Special Issue

Superhydrophobic and Superoleophobic Materials

Message from the Guest Editor

Wettability is one of the most basic properties of solid surfaces, mainly depending on surface chemical composition and structure. Particularly, materials showing superwettability are most captivating for their significance in bionics, fundamental research and practical applications. Inspired by superwettability in nature, a large number of superhydrophobic and superoleophobic materials have been developed by the combination of designing special surface microstructures and appropriate chemical composition in the past two decades. Artificial superhydrophobic or superoleophobic materials have attracted much attention because of their broad applications in liquid repellence, self-cleaning coatings, anti-fog/ice/snow, anti-corrosion for metals, underwater drag reduction, cell engineering, oil/water separation, liquid/droplet manipulation, microfluidics, lab on a chip, buoyancy enhancement, liquid patterning, etc. Studies related to extreme surface wettability is still a current research focus. This issue presents recent developments of superhydrophobic/superoleophobic surfaces, mainly focusing on their design principles, fabrication methods, colorful properties and novel applications.

Guest Editor

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As the premier open access journal dedicated to molecular chemistry, now in its 29th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts, and novel materials. Pushing the boundaries of the discipline, we invite papers on all major fields of molecular chemistry and multidisciplinary topics bridging chemistry with biology, physics, and materials science, as well as timely reviews and topical issues on cutting-edge fields in all of these areas.

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