

Fig. 1. A series of STM images in the process of hydrogen adsorption on the Ag-deposited Si(100) surface with BLSs. All STM images were taken at sample bias $V_S = -2.0\text{V}$, tunneling current $I = 0.3\text{ nA}$, and image area $S = 44 \times 44\text{ nm}^2$. (a) STM image taken after Ag deposition for 60 s on the Si(100) surface with BLSs at room temperature. (b)-(c) STM images taken after hydrogen-adsorption on the Ag/Si(100) surfaces with BLSs. The exposures to hydrogen are (b) 10 L and (c) 50 L. (d) STM image taken after annealing (c) at 490°C .

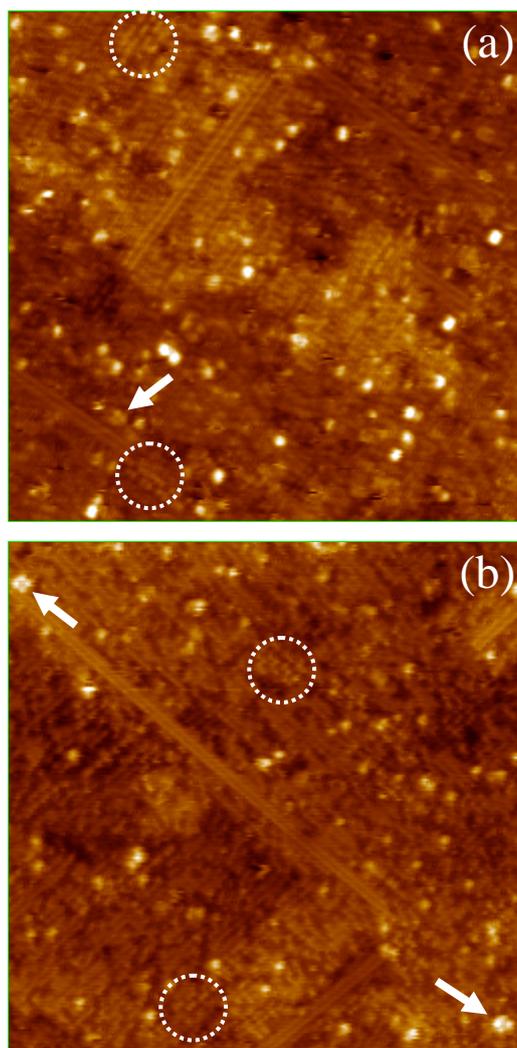


Fig. 2. STM images taken after CuPc deposition (a) for 30 s and (b) for 60 s on the Si(100) surface with BLSs at room temperature. All STM images were taken at sample bias $V_S = -2.0$ V, tunneling current $I = 0.30$ nA, and image area $S = 44 \times 44$ nm².

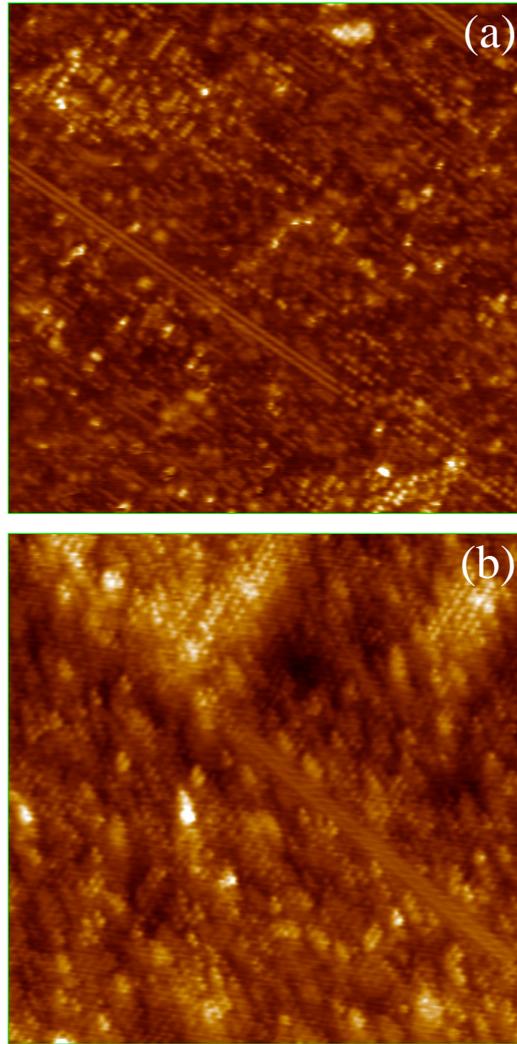


Fig. 3. STM images taken after annealing the specimen corresponding to Fig. 2(b) for 120 s (a) at 200 °C and (b) at 400 °C. All STM images were taken at sample bias $V_S = -2.0$ V, tunneling current $I = 0.30$ nA, and image area $S = 44 \times 44$ nm².