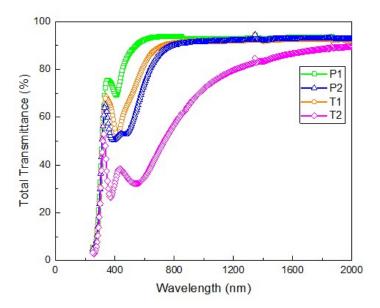


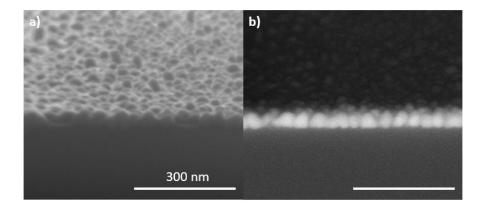
Figure. S04. <sup>13</sup>C NMR spectrum of AgT in CDCl<sub>3</sub>.



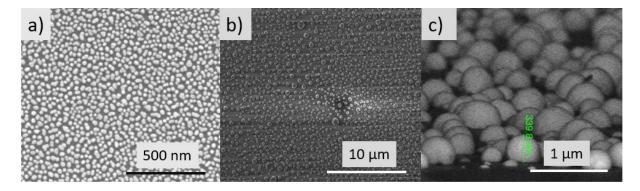
**Figure. S05** Images of silver coatings: a) P1 (yellow), b) P2 (dark in the picture but with a purple hue to the naked eye), c) T1 (orange), d) T2 (as for P2, dark in the image but having a purple hue to the naked eye).



**Figure. S06** Transmittance spectra of Ag films deposited with different precursors AgP and AgT with deposition duration 0.5 h (P1 and T1) and 1.5 h (P2 and T2).



**Figure. S07** SEM Crossection of sample T2 (deposited using AgT precursor for 1.5 h). a) Secondary electrons b) Back/scattered electrons. The height of the coating is about 35 nm.



**Figure. S08** a) SEM image of the as deposited Ag coating (using AgP). Images b) and c) show SEM images of the coating after annealing at 400 °C in air for 1 h.