CLAIMS

1. A method for profile control in atomic level deposition (ALD), the method comprising:

admitting precursor gas into a chamber of an ALD reactor at a first gaseous flow rate in a first region of a plurality of regions in the chamber to form a first film at a first deposition rate; and

delivering inhibiting precursor gas at a second gaseous flow rate in the same or a second region of the plurality of regions in the chamber to inhibit growth of the first film, the inhibiting precursor gas delivered at an exposure level <1% of a minimum exposure required to achieve saturation of the precursor gas on a flat surface.

2. The method of claim 1, further comprising deliver the inhibiting precursor gas into the chamber prior to admission of the precursor gas into the chamber.

3. The method of claim 1, further comprising delivering the precursor gas into the chamber prior to admission of the inhibiting precursor gas into the chamber.

4. The method of claim 1, further comprising delivering the inhibiting precursor gas into the chamber simultaneously with admission of the precursor gas into the chamber.

5. The method of claim 1, further comprising delivering a second precursor gas at a third gaseous flow rate in one of the plurality of regions to form a second film at a second deposition rate in the chamber.

6. The method of claim 5, further comprising delivering the second precursor gas simultaneously with admission of the inhibiting precursor gas into the chamber.

7. The method of claim 1, further comprising including a chelating agent in the precursor gas.

8. The method of claim 7, further comprising including in the chelating agent one or more of HAcAc, butane thiol, ethanol, and phosphine.