

What is claimed is:

1. A chamber for substrate processing comprising:
 - a chamber body;
 - a gas inlet disposed through a sidewall of the chamber body;
 - a gas outlet disposed through a sidewall of the chamber body and opposite the gas inlet;
 - an upper window;
 - a lower window; and
 - an upper heating device, the upper heating device further comprising:
 - an upper cooling plate;
 - one or more upper base members disposed on the upper cooling plate;
 - one or more upper light sources;
 - one or more optical fibers connected to the one or more upper light sources at a first end and the upper base member at a second end; and
 - an irradiation window disposed within the upper base member and between the one or more optical fibers and the upper window.
2. The chamber of claim 1, further comprising a lower heating device, the lower heating device comprising:
 - a lower cooling plate;
 - one or more lower base members disposed on the lower cooling plate;
 - one or more lower light sources;
 - one or more optical fibers connected to the one or more lower light sources at a first end and the lower base member at a second end; and
 - an irradiation window disposed within the lower base member and between the one or more optical fibers and the lower window.
3. The chamber of claim 1, wherein the one or more upper light sources comprise ten or more light sources.

4. The chamber of claim 1, wherein the irradiation window further includes a lens for diverging a laser beam emitted by the one or more optical fibers into a conical beam.
5. The chamber of claim 1, wherein the upper cooling plate includes one or more coolant channels disposed therein.
6. The chamber of claim 1, wherein the upper window is a quartz window.
7. The chamber of claim 6, wherein the quartz window is a reflective quartz window with one or more window openings disposed therethrough.
8. The chamber of claim 6, wherein the upper window is a dome-shaped window.
9. The chamber of claim 1, wherein the upper cooling plate further comprises one or more openings disposed therethrough.
10. The chamber of claim 9, wherein the one or more openings have a conical frustum shape.
11. A chamber for substrate processing comprising:
 - a chamber body;
 - a gas inlet disposed through a sidewall of the chamber body;
 - a gas outlet disposed through a sidewall of the chamber body and opposite the gas inlet;
 - an upper window;
 - a lower window;
 - an upper heating device, the upper heating device further comprising:
 - an upper cooling plate with a one or more openings disposed therethrough;
 - one or more upper base members disposed on the upper cooling plate;
 - one or more upper light sources;

one or more optical fibers connected to the one or more upper light sources and the upper base member; and

an irradiation window disposed within the upper base member and between the one or more optical fibers and the upper window; and a lower heating device.

12. The chamber of claim 11, wherein the upper window is an upper quartz dome and the lower window is a lower quartz dome.

13. The chamber of claim 11, wherein the upper window is an upper reflective quartz liner and the lower window is a lower reflective quartz liner.

14. The chamber of claim 13, further comprising an opaque quartz body liner disposed on an inner surface of the chamber body.

15. The chamber of claim 14, wherein the upper window further comprises one or more window openings disposed therethrough and the lower window further comprises one or more window openings disposed therethrough.

16. The chamber of claim 15, wherein the one or more openings have a shape of a conical frustum and a narrow portion of the conical frustum is adjacent the one or more upper base members.

17. The chamber of claim 16, wherein a wide portion of the conical frustum is adjacent to the upper window and is aligned with the one or more window openings disposed through the upper window.

18. A chamber for substrate processing comprising:
a chamber body;
a gas inlet disposed through a sidewall of the chamber body;
a gas outlet disposed through a sidewall of the chamber body and opposite the gas inlet;
an upper window;

a lower window;
a substrate support disposed between the upper window and the lower window;
an upper heating device, the upper heating device further comprising:
 an upper cooling plate with a one or more openings disposed therethrough;
 one or more upper base members disposed on the upper cooling plate;
 one or more upper light sources;
 one or more optical fibers connected to the one or more upper light sources and the upper base member, wherein a divergent laser is supplied by the one or more upper light sources to the optical fibers; and
 an irradiation window disposed within the upper base member and between the one or more optical fibers and the upper window; and
a lower heating device.

19. The chamber of claim 18, wherein the irradiation window includes a coaxial lens.

20. The chamber of claim 18, wherein the upper window is disposed on a bottom surface of the upper cooling plate and the upper cooling plate is disposed on top of the chamber body.