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## **ACCEPTED MANUSCRIPT**

Synthesis, structural and optical properties of electrospun magnesium aluminate nanofibers

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#### **Abstract**

Magnesium aluminate (MgAl<sub>2</sub>O<sub>4</sub>) nanofibers were successfully synthesized by a combination of electrospinning and calcination processes. The as-spun fibers were calcined at 700, 800, and 900 °C for 2 h to crystallization of MgAl<sub>2</sub>O<sub>4</sub>. X-ray diffraction result detected the crystalline phase of MgAl<sub>2</sub>O<sub>4</sub>. Field emission scanning electron microscopy and transmission electron microscopy images revealed that MgAl<sub>2</sub>O<sub>4</sub> nanofibers had rough surfaces with

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