

Fig. S1. FT-IR spectra of eri silkworm silk fibers obtained by forced reeling at different reeling speeds.

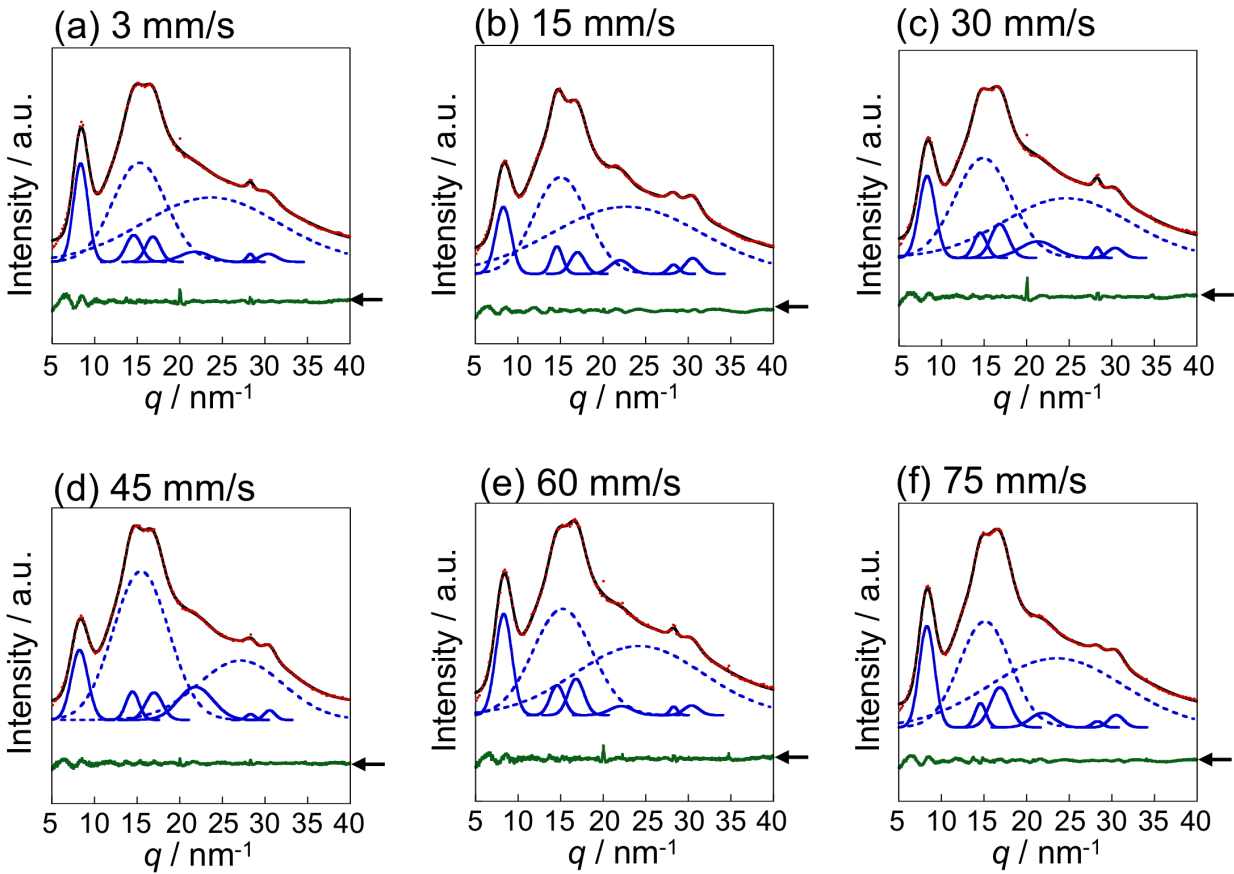


Fig. S2. Peak separations of one-dimensional radial integration WAXS profiles using Gaussian functions for the eri silkworm silk fibers obtained by forced spinning at different reeling speeds. Black lines are fitted curves and broken lines represent the amorphous halos. Solid lines represent the crystal peaks. Arrows show the residual between the fitted curves and the measured curves.

