Abstract Submitted
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Comment on Elimination of Polarization Dependence from Optical Excitation Functions[1] J.W. MASEBERG, University of Nebraska — The measurement of optical excitation functions excited by electron impact is typically accomplished by recording fluorescence emitted into a small solid angle perpendicular to the incident electron beam. This measured intensity is not proportional to the emission cross section due to target alignment, and a linear polarizer is typically oriented at the "magic angle" (54.7°) with respect to the incident electron beam in order to eliminate this polarization dependence [1]. Existing literature for the derivation of the value for the magic angle assumes the polarizing element is ideal. A simple expression for this angle that accounts for the use of a partial polarizer is presented. [1] P.N. Clout and D.W.O. Heddle, J. Opt. Soc. Am. **59**, 715 (1969).

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