# Microstructures of Iron Aluminides Processed by Additive Layer Manufacturing and Spark Plasma Sintering

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**Additive layer manufacturing (ALM) methods such as selective laser melting (SLM) and laser metal deposition (LMD) enable production of parts with complicated shapes. Iron based aluminides are a new promising class of materials for high temperature applications. Near net shape production by ALM is specifically interesting in case of these wear resistant aluminides, where machining is difficult. In this article the microstructure of aluminides prepared by SLM and LMD will be compared with those prepared by spark plasma sintering of the same compositions.**

**Keywords:** Laser additive manufacturing, intermetallics, powder metallurgy

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