Erratum: Atomic-Scale Spin Spiral with a Unique Rotational Sense: Mn Monolayer on W(001) [Phys. Rev. Lett. 101, 027201 (2008)]

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In Figs. 1(g) and 1(h) of the Letter, we provided a schematic representation of a cycloidal spin spiral that could explain the experimental data given in Figs. 1(a)–1(e) and the simulated spin-polarized scanning tunneling microscopy image of Figs. 1(e) and 1(f). Assuming the common convention that the substrate lies underneath the sketched magnetic layer, the depicted spiral is right rotating. Experimentally, a determination of the type of spiral (helical or cycloidal) or the rotational sense has not been done; therefore, Figs. 1(g) and 1(h) have a purely illustrative nature in this context. Unfortunately, they are inconsistent with the theoretical result of Fig. 2, where it is shown that the spiral is left-handed and rotates as in Fig. 3(b), in which the same convention for the substrate lying below the Mn surface has been adopted. Therefore, we present here the consistent Figs. 1(g) and 1(h). The content of this Erratum does not affect any scientific point or the conclusions of the Letter.

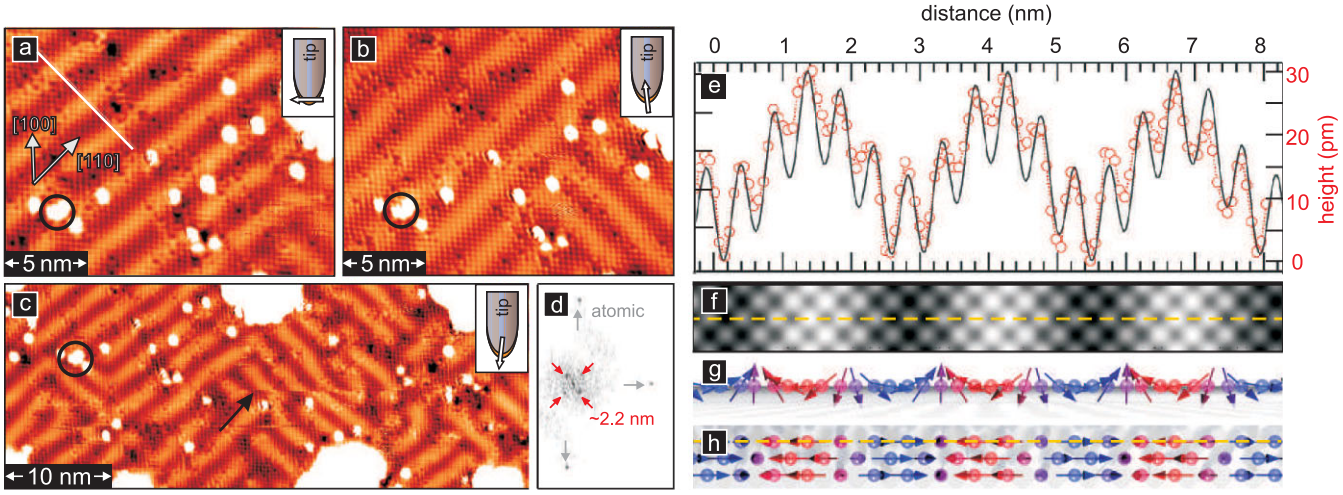

FIG. 1 (color online). Spin-resolved STM measurements of 1 ML Mn/W(001). Constant-current image with magnetic tip sensitive to (a) the in-plane and (b),(c) the out-of-plane component of the sample magnetization (the black circle acts as a position marker); (d) Fourier transform of a dI/dU map (not shown) of a sample area with both rotational domains; (e) experimental (circles) and simulated (solid line) profile along the lines indicated in (a) and (f), respectively; (f) simulated SP-STM image; (g) side and (h) top view of the corresponding model of the left-handed spin spiral (colors represent the moment's in-plane component). The following values of bias voltage U and current I were used: (a),(b) $U = -0.1$ V, $I = 1$ nA; (c) $U = -0.1$ V, $I = 0.1$ nA.

