

Abstract Submitted  
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**Local Stoichiometry Distortions in a Rotatable Magnetron Sputter Source measured by True 2D Imaging Spectroscopy** TILL WALLEN-DORF, SWEN MARKE, IfU Diagnostic Systems GmbH, FALK MILDE, Von Ardenne Anlagentechnik GmbH — Reactive sputter processes are widely being used for large scale optical glass coating. Even though there is a strong push towards the use of ceramic target materials at the moment, also in the future reactive sputtering will play an important role. Process control is of very high importance for reactive sputtering especially for the transition mode, where working points are not stable by nature. By use of a new type true 2D imaging spectrograph we demonstrate, how to acquire the spatial intensity distribution of selected emission lines. This true 2D imaging spectrograph combines wide wavelength range, excellent wavelength resolution, and good spatial resolution with a short sample time. The observations presented in this paper may serve as a starting point for systematic optimization of the appropriate choice of position and properties of the optical collimation hardware.

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