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**Original Articles** 

# Microstructure, indentation and work hardening of Cu/Ag multilayers

M. Verdier§ ■, H. Huang¶, F. Spaepen, J. D. Embury & H. Kung Pages 5009-5016 | Received 20 Jan 2006, Accepted 29 Mar 2006, Published online: 19 Aug 2006

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## **Abstract**

Instrumented indentation and tensile tests were performed on free standing Cu/Ag multilayer thin films with layer thicknesses in the range 0.85-900 nm. The effect of layer thickness can be described by a Hall-Petch relationship. The work-hardening rate in the tensile test depends on layer thickness, which indicates that the interfaces create storage sites for dislocations and follows an inverse power law.

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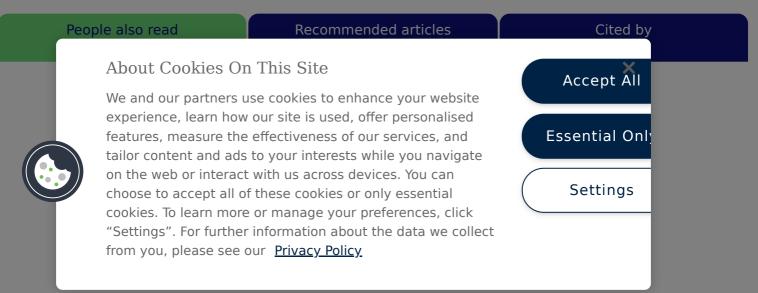
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