

## عنوان مقاله:

EFFECT OF INTERFACIAL FRACTURE ENERGY ON IMPACT PERFORMANCE OF SIX-LAYER COMPOSITES

## محل انتشار:

چهاردهمین کنفرانس سالانه مهندسی مکانیک (سال: 1385)

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## خلاصه مقاله:

In this investigation, aluminum layers are bonded together using epoxy adhesive. The adhesive is modified using different additives and the influence of adhesive composition on interfacial fracture energy is measured via double cantilever beam (DCB) test. To characterize the mechanical behavior of the adhesive, compression and impact tests were incorporated. The results of compression and impact tests show that compressive and impact properties of adhesives are functions of type and content of modifier. In the DCB test, it was observed that while addition of rubber particles increase interfacial fracture energy of epoxy, incorporating SiC particles decrease this parameter. Also, the results of present study illustrate that there is an optimum for the interfacial fracture energy where beyond that the impact energy of the multi-layer composite drops sharply.

## کلمات کلیدی:

Multi Layer Composites-Impact Energy-Interfacial Fracture Energy

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/28043>

