

## عنوان مقاله:

Effect of Aging on Fracture Toughness of Al6061-Graphite Particulate Composites

## محل انتشار:

مجله مکانیک سازه های پیشرفته کامپوزیت، دوره 6، شماره 2 (سال: 1398)

تعداد صفحات اصل مقاله: 8

## نویسندگان:

Saleemsab Doddamani - *Department of Mechanical Engineering, Jain Institute of Technology, Davangere, 577004, India*

Mohamed Kaleemulla K - *Department of Mechanical Engineering, U BDT College of Engineering, Davangere, 577004, India*

## خلاصه مقاله:

This article presents the investigative work conducted on the fracture toughness and microstructure of Al6061-9% graphite particulate composites. The requisite specimens for the fracture toughness testing were compact tension ones prepared using stir casting technique. The Al6061-9% graphite particulate metal matrix composite has been heat treated in the underaged condition. It is observed from the results that as aging time increases, the fracture toughness increases. This gain in fracture toughness is with the loss of ductility. Examination of the fractured surface of Al6061-graphite is done using a scanning electron microscope (SEM) which shows the brittle fracture of the composite.

## کلمات کلیدی:

Al6061-9%graphite, Fracture toughness, Age hardening, CT specimens, SEM

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1026085>

