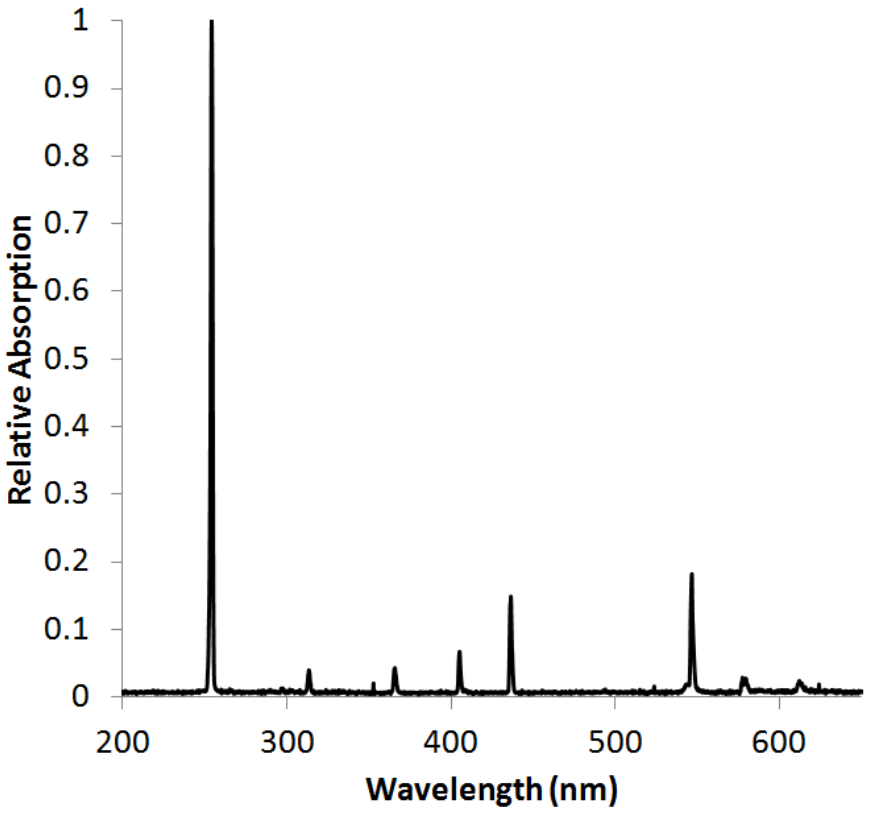
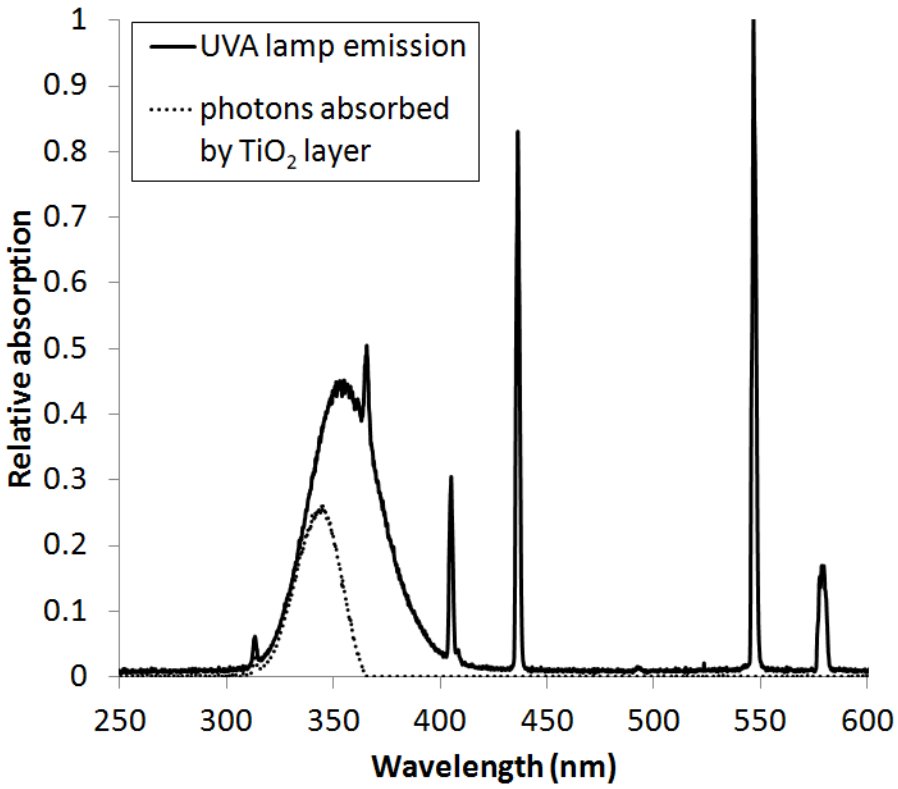
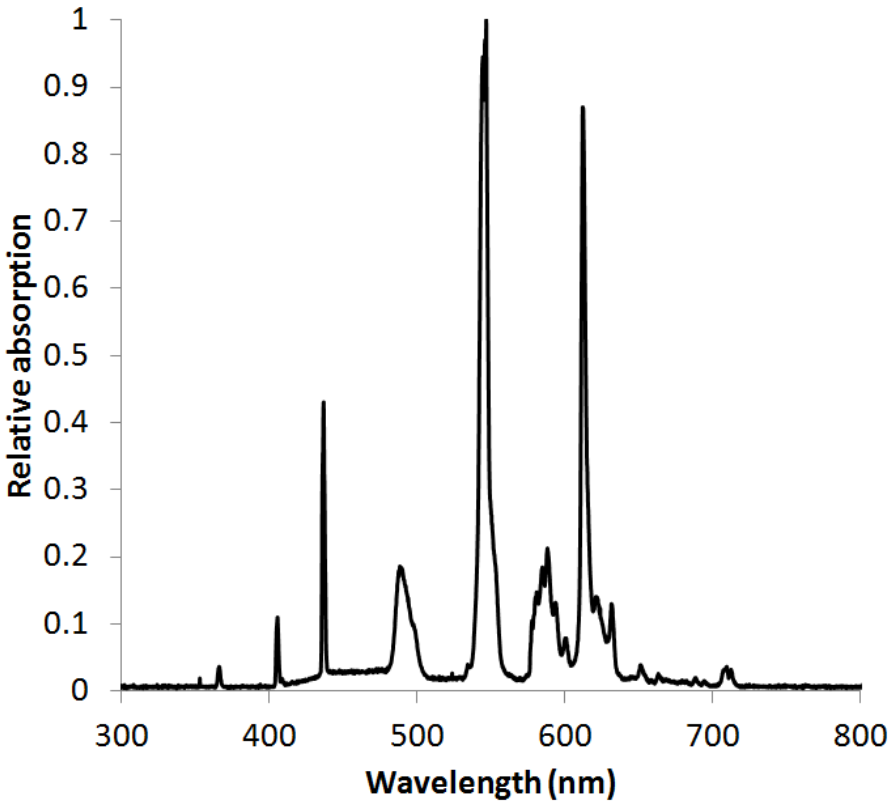


