

## **Observation of subdivided 180° Bloch wall configurations on iron whiskers**

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Subdivided 180° Bloch walls have been observed on iron whiskers using an improved colloid technique. Under the influence of a magnetic field applied vertical to the surface of a specimen the magnetization reversal of the complex wall is governed by Néel line motion. The field-induced conversion exhibits a characteristic "remanence" and "coercivity" of the wall. During a longitudinal magnetization cycle of a whisker the actual wall configuration has a substantial influence on the magnetization curve. The coercivity of the specimen is closely correlated to the initial mobility of the Néel lines. Discontinuities in the Néel line motion are responsible for small Barkhausen jumps, especially in the low-field region. The irregular segmentation of the complex wall in the remanent state appears to be an essential source of the remanent whisker magnetization.