

## Electronic Supplementary Information (ESI)

### Low-temperature ALD/MLD growth of alucone and zincone thin films from non-pyrophoric precursors

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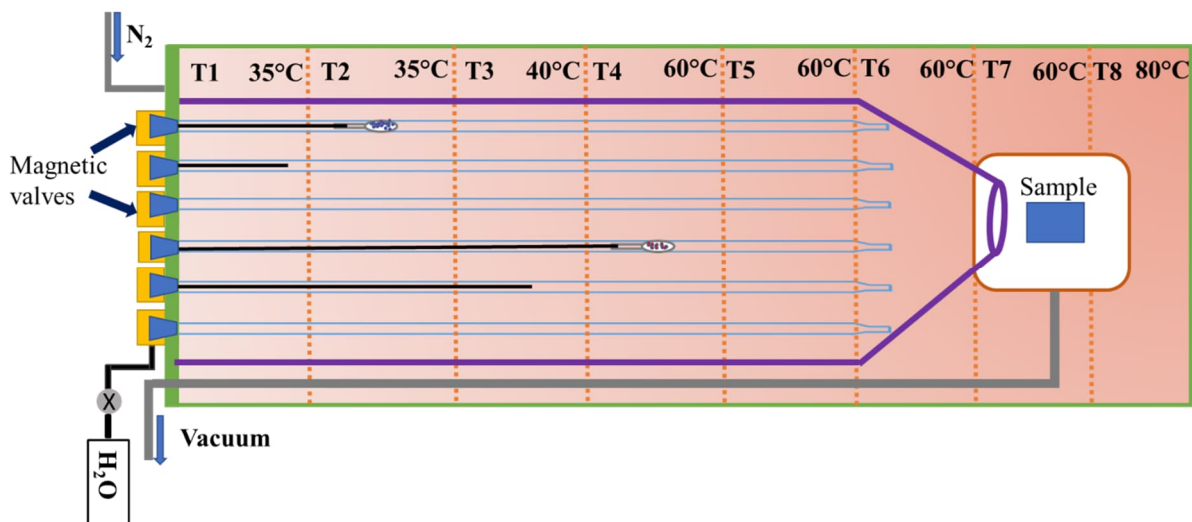


Fig. S1 Schematic diagram of the F-120 ALD reactor used. The temperature profile is demonstrated taking the deposition of Zn-HQ film as an example. Precursors [Zn(DMP)<sub>2</sub>] and HQ are placed in the T2 and T4 temperature zones, respectively.

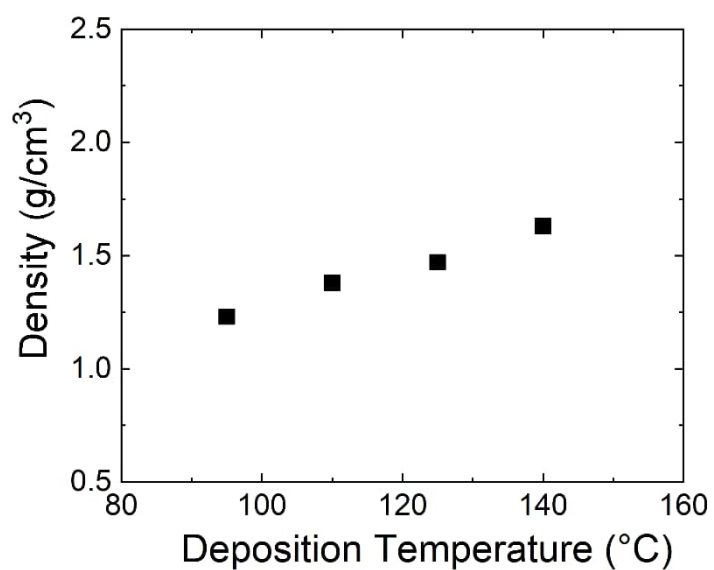


Fig.S2 Densities of Al-HQ films deposited at different temperatures.

