

Abstract Submitted
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MOKE: Magneto Optical Kerr Effect ERIK WILDFORSTER, KRISTEN BUCHANAN, Colorado State University — The magneto-optical Kerr effect (MOKE) is a powerful tool for studying the magnetization reversal process of ferromagnetic materials. It works by measuring changes in the polarization of reflected light that are proportional to the magnetization of the sample, an effect discovered in the 1800's. This effect, known as the magneto-optical Kerr effect, provides a non-destructive means to measure the magnetization of thin film or patterned ferromagnetic materials. Furthermore, the light can be focused down to a diffraction-limited spot, allowing one to measure much smaller samples than conventional magnetometers. This poster will give an overview of the MOKE technique and we will show a comparison of magnetic hysteresis loops of ferromagnetic thin film samples measured using the longitudinal MOKE effect and with a conventional vibrating sample magnetometer. We acknowledge support from NIST award number 60NANB10D011 and the NSF, award 0907706.

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