

Special Issue Reprint

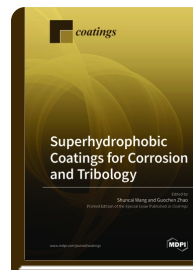
Superhydrophobic Coatings for Corrosion and Tribology

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Superhydrophobic surfaces, with a water contact angle $>150^\circ$, have attracted both academic and industrial interest due to their wide range of applications, such as water proofing, anti-fogging, antifouling, anti-icing, fluidic drag reduction and anti-corrosion. Currently the majority of superhydrophobic coatings are created using organic chemicals with low surface energy. However, the lack of mechanical strength and heat resistance prevents the use of these coatings in harsh environments. Quality superhydrophobic coatings developed using inorganic materials are therefore highly sought after. Ceramics are of particular interest due to their high mechanical strength, heat and corrosion resistance. Such superhydrophobic coatings have recently been successfully fabricated using a variety of ceramics and different approaches, and have shown the improved wear and tribocorrosion resistance properties. This Special Issue will focus on the recent developments in the fabrication of superhydrophobic coatings and their robustness against corrosion and wear resistance, but the original work on other properties of superhydrophobic coatings are also welcome.

In particular, the topics of interest include, but are not limited to:

- Robust superhydrophobic coatings;
- Coatings with super-wettability in multifunctional applications;
- Effects on corrosion and tribology;
- Chemical Coating for wetting and modelling



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