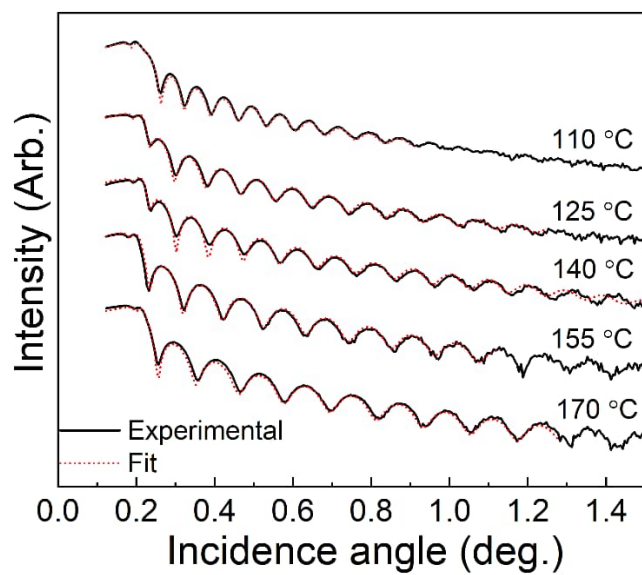


Fig. S3 Comparison of fitted and experimental XRR patterns for Al-HQ films deposited at different temperatures.

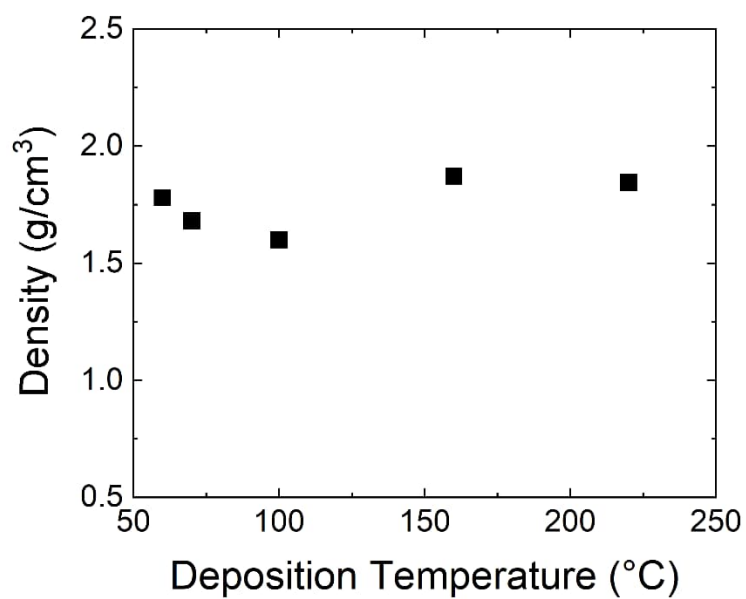


Fig. S4 Densities of Zn-HQ films deposited at different temperatures.

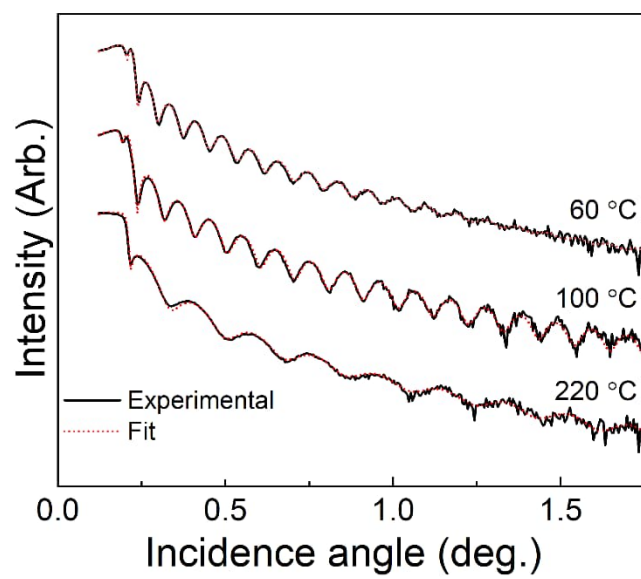


Fig. S5 Comparison of fitted and experimental XRR patterns for Zn-HQ films deposited at different temperatures.