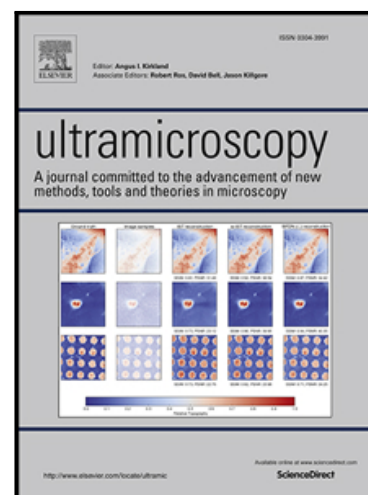


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Enhanced Thermal Stability of a Polymer Solar Cell Blend Induced by Electron Beam Irradiation in the Transmission Electron Microscope

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Abstract

We show by in situ microscopy that the effects of electron beam irradiation during transmission electron microscopy can be used to lock microstructural features and enhance the structural thermal stability of a nanostructured polymer:fullerene blend. Polymer:fullerene bulk-heterojunction thin films show great promise for use as active layers in organic solar cells but their low thermal stability is a hindrance. Lack of thermal stability complicates manufacturing and influences the lifetime of

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