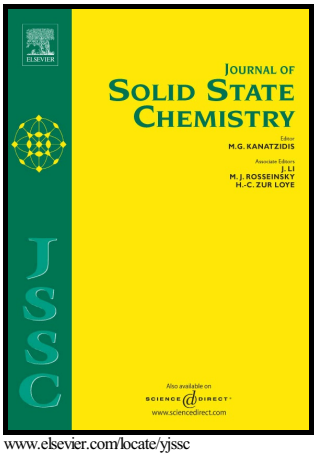

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A Mixed Matrix Eu-4,4'-Biphenyldicarboxylate Coordination Polymer Film as a Fluorescence Turn-Off Sensor to Aniline Vapor

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Abstract

The ionothermal reaction of $EuCl_3$ with 4,4'-biphenyldicarboxylic acid (H_2BPDC) produced a 3D fluorescence coordination polymer (CP), $[PMI]_2[Eu_2(BPDC)_3Cl_2]$ (**1**). **1** was dispersed onto the bandage, and further infiltrated by polyvinylidene fluoride (PVDF) to give a mixed matrix **1**@PVDF/bandage composite film (**1-film**). The fluorescence and the morphology indicate **1-film** can emit red fluorescence and the CP particles are on the surfaces of bandage fabrics with the adhesion of PVDF. The fluorescence of **1-film** can be quenched

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