

# Author's Accepted Manuscript

Microstructure and strengthening mechanism of  $\text{Si}_3\text{N}_4/\text{Invar}$  joint brazed with  $\text{TiN}_p$ -doped filler

Tianpeng Wang, Chunfeng Liu, Christian Leinenbach, Jie Zhang



PII: S0921-5093(15)30500-1  
DOI: <http://dx.doi.org/10.1016/j.msea.2015.10.038>  
Reference: MSA32889

To appear in: *Materials Science & Engineering A*

Received date: 10 August 2015

Revised date: 8 October 2015

Accepted date: 10 October 2015

Cite this article as: Tianpeng Wang, Chunfeng Liu, Christian Leinenbach and Jie Zhang, Microstructure and strengthening mechanism of  $\text{Si}_3\text{N}_4/\text{Invar}$  joint brazed with  $\text{TiN}_p$ -doped filler, *Materials Science & Engineering A* <http://dx.doi.org/10.1016/j.msea.2015.10.038>

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 galley proof before it is published in its final citable 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.

# Microstructure and strengthening mechanism of $\text{Si}_3\text{N}_4/\text{Invar}$ joint brazed with $\text{TiN}_p$ -doped filler

Tianpeng Wang,<sup>a</sup> Chunfeng Liu,<sup>a</sup> Christian Leinenbach,<sup>b</sup> Jie Zhang<sup>a,\*</sup>

<sup>a</sup> School of Materials Science and Engineering, Harbin Institute of Technology, Harbin 150001, PR China

<sup>b</sup> Empa, Swiss Federal Laboratories for Materials Science and Technology, Laboratory for Joining Technologies  
and Corrosion, CH-8600 Dübendorf, Switzerland

## Corresponding author:

Jie Zhang

School of Materials Science and Engineering

Harbin Institute of Technology

Harbin 150001

P. R. China

Tel.: +86-451-86414234

Fax: +86-451-86414234

E-mail: [hitzhangjie@hit.edu.cn](mailto:hitzhangjie@hit.edu.cn)

## Abstract

Ag-Cu-Ti+TiN<sub>p</sub> composite filler was developed to braze  $\text{Si}_3\text{N}_4$  ceramic to Invar alloy, and subsequently the effect of TiN<sub>p</sub> content on the microstructure and

Download English Version:

<https://daneshyari.com/en/article/7976571>

Download Persian Version:

<https://daneshyari.com/article/7976571>

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