

Accepted Manuscript

Tribological and surface behavior of Silicon carbide reinforced aluminum matrix nanocomposite

I. Manivannan , S. Ranganathan , S. Gopalakannan , S. Suresh ,
K. Nagakarhigan , R. Jubendradass

PII: S2468-0230(17)30061-5
DOI: [10.1016/j.surfin.2017.05.007](https://doi.org/10.1016/j.surfin.2017.05.007)
Reference: SURFIN 102



To appear in: *Surfaces and Interfaces*

Received date: 10 February 2017
Revised date: 25 May 2017
Accepted date: 29 May 2017

Please cite this article as: I. Manivannan , S. Ranganathan , S. Gopalakannan , S. Suresh ,
K. Nagakarhigan , R. Jubendradass , Tribological and surface behavior of Silicon carbide reinforced
aluminum matrix nanocomposite, *Surfaces and Interfaces* (2017), doi: [10.1016/j.surfin.2017.05.007](https://doi.org/10.1016/j.surfin.2017.05.007)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Highlights

- Al 6061 reinforced with nanometric SiC were successfully fabricated using ultrasonic cavitation based solidification process.
- The Wear resistant of nanocomposite is higher than that of Al alloy.
- The Coefficient of friction of nanocomposite was significantly improved as compared to Al alloy.
- Nanocomposite worn surface shows smooth surfaces, but the worn surfaces of Al alloy indicate rough surface.

Download English Version:

<https://daneshyari.com/en/article/4985639>

Download Persian Version:

<https://daneshyari.com/article/4985639>

[Daneshyari.com](https://daneshyari.com)