Supplementary Information 1: The emission profile of the UVC – 254 nm lamp.
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 ($\mu(E)$) at the K-edge of silver. Shown are AgO and Ag$_2$O powder pellets diluted in BN (AgO and Ag$_2$O 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.
Supplementary Information 5: Stacked plots of the normalized EXAFS patterns ($\mu(E)$) 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 ($1.13 \times 10^{15}$ photons cm$^{-2}$s$^{-1}$) and (b) UVA ($2.83 \times 10^{15}$ photons cm$^{-2}$s$^{-1}$) sources. Each pattern represents a cumulative irradiation time in seconds from which the mid-data point was measured.