Electronic Supplementary Material (ESI) for CrystEngComm

Electronic supplementary information

Synthesis and growth mechanism of triangular Ag-rich AgAu alloy prisms in an aqueous solution in the presence of PVP, citrate and H_2O_2

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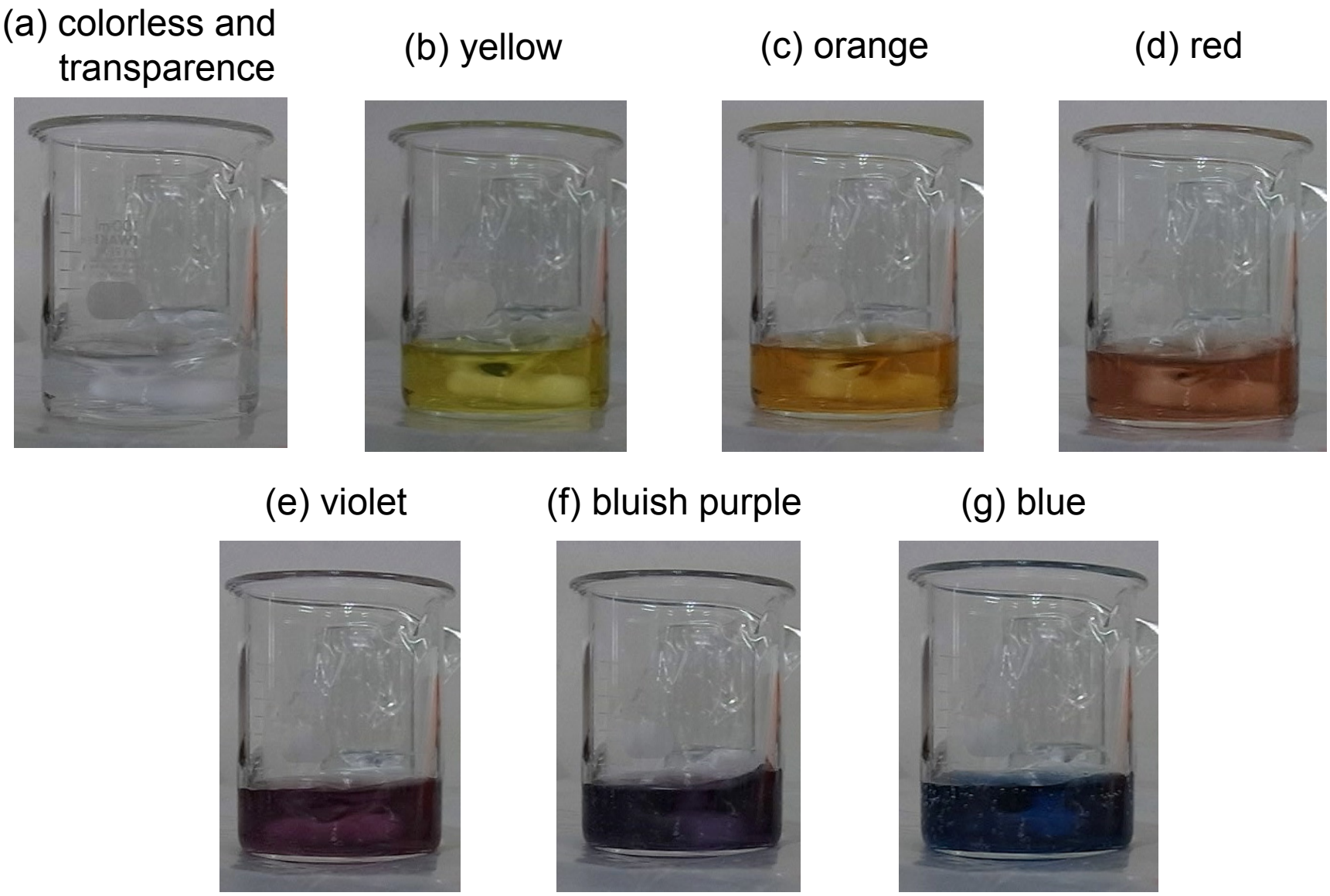

Fig. S1. Color changes of $HAuCl_4 \cdot 4H_2O/AgNO_3/NaBH_4/PVP/Na_3CA/H_2O_2$ solution at Au/Ag molar ratio of 4% (a) before and (b)–(g) after addition of $NaBH_4$.

