

ABSTRACT

A thin film deposition device, comprising a controller (100) and a first-stage lifting mechanism (1), a second-stage lifting mechanism (2), a rotating mechanism (5), a supporting mechanism (3) and a heating mechanism (4) connected to the controller (100). The heating mechanism (4) comprises a heating tray (41) for heating a wafer (10). The first-stage lifting mechanism (1) is used for driving the second-stage lifting mechanism (2), the rotating mechanism (5), the supporting mechanism (3) and the heating mechanism (4) to synchronously ascend and descend to complete the first thin film deposition of the wafer (10). The supporting mechanism (3) comprises a guide ring (31) and a guide support shaft (34), and the guide support shaft (34) is connected to the guide ring (31). The second-stage lifting mechanism (2) is used for driving the guide ring (31) to ascend and descend, and enabling the guide ring (31) to be higher than the heating tray (41) when the guide ring (31) carries the wafer (10) to ascend. The rotating mechanism (5) is used for controlling the guide ring (31) to rotate, and the guide ring (31) is used for carrying the wafer (10) and driving the wafer (10) to rotate at a preset angle. The wafer (10) continues to carry out the second thin film deposition, and the device can repeatedly carry out the second thin film deposition step, thereby compensating for unevenness in the thickness of the thin film deposited on the wafer (10).