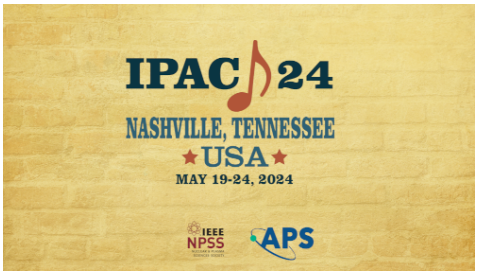

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Digital processing of electron beam images for glass plate irradiation: analysis of electron beam profiles and absorbed dose distribution

Wednesday, 22 May 2024 16:00 (2 hours)

In recent years, materials irradiation processing experiments have gained significant attention due to their critical role in science and various industries, including life science, material science and electronics. Efficient and accurate dose distribution determination is essential to optimize the irradiation process. This research explores the integration of glass plate irradiation and electron beam image digital processing to enhance the characterization of electron beam profiles and absorbed dose in materials irradiation experiments. The proposed method aims to overcome challenges associated with conventional irradiation techniques, such as lack of real-time feedback and inadequate spatial resolution. The integration of glass plate irradiation and advanced digital processing techniques offers the potential for high-resolution dose distribution mapping, ensuring precise and controlled irradiation for enhanced materials processing.

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