Highly Spin-polarized Co$_{1-x}$Fe$_x$S$_2$ Thin Films for Spintronics

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NNIN Facilities utilized: Characterization Facility & Nanofabrication Center

- High, tunable, spin polarization films for spintronic applications
  - Composition control over magnitude and sign of polarization (-56% < $P$ < +85%)
  - Ideal for spin injection into GaAs

- Thin film deposition by sulfidation of epi CoFe and crystal growth by chemical vapor transport
  - Single phase polycrystalline films
  - Composition controlled by sulfidation temp.

- Publications (2008)