

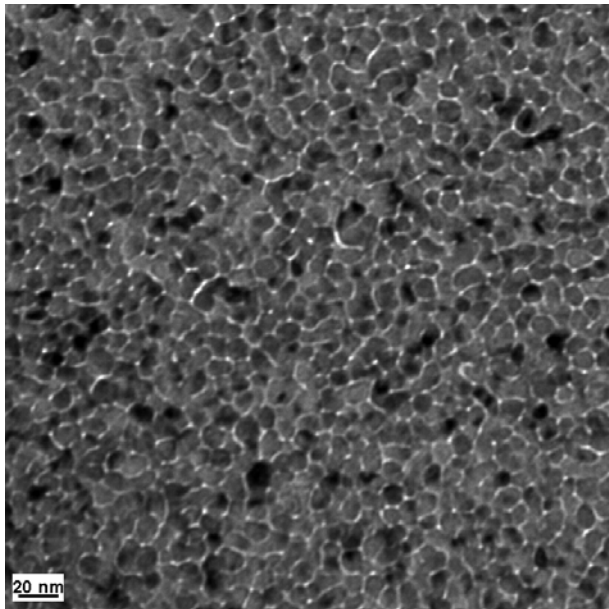
Co/Pd Multilayers for Perpendicular Magnetic Recording Media

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● Motivation: Perpendicular Media

- Volumetric superparamagnetism limits the grain sizes of longitudinal media.
- Perpendicular media provides increases in areal density by allowing thicker films for volumetric stability.

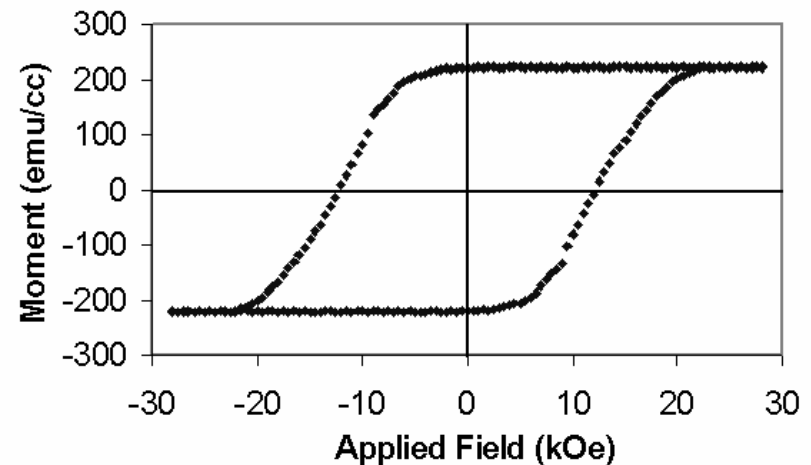


● Publications

- ◆ N. Speetzen, B.J.H. Stadler, E. Yuan, R.H. Victora, X. Qi, J.H. Judy, N. Supper, and T. Pohkil, accepted by J. Magn. Magn. Mat. (2005)
- ◆ N.J. Speetzen, B.J.H. Stadler, accepted by J. Appl. Phys. (2005)

● Seedlayer engineering yields:

- High Coercivity: InSn seedlayers increased coercivity from ~5kOe to 12.2kOe, shown in VSM curve below.



- Small Grain Size: O-doping has been shown to reduce grain size from 20nm to 7.8 +/- 1.8nm, shown by bright field TEM to left.