Supporting Information

A Fast Self-Cleaning SERS-Active Substrate Based on Inorganic–Organic Hybrid Nanobelts Film

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![SEM images of the samples prepared with different hydrothermal reaction time: (A) 0 h; (B) 1 h; (C) 2 h; (D) 4 h; (E) 6 h.](image1)

*Fig. S1* SEM images of the samples prepared with different hydrothermal reaction time: (A) 0 h; (B) 1 h; (C) 2 h; (D) 4 h; (E) 6 h.

![SEM images of the samples prepared with different mass of added PVP: (A) 0 g; (B) 0.054 g; (C) 0.54 g.](image2)

*Fig. S2* SEM images of the samples prepared with different mass of added PVP: (A) 0 g; (B) 0.054 g; (C) 0.54 g.
**Fig. S3** SEM images of the samples prepared with different mass of added NaCl: (A) 0.0256 g; (B) 0.768 g; (C) 1.28 g; (D) 1.792 g; (E) 2.56 g.

**Fig. S4** (A, B) SEM images of the sample prepared with AgNO₃ as silver source.
Fig. S5 (A) AFM image and (B) the corresponding height profiles of Ag@Ag(DMSO)$_x$Cl nanobelts.

Fig. S6 (A, B) TEM and SAED images of Ag@Ag(DMSO)$_x$Cl nanobelts.

Fig. S7 TGA and DTG curves of pure AgCl product.
**Fig. S8** The XRD of the as-prepared Ag@Ag(DMSO)$_x$Cl nanobelts after calcination at 230 °C in N$_2$ atmosphere.

**Fig. S9** DRS of as-prepared Ag@Ag(DMSO)$_x$Cl nanobelts.

**Fig. S10** Raman spectra of pure MB (A) and R 6G (B) dye molecules.
Fig. S11  SERS spectra of R 6G under uninterrupted measurement with different laser power and laser wavelength. A) 514 nm, 10 mW; B) 514 nm, 5 mW; C) 514 nm, 2.5 mW; D) 633 nm, 1.5 mW; E) 633 nm, 0.8 mW; F) 633 nm, 0.4 mW; G) 647 nm, 10 mW; H) 647 nm, 5 mW; I) 647 nm, 2.5 mW.