WHAT IS CLAIMED IS:

1. A method for detecting levels of surface contamination of substrates used in imprint lithography, the method comprising the steps of:

providing a substrate;

depositing polymerizable material in a periodic drop pattern on the substrate;

contacting the polymerizable material with a ~~planar~~ imprint template;

polymerizing the polymerizable material to form ~~an~~ imprint layer on the substrate;

detecting the presence of defects on the imprint layer;

analyzing the detected defects and identifying periodic nanovoid defects within the detected defects;

determining the number of periodic nanovoid defects per unit area of substrate, wherein the number of periodic nanovoid defects per unit area correlates to the level of surface contamination of the substrate.

2. The method of claim 1 wherein the detecting step further comprises using light scattering techniques.

3. The method of claim 2 further comprising the step of generating a scatter map of the substrate.

WHAT IS CLAIMED IS:

1. A method for detecting levels of surface contamination of substrates used in imprint lithography, the method comprising the steps of:

providing a substrate;

depositing polymerizable material in a periodic drop pattern on the substrate;

contacting the polymerizable material with a blank, featureless imprint template;

polymerizing the polymerizable material to form a planar imprint layer on the substrate;

detecting the presence of defects on the imprint layer;

analyzing the detected defects and identifying periodic nanovoid defects within the detected defects;

determining the number of periodic nanovoid defects per unit area of substrate, wherein the number of periodic nanovoid defects per unit area correlates to the level of surface contamination of the substrate.

2. The method of claim 1 wherein the detecting step further comprises using light scattering techniques.

3. The method of claim 2 further comprising the step of generating a scatter map of the substrate.