

Figure 1. Schematic diagram of temperature gradient combinatorial approach to generate various growth conditions simultaneously at different sample locations.

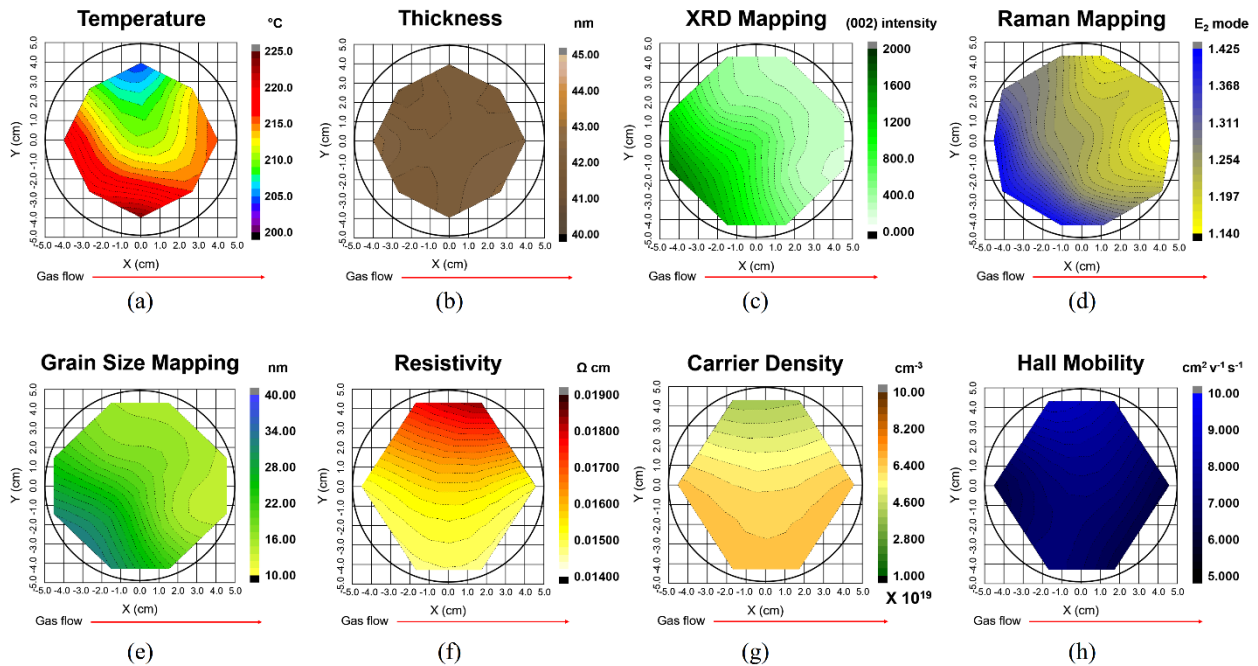


Figure 2. 4-inch Wafer-scale mapping of various properties of ALD ZnO. Wafer-scale mapping of (a) calibrated temperature, (b) physical thickness, (c) (002) peak intensity of XRD, (d) ratio of E_2 and A_1 peaks in Raman spectroscopy, (e) calculated ZnO grain size based on Scherrer equation. Hall measurement extracted electrical properties of (f) resistivity, (g) carrier concentration, and (h) Hall mobility are also mapped.