

SUPPORTING INFORMATION

Elucidating the growth mechanism of ZnO films by Atomic Layer Deposition with Oxygen Gas via isotopic tracking

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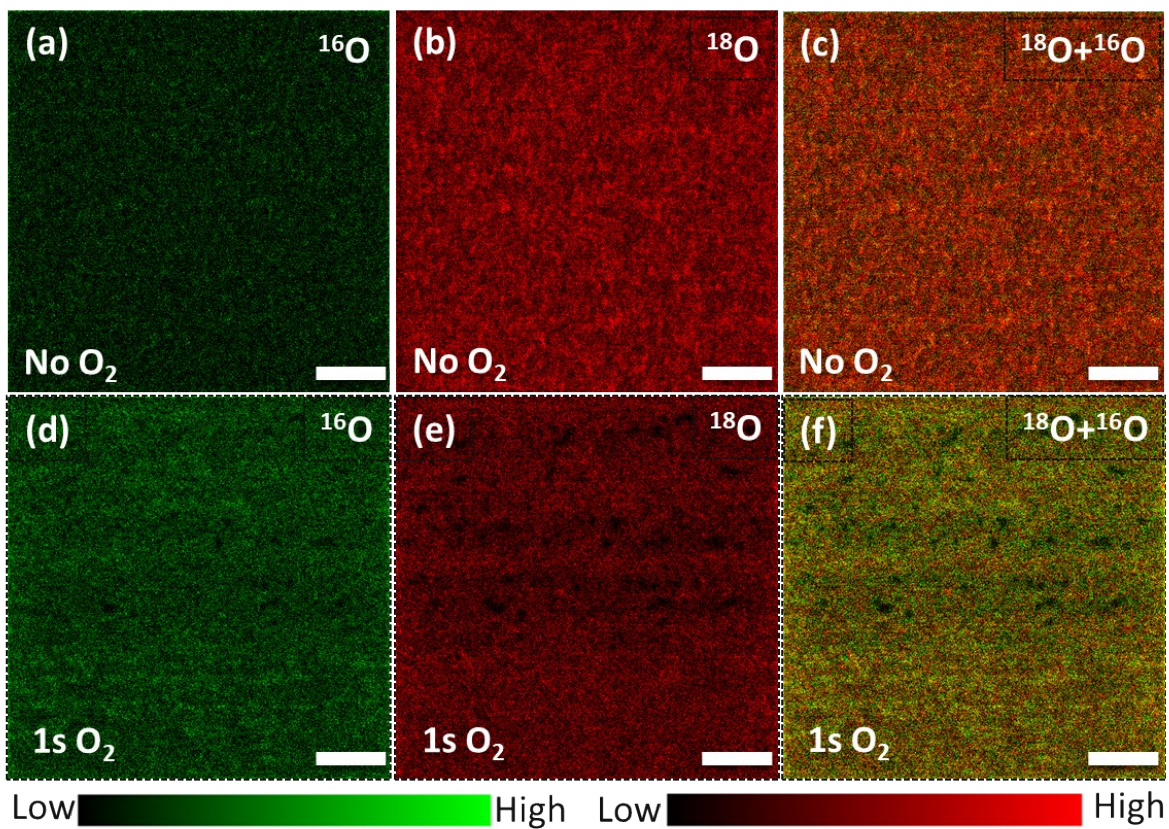


Figure S1: HIM-SIMS mapping. Distribution of ^{18}O (the red scale bar) and ^{16}O (the green scale bar), and respective overlaps of ($^{18}\text{O} + ^{16}\text{O}$) of ZnO samples synthesized with and without 1 s of oxygen gas pulsing for each ALD loop at a deposition temperature of 180 °C. The scale bar is 500 nm.

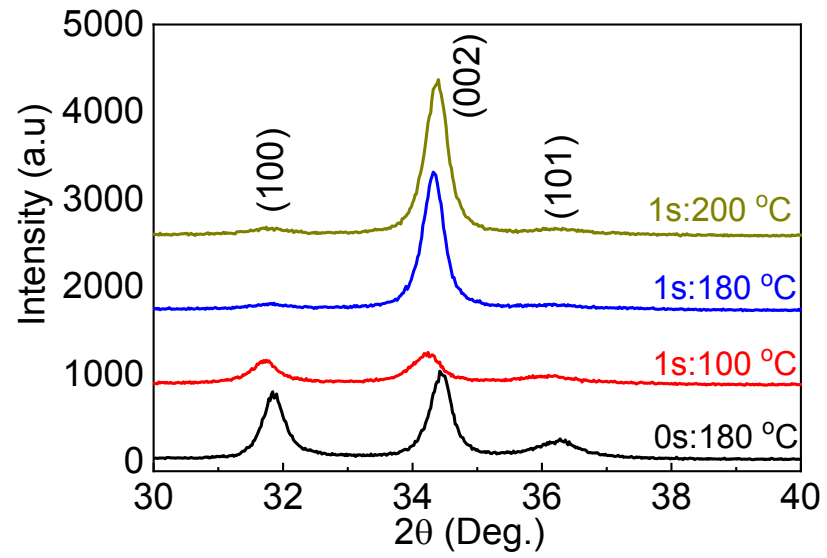


Figure S2: XRD spectra of the ZnO thin film grown with and without oxygen gas pulsing at different deposition temperatures.

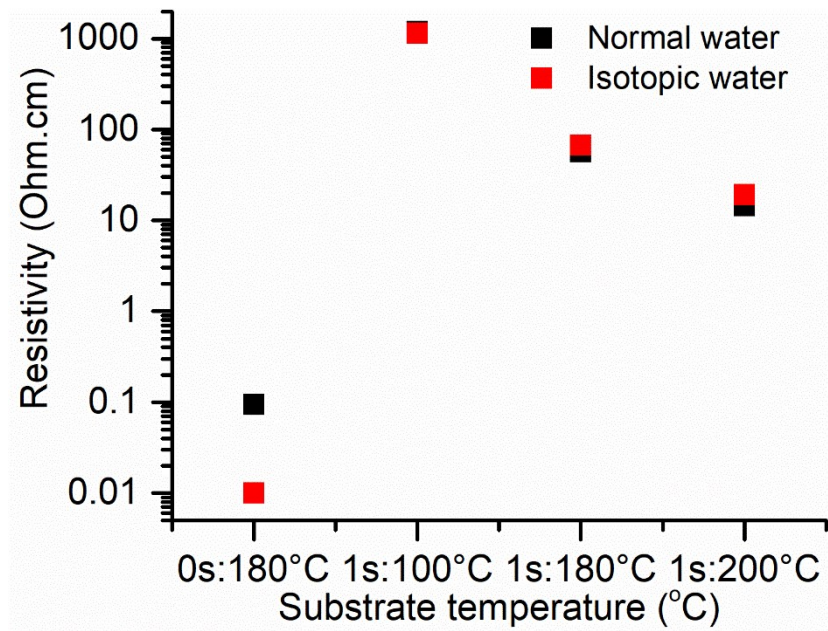


Figure S3: Electrical resistivity of ZnO thin films grown at different temperatures with conventional DI water and ^{18}O -labelled water.