

Abstract Submitted  
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**Transmission Profiles of a Mini-Orange Spectrometer for Conversion-Electron Spectroscopy** AXEL SCHMIDT, Yale University, ROMAN GERNHAEUSER, REINER KRUECKEN, ROBERT MUENZER, Technische Universitaet Muenchen — A Mini-Orange Spectrometer (MOS) consists of an orange-type array of 3, 4, or 6 permanent magnets that focus electrons onto a cooled Si-Li detector. At the center of the array is a lead plug for shielding gamma rays and delta electrons. Since electron transmission of an MOS is highly energy dependent - electrons with too much or too little energy are not bent into the detector - measuring transmission as a function of electron energy is an important calibration task, allowing the MOS to make absolute intensity measurements for conversion electron lines. We report a method for calculating the absolute transmission for an MOS using standard calibration sources, as well as discuss the relevance of conversion electron spectroscopy to the study of nuclear structure.

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