

Defect Analysis in YBCO thin film Using Positron Annihilation Methods

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We introduce the slow positron beam method for the analysis of defect concentration. Slow positron with coincidence Doppler broadening spectroscopy was applied to YBCO thin film in order to analyze the defect structures. The sample was irradiated by 0-30 kV positron beam which is 8 mm diameter and was varied with the temperature between 15 to 290 K. The S-parameter values of the LAO substrate varied, even though the S-parameter values of YBCO film were not changed.

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