

Imprinting bulk amorphous alloy at room temperature

Song-Yi Kim¹, Eun-Soo Park², Ryan T. Ott³, Thomas A. Lograsso³, Moo-Young Huh⁴, Do-Hyang Kim⁵, Jürgen Eckert^{6,7} & Min-Ha Lee^{1*}

¹ Rare Metals R&D Group, Korea Institute of Industrial Technology, Incheon 406-840, Korea

² Global Technology Center, Samsung Electronics Co., Ltd., Suwon, 443-742, Korea

³ Division of Materials Sciences and Engineering, Ames Laboratory (USDOE), Ames, Iowa 50011, USA

⁴ Department of Materials Science and Engineering, Korea University, Seoul, 136-701, Korea

⁵ Department of Metallurgical Engineering, Yonsei University, Seoul, 120-749, Korea

⁶ IFW Dresden, Institute for Complex Materials, P.O. Box 27 01 16, D-01171 Dresden, Germany

⁷ TU Dresden, Institute of Materials Science, D-01062 Dresden, Germany

Supplement 1

FEM simulation analysis on the effective strain effect by strain rate changing on the formation of shear band in metallic glass during the patterning process. Shear strain rate plays a key role to decide shear banding or homogeneous flow during deformation rather than effective strain.