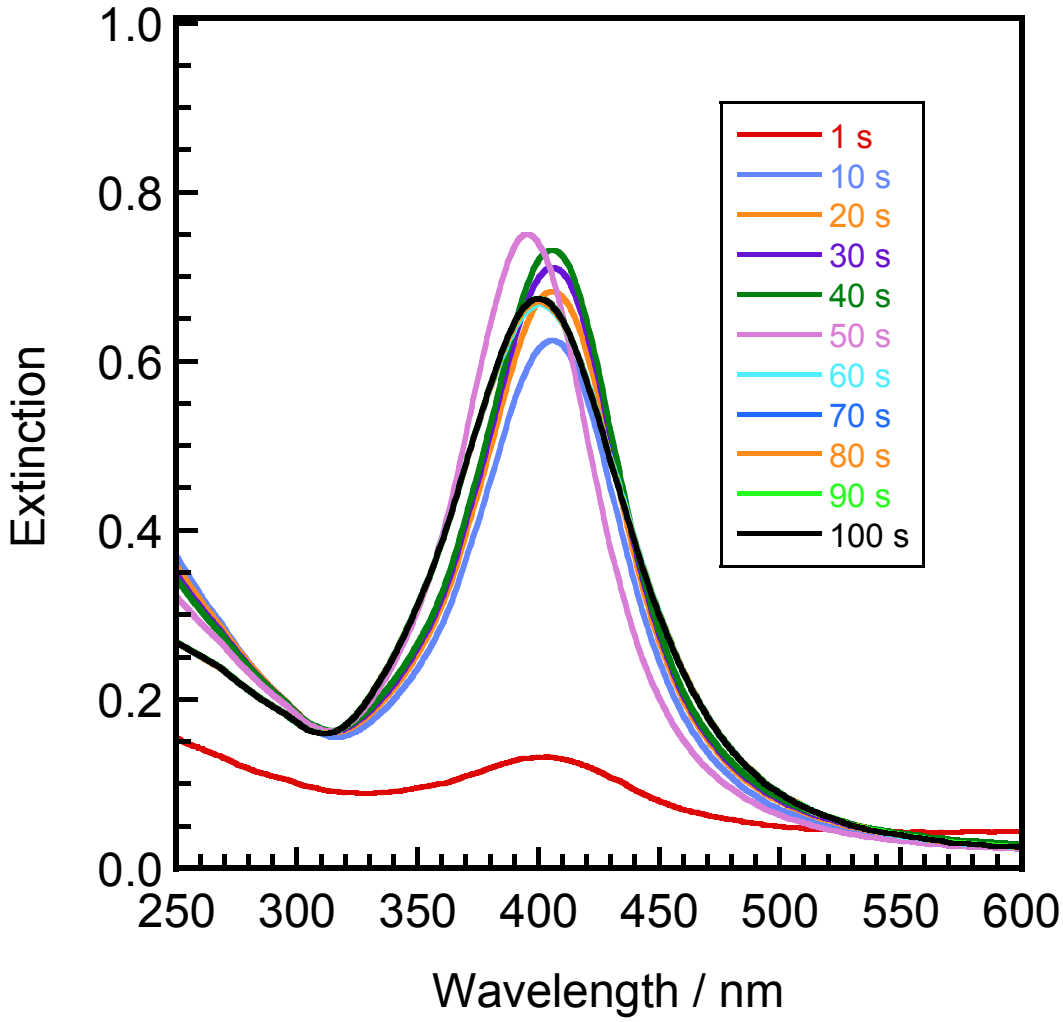

Fig. S2. UV-Vis spectra of products after addition of $NaBH_4$ to $HAuCl_4 \cdot 4H_2O/AgNO_3/PVP/Na_3CA$ solution at Au/Ag molar ratio of 4%.

