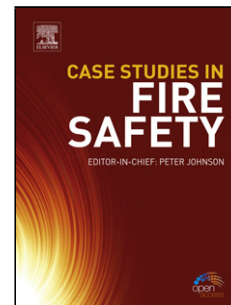


## Accepted Manuscript

Title: Hydrogen embrittlement of an interstitial equimolar high-entropy alloy

Authors: Hong Luo, Zhiming Li, Wenjun Lu, Dirk Ponge, Dierk Raabe



PII: S0010-938X(17)31641-4  
DOI: <https://doi.org/10.1016/j.corsci.2018.03.040>  
Reference: CS 7456

To appear in:

Received date: 6-9-2017  
Revised date: 9-3-2018  
Accepted date: 21-3-2018

Please cite this article as: Luo H, Li Z, Lu W, Ponge D, Raabe D, Hydrogen embrittlement of an interstitial equimolar high-entropy alloy, *Corrosion Science* (2018), <https://doi.org/10.1016/j.corsci.2018.03.040>

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.

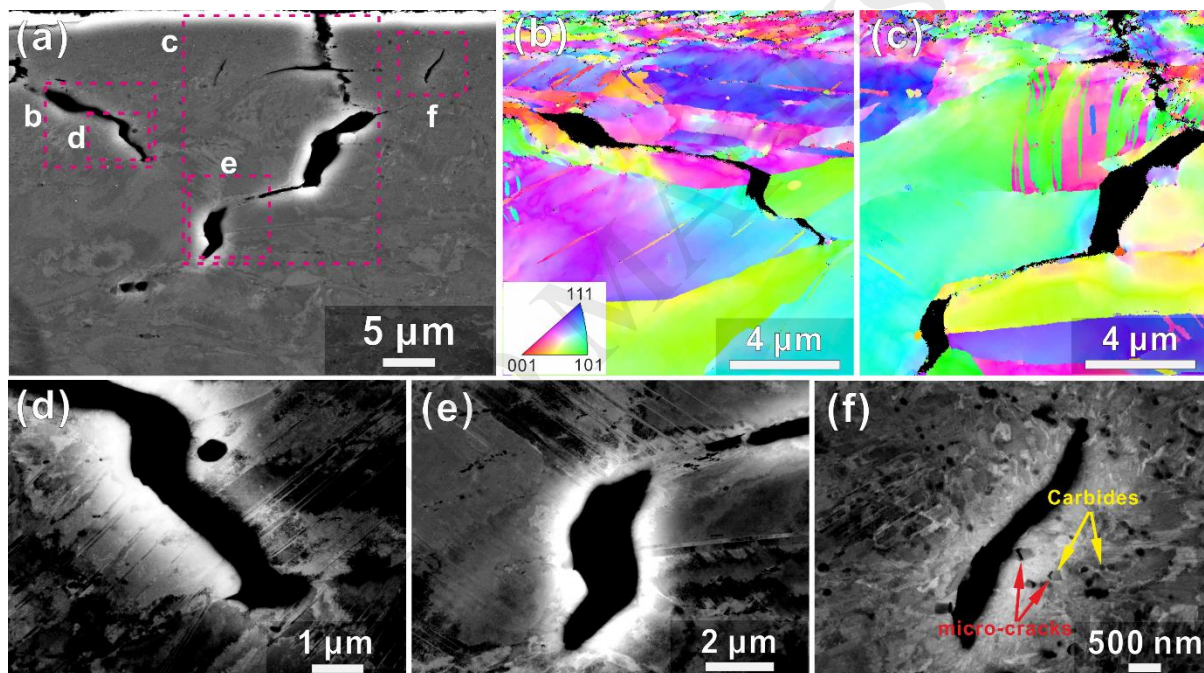
# Hydrogen embrittlement of an interstitial equimolar high-entropy alloy

Hong Luo\*, Zhiming Li\*\*, Wenjun Lu, Dirk Ponge, Dierk Raabe

Max-Planck-Institut für Eisenforschung, Max-Planck-Straße 1, 40237 Düsseldorf, Germany

Correspondence to: h.luo@mpie.de (H. Luo); zhiming.li@mpie.de (Z. Li)

Graphical abstract



## Research Highlights

- Hydrogen embrittlement mechanism in an interstitial high-entropy alloy is revealed.
- Hydrogen enhanced localized plasticity is critical to the embrittlement.
- Both intergranular and transgranular fracture under hydrogen are observed.
- Aggregated nano-carbides are potential sites for crack initiation under hydrogen.

Download English Version:

<https://daneshyari.com/en/article/7893812>

Download Persian Version:

<https://daneshyari.com/article/7893812>

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