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## **ACCEPTED MANUSCRIPT**

#### Elevated temperature compressive properties and energy absorption response of

## in-situ grown CNT-reinforced Al composite foams

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#### Abstract

Carbon nanotube (CNT) reinforced Al composite foams were successfully fabricated by the combination of an *in-situ* chemical vapor deposition (CVD), short-time ball-milling and space-holder method. The CNTs are homogeneously dispersed and embedded in the Al foam matrix after 90 min ball-milling while maintaining the structural integrity. Both compressive properties and energy absorption capacity of the composite foams increase with the increment of CNT content but decrease with the temperature rising between 25 and 250 °C. The compressive yield Download English Version:

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