lithography for three-dimensional structures. Thus, in order to create a multi-architectural topographical surface on a single substrate, each technique needs to be employed separately and it is also necessary to mask all the other patterns whilst each pattern is being fabricated. This task is clearly challenging and not practical if a large number of vastly different topographies are involved.

Accordingly, there is a need to provide method for making an array comprising multiple topographies on a single substrate that overcomes, or at least ameliorates, the disadvantages mentioned above.

Summary

~~According to a first aspect, t~~There is provided a method of making an array for cell assays comprising the step of providing an array of structures on a substrate, each of said structures having a defined topography thereon, and wherein at least one structure has a different topography from at least one other structure.

In a first aspect, there is provided a method of making an array for cell assays comprising the step of providing an array of structures that each extend from a substrate and having pre-defined topographic formations thereon, the topographic formations on at least one structure (A) is different from the topographic formations on at least one other structure (B), wherein structure (A) is imprinted separately to structure (B), and wherein structure (A) is capable of being imprinted to an imprinting condition (A_c) that is different to imprinting condition (B_c) of structure (B).

It is an advantage of the method described herein that a plurality of different topographies can be presented on a single substrate to form a microarray, which would otherwise be difficult using existing single patterning techniques.

It is a further advantage of the method described herein that different topographies can be presented on a single substrate which permits customization of the array.

Advantageously, the method described herein provides a low cost fabrication process. In particular, nanoimprint technology, which is a cost-efficient, scalable, high throughput nanoimprinting technique, may be used to create the different topographies which are

otherwise prohibitively expensive if they are fabricated by conventional electron beam lithography.

It is a further advantage that the method as described herein may provide a biocompatible array.

It is a further advantage of the method as described herein that the array may be replicated using known casting methods, for example PDMS casting. This provides a cost-effective way of producing replicas of the original array.

Advantageously, the method as described herein may not encounter problems of resolution limit in providing the different topographies, as nanoimprinting may be used to form the topographies, where the limit of resolution is limited by the mold to be used for imprinting.

It is a further advantage of the method as described herein that the individual topographies of the array can be optimized as different topographies are imprinted separately.

It is a further advantage of the method as described herein that a dry/etch-free method may be used to form the different topographies on a single substrate.

Advantageously, the method as described herein permits the use of different types of polymer (for example, PMMA, PC, ETFE and the like) to form the structures having a defined topography thereon.

~~According to a second aspect t~~There is provided an array comprising a substrate having an array of structures projecting therefrom, wherein each of said structures have a defined topography thereon, and wherein at least one structure has a different topography from at least one other structure. In one embodiment, the array can be used as a master mold to make other array structures, such as by imprint lithography.

In a second aspect, there is provided an array made from the method as defined herein comprising a substrate having an array of structures projecting therefrom, wherein each of said structures have pre-defined topographic formations thereon, the topographic formations on at least one structure (A) is different from the topographic formations on at least one other structure (B).