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## The 11th Iranian-led International Nanotechnology Standard Is Published

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An international standard in the field of nanotechnology was developed under the leadership of Iran, titled "Nanotechnologies — Textiles containing nanomaterials and nanostructures — Superhydrophobic characteristics and durability assessment". This standard (ISO/TS 10818:2023), has been developed by a specialized group including experts from industry, university and laboratories with the support of Iran Nanotechnology Innovation Council.

One of the main obstacles affecting the growth of the market for water-repellent textiles containing nanomaterials is their durability in different environmental and usage conditions. From a consumer perspective, the durability of water-repellent and superhydrophobic textiles is of utmost importance. If the superhydrophobic properties are not durable, they will lose their efficacy in long-term applications. Generally, there has been no international standard method for assessing the durability of superhydrophobic textiles and classifying these properties.

The international standard [ISO/TS 10818:2023](#) assesses the properties, performance, and durability of nano-enhanced textiles based on usage conditions (washing, drying, ironing, exposure to light sources, and mechanical abrasion). Superhydrophobic textiles are significant due to their applications for protective clothing, in healthcare, and different industries.

So far, 103 international standards have been published by the ISO's technical committee on Nanotechnologies ([ISO/TC 229](#)), of which 11 standards were developed under leadership of the Islamic Republic of [Iran](#).

The development of international standards normally takes 2 to 3 years. The basis for developing international standards within the ISO organization is global consensus among

member countries. Member countries of the technical committees provide various expert comments at different stages of standard development to complete and develop the standard.

The ISO/TC 229 has 39 member countries as participant members and 18 member countries as observer members. After the [USA](#), [Japan](#), [South Korea](#), and the [United Kingdom Iran](#) has developed the highest number international nanotechnology standards in ISO/TC229.

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