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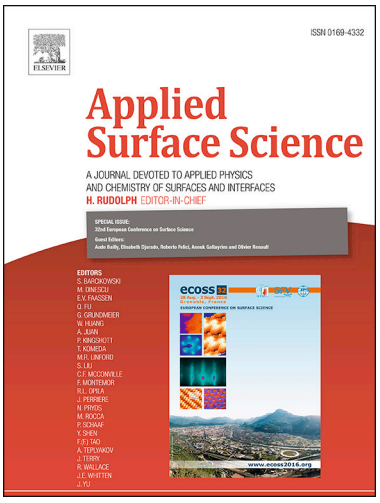

Full Length Article

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PII: S0169-4332(18)31594-0
DOI: https://doi.org/10.1016/j.apsusc.2018.06.026
Reference: APSUSC 39534

To appear in: *Applied Surface Science*

Received Date: 8 March 2018
Revised Date: 23 May 2018
Accepted Date: 5 June 2018

Please cite this article as: S. Guo, K. Zhao, Z. Feng, Y. Hou, H. Li, J. Zhao, Y. Tian, H. Song, High Performance Liquid Crystalline Bionanocomposite Ionogels Prepared by In Situ Crosslinking of Cellulose/Halloysite Nanotubes/Ionic Liquid Dispersions and Its Application in Supercapacitors, *Applied Surface Science* (2018), doi: https://doi.org/10.1016/j.apsusc.2018.06.026

High Performance Liquid Crystalline Bionanocomposite Ionogels Prepared by In Situ Crosslinking of Cellulose/Halloysite Nanotubes/Ionic Liquid Dispersions and Its Application in Supercapacitors

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ABSTRACT: A high performance halloysite nanotubes (HNTs)-doped liquid crystalline bionanocomposite ionogels has been synthesized by in situ crosslinking of cellulose/ionic liquid solutions using bisphenol A epoxy resin via ring opening reactions with cerium ammonium nitrate, and HNTs as the ionic conducting promoter. These ionogels with HNTs demonstrate significantly improved ionic conductivity compared with that of pure ionogel without the addition of HNTs, due to the liquid