Supporting Information

Liquid-phase Driven Growth of Ultralong, Flexible AlN Whiskers

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Supplementary Tables

Table S1. ICF-OES analysis of the AIN whiskers without utrasonic treatment.						
Element	Concentration	Content	Weight	Atom		
	(mg/L)	(mg/kg)	(wt%)	(%)		
Al	145.70	113828.16	11.38	92.1		
Fe	4.34	3388.90	0.34	1.33		

Table S1. ICP-OES analysis of the AlN whiskers without ultrasonic treatment.

 Table S2. ICP-OES analysis of the AlN whiskers after ultrasonic treatment.

Element	Concentration	Content	Weight	Atom
	(mg/L)	(mg/kg)	(wt%)	(%)
Al	268.09	258275.53	25.83	95.6
Fe	0.15	143.35	0.0143	0.0261

Note: The elemental composition was determined by ICP-OES. The uncertainties for Al and Fe concentrations are ± 0.01 mg/kg. The expanded uncertainty of the measurement results for concentration is U_{rel}=3.2% (k = 2).



Fig. S1 XRD pattern of the residual solid after the reaction.



Fig. S2 XPS spectra of Fe $2p_{3/2}$ region in AlN whiskers, indicating that no Fe impurities are present in the synthesized AlN whiskers.



Fig. S3 SEM image of as-synthesized AlN whiskers without ultrasonic treatment showing spherical particles at the tips.



Fig. S4 EDS spectra of as-synthesized whiskers without ultrasonic treatment showing Fe peaks in the particle regions.



Fig. S5 SEM image of AlN whiskers after ultrasonic treatment showing no spherical particles at the tips.



Fig. S6 EDS spectra of AlN whiskers after ultrasonic treatment showing no Fe peaks in the particle regions.



Fig. S7 HRTEM image of AlN whisker reveals an amorphous layer (~5 nm) on the surface.



Fig. S8 Low magnification SEM image of the products prepared at 1600 °C.



Fig. S9 Length distribution of AlN whiskers prepared at 1600 °C.