Supplementary Information 1: The emission profile of the UVC – 254 nm lamp.

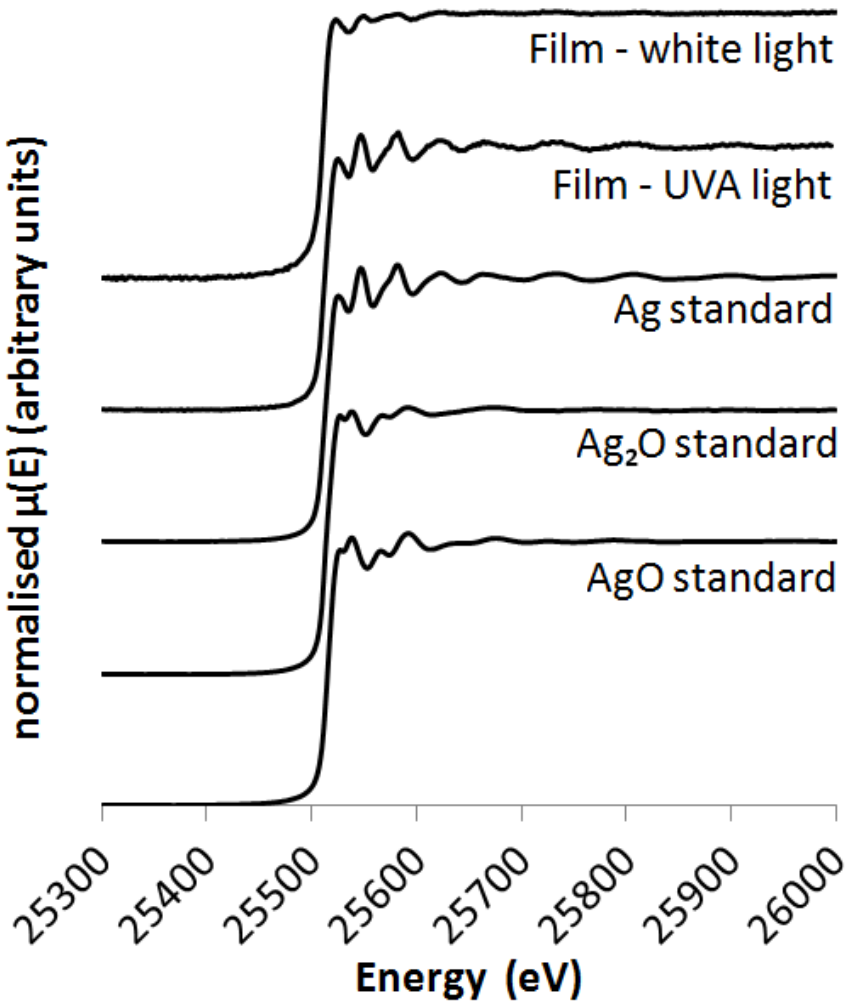
This journal is © The Owner Societies 2013



Supplementary Information 2: The emission profile of the UVA – 365 nm lamp (solid line) and the portion that was absorbed by the TiO_2 film (dashed line).

