

Supporting Information

Nitrogen-doped Carbon Encapsulated Al_2O_3 Composites for Microwave Absorption and Heat Conduction

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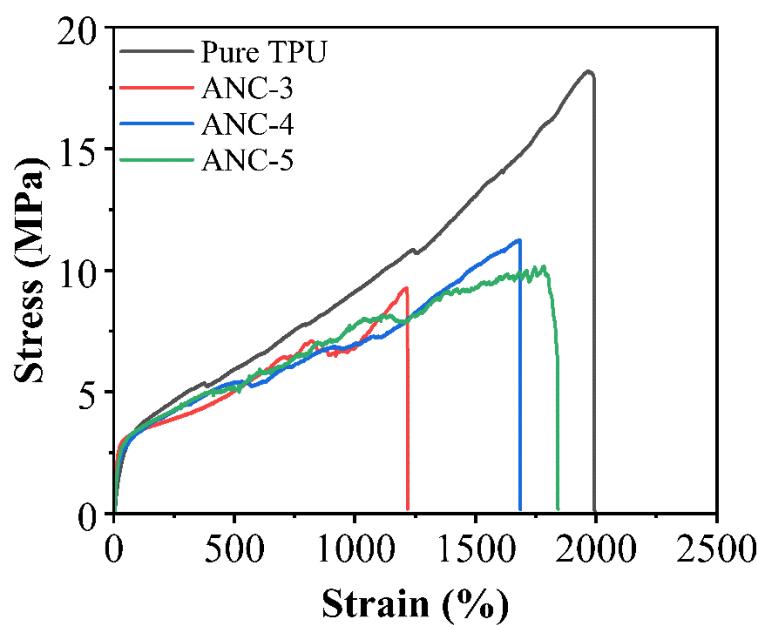


Fig. S1. Stress-strain curves of pure TPU, ANC-3, ANC-4 and ANC-5 membranes.

Table S1. Comparison of microwave absorption and thermal conductive performance with reported references.

Samples	RL (dB)	EAB (GHz)	Thermal conductivity (W/(m·K))	Ref.
$\text{Al}_2\text{O}_3/\text{CNT}$	-35	2.2	/	1
MWCNT/ Al_2O_3	-37	2.5	/	2
$\text{Al}_2\text{O}_3@\text{NC}@ \text{MoS}_2$	-56.1	6.0	/	3
$\text{Al}_2\text{O}_3@\text{PPy}@ \text{rGO}$	-39.7	5.5	/	4
rGO@ $\text{Al}_2\text{O}_3/\text{NR}$ (18 vol%)	/	/	0.514	5
ETDS/ Al_2O_3 -doped MWCNT	/	/	0.201	6
$\text{Al}_2\text{O}_3@\text{PCPA}@ \text{GO}/\text{XNBR}$	/	/	0.48	7
EG/ $\text{Al}_2\text{O}_3/\text{EP}$	-43	2.8	0.76	8
ANC-3	-63.96	3.8	0.65	This work

Reference

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