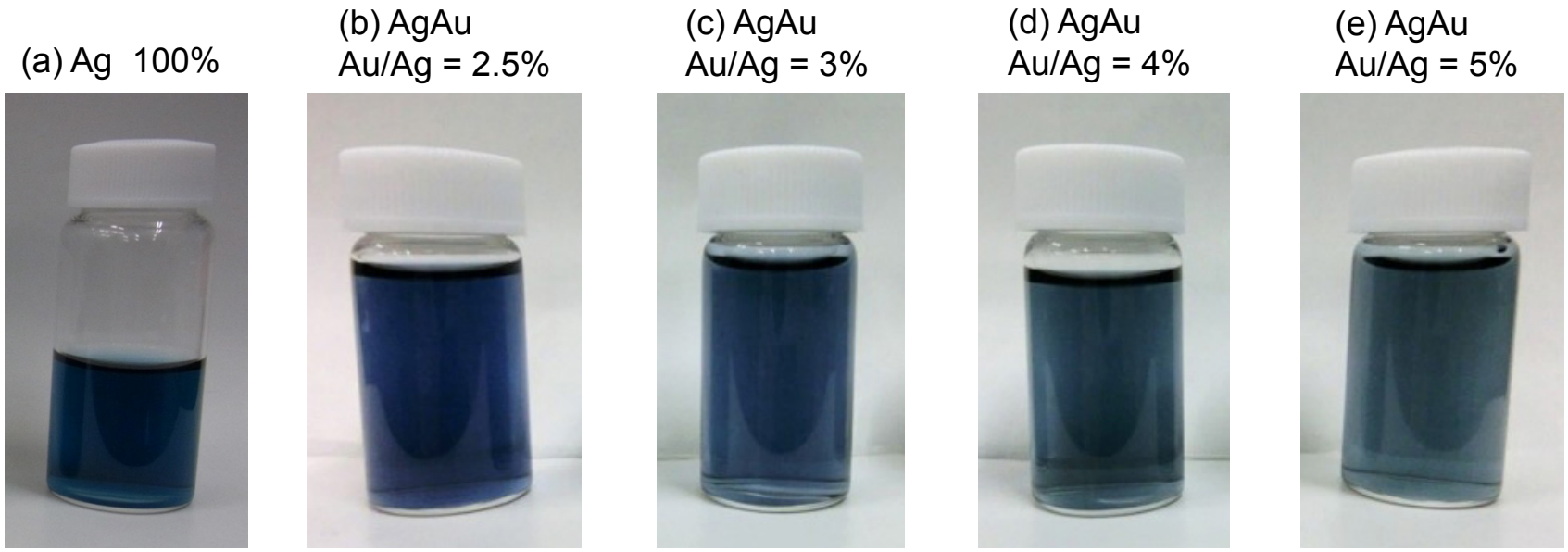

Fig. S3. Colors of product solutions of (a) Ag prisms obtained from $AgNO_3/NaBH_4/PVP/Na_3CA/H_2O_2$ solution and (b)–(e) Ag-rich AgAu alloy prisms obtained from $HAuCl_4 \cdot 4H_2O/AgNO_3/NaBH_4/PVP/Na_3CA/H_2O_2$ solution at Au/Ag molar ratios of 2.5–5%.

