Influence of Width and Lateral Separation of the Strips on AC Loss in Subdivided YBCO Thin Film

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To investigate the influence of width of strips and inter-strip separation on the AC Loss arrays of parallel strips with different widths and separations were prepared. Studies on the spatial resolved hysteresis loss characteristics were performed. The local magnetic field due to magnetization currents is measured by a scanning Hall probe microscope. Based on these results a conceptual design for a low loss YBCO coated conductor is suggested.

keywords: YBCO tape; Filament; Magnetization; Hysteresis loss

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