

University of Groningen

## Wettability of Nanoparticle Decorated Surfaces

Guo, Jack

DOI:  
[10.33612/diss.134698894](https://doi.org/10.33612/diss.134698894)

**IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.**

*Document Version*  
Publisher's PDF, also known as Version of record

*Publication date:*  
2020

[Link to publication in University of Groningen/UMCG research database](#)

*Citation for published version (APA):*  
Guo, J. (2020). *Wettability of Nanoparticle Decorated Surfaces*. [Thesis fully internal (DIV), University of Groningen]. University of Groningen. <https://doi.org/10.33612/diss.134698894>

### Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

### Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

# **Propositions**

Accompanying the PhD thesis

## **Wettability of Nanoparticle Decorated Surfaces**

Weiteng Guo

1. Nanoparticles are ideal candidates to create nanostructured surfaces to study wetting phenomena.
2. Airborne hydrocarbons can significantly affect the wettability of nanostructured surfaces. (Chapter 3)
3. Nanoparticles, before reaching an extremely high surface coverage, can enhance the static contact angle as well as hysteresis of a flat hydrophilic substrate. (Chapter 3&4)
4. Combing polymer techniques and nano science is a promising way to fabricate surfaces with various nano-structured morphologies. (Chapter 4)
5. The wetting contact angles are easy to obtain and measure in most cases, but the theories behind them are usually much more complex. (Chapter 5)
6. The interactions between the liquid testing droplets and the solid surfaces are diverse, one should be very careful when trying to predict a contact angle with theoretical models. (Vitaly Svetovoy)
7. 吾道一以贯之-孔子。 (Hold on the principal throughout the entire life and keep practicing. -Confucius)