

ABSTRACT

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A technique for automatically determining a film-thickness estimation recipe suitable for workpiece, such as wafer, is disclosed. A film-thickness estimation method for a workpiece, includes: generating a plurality of reference spectra of reflected light from a plurality of reference workpieces during polishing of the plurality of reference workpieces; 10 creating training data containing the plurality of reference spectra and a plurality of recipe labels indicating a plurality of film-thickness estimation recipes determined for the plurality of reference workpieces; performing machine learning using the training data to create a recipe classification model; generating a measurement spectrum of reflected light from a film-thickness measurement point; inputting the measurement spectrum into the recipe 15 classification model and outputting a classification result indicating one of the plurality of recipe labels; and determining one of the plurality of recipe labels based on the classification result.

FIG. 5