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Record 1 of 1**Author(s):** Banhart, J (Banhart, John)**Title:** Gold and Gold Alloy foams**Source:** GOLD BULLETIN, 41 (3): 251-256 2008**Language:** English**Document Type:** Article**KeyWords Plus:** ALUMINUM FOAM; METAL FOAMS; MANUFACTURE

Abstract: The possibilities to manufacture gold-based foams are explored. Gold powder and various powdered alloying elements are mixed with a small volume fraction of a gas-releasing blowing agent. The blend is compacted to a dense precursor, which is then melted in a further step in order to trigger foam formation. We find that gold-silicon alloys containing 2-3 wt.% of silicon or around 8 wt.% of germanium can be foamed using TiH₂ or ZrH₂ as a blowing agent. Foams with about 85% porosity are obtained.

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Cited Reference Count: 25**Times Cited:** 0**Publisher:** WORLD GOLD COUNCIL**Publisher Address:** 55 OLD BROAD STREET, LONDON EC2M 1RX, ENGLAND**ISSN:** 0017-1557**29-char Source Abbrev.:** GOLD BULL**ISO Source Abbrev.:** Gold Bull.**Source Item Page Count:** 6**Subject Category:** Chemistry, Inorganic & Nuclear; Chemistry, Physical; Materials Science, Multidisciplinary**ISI Document Delivery No.:** 361WA[Back to Results](#)ISI Web of Knowledge
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