How to make a better microarray  
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Microarrays of antibody spots on polymer slides are commonly used for diagnostic purposes for the detection of disease. These arrays can be optimised by creating well-defined antibody spots and by maximising the density of blood cells attached to the antibody spot and minimising the cell attachment to the surrounding polymer. Well-defined antibody spots were achieved by deriving a formula for the volume of drop required for any given contact angle to produce the required spot size. The maximisation of cells on the antibody spot and their minimisation on background was achieved by using a skim milk powder blocker. The effect of treated polystyrene on maximisation of cell attachment to antibodies appeared to be minimal. However, the results were inconclusive and further tests must be carried out.

From pillar to post; a story of evacuated window strength  
(Dr Cenk Kocer c.kocer@physics.usyd.edu.au)

An evacuated window can provide excellent thermal insulation in residential and commercial buildings. The window is produced with a vacuum space between two sheets of glass, removing the thermal processes of conduction and convection between the glass sheets. An array of metal pillars is used to maintain the space between the sheets under the action of atmospheric pressure. The question is; can you change the form of these pillars to improve the strength of the window?