SUPER-HYDROPHOBIC HIERARCHICAL STRUCTURES, METHOD OF FORMING THEM AND MEDICAL DEVICES INCORPORATING THEM

ABSTRACT

Synthetic polymer substrates comprising a hierarchical surface structure of multiple domes and multiple pillars on said domes, wherein said substrate is a synthetic polymer film, said domes have diameters in the range from about 5 μm to about 400 μm, heights in the range from about 2.5 μm and about 500 μm, and said pillars have diameters in the range from about 20 nm to about 5 μm and aspect ratios of from about 2 to about 50, and methods of making and using them.

(Fig. 2A)