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### **Tuning Materials with Mechanical Exfoliation**

Materials with Nanometer thickness are an appealing platform for devices as well as exploring the roles of dimensionality, disorder, and free carrier density in complex materials. To this end we have produced exfoliated crystals of  $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8$  and  $\text{Bi}_2\text{Se}_3$  on a variety of substrates. I will discuss unique advantages of this technique as well as some of the challenges it poses. Interestingly we have observed subtle differences in the Raman spectra between the exfoliated and bulk crystals enabling noninvasive determination of thickness ( $\text{Bi}_2\text{Se}_3$ ) and Doping level (Bi-2212).