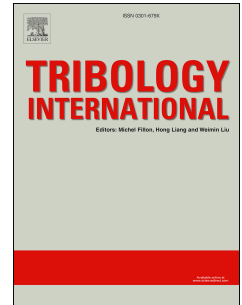


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Effects of secondary orientation and temperature on the fretting fatigue behaviors of Ni-based single crystal superalloys

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The corresponding author in the cover letter and the manuscript is the same: **Li-Sha Niu**.

Li-Sha Niu is my supervisor, so she should be the final corresponding author in this paper.

But in order to receive the emails from the editor and contact with the editor directly and timely, the corresponding author on Elsevier Editorial System is me, Yue Su (the first author).

Therefore, during the submission, please contact my e-mail address:

suy15@mails.tsinghua.edu.cn for any questions and revisions. Thank you very much.

Abstract: A dovetail fixture for fretting fatigue test was designed. Fretting fatigue experiments were performed for Ni-based single crystal (NBSX) superalloys at 600 and 700°C in two secondary orientations, [110] and [010]. The influence of secondary orientation and temperature on fretting fatigue behavior was investigated. The crystal plasticity finite element (CPFE) simulation was used to study the stress field at the contact region. The result indicates that the stress distribution is correlated to fretting damage, which is consistent with the crack

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