

Supplementary Materials

Direct Evidence on Effect of Oxygen Dissolution on Thermal and Electrical Conductivity of AlN Ceramics using Al Solid-State NMR Analysis

Jaegyeom Kim ^{1,†}, Jong-Young Kim ^{1,†}, Heewon Ahn ¹, Mu Hyeok Jeong ^{1,2}, Eunsil Lee ^{1,2}, Keonhee Cho ¹, Sung-Min Lee ¹, Wooyoung Shim ² and Jae-Hwan Pee ^{1,*}

¹ Icheon Branch, Korea Institute of Ceramic Engineering and Technology(KICET), 3321, Gyeongchung Rd., Sindun-Myeon, Icheon-si, Gyeonggi-do 467-843, Republic of Korea

² Department of Materials Sciences & Engineering, Multi-scale Materials Laboratory, Yonsei University, 50, Yonsei-ro, Seodaemun-gu, Seoul 37022, Republic of Korea

* Correspondence: pee@kicet.re.kr; Tel.: +82-31-645-1423

† The authors equally contributed as the first author.

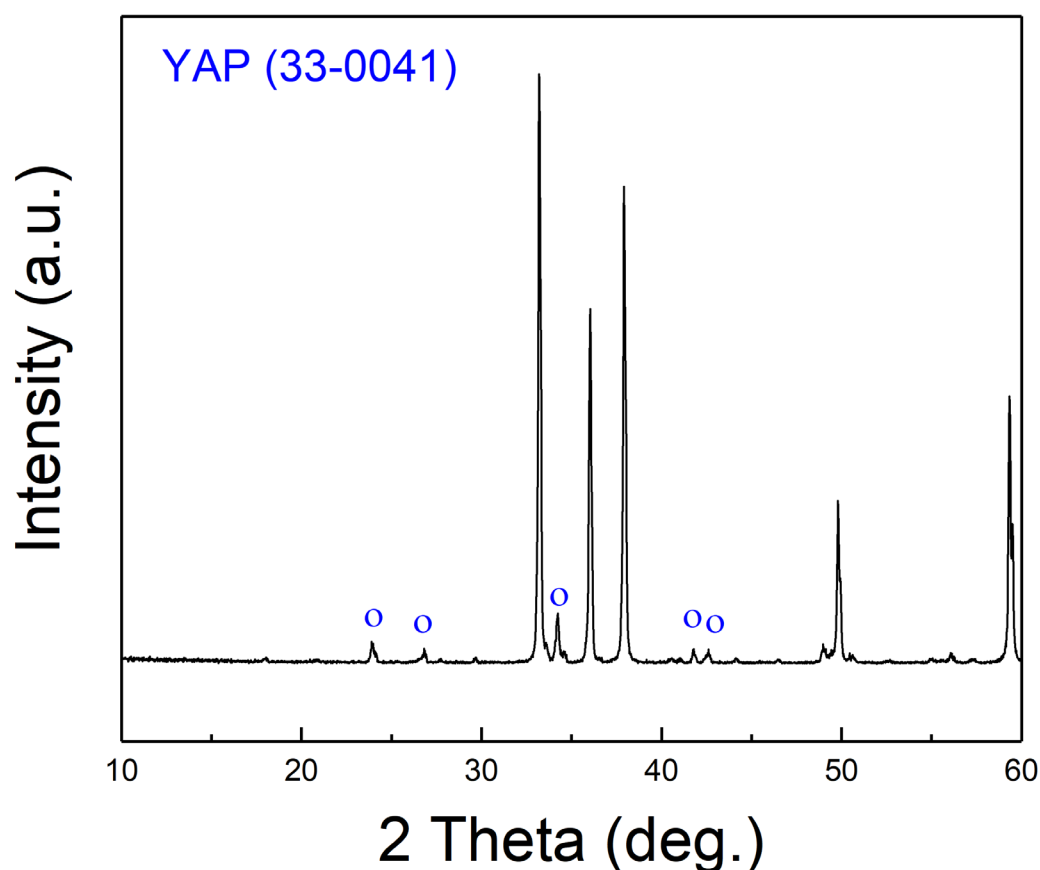


Figure S1. XRD pattern of sintered commercial AlN.

