

Accepted Manuscript

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PII: S0266-3538(16)30860-0

DOI: [10.1016/j.compscitech.2016.12.008](https://doi.org/10.1016/j.compscitech.2016.12.008)

Reference: CSTE 6598

To appear in: *Composites Science and Technology*

Received Date: 1 August 2016

Revised Date: 21 October 2016

Accepted Date: 5 December 2016

Please cite this article as: Zuo L, Fan W, Zhang Y, Zhang L, Gao W, Huang Y, Liu T, Graphene/montmorillonite hybrid synergistically reinforced polyimide composite aerogels with enhanced flame-retardant performance, *Composites Science and Technology* (2017), doi: 10.1016/j.compscitech.2016.12.008.

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ABSTRACT

Polyimide (PI) composite aerogels with enhanced flame-retardant performance have been fabricated with the addition of environmentally friendly flame-retardant additives (i.e. graphene (G) and montmorillonite (MMT)) via an eco-friendly freeze-drying method followed by a thermal imidization process. Through the strong interaction between the two components, graphene oxide/MMT hybrid can be synergistically dispersed in water, providing good dispersibility in PI matrix, thus endowing the composite aerogels with enhanced

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