Combinatorial process for Bulk Metallic Glasses

OCR Number: OCR 6186

Rapid Development of BMG Alloys with High Formability

High-Throughput Characterization

\[ F \propto \frac{h}{S} \]

Compositional Library

- Gas Releasing Agents
- (GRAs) (GRAs)
- Si
- Steel

Alloys

- \(10-30\%\) Al
- \(30-60\%\) Cu
- \(30-55\%\) Zr
High-Throughput Characterization of Formability

\[ F \propto \frac{h}{S} \]

A. 

B. 

C. 

~3000 compositions
Best formability composition here: $\text{Mg}_{69}\text{Cu}_{21}\text{Y}_{10}$

Best formability composition reported: $\text{Mg}_{65}\text{Cu}_{25}\text{Y}_{10}$

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