CLAIMS

~~What is claimed is:~~

~~1. An atomic level deposition (ALD) apparatus comprising:~~

~~a chamber;~~

~~a source of precursor gas;~~

~~a source of inhibiting precursor gas;~~

~~one or more injectors having respective gas flow paths, each having an inlet connectable to the source of the precursor or the inhibiting precursor gas, and being adapted to deliver into the chamber, separately or in conjunction with another injector, precursor gas at a first gaseous flow rate in a first region of the plurality of regions to form a first film at a first deposition rate,~~
~~and being adapted to deliver inhibiting precursor gas at a second gaseous flow rate in the same or a second region of the plurality of regions to inhibit growth of the first film.~~

~~2. The ALD apparatus of claim 1, wherein the one or more injectors is further adapted to deliver the inhibiting precursor gas into the chamber prior to admission of the precursor gas into the chamber.~~

~~3. The ALD apparatus of claim 1, wherein the one or more injectors is further adapted to deliver the precursor gas into the chamber prior to admission of the inhibiting precursor gas into the chamber.~~

~~4. The ALD apparatus of claim 1, wherein the one or more injectors is further adapted to deliver the inhibiting precursor gas into the chamber simultaneously with admission of the precursor gas into the chamber.~~

~~5. The ALD apparatus of claim 1, wherein the one or more injectors is further adapted to deliver 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.~~

~~6. The ALD apparatus of claim 5, wherein the one or more injectors is further adapted to deliver the second precursor gas simultaneously with admission of the inhibiting precursor gas into the chamber.~~

~~7. The ALD apparatus of claim 1, wherein the precursor gas includes a chelating agent.~~

~~8. The ALD apparatus of claim 1, wherein the chelating agent includes one or more of HAcAc, butane thiol, ethanol, and phosphine.~~

~~9. The ALD apparatus of claim 1, wherein the one or more injectors is further adapted to deliver a low exposure of an inhibiting precursor gas at an exposure level <1% of the minimum exposure required to achieve saturation of the precursor gas on a flat surface.~~

~~10~~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.

~~11~~2. The method of claim ~~10~~1, further comprising deliver the inhibiting precursor gas into the chamber prior to admission of the precursor gas into the chamber.

~~12~~3. The method of claim ~~10~~1, further comprising delivering the precursor gas into the chamber prior to admission of the inhibiting precursor gas into the chamber.

~~13~~4. The method of claim ~~10~~1, further comprising delivering the inhibiting precursor gas into the chamber simultaneously with admission of the precursor gas into the chamber.

~~14~~5. The method of claim ~~10~~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.

~~15~~6. The method of claim ~~14~~5, further comprising delivering the second precursor gas simultaneously with admission of the inhibiting precursor gas into the chamber.

~~16~~7. The method of claim ~~10~~1, further comprising including a chelating agent in the precursor gas.

~~17~~8. The method of claim ~~16~~7, further comprising including in the chelating agent one or more of HAcAc, butane thiol, ethanol, and phosphine.

~~18. The method of claim 10, further comprising delivering the inhibiting precursor gas at an exposure level <1% of the minimum exposure required to achieve saturation of the precursor gas on a flat surface.~~