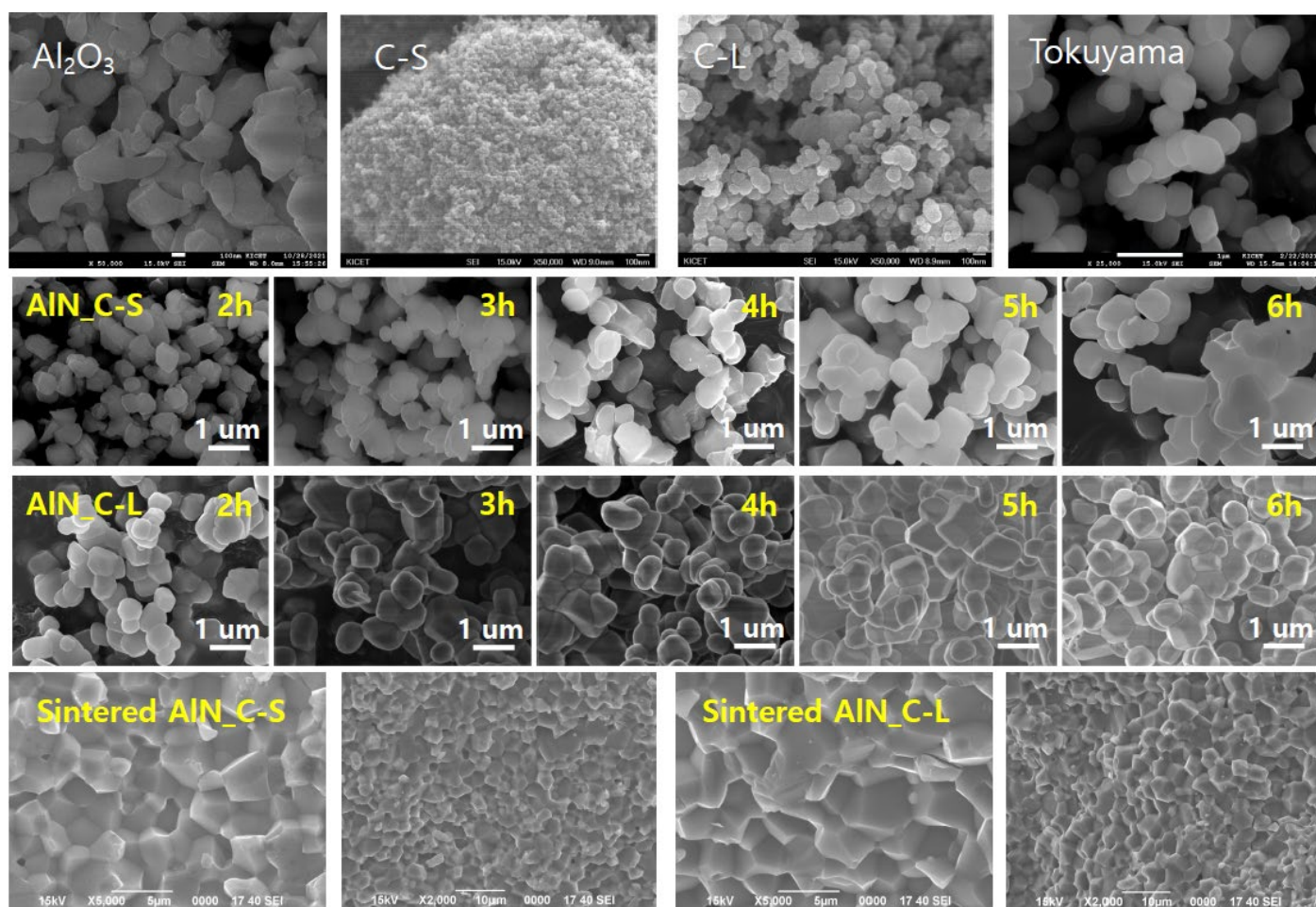


Figure S2. SEM images for Al_2O_3 , carbon black, AlN raw materials, and sintered AlN.

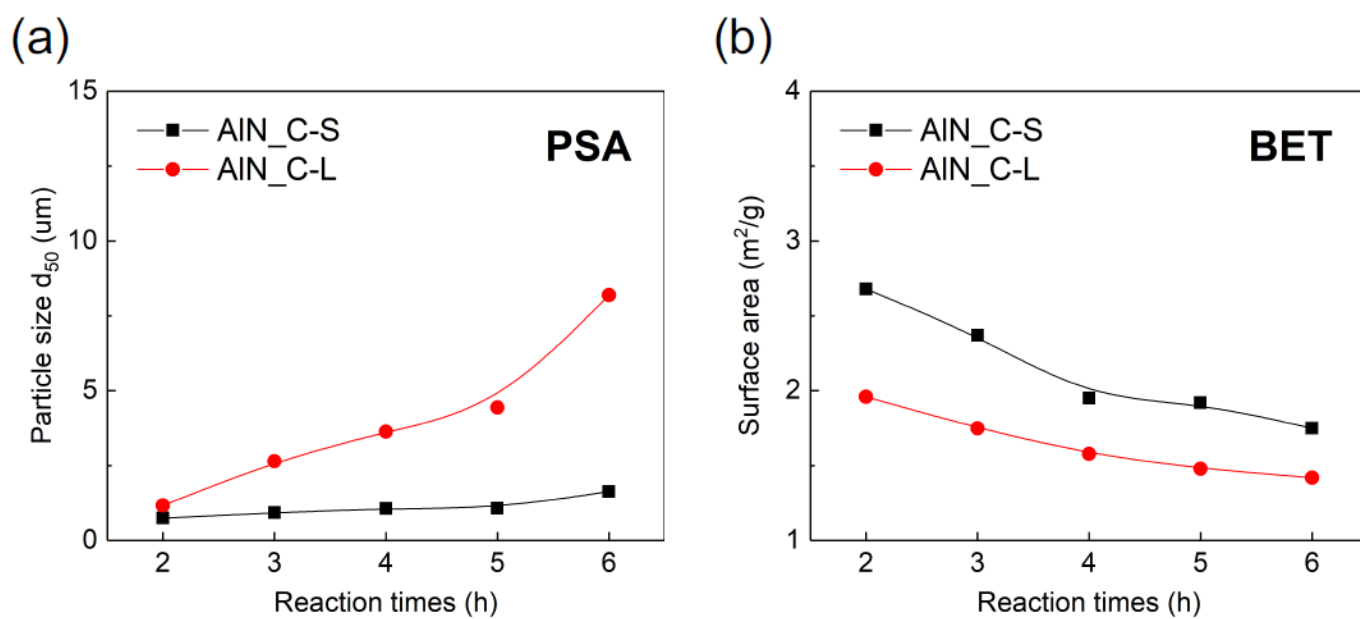


Figure S3. Particle size and BET data of AlN_C-S/C-L.