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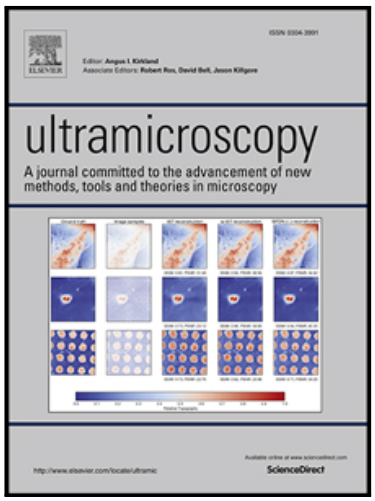

Gaining sight after being blind A Tribute to Jing Zhu

Jeff Th M.De Hosson

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Highlights

This contribution to the Festschrift for Professor Jing Zhu concentrates on *in-situ* electron microscopy, a topic which is key in her scientific work. In particular this paper delineates the possibilities of utilizing *in-situ* transmission electron microscopy to unravel size effects in the structure-property relationship. The focus is on metallic glasses.

Unpublished results are highlighted as:

- A unique increase in strength and strain hardening was observed for smaller sized specimens in tension which is different compared to compression experiments in in-situ TEM with the same MG compositions;
- Under cyclic loading a very interesting new phenomenon was observed and explained of increasing toughness depending on the number of cycles and size;
- The proposed experimental in-situ technique of loading and unloading cycles opens a new route to increase the ductility of metallic glasses.

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