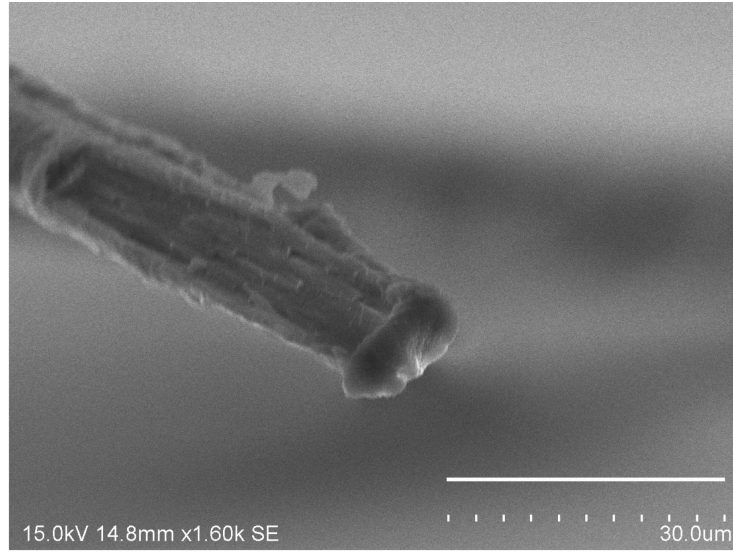


Fig. S3. SEM image showing the fracture surface of the naturally spun eri silkworm silk fibers. Scale bars denote 30 μm.

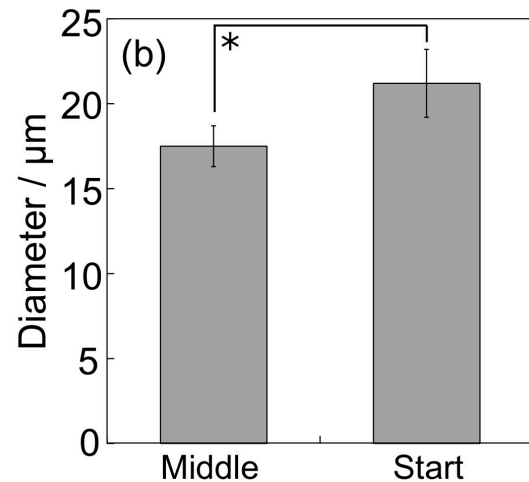
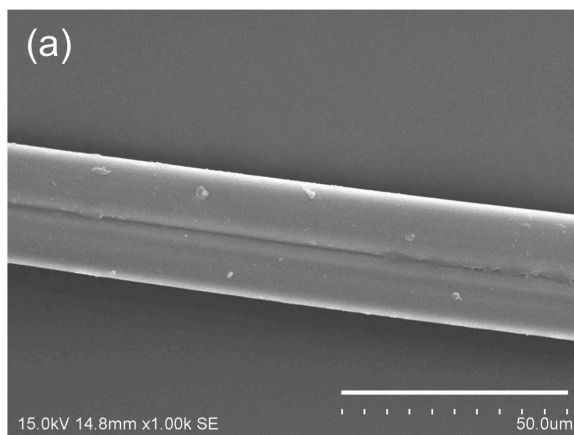


Fig. S4. Morphological feature of the eri silkworm silk fibers obtained from the start of the forced reeling. (a) SEM images of the eri silkworm silk fibers from the start of the forced reeling at 15 mm/s. Scale bars denote 50 μm. (b) Comparison of the fiber diameter at the middle and start of the forced reeling process at 15 mm/s. *Significant differences between groups at $p < 0.05$.

