

Figure 1: ZnO film thickness across the 8" wafers as measured by ellipsometry for processes with 300 cycles with DEZ (a) and  $[Zn(DMP)_2]$  (b). Growth rates at different deposition temperatures and with both Zn-precursors (c). Saturation study for the process using  $[Zn(DMP)_2]$  at 200 °C (d).

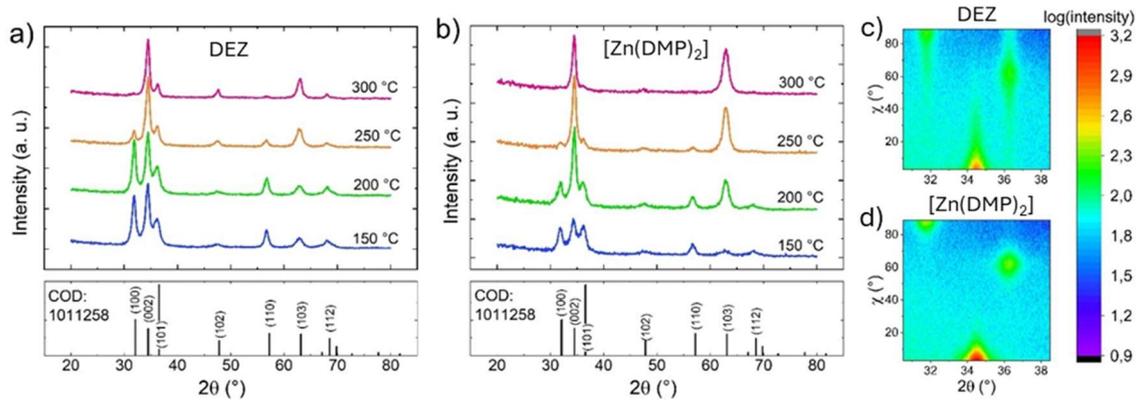


Figure 2: GI-XRD patterns of ZnO grown at different temperatures and either from DEZ (a) or  $[Zn(DMP)_2]$  (b) as first precursor compared to reference peak positions.  $\chi$ - $2\theta$  GI-XRD intensity maps of ZnO grown at 300 °C either from DEZ (c) or  $[Zn(DMP)_2]$  (d) as first precursor.

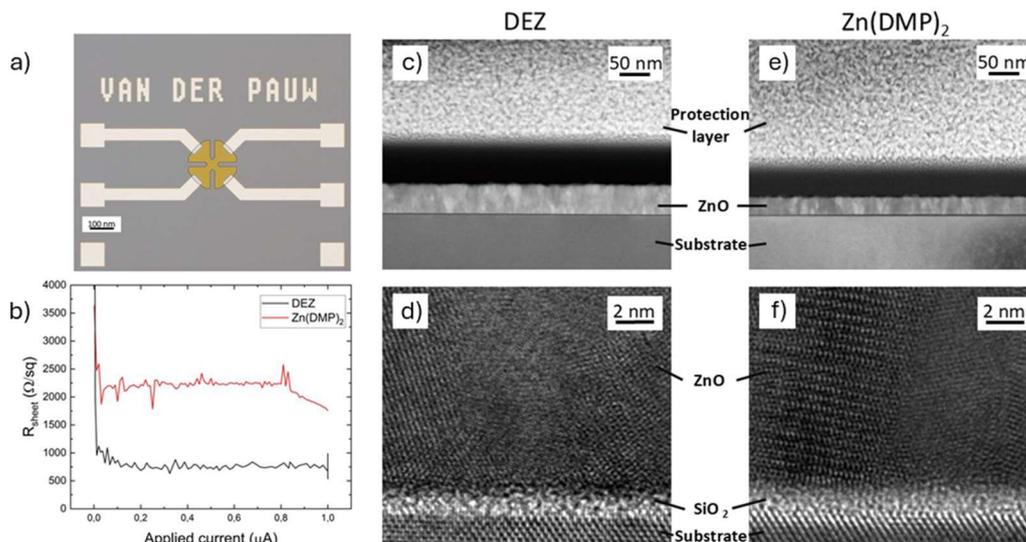


Figure 3: Light micrograph of patterned ZnO from  $[Zn(DMP)_2]$  (a) and sheet resistance measurements from van der Pauw structures fabricated from ZnO grown at 200 °C (b). Structural morphology analysis via TEM (c)-(f)

The results presented here are from the journal article "Tailoring Atomic Layer Deposited Zinc Oxide Thin Films via Precursor Chemistry on 200 mm Wafers" by K. Guzey, N. Brechmann, E. Najafidehaghani, T. Gemming, I. Kaban, M. Schmickler, J.-P. Glauber, V. Hofmann, D. Rogalla, H. Parala, A. L. Schall-Gieseke, A. Devi, N. Boysen (submitted).

[1] Mai et al., 2023, Small. DOI: 10.1002/sml.201907506

[2] Philip et al., 2022, Dalton Trans. DOI: 10.1039/d2dt02279f