

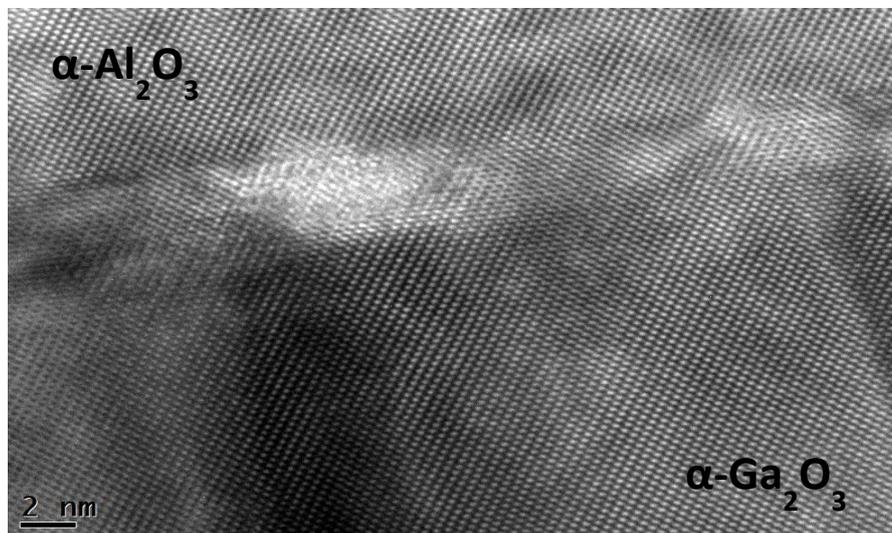
Supplementary Materials: Influence of carrier gases on the quality of epitaxial corundum-structured α - Ga_2O_3 films by mist chemical vapor deposition method

Yu Xu, Chunfu Zhang *, Yaolin Cheng, Zhe Li, Ya'nan Cheng, Qian Feng, Dazheng Chen, Jincheng Zhang and Yue Hao

Wide Bandgap Semiconductor Technology Disciplines State Key Laboratory, School of Microelectronics, Xidian University, Xi'an 710071, China; xuyuxidian@163.com (Y.X.); chengyaolin96@163.com (Y.C.); zhe_li1024@163.com (Z.L.); yanancheng@stu.xidian.edu.cn (Y.C.); qfeng@mail.xidian.edu.cn (Q.F.); dzchen@xidian.edu.cn (D.C.); jchzhang@xidian.edu.cn (J.Z.); yhao@xidian.edu.cn (Y.H.)

* Correspondence: cfzhang@xidian.edu.cn

(1)



(2)



Figure S1. TEM images of the sample grown with Air as the carrier gas. (1) Cross-sectional α - Ga_2O_3 / α - Al_2O_3 interface, (2) diffraction spots of α - Ga_2O_3 / α - Al_2O_3 .