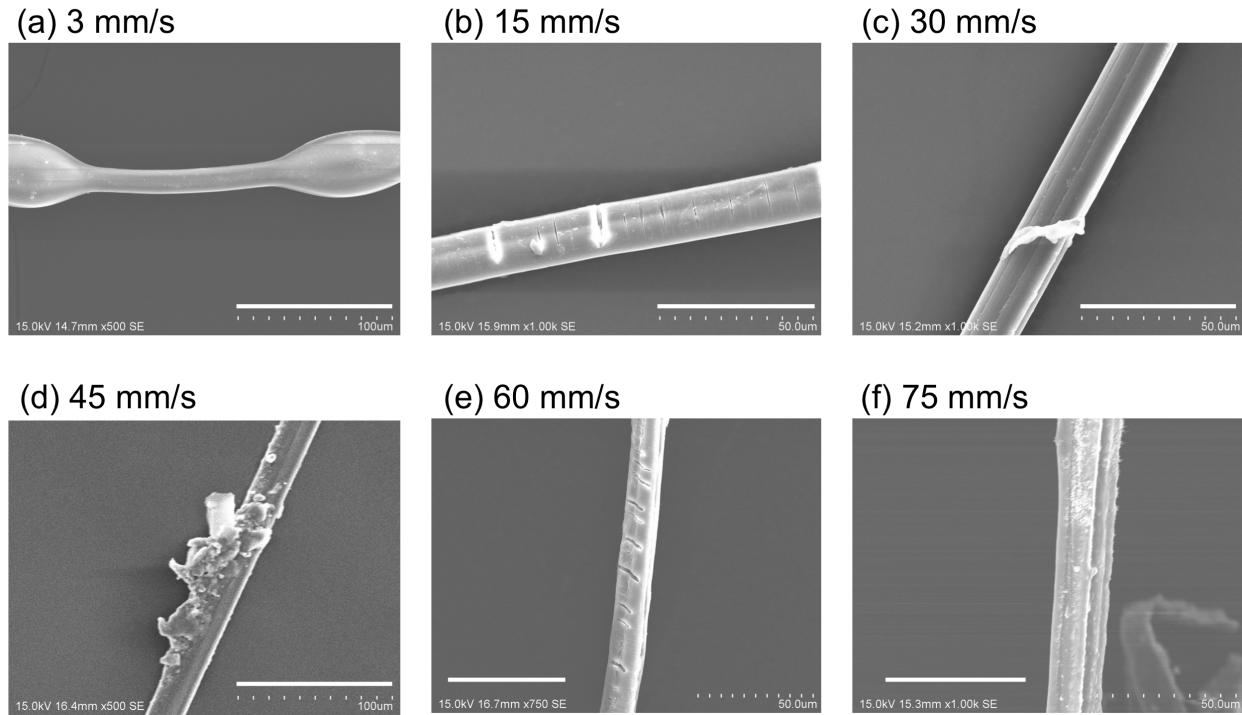


Fig. S5. SEM images of the eri silkworm silk fibers obtained from the end of the forced reeling at different reeling speeds. Scale bars denote 100 μm (a, d) and 50 μm (b, c, e, f).

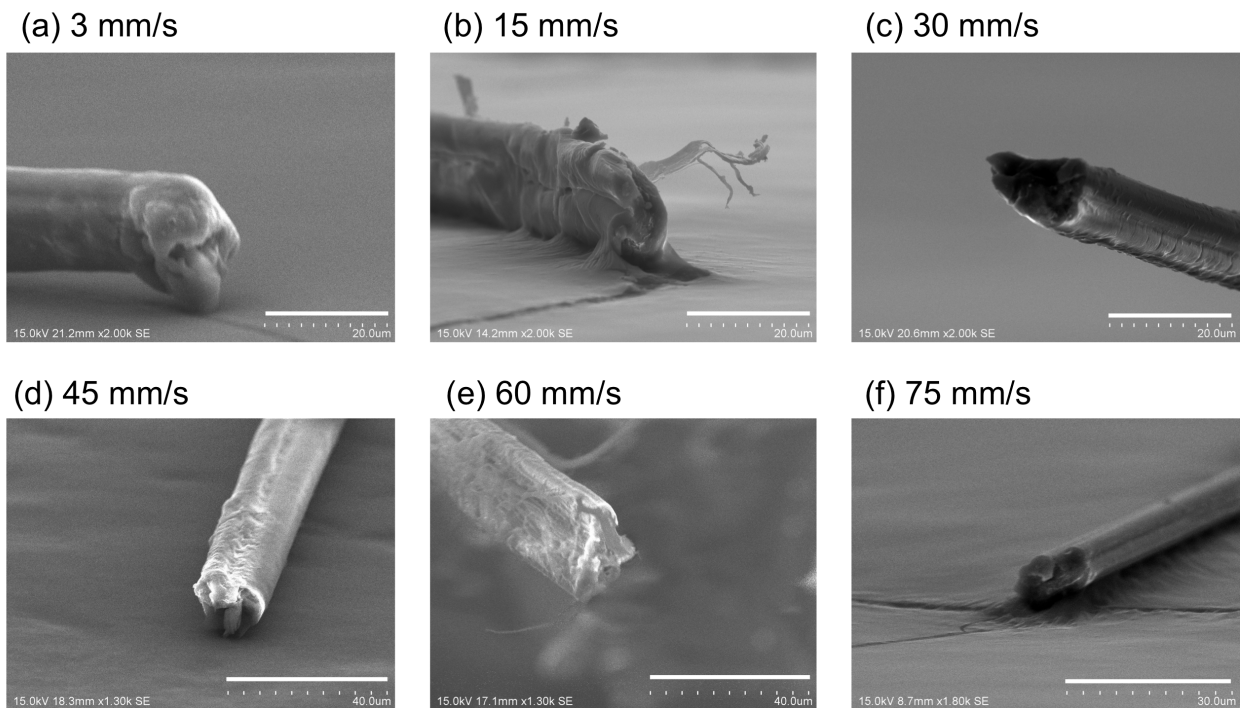


Fig. S6. SEM images showing a fracture surface of the eri silkworm silk fibers obtained by forced spinning at different reeling speeds. Scale bars denote 20 μm (a, b, c), 40 μm (d, e), and 30 μm (f).