ABSTRACT

PROCESS-INDUCED DISPLACEMENT CHARACTERIZATION DURING SEMICONDUCTOR PRODUCTION

A controller is configured to perform at least a first characterization process prior to at least one discrete backside film deposition process on a semiconductor wafer; perform at least an additional characterization process following the at least one discrete backside film deposition process; determine at least one of a film force or one or more in-plane displacements for at least one discrete backside film deposited on the semiconductor wafer via the at least one discrete backside film deposition process based on the at least the first characterization process and the at least the additional characterization process; and provide at least one of the film force or the one or more in-plane displacements to at least one process tool via at least one of a feed forward loop or a feedback loop to improve performance of one or more fabrication processes.

Figure 1