

عنوان مقاله:

Effect of SiC additive on fatigue behavior of Al foams

محل انتشار:

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خلاصه مقاله:

This research deals with the effect of SiC on fatigue behaviors of closed cell Al/SiC composite foams under compression cyclic loading. The composite foams are made of aluminum foam with the addition of different concentration of SiC (5, 10, 15 vol%). Results show that the fatigue strength of Al/SiC composite foams increases with increasing the volume fraction of SiC particles. Therefore, SiC is a great factor for strengthening. The addition of SiC lead to decrease the dislocation motion and form the calcium silicate that is hard phase and cause to increase the strength. Therefore, the fatigue strength of sample with 5 vol% SiC is lower than the other, because foam stabilizer .value in these foams, is very little

کلمات کلیدی:

Fatigue strength, Composite foams, SiC

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