

Abstract Submitted  
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**Composition, Temperature, and Electric Field Dependence of Magneto-Optical Properties of Lead Halide Perovskites**<sup>1</sup> RYAN MCLAUGHLIN, CHUANG ZHANG, DALI SUN, Z. VALY VARDENY, University of Utah — Organometallic Perovskites have received much attention in recent years due to their remarkable efficiency in photovoltaic cells, along with their highly tunable optical and electrical properties. It is an important goal to quantify and understand the effects of Spin-Orbit Coupling in Perovskite-based optoelectronic devices, which can be characterized by magneto-optical properties such as Kerr rotation and Faraday rotation. Here we use the Verdet constant to investigate the tunability of the Spin-Orbit coupling parameters of Organometallic Perovskites as a function of chemical composition, temperature, and electric field.

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