CLAIMS

1. A method comprising:

determining, based at least in part on first disturbance data, a first actuation value associated with compensating for disturbance in a processing chamber;

associating the first actuation value with an identifier corresponding to a first recipe operation, wherein the first actuation value is to be retrieved, via the identifier, for subsequent execution of the first recipe operation; and

causing, based on retrieval of the first actuation value via the identifier, actuation of one or more components of the processing chamber during a subsequent execution of the first recipe operation to compensate for the disturbance.

2. The method of claim 1, wherein the first disturbance data is associated with a comparison of first sensor data and first setpoint data, wherein the first sensor data is associated with processing a first substrate according to the first recipe operation, and wherein the first setpoint data is associated with the first recipe operation.

3. The method of claim 2, wherein the first setpoint data is indicative of a change in one or more predetermined process condition setpoints during the first recipe operation.

4. The method of claim 2, wherein the first sensor data comprises pressure data and the first setpoint data comprises first pressure setpoint data, and wherein the actuation of the one or more components comprises actuating, based on the first actuation value, a throttle valve of the processing chamber to adjust a flow rate out of the processing chamber to cause the processing chamber to meet the first pressure setpoint data.

5. The method of claim 2, wherein the first sensor data comprises temperature data and the first setpoint data comprises first temperature setpoint data, and wherein the actuation of the one or more components comprises actuating, based on the first actuation value, power provided to a heater of the processing chamber to adjust temperature in the processing chamber to cause the processing chamber to meet the first temperature setpoint data.

6. The method of claim 1 further comprising:

determining, based on second disturbance data, a second actuation value associated with compensating for disturbance in the processing chamber.

7. The method of claim 1 further comprising performing one or more of:

moving-average filtering of the first disturbance data; or

time-shift compensation of the first disturbance data.

8. The method of claim 1, wherein the determining of the first actuation value comprises providing the first disturbance data to a physics-based model and receiving output from the physics-based model indicative of the first actuation value.

9. A non-transitory machine-readable storage medium storing instructions which, when executed cause a processing device to:

determine, based at least in part on first disturbance data, a first actuation value associated with compensating for disturbance in a processing chamber;

associate the first actuation value with an identifier corresponding to a first recipe operation, wherein the first actuation value is to be retrieved, via the identifier, for subsequent execution of the first recipe operation; and

cause, based on retrieval of the first actuation value via the identifier, actuation of one or more components of the processing chamber during a subsequent execution of the first recipe operation to compensate for the disturbance.

10. The non-transitory machine-readable storage medium of claim 9, wherein the first disturbance data is associated with a comparison of first sensor data and first setpoint data, wherein the first sensor data is associated with processing a first substrate according to the first recipe operation, and wherein the first setpoint data is associated with the first recipe operation.

11. The non-transitory machine-readable storage medium of claim 10, wherein the first setpoint data is indicative of a change in one or more predetermined process condition setpoints during the first recipe operation.

12. The non-transitory machine-readable storage medium of claim 9, wherein the processing device is further to:

determine, based on second disturbance data, a second actuation value associated with compensating for disturbance in the processing chamber.

13. The non-transitory machine-readable storage medium of claim 9, wherein the processing device is further to perform one or more of:

moving-average filtering of the first disturbance data; or

time-shift compensation of the first disturbance data.

14. The non-transitory machine-readable storage medium of claim 9, wherein to determine the first actuation value, the processing device is to provide the first disturbance data to a physics-based model and receive output from the physics-based model indicative of the first actuation value.

15. A system comprising:

memory; and

a processing device coupled to the memory, the processing device to:

determine, based at least in part on first disturbance data, a first actuation value associated with compensating for disturbance in a processing chamber;

associate the first actuation value with an identifier corresponding to a first recipe operation, wherein the first actuation value is to be retrieved, via the identifier, for subsequent execution of the first recipe operation; and

cause, based on retrieval of the first actuation value via the identifier, actuation of one or more components of the processing chamber during a subsequent execution of the first recipe operation to compensate for the disturbance.

16. The system of claim 15, wherein the first disturbance data is associated with a comparison of first sensor data and first setpoint data, wherein the first sensor data is associated with processing a first substrate according to the first recipe operation, and wherein the first setpoint data is associated with the first recipe operation.

17. The system of claim 16 wherein the first setpoint data is indicative of a change in one or more predetermined process condition setpoints during the first recipe operation.

18. The system of claim 15, wherein the processing device is further to:

determine, based on second disturbance data, a second actuation value associated with compensating for disturbance in the processing chamber.

19. The system of claim 15, wherein the processing device is further to perform one or more of:

moving-average filtering of the first disturbance data; or

time-shift compensation of the first disturbance data.

20. The system of claim 15, wherein to determine the first actuation value, the processing device is to provide the first disturbance data to a physics-based model and receive output from the physics-based model indicative of the first actuation value.