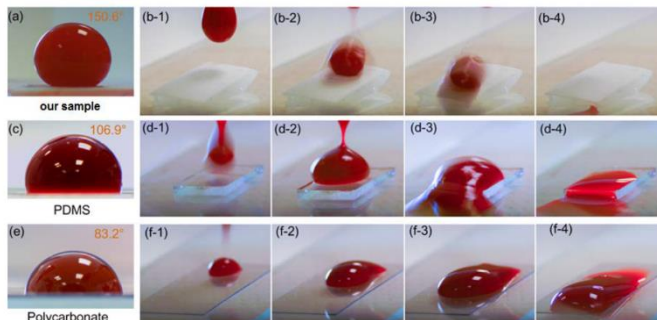


Super hydrophobic coating



MARKET OPPORTUNITY

The global market for hydrophobic coatings is expected to increase from \$1.3 billion in 2015 to more than \$1.8 billion in 2020, growing at a five-year compound annual growth rate (CAGR) of 6.4% from 2015 through 2020. The current state-of-the-art super hydrophobic surface layer is very thin and can be easily abraded or damaged. Moreover, the skin layer of the prepared bulk material is not super hydrophobic

and should be removed to expose the inner super hydrophobic material. Therefore, NUS technology has proven to be comparatively superior to the current state-of-the-art.

TECHNOLOGY

This invention describes a method using polymers and silicon oxide nanoparticles to prepare a super hydrophobic coating. This method of coating has been tested on rigid polymer/plastic and rubber and may also be used on metals.

CATEGORY

Advanced materials

STAGE OF DEVELOPMENT

TRL3

APPLICATIONS

Medical devices, Wearables, Flexible electronics, Aerospace, Marine, Packaging

ADVANTAGES

- Highly durable
- Biocompatible
- Flexible
- Customizable
- No surface treatment is required
- Prevents protein adsorption (excellent as medical device coating)
- Prevent blood lysis (excellent as medical device coating)

STATUS

Available for research collaboration and licensing

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