CLAIMS

1. A method, for determining overlay at plural heights of a non-flat, buried metrology target having another metrology target disposed thereon, the method comprising

measuring radiation reflected by metrology targets;

decomposing the periodical variation of the parameter to isolate the plural heights of the buried metrology target as a function of amplitude verses wavelength.

2. A method according to claim 1, wherein decomposing comprises performing a Fourier transform, a wavelet transform, or a Laplace transform.

3. The method of claim 1, wherein the decomposing to isolate the plural heights of the buried metrology target comprises determining a top and a bottom of the buried metrology target.

4. The method of claim 1, wherein the decomposing to isolate the plural heights of the buried metrology target comprises determining a tilt of the buried metrology target.

5. The method of claim 1, wherein the decomposing to isolate the plural heights of the buried metrology target comprises determining an overlay between the metrology targets.

6. The method of claim 1, wherein the decomposing to isolate the plural

heights of the buried metrology target comprises determining an intermediate height of the buried metrology target.

7. The method of claim 1, wherein the decomposing comprises filtering.

8. The method of claim 7, wherein the filtering comprises using an upper and a lower value that defines an individual component.

9. The method of claim 7, wherein the filtering comprises using an upper and a lower value that defines plural components.

10. The method of claim 7, further comprising varying the filtering.

11. A metrology system for determining overlay at plural heights of a non-flat, buried metrology target having another metrology target disposed thereon, the metrology system comprising:

an illumination source configured to direct a beam of radiation at a metrology; a detector configured to detect scattered radiation from the target; and

a controller configured to:

measuring the detected radiation;

infer data of a parameter of the buried metrology target from the measurement as a function of the parameter verses wavelength, which yields a periodical variation of the parameter; and

decomposing the periodical variation of the parameter to isolate the plural heights of

the buried metrology target as a function of amplitude verses wavelength.

12. The metrology system of claim 11, wherein the decomposing comprises performing a Fourier transform, a wavelet transform, or a Laplace transform.

13. The metrology system of claim 11, wherein the decomposing to isolate the plural heights of the buried metrology target comprises determining a top and a bottom of the buried metrology target.

14. The metrology system of claim 11, wherein the decomposing to isolate the plural heights of the buried metrology target comprises determining a tilt of the buried metrology target.

15. The metrology system of claim 11, wherein the decomposing to isolate the plural heights of the buried metrology target comprises determining an overlay between the metrology targets.

16. The metrology system of claim 11, wherein the decomposing to isolate the plural heights of the buried metrology target comprises determining an intermediate height of the buried metrology target.

17. The metrology system of claim 11, wherein the decomposing comprises filtering.

18. The metrology system of claim 17, wherein the filtering comprises using an upper and a lower value that defines an individual component.

19. The metrology system of claim 17, wherein the filtering comprises using an upper and a lower value that defines plural components.

20. A lithography system comprising the metrology system of claim 11.