

Mohamed BOUKHICHA^{1,2}Joseph ANDRADE¹, Jan FOLKSON¹, Amanda CARR¹, Matthew D. EISAMAN^{1,2}¹ Nonproliferation and National Security Department, Brookhaven National Laboratory, NY, Unites States² Electrical and Computer Engineering, Stony Brook University, NY, United Statesmohamed.boukhicha@stonybrook.edu

Large Scale LiC₆ for Electronic Applications

Electronic devices operating at GHz frequencies have rapidly become an integral component of modern technology. As their applications continue to develop, electromagnetic interference could severely degrade performance. In this work, we explore the use of LiC₆, a graphite intercalation compound used in battery technology, as a shielding material for prevention of electromagnetic interference. LiC₆ exhibits metallic behaviour at room temperature with high reflectivity in the microwave regime and reasonable optical transparency in the visible spectrum [1]. We present preliminary results on the fabrication and characterization of large-scale, stable LiC₆ films.

Reference

- [1] Wenzhong Bao et al., Nat Commun, 5 (2014) 4224