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Authors: Liang Chen, Jianwei Tang, Guoqun Zhao, Cunsheng Zhang, Xingrong Chu



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# ACCEPTED MANUSCRIPT

### Fabrication of Al/Mg/Al laminate by a porthole die co-extrusion

#### process

Liang Chen<sup>a</sup>, Jianwei Tang<sup>a</sup>, Guoqun Zhao<sup>a,\*</sup>, Cunsheng Zhang<sup>a</sup>, Xingrong Chu<sup>a</sup>

<sup>a</sup>Key Laboratory for Liquid-Solid Structural Evolution and Processing of Materials (Ministry of Education), Shandong University, Jinan, Shandong 250061, PR China.

\* Corresponding author: Guoqun Zhao, Professor @ Shandong University.

Email: sduzhaogq@gmail.com, Tel: +8653181696577, Fax: +8653188392811.

#### **Graphical Abstract**



#### Abstract

A porthole die co-extrusion (PCE) process was proposed to fabricate the Al/Mg/Al laminate. The results showed that the laminate was successfully extruded without voids and cracks on the Al/Mg interface. The transition layer was formed and its thickness was increased with the increase of temperature. Partial dynamic recrystallization (DRX) occurred in Al layer, and the texture of Al layer has strong E {111}<011> and Y {111}<112> sheartyped components and relative weak Copper {112}<111> and S {123}<634> rolling components. The near complete DRXed grain structure was observed in Mg layer, and the average grain size increases with increasing temperature. Mg layer has strong basal plane Download English Version:

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