

Fabrication of Novel Nanoporous Films in Moisture-in-Oil Sensors via Chemical Dealloying of Cu-Cr using Combinatorial Search of Cu-Cr Alloy Compositions – ERRATUM

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doi: 10.1557/adv.2018.198, Published by Materials Research Society, 19 February 2018.

Due to a technical error in the original publication of Yoshii et al.,¹ numerical values given in in Figs. 1, 3, and 5-7 were either cut off or illegible. The online version of the article has been updated, and the correct figures are given below.

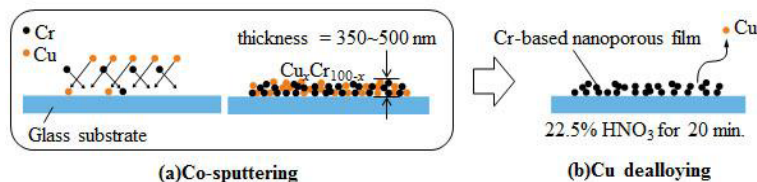


Figure 1. A schematic showing the two-step chemical dealloying process of Cu-Cr: (a) co-sputtering of Cu-Cr on a substrate and (b) dealloying of Cu from the Cu-Cr alloy with HNO₃.

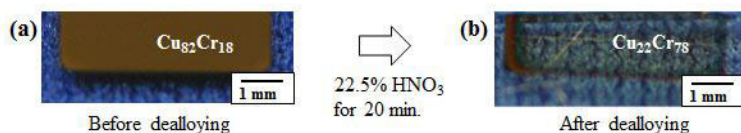


Figure 3. The Cu-Cr film (a) before and (b) after dealloying. The appearance of the film changed from brown to transparent appearance as Cu was gradually etched out.

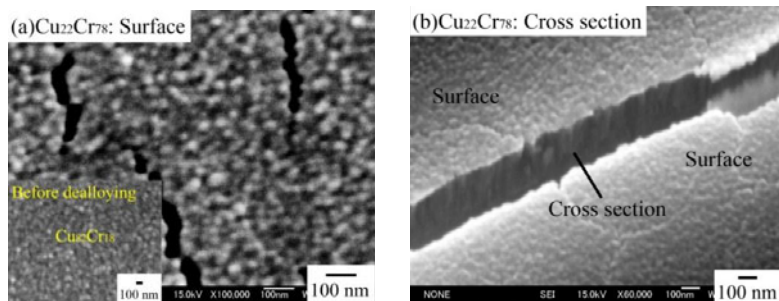


Figure 5. FE-SEM images of (a) the surface of an as-deposited $\text{Cu}_{22}\text{Cr}_{78}$ film co-sputtered on a glass substrate, and the surface of the film shown in (a) after dealloying, and (b) the cross section of the film shown in (a) after dealloying. No pores are visible on the surface or cross section of the dealloyed film.

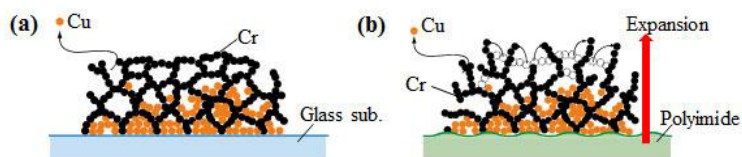


Figure 6. Schematics of the final nanoporous structures obtained by dealloying $\text{Cu}_{22}\text{Cr}_{78}$ films deposited on (a) a glass substrate and (b) a polyimide substrate.

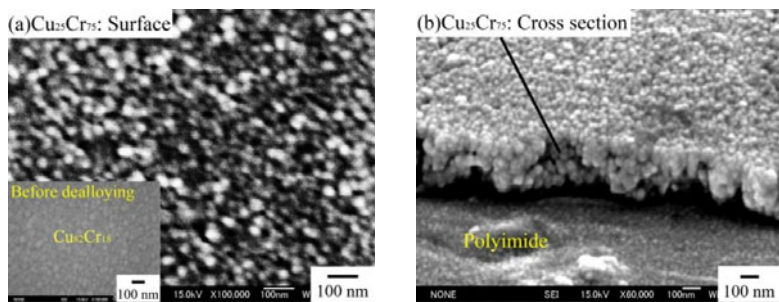


Figure 7. FE-SEM images of (a) the surface of a $\text{Cu}_{22}\text{Cr}_{78}$ film deposited on polyimide prior to dealloying, and the surface of the film shown in (a) after dealloying, and (b) the cross section of the film shown in (a) after dealloying. Nanopores are observed on both the surface and the cross section of the film after dealloying.

REFERENCE

1. Y. Yoshii, J. Sakurai, M. Mizoshiri, and S. Hata (2018). Fabrication of Novel Nanoporous Films in Moisture-in-Oil Sensors via Chemical Dealloying of Cu-Cr using Combinatorial Search of Cu-Cr Alloy Composition. *MRS Advances* 3, 225-232. doi:10.1557/adv.2018.198.