

Review of: "The Influence of Hot Extrusion on The Mechanical and Wear Properties of an Al6063 Metal Matrix Composite Reinforced With Silicon Carbide Particulates"

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Potential competing interests: No potential competing interests to declare.

ABSTRACT

Line 4 - The authors wrote 'Mechanical and wear behavior study'. It should be studies since we have more than one noun.

Line 10 -11 - The authors wrote '.... mechanical and wear resistance was...'. Just like the above, 'was' should be changed to 'were.'

In the Abstract, the science behind the improvement of the mechanical and wear properties should be explained, i.e., the transfer of the structural hardness of the SiC to the Aluminum matrix.

INTRODUCTION

The choice of SiC, of all the other mentioned reinforcements, was not justified.

Paragraph 1, line 3, the authors wrote 'ease of availability'. Do you mean 'availability and ease of formation'?

Paragraph 2, line 2, The authors wrote '..... investigated the effects of composite wear life'. Do you mean 'composite's wear life.....'?

EXPERIMENTAL WORK

The experimental procedure was disjointed, i.e., from solidification to removal from the mold and the extrusion process. This should be meticulously presented.

RESULTS AND DISCUSSION

What informed the use of 'Graph' instead of Figures? Figures are better used and should also reflect as such in the writeup.

TENSILE TEST RESULTS

What were referred to as Figures are not Figures but 'Plates'. This should be corrected throughout the writeup.

DENSITY AND POROSITY

The relationship between density and porosity was not explained.

ADHESIVE WEAR TEST

It was mentioned towards the end that different wear mechanisms were observed with varying loads. It will be advisable to explain these various wear mechanisms observed.

The SEM images were not clear enough for better analysis and understanding.