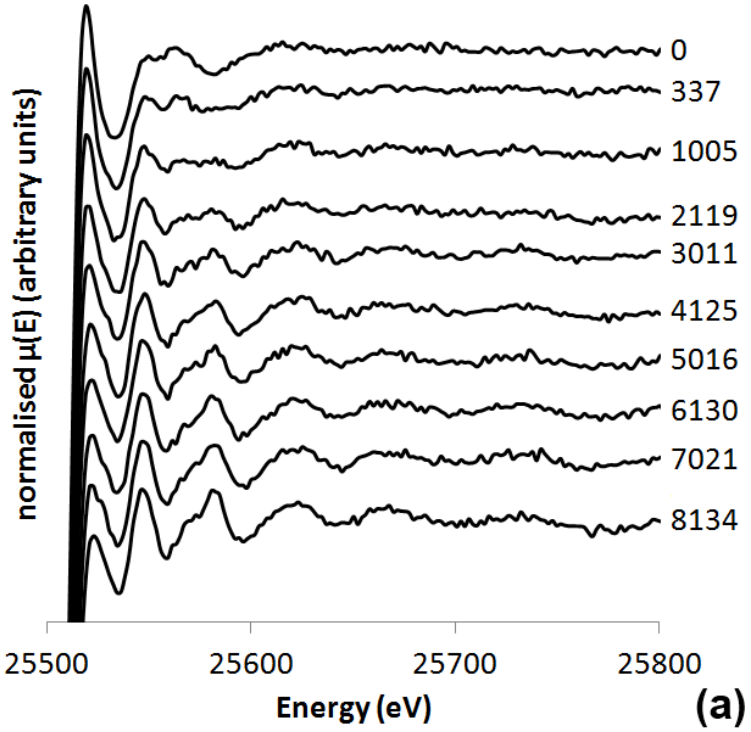


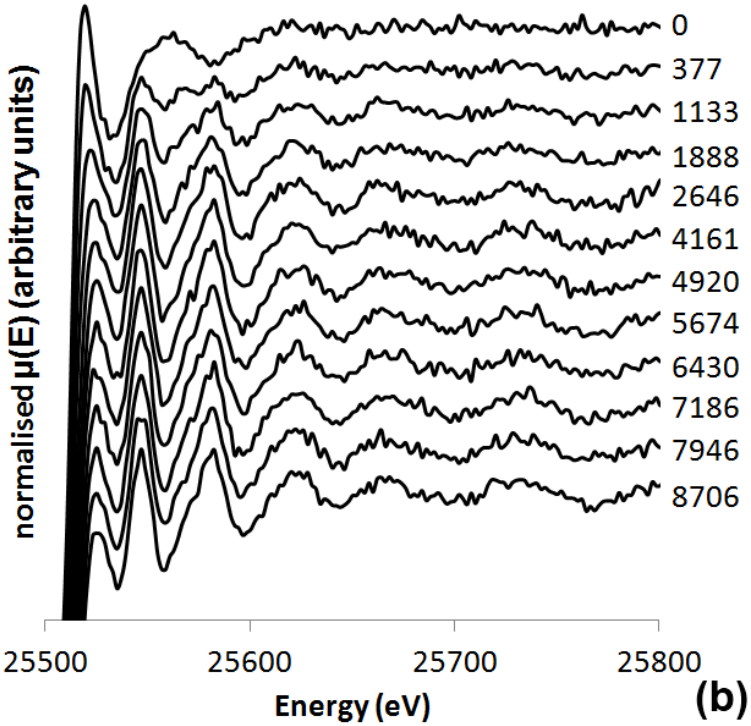
Supplementary Information 3: The emission profile of the white light source.



Supplementary Information 4: The full spectrum of normalized EXAFS spectra (μ(E)) at the K-edge of silver. Shown are AgO and Ag_2O powder pellets diluted in BN (AgO and Ag_2O standards), Ag foil (Ag standard) and the Ag-TiO_2 thin-film after being exposed to white light (Film – white light) or UVA light (Film – UVA light) for 12 hours

This journal is © The Owner Societies 2013





Supplementary Information 5: Stacked plots of the normalized EXAFS patterns (μ(E)) from the K-edge of silver during the photo-assisted growth of Ag nanoparticles from $AgNO_3$ on TiO_2 thin-films using (a) UVC (1.13×10^{15} photons $cm^{-2}s^{-1}$) and (b) UVA (2.83×10^{15} photons $cm^{-2}s^{-1}$) sources. Each pattern represents a cumulative irradiation time in seconds from which the mid-data point was measured.