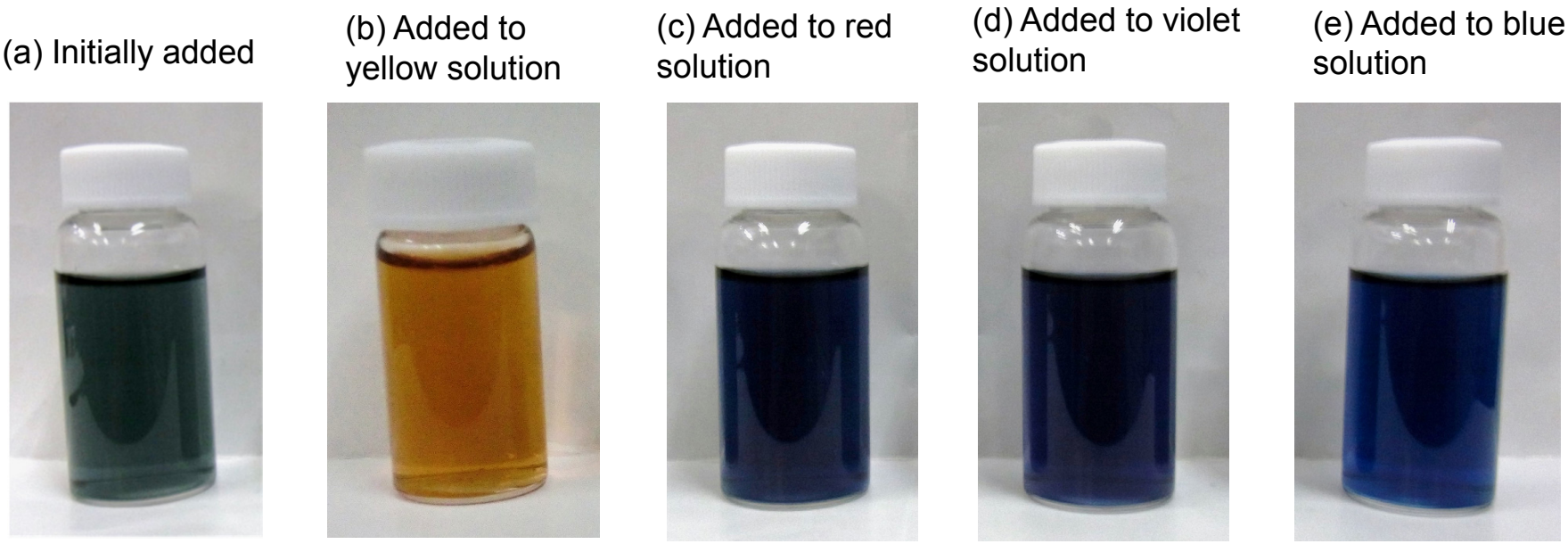

Fig. S4. Colors of product solutions obtained after various timing of addition of $HAuCl_4 \cdot 4H_2O$ to $AgNO_3/NaBH_4/PVP/Na_3CA/H_2O_2$ solution at Au/Ag molar ratio of 4%.

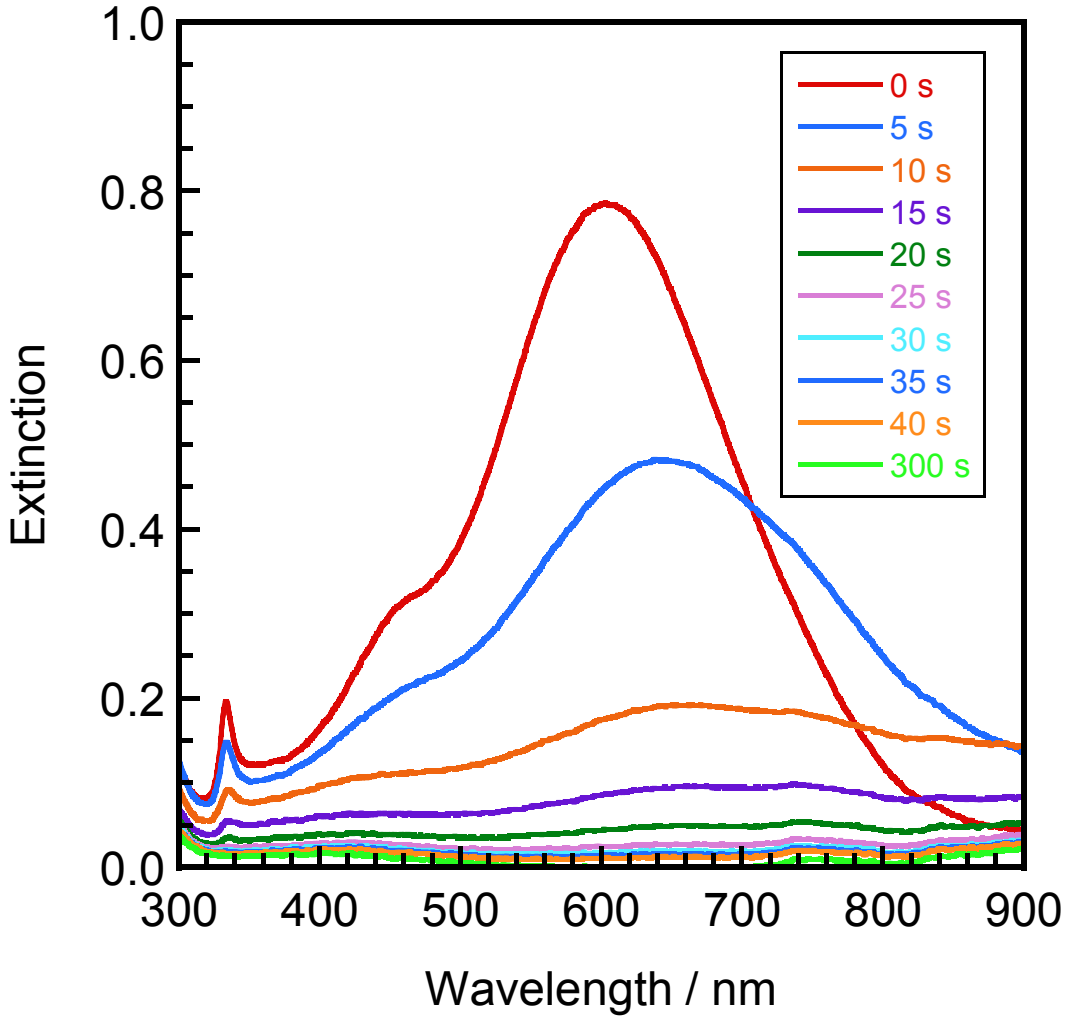

Fig. 5. UV-Vis spectra of Ag-rich AgAu prisms after addition of H_2O_2. AgAu prisms were prepared at Au/Ag molar ratio of 4%. The concentration of H_2O_2 after addition was 7.0 mM.