LiNb0₃ polymer composite thin film: Towards it's preparation

ABSTRACT

Lithium Niobate (LiNbO $_3$) is a well-known ferroelectric material with excellent nonlinear piezoelectric, pyroelectric and electro-optic properties. However, there is little research conducted exploring its application in thin film composites. Here we describe the preparation and characterization of LiNbO $_3$, as a precursor to its use in polymer composites. LiNbO $_3$ has been prepared via a molten salt route, which has been previously shown to be one of the simplest means to prepare pure and stoichiometric LiNbO $_3$ nanocrystals.