Electronic Supplementary Material (ESI) for Journal of Materials Chemistry C.
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Supplementary information

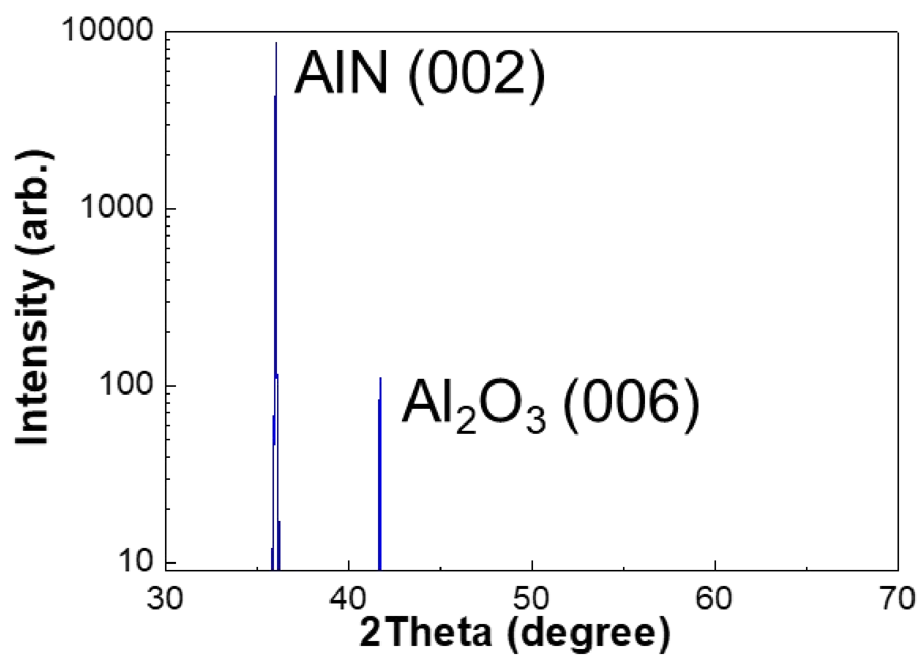
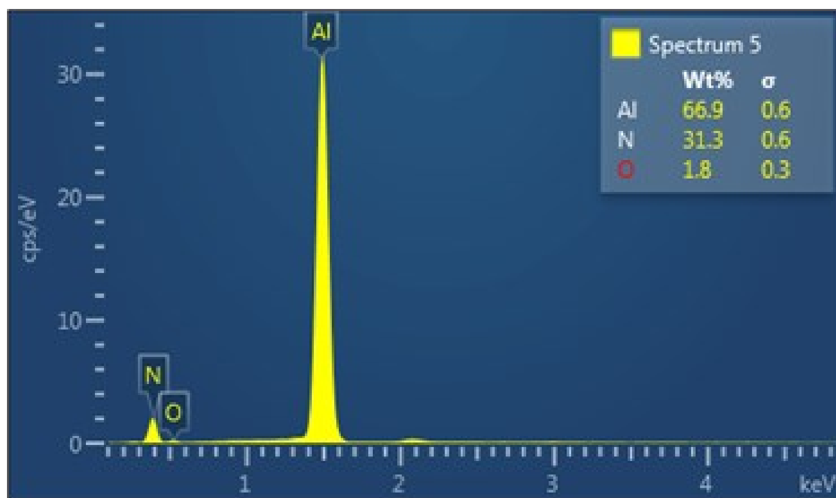
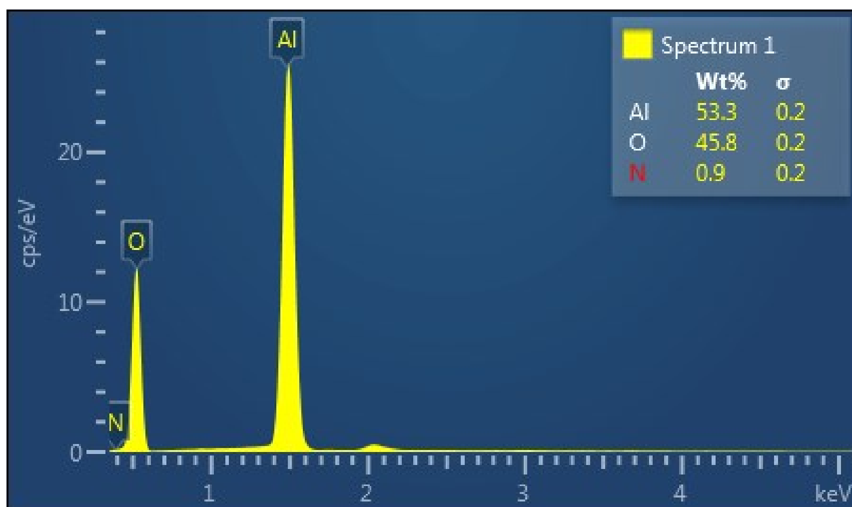


Fig. S1. X-ray diffraction of as-dep AlN template by HVPE.



Element	Line Type	Apparent Concentration	k Ratio	Wt%	Wt% Sigma	Atomic %	Standard Label	Factory Standard	Standard Calibration Date
N	K series	57.40	0.10219	31.32	0.62	46.32	BN	Yes	
O	K series	1.36	0.00459	1.80	0.26	2.33	SiO2	Yes	
Al	K series	109.14	0.78389	66.89	0.63	51.35	Al2O3	Yes	
Total:				100.00		100.00			

Fig. S2. EDS analysis of AlN layers after surface treatment for 3 min.



Element	Line Type	Apparent Concentration	k Ratio	Wt%	Wt% Sigma	Atomic %	Standard Label	Factory Standard	Standard Calibration Date
N	K series	2.18	0.00388	0.94	0.22	1.37	BN	Yes	
O	K series	91.38	0.30752	45.76	0.24	58.34	SiO2	Yes	
Al	K series	85.00	0.61048	53.30	0.24	40.29	Al2O3	Yes	
Total:				100.00		100.00			

Fig. S3. EDS analysis of AlN layers after surface treatment for 10 min.