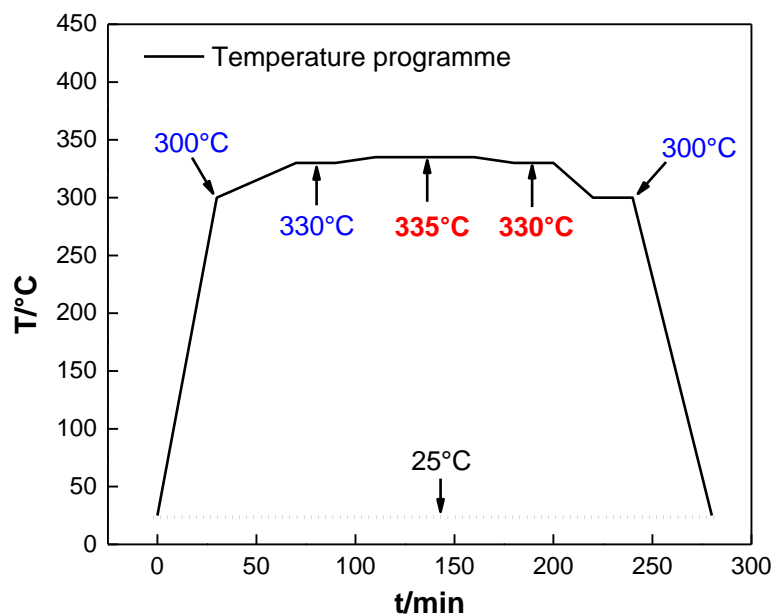


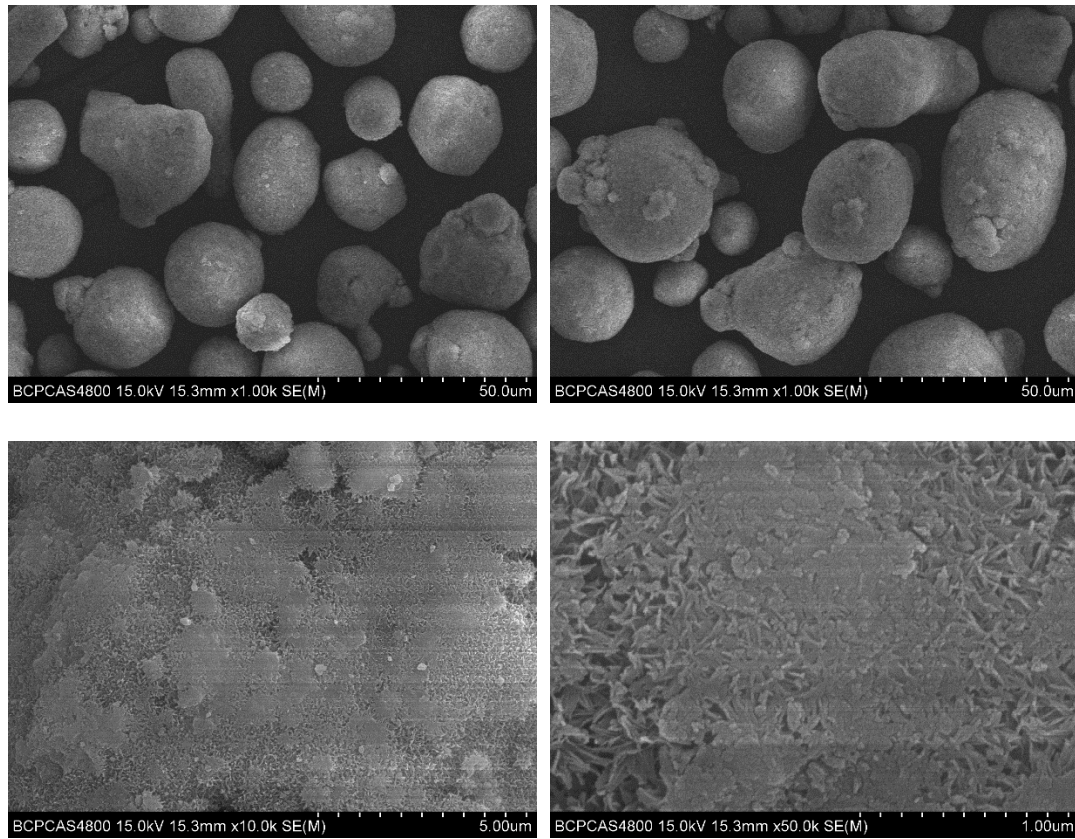
Article

# Fabrication of Polytetrafluoroethylene Coated Micron Aluminium with Enhanced Oxidation

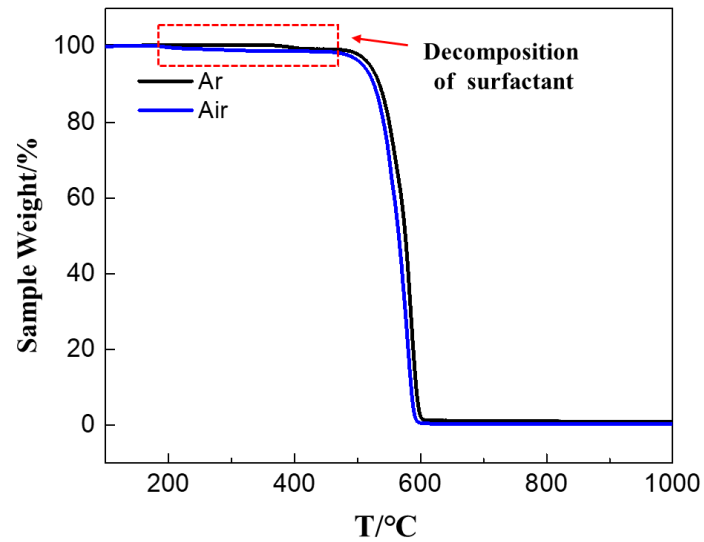
Benbo Zhao <sup>1</sup>, Shixiong Sun <sup>1</sup>, Yunjun Luo <sup>2,3,\*</sup> and Yuan Cheng <sup>1,\*</sup>



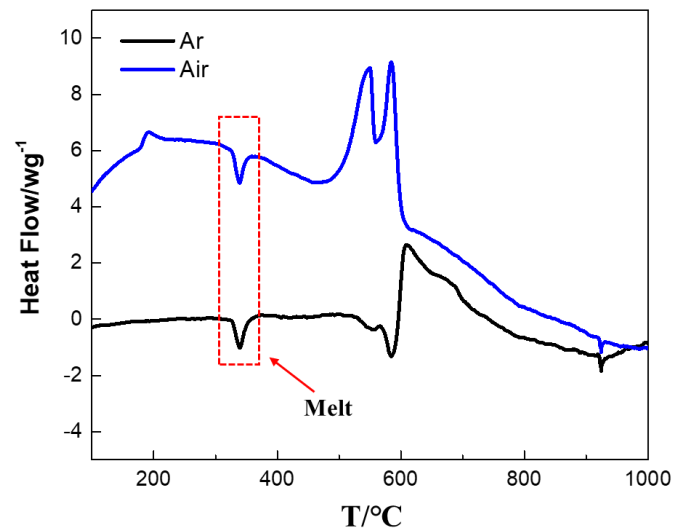
**Figure S1.** The curve of programed temperature in the heat treatment of Al/PTFE.



**Figure S2.** SEM images of core-shell structure Al/PTFE composite materials.



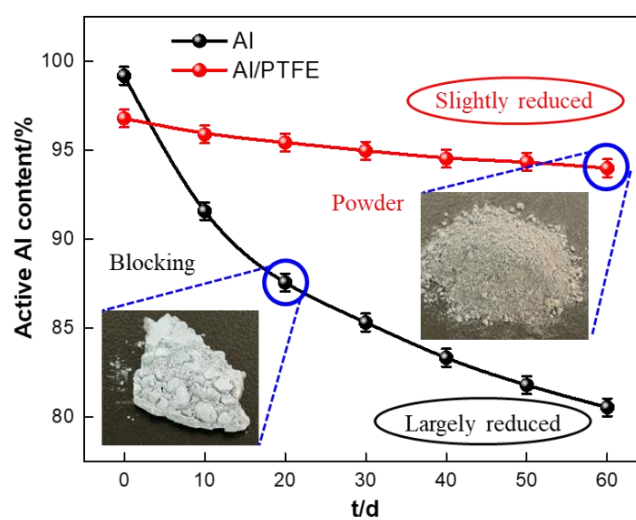
(a) TGA



(b) DSC

**Figure S3.** TGA (a) and DSC (b) curve of PTFE nano particles in aqueous solution.**Table S1.** Parameters of TGA/DSC curves of Al and Al/PTFE.

Sample	Atmosphere	Convert Ratio/%	Reaction Heat/(kJ·g <sup>-1</sup> )
Al	N <sub>2</sub>	4.83	2.19
Al	O <sub>2</sub>	12.6	3.04
Al	Air	10.5	2.43
Al/PTFE	N <sub>2</sub>	6.61	4.39
Al/PTFE	O <sub>2</sub>	37.1	10.4
Al/PTFE	Air	29.4	8.02



**Figure S4.** The active Al content in pure Al and Al/PTFE powders during aging.