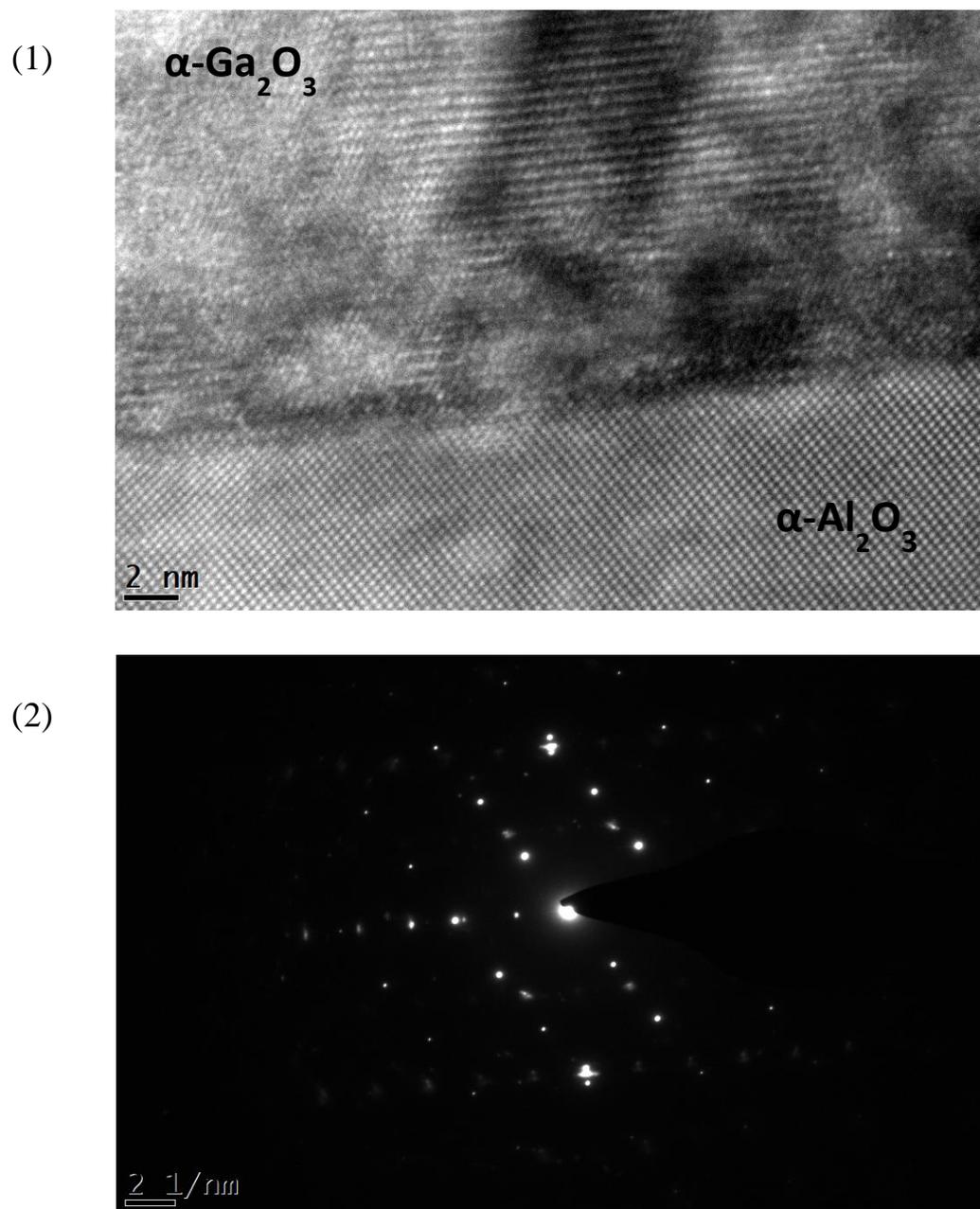


Figure S2. TEM images of the sample grown with N_2 as the carrier gas. (1) Cross-sectional $\alpha\text{-Ga}_2\text{O}_3/\alpha\text{-Al}_2\text{O}_3$ interface, (2) diffraction spots of $\alpha\text{-Ga}_2\text{O}_3/\alpha\text{-Al}_2\text{O}_3$.

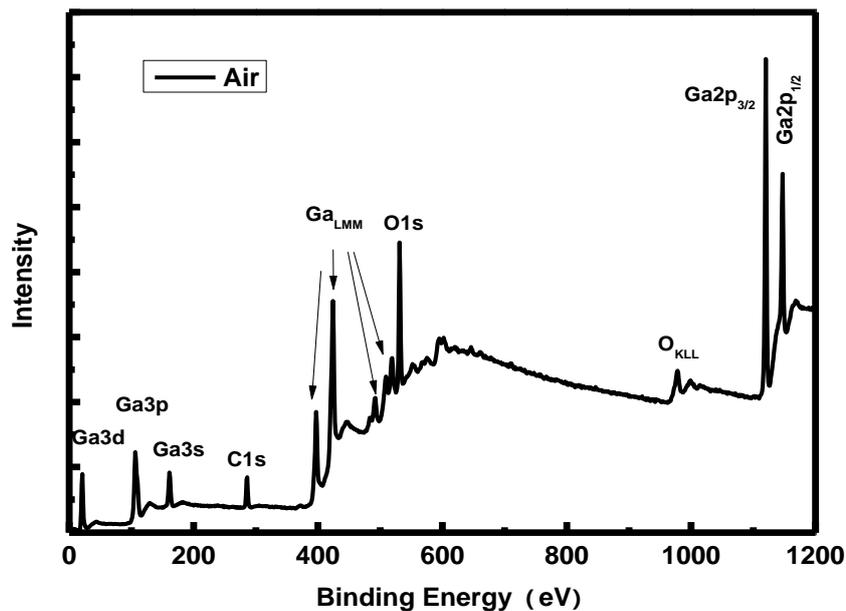


Figure S3. X-ray photoelectron wide spectra for the α -Ga₂O₃ sample grown with Air as the carrier gas.

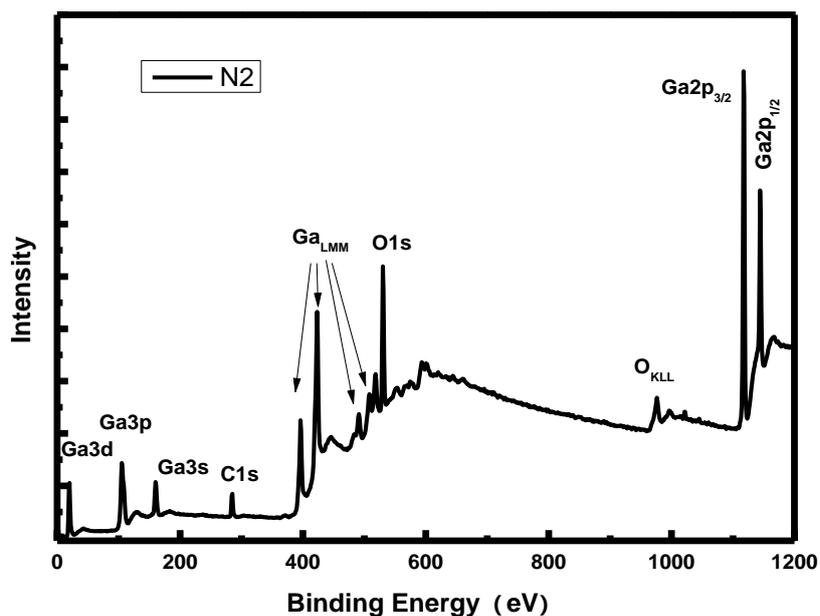


Figure 4. X-ray photoelectron wide spectra for the α -Ga₂O₃ sample grown with N₂ as the carrier gas.

