

Abstract Submitted
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Fabrication of Copper Selenate Thin-Films with Pulsed Laser Deposition¹ DAVID KING, JINKE TANG, University of Wyoming — Cu_2OSeO_3 is a rare material that has several properties that are highly desirable for spintronic devices: it is an insulating ferrimagnet that also hosts magnetic skyrmions. Thus far, investigations of Cu_2OSeO_3 have emphasized single crystals. However, skyrmions are typically more stable in thin films than in bulk materials. Also, thin films are more suitable for device applications than single crystals. In this research, we present preliminary results of using pulsed laser deposition (PLD) to fabricate thin films of Cu_2OSeO_3 . Data showing the film's magnetic properties, crystallography, and electrical properties are presented.

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