

# **Metallic glass properties, processing method and development perspective: a review**

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## **ABSTRACT**

This review paper aims to outline the development of Metallic Glass and its progress to functionally graded material. The review begins with the fundamental theory of producing the Metallic Glass and the challenges. Namely, the concept of glass-forming ability, alloy system of Metallic Glass, supercooling process, the mechanical and thermal characteristics. The authors presented the Metallic Glass processing method as pre and post-processing for further description. The different alloy systems of Metallic Glass produced by researchers created properties suitable for various industrial applications. Consequently, the authors point a focus on the Functionally Graded Material (FGM) of the Metallic Glass (MG) areas where further research needs to be researched. In distinction, the Functionally Graded Material Metallic Glass novelty is to combine the crystalline and amorphous structure state in one product. Preliminary researches selected by the authors convince the promising aspect of the Functionally Graded Material Metallic Glass.

**KEYWORDS:** Metallic glass processability; Functionally graded material metallic glass; Metallic glass characteristics

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