Supplementary information

The use of polyimide-modified aluminum nitride fillers in AlN@PI/Epoxy composites with enhanced thermal conductivity for electronic encapsulation

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Table S1. Basic properties of the aluminum nitride, BTDA/ODA (PI) and epoxy.

	AlN	**BTDA/ODA (PI)**	**Epoxy**
Average particle size (μm)	1	—	—
Density (g cm^{-3})	3.26	1.33	2.75
Thermal conductivity (W mK^{-1})	210	0.22	0.19
Coefficient of thermal expansion ($°C^{-1}$)	4×10^{-6}	80×10^{-6}	65×10^{-6}
Dielectric constant (1 MHz)	8.7	3.4	5.3
Electrical resistivity (Ω cm)	$>10^{14}$	$>10^{16}$	$>10^{15}$

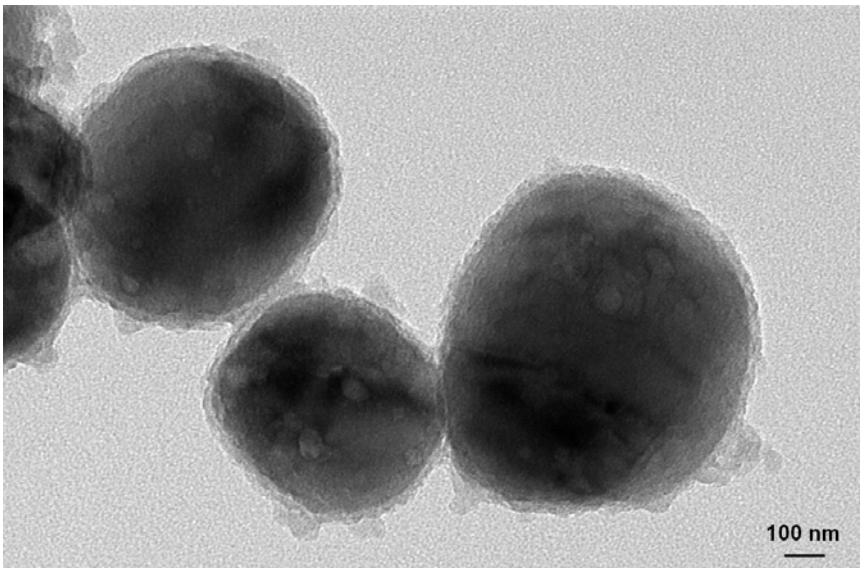

Figure S1. TEM image of PI modified AlN particles.