Supporting Information

Combination of chemical etching of gold nanoclusters with aggregation-induced emission for preparation of new phosphors for development of UV-driven phosphor-converted white light-emitting diodes

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Fig. S1 Photoluminescent excitation (dash line) and emission (solid line) spectra of the GNCs@BSA ($\lambda_{\text{ex}}$: 490 nm).
**Fig. S2** Photographs of the TCEP-Au(I)-BSA solutions in the presence of 5 mM cadmium ion and 19 kinds of other metal ions under visible light (left) and 365 nm UV light (right), respectively.
Fig. S3 Photographs of the filtrate of the ultrafiltrated TCEP-Au(I)-BSA solution in the absence (a) and presence (b) of 5 mM cadmium ion under visible light (i) and 365 nm UV light (ii), respectively.
Fig. S4 Photographs of the TCEP-Au(I) solutions in the presence of 5 mM cadmium ion and 19 kinds of other metal ions under visible light (left) and 365 nm UV light (right), respectively.